

European Aviation Safety Agency

DECISION No 2007/003/R
OF THE EXECUTIVE DIRECTOR OF THE AGENCY
of 13 March 2007

amending Annex IV of Decision N° 2003/19/RM of the Executive Director of the Agency of 28 November 2003 on acceptable means of compliance and guidance material to Commission Regulation (EC) No 2042/2003 of 20 November 2003 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks.

THE EXECUTIVE DIRECTOR OF THE EUROPEAN AVIATION SAFETY AGENCY,

Having regard to Regulation (EC) No 1592/2002 of the European Parliament and of the Council of 15 July 2002 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency¹ (hereinafter referred to as the Basic Regulation), and in particular Articles 13 and 14 thereof,

Having regard to the Commission Regulation (EC) No 2042/2003 of 20 November 2003 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks²,

Whereas:

- (1) Annex IV of Acceptable Means of Compliance to Part-66 of Decision 2003/19/RM is required to be up to date to reflect the need of introducing the concept of Critical Design Control Configuration Limitations (CDCCL).
- (2) To achieve this requirement the text of the Annex IV of Acceptable Means of Compliance to Part-66 of Decision 2003/19/RM should be amended accordingly.
- (3) The Agency shall issue certification specifications, including airworthiness codes and acceptable means of compliance, as well as any guidance material for the application of the Basic Regulation and its implementing rules.

¹ OJ L 240, 7.9.2002, p. 1. Regulation as last amended by Regulation (EC) No 1701/2003 (OJ L 243, 27.9.2003, p. 5).

² OJ L 315, 28.11.2003, p. 1. Regulation as amended by Regulation (EC) No 707/2006 (OJ L 122, 9.5.2006, p. 17).

- (4) The Agency, pursuant to Article 43 of the Basic Regulation and Articles 5(3) and 6 of the rulemaking procedure³, has widely consulted interested parties⁴ on the matters which are the subject of this Decision and has provided thereafter a written response to the comments received⁵.

HAS DECIDED:

Article 1

The Annex IV of Acceptable Means of Compliance to Part-66 of Decision 2003/19/RM of the Executive Director of the Agency of 28 November 2003 on acceptable means of compliance and guidance material to Commission Regulation (EC) No 2042/2003 of 20 November 2003 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks, is hereby amended in accordance with the Annex 1 to this Decision.

Article 2

This Decision shall enter into force on 20 March 2007.

Done in Cologne, 13 March 2007

P. GOUDOU
By delegation C. PROBST

³ Decision of the Management Board concerning the procedure to be applied by the Agency for the issuing of opinions, certification specifications and guidance material ("rulemaking procedure"), EASA MB/7/03, 27.6.2003.

⁴ See: NPA No 22-2005

⁵ See: CRD No 22-2005

Annex 1 to Decision 2007/003/R

The following paragraphs of Annex IV to Decision 2003/19/RM AMC to Part-66 are amended as follows:

Insert a new paragraph to AMC 66.A.45(d) and correct numbering for incorrectly numbered paragraph:

AMC 66.A.45(d) Type/task training and ratings

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3. Theoretical and practical training should also take into account critical aspects such as Critical Design Configuration Control Limitations.
EASA guidance is provided for training in Appendix IV to AMC to 66.A.45(d).

~~3.~~ 4

~~4.~~ 5

~~5.~~ 6 A programme of structure on-job-training (OJT) may be prepared to satisfy the practical training requirement

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~~5.~~ 7 Before grant of the aircraft type, the applicant should be able to:

....

~~6.~~ 8

Insert a new Appendix IV to AMC Part-66:

Appendix IV to AMC to 66.A.45(d)

Fuel Tank Safety training

This appendix includes general instructions for providing training on Fuel Tank Safety issues.

1. Level of training required by this Annex is only level 2.

Level 2 Detailed training

Objectives:

The attendant should, after the completion of the training:

1. know the history and the theoretical and practical elements of the subject, have an overview of Special Federal Aviation Regulations (SFARs) from 14 CFR SFAR 88 of the FAA and of JAA TGL 47, be able to give a detailed description of the concept of CDCCL, Airworthiness Limitations Items (ALI) and using theoretical fundamentals and specific examples,
2. have the capacity to combine and apply the separate elements of knowledge in a logical and comprehensive manner.
3. have detailed information on how the above items affect the aircraft in the scope of the activity of the organisation or in the fleet.
4. understand and carry out activities with the use of manufacturer and regulatory authority data providing instructions on design and maintenance, such as Service Bulletins, Airworthiness Directives, Aircraft Maintenance Manual, Component Maintenance Manual etc.
5. use easily the manufacturer's documentation from various sources and apply corrective action where appropriate.
6. identify the components or parts or the aircraft subject to FTS from the manufacturer's documentation, plan the action or apply a Service Bulletin and an Airworthiness Directive.

Continuing training

The interval between continuing training shall be established by the organisation employing such personnel, but should not exceed two years.

The continuing training shall include knowledge on evolution of material, tools, documentation and manufacturer's or competent authority's directives.

2. The personnel directly involved in Fuel Tank Safety (FTS) systems shall be qualified according to the following table:

Organisation	Personnel	Level of knowledge	Continuing training
Part-66 licence holders in a continuing airworthiness management organisation	The airworthiness review staff as required by M.A.707.	2	Yes

Part-66 licence holders in aircraft and component maintenance organisations	Maintenance organisation support and certifying staff	2	Yes
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3. General requirements

The training for the personnel designated in table above has to be carried out before any airworthiness review certificate is issued or any maintenance task is certified on an aircraft or a component.

The training should be made in appropriate facilities containing examples of components, systems and parts affected by FTS issues and having access to aircraft or component where typical examples of FTS issues can be shown. The use of pictures, films and practical examples of the maintenance on fuel tank system is recommended. The training shall include a representative number of repair and inspections as required by the maintenance programme showing the necessity of using the manufacturer's data.

4. Characteristics of the training

The following characteristics shall be taken into consideration when the level 2 training programmes are being established:

- a) understanding of the background and concepts of fuel tank safety as developed during the last 10 years, and
- b) how in maintenance organisations mechanics can recognise, interpret and handle the improvements that have been made or are being made during fuel tank system maintenance,
- c) awareness of any hazards working on the Fuel System, and especially with a Flammability Reduction System using nitrogen.

a), b) and c) should be introduced in the training programme addressing the following issues:

- i) The theoretical background behind the fuel tank safety: the explosions of mixtures of fuel and air, the behaviour of those mixtures in an aviation environment, the effects of temperature and pressure, energy needed for ignition etc, the 'fire triangle',
- Explain 2 concepts to prevent explosions: (1) ignition source prevention and (2) flammability reduction,
- ii) The major accidents and accident investigations and their conclusions,
- iii) SFARs from 14 CFR SFAR 88 of the FAA and JAA Internal Policy INT POL 25/12: reason of these documents, and what was the ultimate goal, margins of fuel system safety improvements (from 10-6 to 10-9, in fact improvement by a factor 100-1000, to identify unsafe conditions and to correct them, to systematically improve fuel tank maintenance),
- iv) Explain the concepts that are being used: the results of SFAR 88 of the FAA and JAA INT/POL 25/12: modifications, airworthiness limitations and CDCCL,
- v) Where relevant information can be found by the mechanics and how to use and interpret this information (maintenance manuals, component maintenance manuals)
- vi) Fuel Tank Safety and Maintenance: fuel tank entry and exit procedures, clean working environment, what is meant by configuration control, wire separation, bonding of components etc,

- vii) Flammability reduction systems: reason for their presence, their effects, the hazards of an FRS using nitrogen for maintenance, safety precautions in maintenance/working with an FRS,
 - viii) recording maintenance actions, recording measures and results of inspections.
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