



Explanatory Note to Decision 2015/026/R

Flight testing

RELATED NPA/CRD 2008-20 — OPINION No 07/2013 — RMT.0219 (MDM.003) — 10.11.2015

EXECUTIVE SUMMARY

The European Commission adopted Commission Regulation (EU) 2015/1039 of 30 June 2015 on flight testing, which amends Commission Regulation (EU) No 748/2012. It is, therefore, necessary to support this amendment by new acceptable means of compliance (AMC) and guidance material (GM).

Decision 2015/026/R addresses a level playing field as well as a harmonisation and safety issue related to flight testing. The specific objective is to harmonise the flight test crew qualification requirements, as well as to increase safety by requiring the organisations involved in flight testing to develop a flight test operations manual (FTOM).

This Decision provides the AMC with the FTOM requirement and the GM with respect to the lead flight test engineer (LFTE) and flight test categories. Additionally, the GM on the competence and experience of pilots performing Category 3 and 4 flight tests, as well as a detailed AMC on the training course for LFTEs, are part of this Decision.

This Decision also includes AMC detailing the conditions for the appointment of LFTEs from a medical fitness perspective.

Applicability		Process map	
Affected regulations and decisions:	AMC/GM to Part 21	Concept Paper:	Yes
Affected stakeholders:	Part-21 organisations and personnel involved in flight testing	Rulemaking group:	Yes
Driver/origin:	Level playing field, safety	Terms of Reference (Issue 2):	11.1.2010
Reference:	N/A	RIA type:	Full
		Technical consultation during NPA drafting:	Yes
		Publication date of the NPA:	29.8.2008
		Duration of NPA consultation:	6 months
		Review group:	Yes
		Focused consultation:	Yes
		Publication date of the Opinion:	22.8.2013



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1. Procedural information

1.1. The rule development procedure

The European Aviation Safety Agency (hereinafter referred to as the 'Agency') developed Decision 2015/026/R in line with Regulation (EC) No 216/2008¹ (hereinafter referred to as the 'Basic Regulation') and the Rulemaking Procedure².

This rulemaking activity is included in the Agency's [4-year Rulemaking Programme](#) under RMT.0219 (MDM.003(a) and (b))³. The scope and timescale of the task were defined in the related Terms of Reference (see process map on the title page).

The draft text of this Decision has been developed by the Agency based on the input of the Rulemaking Group MDM.003(a). All interested parties were consulted through NPA 2008-20⁴. 319 comments were received from interested parties, including industry and national aviation authorities.

The Agency has reviewed the comments received during the NPA public consultation with the support of Review Group MDM.003(a). The comments received and the Agency's responses thereto are presented in the Comment-Response Document (CRD) 2008-20⁵. Based on the comments received, the Agency published Opinion 07/2013 on 22 August 2013, which was submitted to the European Commission. The related Commission Regulation (EU) 2015/1039⁶ was adopted on 30 June 2015.

The final text of this Decision and of the related AMC and GM has been developed by the Agency based on the input of Review Group MDM.003(a).

The process map on the title page summarises the major milestones of this rulemaking activity.

1.2. Structure of the related documents

Chapter 1 contains the procedural information related to this task. Chapter 2 explains the core technical content. Chapter 3 provides references. The text of the AMC and GM is annexed to the Decision.

¹ Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC (OJ L 79, 19.3.2008, p. 1).

² The Agency is bound to follow a structured rulemaking process as required by Article 52(1) of the Basic Regulation. Such process has been adopted by the Agency's Management Board and is referred to as the 'Rulemaking Procedure'. See Management Board Decision 01-2012 of 13 March 2012 concerning the procedure to be applied by the Agency for the issuing of opinions, certification specifications and guidance material (Rulemaking Procedure).

³ [http://easa.europa.eu/system/files/dfu/EASA-ToR-MDM.003\(a\)-02-11012010.pdf](http://easa.europa.eu/system/files/dfu/EASA-ToR-MDM.003(a)-02-11012010.pdf)

⁴ In accordance with Article 52 of the Basic Regulation and Articles 5(3) and 6 of the Rulemaking Procedure.

⁵ <http://easa.europa.eu/system/files/dfu/CRD%202008-20.pdf>

⁶ Commission Regulation (EU) 2015/1039 of 30 June 2015 amending Regulation (EU) No 748/2012 as regards flight testing (OJ L 167, 1.7.2015, p. 1).



2. Explanatory Note

This amending Decision provides the AMC and GM which illustrate the means to demonstrate compliance with the requirements of Commission Regulation (EU) No 748/2012 of 3 August 2012, as amended by Commission Regulation (EU) 2015/1039.

2.1. Overview of the issues to be addressed

Flight test crew qualifications in the European Union (EU) were not harmonised, and industry experienced cases where flight test crews qualified in one EU Member State were not recognised in others. Additionally, it was established that it was necessary for organisations involved in flight testing to develop an FTOM. Such manual would detail the necessary policy and procedures for an organisation to perform flight tests. Documenting for example the risk and safety management policy, composition and competence of the flight crew, as well as the safety-related instruments or equipment needed would constitute a safety improvement.

Commission Regulation (EU) No 748/2012 has been recently amended by Commission Regulation (EU) 2015/1039 to address the issues highlighted above. It is necessary to support Commission Regulation (EU) 2015/1039 by issuing new AMC and GM material.

2.2. Objectives

The overall objectives of the EASA system are defined in Article 2 of the Basic Regulation. This proposal will contribute to the achievement of the overall objectives by addressing the issues outlined in Chapter 2. The specific objective of this proposal is, therefore, to harmonise the flight test crew qualifications requirements, increase the level of safety and ensure proportionate rules, where appropriate.

2.3. Overview of the amendments

Part-21, i.e. Annex I to Commission Regulation (EU) No 748/2012, has been amended by Commission Regulation (EU) 2015/1039 by adding provisions for an FTOM, adding an Appendix XII to Part-21 defining flight test categories, competency and experience requirements for pilots, LFTEs and Flight Test Engineers (FTEs) involved in flight testing, as well as linking the flight conditions with the requirements defined in Appendix XII.

As a result of these changes, there is a need to provide the related AMC and GM.

Specifically, the means of compliance to Part-21 FTOM provision requirements include the FTOM format, the FTOM use by contractors and sub-contractors, as well as the details of the FTOM content. In particular, it should be noted that the FTOM should:

- include a policy regarding the presence on board of people other than crew members;
- list specific safety-related instruments and equipment that should be available or carried on board the aeroplane; and
- include an up-to-date list of documents relevant to the flight test.

The FTOM should also describe the involvement of the flight test organisation in the approval of flight conditions. Another important element is that the FTOM should describe the training and the currency of the flight crew.

GM No. 1 to Appendix XII to Part-21 elaborates on the LFTE duties and the wording used in the Implementing Rule (IR) for LFTEs 'assisting' the pilots. This GM provides the steps to be taken to



determine if the operation is a flight test, as well as details on flight test categories, for which specific examples per flight test category are provided.

GM No. 2 to Appendix XII defines the 'similar complexity and characteristics' for the requirements in the IR. The guidance for the flight experience requirements for an LFTE are also described in this GM.

Two more AMCs on various requirements in Appendix XII to Part-21 have also been added.

AMC No. 1 provides details on different levels of training courses for LFTEs, based on the required competence level (Level 1 and Level 2), as well as the aircraft category (aeroplanes and rotorcraft).

AMC No. 2 details the conditions for the appointment of LFTEs, from a medical fitness perspective.

Note: This Decision does not address the issue of LFTE licence, which is the subject of a separate rulemaking task.

Changes which have been introduced to the AMC/GM material since the publication of the CRD 2008-20, include:

AMC for the FTOM provision

Paragraph 1.a. 'Scope' has been updated to include the phrase 'the FTOM complexity should be proportionate to the aircraft and the organisation complexity'.

Paragraph 2.d. 'Carriage of persons other than the crew members has been updated to add 'and safety' '...FTOM should describe the organisation's policy in relation to the presence and safety on board...'

Paragraph 2.f. 'Documents' has been amended by adding two points to the list of items to be included in a Flight Order: 'Safety considerations relevant to the flight' and the 'Aircraft configuration items relevant to the test to be highlighted to the crew'.

Paragraph 2.h. 'Flight test training' has been amended to better align it with the applicability of Appendix XII and the flight test categories.

GM No. 1 to Appendix XII to Part-21

This GM has been amended to include a paragraph on 'Lead Flight Test Engineer (LFTE)', which provides additional guidance on the LFTE duties, as well as an explanation on the wording 'assisting' the pilots, as used in Commission Regulation (EU) 2015/1039. Various other changes, primarily syntactical improvements, have been made to the paragraph on 'Flight test categories'.

GM No. 2 to Appendix XII to Part-21

The definition of similar 'complexity and characteristics' has been further clarified. Additionally, it was considered that to its generic content, the text would serve better as a GM rather than an AMC. As a result of this change, the AMCs/GMs to Appendix XII to Part-21 have been re-numbered.

AMC No.1 to Appendix XII to Part-21

AMC No. 1 has been updated to allow some flexibility in the instruction for the LFTEs with duties on CS-23 or CS-27 aircraft.



As part of the training courses for LFTEs (Competence Level 1 and Level 2), the review of the principles of Crew Resource Management (CRM) tailored to the flight test environment has been added. Additionally, the subject 'Human factors' has been included in the theoretical knowledge syllabus.

AMC No. 2 to Appendix XII to Part-21

The title has been changed, to better reflect the focus of this AMC on the medical fitness of the LFTE. Some other minor improvements to the text have been made.



3. References

3.1. Related regulations

- Commission Regulation (EU) 2015/1039 of 30 June 2015 amending Regulation (EU) No 748/2012 as regards flight testing (OJ L 167, 1.7.2015, p. 1)

3.2. Affected decisions

- Decision 2012/020/R of the Executive Director of the Agency of 30 October 2012 on acceptable means of compliance and guidance material for the airworthiness and the environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations ('AMC and GM to Part-21')

3.3. Reference documents

N/A

