



Explanatory Note to Decision 2013/015/R

Certification Specifications and Acceptable Means of Compliance for Light Sport Aeroplanes ('CS-LSA')

RELATED NPA/CRD 2013-05 — RMT. 0003 (LSA.001) — 19/07/2013

EXECUTIVE SUMMARY

This Decision amends the Certification Specifications (CS) for Light Sport Aeroplanes (CS-LSA) in order to follow-up on revisions of the existing referenced ASTM Standards in the CS-LSA. One of the revisions of the referenced ASTM standards introduces a change that addresses the safety recommendation from an accident that occurred on June 25th 2011 and shows the efficiency of the revision process of ASTM standards followed by the shortened process used by the Agency to introduce such a revised standard into CS-LSA.

Apart from changes to the existing referenced ASTM standards, this Decision also introduces a new ASTM Standard for the design and manufacture of electric propulsion units.

Because the ASTM standards are consensus standards that are developed through a balloting and review process that allows stakeholders to participate in their development, the EASA rulemaking process could be executed within 1 year from publication of the Terms of Reference to this Decision.

Supportive comments from industry and several aviation authorities on the content of the NPA and no adverse comments regarding the shortened consultation time, indicate that the taken course of action was acceptable for the adoption of this consensus standard.

The adoption of the revised ASTM standards has reduced the number of differences between CS-LSA and the ASTM standards, resulting in an improved harmonisation of rules between EASA and FAA.

Applicability		Process map	
Affected regulations and decisions:	CS-LSA ED Decision 2011/005/R	Concept Paper:	No
Affected stakeholders:	Applicant for type certificates and major changes to type certificates of Light Sport Aeroplanes	Rulemaking group:	No
Driver/origin:	Level playing field	RIA type:	Light
Reference:	N/A	Technical consultation during NPA drafting:	No
		Publication date of the NPA:	2013/Q1
		Duration of NPA consultation:	1 month
		Review group:	No
		Focussed consultation:	No
		Publication date of the Decision:	2013/Q3

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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 ED Decision 2013/015/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 Rulemaking Programme for 2013 under RMT.0003 (LSA.001)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. All interested parties were consulted through NPA 2013-05⁴, which was published on 05/04/2013. 7 comments were received from interested parties, including industry and national aviation authorities.

The Agency has reviewed the comments received on the NPA. The comments received and the Agency's responses are presented in the Comment-Response Document (CRD) 2013-05⁵.

The final text of this Decision with the Certification Specifications (CS) has been developed by the Agency.

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

1.2. Structure of the related documents

This Explanatory Note is divided in three chapters:

- Chapter 1 contains the procedural information related to this task,
- Chapter 2 explains the core technical content,
- Chapter 3 provides references to related rules.

The comments received during the public consultation of NPA 2013-05, together with the answers are provided in the Comment-Response Document CRD 2013-05.

The text of the amendment 1 of CS-LSA is annexed to the ED Decision 2013/015/R.

¹ Regulation (EC) No 216/2008 of the European Parliament and 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), as last amended by Commission Regulation (EU) No 6/2013 of 8 January 2013 (OJ L 4, 9.1.2013, p. 34).

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 concerning the procedure to be applied by the Agency for the issuing of opinions, certification specifications and guidance material (Rulemaking Procedure), EASA MB Decision No 01-2012 of 13 March 2012.

³ [ToR-LSA.001.pdf](#)

⁴ [NPA 2013-05.pdf](#)

⁵ <http://easa.europa.eu/rulemaking/r-archives.php#crd>.

2. Explanatory Note

2.1. The issues to be addressed

The Agency shall, in accordance with article 19 of the Basic Regulation, develop airworthiness codes and acceptable means of compliance for certification that reflect best practices in the fields concerned and be updated taking into account worldwide aircraft experience in service. This obligation is confirmed in paragraph 21A.16A of the implementing rule Commission Regulation (EU) No 748/2012 (hereinafter referred to as 'Part 21').

In response to an accident where the fuel flow was blocked by an object in the fuel tank, a requirement for a fuel strainer was introduced in the revision of one of the ASTM standards. Also some of the remaining recommendations related to in-flight wing failure accidents from the FAA's Special Review Report have been covered in the amendment of the ASTM standard. These changes and other amendments in the ASTM standards that are referred to in the Certification Specifications for Light Sport Aeroplanes (CS-LSA) initiated the need for this revision of CS-LSA.

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 maintain a high uniform level of civil aviation safety in Europe. Recent improvements that have been introduced to the referenced ASTM consensus standards are therefore adopted.

2.3. Outcome of the consultation

There were no contentious issues raised during the public consultation of NPA 2013-05. CRD 2013-05, published together with this Explanatory Notes and the Decision, provides the 7 comments received together with the Agency's individual answers to each of them.

2.4. Overview of changes to CS-LSA Amendment 1

Compared to the NPA some editorial corrections have been introduced. Furthermore the colour of the cable release control for glider towing (F2245-12d Annex A1.6.1.5) has been changed from red/yellow to only yellow. This is consistent with the colour coding of the release handle at the glider side and in-line with the function of the control (Not primarily an emergency function).

A clarification has also been added to the AMC1 to ASTM F2245-12d Annex 1.1 to explain that it does not cover cable retraction devices.

3. References (ASTM)

- F2245-12d Design and Performance of a Light Sport Airplane
- F2483-12 Maintenance and the Development of Maintenance Manuals for Light Sport Aircraft
- F2746-12 Standard Specification for Pilot's Operating Handbook (POH) for Light Sport Airplane
- F2339-06 Design & Manufacture of Reciprocating Spark Ignition Engines
- F2506-10 Design and Testing of Fixed-Pitch or Ground Adjustable Propellers
- F2538-07a Design & Manufacture of Reciprocating Compression Ignition Engines
- F2316-12 Airframe Emergency Parachutes for Light Sport Aircraft
- F2840-11 Design and Manufacture of Electric Propulsion Units