EUROPEAN AVIATION SAFETY AGENCY
AGENCE EUROPÉENNE DE LA SÉCURITÉ AÉRIENNE
EUROPÄISCHE AGENTUR FÜR FLUGSICHERHEIT

10TH ANNIVERSARY

EASA Form 1 in European Light Aircraft

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ELA and EASA Form 1

- Concept and Problem
- Legal Basis and Definitions
- Certification Memorandum
  - Content and Interpretation
- Final Conclusion

ELA and EASA Form 1 - Concept

- Owners of aircraft within the ELA scope may accept certain non-safety critical parts for installation without an EASA Form 1
- Opinion 01/2011 was published in 2011 with applicability since 10 September 2012
- Intent to reduce the regulatory burden to a level proportionate with the safety risks

ELA and EASA Form 1 - Problem

- New Rulemaking task (21.026) to extend this concept to aircraft other than ELA with expected results from 2014 onwards
  - *Guidance material to be one of these results*
- Lack of Acceptable Means of Compliance and Guidance Material (AMC) to support the new provisions in the rule
- The Certification Memorandum provides that guidance

Legal basis

- Commission Regulation (EU) No 748/2012
  - 21.A.307 (c) in the case of ELA1 or ELA2 aircraft, a part or appliance that is:
    1. not life-limited, nor part of the primary structure, nor part of the flight controls;
    2. manufactured in conformity to applicable design;
    3. marked in accordance with Subpart Q;
    4. identified for installation in the specific aircraft;
    5. to be installed in an aircraft for which the owner has verified compliance with the conditions 1 through 4 and has accepted responsibility for this compliance.
- Commission Regulation (EU) No 593/2012
  - M.A.502(e), M.A.613, M.A.802(b)
  - 145.A.42 (a)6, 145.A.42(e), 145.A.50(d)

Definitions – ELA1

- Aeroplane
  - 1200 kg MTOM or less
  - Not complex motor-powered
- Sailplane or powered sailplane
  - 1200 kg MTOM or less
- Balloon
  - 3400 m³ hot air or less
  - 1050 m³ gas or less
  - 300 m³ tethered gas or less
- Airship
  - 4 occupants
  - 3400 m³ hot air
  - 1000 m³ gas

Definitions – ELA2

- Aeroplane
  - 2000 kg MTOM or less
  - not complex motor-powered
- Sailplane or powered sailplane
  - 2 000 kg MTOM or less
- Balloon
- Hot air airship
- Gas airship complying with all of the following characteristics:
  - 3 % maximum static heaviness,
  - Non-vectored thrust (except reverse thrust),
  - Conventional and simple design of structure, control system and ballonet system,
  - Non-power assisted controls;
- Very Light Rotorcraft

Certification Memorandum

- Eligibility for installation and maintenance of parts and appliances that fall within the scope and criteria defined by 21.A.307(c)
- EASA CM–21.A–K–001 dated 21 June 2013
- http://easa.europa.eu/certification/certification-memoranda.php

21.A.307(c)

Parts and appliances without an EASA Form 1 can be considered acceptable for installation by the owner of the aircraft only when they are:

1. Not life-limited, nor part of the primary structure, nor part of the flight controls;
2. Manufactured in conformity to applicable design;
3. Marked in accordance with Subpart Q;
4. Identified for installation in the specific aircraft.
5. And when the owner has verified compliance with the above 4 conditions and has accepted responsibility for this compliance.

Condition 1

- Data not readily available to the owner
- Design Approval Holder documentation may contain some information
  - TCDS, SB, STC, IPC, Maintenance Manual, Repair
- Life-limited parts, normally listed in the Airworthiness Limitations Section of the AMM, or the AFM
- Consult
  - design approval holder
  - Maintenance Organisation

Condition 2

- Original source/Original Equipment Manufacturer (OEM)
  - may be a non-aviation vendor)
  - identified by part number (or vendor code) in the product support documentation (IPC, CMM or SB)
- Fabricated parts
  - conformity with the applicable design data
  - data for manufacture and subsequent inspection in the product support documentation or provided by the design approval holder
- Consult
  - design approval holder
  - Maintenance Organisation

Condition 3

- As for any other part or appliances it needs to be identified and marked for traceability purposes

Condition 4 and 5

- Record that the aircraft owner has accepted the part or appliance that came without an EASA Form 1 for installation in his/her aircraft
- Log book entry, separate document
- An example...

Example of a record

Parts list & Qualifying Statement

This maintenance record lists parts use during maintenance and records the aircraft owner acceptance of parts in accordance with Part 21 Reference 21.A.307(c).

Reg:	Type:	Work Ref No.
Date:		

Part No	Description	Qty	Part release Ref. (EASA Form 1 or equivalent)	Aircraft owner signature for part acceptance (See Ref 21.A.307(c))
AB1234-01	Part A	1	ZY9876	
AB5678-01	Part B	2	N/A	*Owner*
Etc.				

Part 21 21.A.307(c) Release of parts and appliances for installation

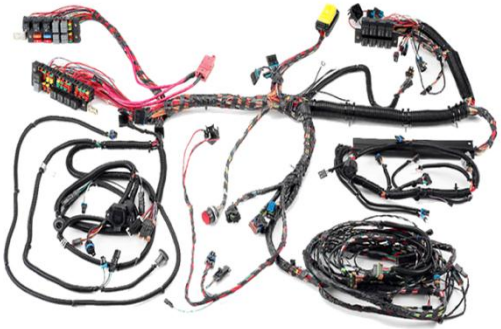
The aircraft owner has verified and accepted the following responsibility for the parts identified by his/her signature in the table above:

- The parts comply with the 4 conditions of 21.A.307(c), and
- The parts are accepted for installation in his/her aircraft.

Signed: *Owner*

Date: dd/mm/yyyy

What kind of parts ?



Airworthiness

How to treat these parts and appliances...

- They cannot be installed on another aircraft unless the owner of that other aircraft considered them as eligible for installation **145.A.42(e)**
- The maintenance release of these parts with an EASA Form 1 is not permitted **M.A.502(e)**
- The storage of these parts must be segregated or isolated from other items **145.A.42(a)6**

Final Conclusion

- Not a way of making or accepting changes to the applicable design
- Not transferable to another aircraft even if of the same type
- Clearly identified in the aircraft records (log book, etc...)
- The owner takes the responsibility to accept the installation on his/her aircraft

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Many Thanks

Your safety is our mission.

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