

 <p>European Aviation Safety Agency</p>	<p>SPECIAL CONDITION</p> <p>Certification Basis</p>	<p>Doc. No. : SC-A01</p> <p>Issue : 1</p> <p>Date : 19 Nov 2010</p> <p>Ref. : CRI A-01</p> <p>Page : 1 of 1</p>
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SUBJECT : Certification Basis

CERTIFICATION SPECIFICATION : FAR 23 Amdt 7

PRIMARY GROUP / PANEL : -

SECONDARY GROUP / PANEL : -

NATURE : SCN

SPECIAL CONDITION

Basic Certification Basis: FAR 23 Amendment 7

Discussion

The subject of this Special Condition is a single-engined, four-seat light aircraft with a composite structure and a maximum take-off weight of 1000 kg. It is powered by a 125 HP reciprocating engine driving a constant speed propeller. It is a development of existing type certificated aircraft certificated to CS-VLA. The maximum weight exceeds that of the upper limit of CS-VLA and the applicant's intention is to certificate for Night VFR and IFR.

The certification basis for an aircraft of this type would normally be CS-23. However, EASA is in the final stages of introducing the ELA¹ process which is intended to simplify the certification of non-complex aircraft (see NPA 2008-07: http://easa.europa.eu/ws_prod/r/doc/NPA/NPA%202008-07.pdf)².

Part of the ELA process is to allow the use of simpler certification codes in accordance with 21A.17(a)(1)(i). It is further proposed that an acceptable certification basis would be FAR 23 Amendment 7, dated 14 September 1969. The use of this code as a certification basis may be seen as a retrograde step but it is essentially the code that was used for the majority of successful French light aircraft of the 70s and eighties, in that it was the basis for AIR 2052, dating from 1967. The level of safety of these aircraft has proven to be acceptable. There have been few European light aircraft certificated to later, more complex codes. The use of this code is in the spirit of ELA.

FAR 23 Amendment 7 can be found on the FAA website at:

http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgFAR.nsf/MainFrame?OpenFrameSet

Note that FAR 23 Amendment 7 is regarded by the applicant as deficient in certain aspects, notably in its treatment of composites. For this reason, associated with this proposal are two further special conditions C-01 and D-01 which address Fatigue evaluation and design properties. During the certification process of this aircraft, certain other special conditions may be identified.

EASA is proposing this certification basis as a Special Condition in accordance with 21A.16(b) to approve the principle of using FAR 23 Amendment 7 as a certification basis. Because it is in advance of the formal introduction of the ELA process into Part 21, it is subject to the normal Special Condition consultation process.

¹ European Light Aircraft, ELA1 which will apply to any aircraft up to 1200 kg.

² The Comment-Response Document (Part 1) is available at:
http://easa.europa.eu/ws_prod/r/doc/crd/CRD%202008-07%20%20Part%201.pdf
 Part 2 is due for publication within the timescale of this SC consultation.