CS-VLR AMENDMENT 2 — CHANGE INFORMATION

The Agency publishes amendments to Certification Specifications as consolidated documents. These documents are used for establishing the certification basis for applications made after the date of entry into force of the amendment.

Consequently, except for a note '[Amdt No: VLR/2]' under the amended paragraph, the consolidated text of CS-VLR does not allow readers to see the detailed changes introduced by the new amendment. To allow readers to also see these detailed changes, this document has been created. The same format as for publication of Notices of Proposed Amendments (NPAs) has been used to show the changes:

— deleted text is ~~struck through~~;

— new or amended text is highlighted in grey;

— an ellipsis '[…]' indicates that the rest of the text is unchanged.

BOOK 1 — CERTIFICATION SPECIFICATIONS

SUBPART A – GENERAL

1. Amend CS VLR.1

CS VLR.1 Applicability (See AMC VLR.1)

~~This~~ These ~~airworthiness code~~ certification specifications ~~is~~ are applicable to very light rotorcraft (helicopters) with maximum certified take-off weights not exceeding 600 kg which:

(a) Are of a simple design.

(b) Are designed to carry not more than two occupants.

(c) Are not powered by turbine and/or rocket engines.

(d) Are restricted to VFR day operations.

SUBPART B — FLIGHT

2. Amend CS VLR.21

CS VLR.21 Proof of compliance

Each requirement of this subpart must be met at each appropriate combination of weight and centre of gravity within the range of loading conditions for which certification is requested. This must be shown:

(…)

3. Amend CS VLR.25

CS VLR.25 Weight limits

(a) *Maximum weight*. The maximum weight is the highest weight at which compliance with each applicable requirement of this CS-VLR is shown. The maximum weight must be established so that it is

(1) (…)

(2) Not less than the higher value resulting from ~~the sum of~~:

(i) The empty weight (…)

4. Amend CS VLR.45

CS VLR.45 General

(…)

(c) The available power must correspond to engine power, not exceeding the approved power less installation losses ~~on~~ and power absorbed by the accessories.

BOOK 2 — ACCEPTABLE MEANS OF COMPLIANCE

SUBPART A — GENERAL

5. Amend AMC VLR General

AMC VLR General

The AMC to CS-VLR consists of the applicable parts of FAA ~~AC 27-1B Change 2 dated 25 April 2006~~ AC 27-1B Change 4 dated 1 May 2014 with the changes/additions given in this Book 2 of CS-VLR.

6. Amend AMC VLR.1 Applicability

AMC VLR.1 Applicability

(…)

3. Similar~~i~~ly ~~this code~~ certification specifications ~~does~~ do not address gyroplanes. Gyroplanes will be addressed by special conditions and/or in accordance with the applicable CS-27 requirements or equiv~~e~~al~~a~~ent.

SUBPART C — STRENGTH REQUIREMENTS

7. Amend AMC VLR.351

AMC VLR.351

Yaw manoeuvre conditions

1. Introduction

This AMC provides further guidance and acceptable means of compliance to supplement FAA AC 27-1B ~~Change 2 (~~AC 27.351b. § 27.351 ~~(Amendment 27-26) YAWING CONDITIONS),~~ to meet the Agency's interpretation of CS VLR.351. As such it should be used in conjunction with the FAA AC but take precedence over it, where stipulated, in the showing of compliance.

Specifically, this AMC addresses two areas where the FAA AC has been deemed by the Agency as being unclear or at variance to the Agency's interpretation. These areas are as follows:

a. Aerodynamic Loads

The certification specification CS VLR.351 provides a minimum safety standard for the design of rotorcraft structural components that are subjected in flight to critical loads combinations of anti-torque system thrust (e.g. tail rotor), inertia and aerodynamics. A typical example of these structural components is the tailboom.

However, compliance with this standard according to the FAA AC ~~27-1B Change 2~~ may not necessarily be adequate for the design of rotorcraft structural components that are principally subjected in flight to significant aerodynamic loads (e.g. vertical empennage, fins, cowlings and doors).

For these components and their supporting structure, suitable design criteria should be developed by the Applicant and agreed with the Agency.

In lieu of acceptable design criteria developed by the applicant, a suitable combination of sideslip angle and airspeed for the design of rotorcraft components subjected to aerodynamic loads may be obtained from a simulation of the yaw manoeuvre of CS VLR.351, starting from the initial directional control input specified in CS VLR.351(b)(1) and (c)(1), until the rotorcraft reaches the maximum transient ~~overswing~~ sideslip angle (overswing) resulting from its motion around the yaw axis.

8. Create AMC MG5

AMC MG5

Agricultural dispensing equipment installation

Certification procedures identified in MG5 refer specifically to the FAA regulatory system and are not fully applicable to the EASA regulatory system due to the different applicability of restricted certification. The EASA regulatory system does not encompass a restricted certification category for design changes or Supplemental Type Certificates.

The certification basis of design changes or Supplemental Type Certificates for agricultural dispensing is to be established in accordance with 21.A.101 of Annex I to Regulation (EU) No 748/2012, on a case-by-case basis through compliance with the applicable airworthiness requirements contained in MG5, supplemented by any special conditions in accordance with 21.A.16B of Regulation (EU) No 748/2012 that are appropriate to the application and specific operating limitations and conditions. If appropriate to the proposed design, compliance with the above could be achieved through the provisions contained in 21A.103(a)2(ii) or 21A.115(b)2 of Regulation (EU) No 748/2012.