CS-23 AMENDMENT 1 - CHANGE INFORMATION

Certification Specifications (CS) are used for establishing the certification basis for applications made after the date of entry into force of a CS including any amendments. Since the complete text of a CS, including any amendments to it, is relevant for establishing the certification basis, the Agency has decided to issue and publish all amendments to CS's as consolidated documents instead of issuing and publishing only the amended text.

Consequently, except for a note "[Amdt. 23/1]" under the amended paragraph, the consolidated text of CS-23 does not allow readers to see the detailed changes introduced by the new amendment. This Change Information document has been created to allow readers to see these detailed changes. The same format as for publication of Notices of Proposed Amendments has been used to show the changes:

1. text not affected by the new amendment remains the same: unchanged
2. deleted text is shown with a strike through: ~~deleted~~
3. new text is highlighted with grey shading: new
4. ....
   Indicates that remaining text is unchanged in front of or following the reflected amendment.
   ....

CS-23 BOOK 1 – AIRWORTHINESS CODE

SUBPART B FLIGHT

1. Amend CS 23.49 by revising paragraph (c) as follows:

CS 23.49 Stalling Speed.

….

(c) Except as provided in sub-paragraph (d) of this paragraph, V_{SO} at maximum weight must not exceed 113 km/h (61 knots) for –

(1) Single-engined aeroplanes; and

(2) Twin-engined aeroplanes of 2722 kg (6 000 lb) or less maximum weight that cannot meet the minimum rate of climb specified in CS 23.67 (a)(1) with the critical engine inoperative.

2. Amend CS 23.49 by adding the new paragraph (d) as follows:

(d) All single-engined aeroplanes, and those twin-engined aeroplanes of 2722 kg (6000 lb) or less maximum weight, with a V_{SO} of more than 113 km/h (61 knots) at maximum weight that do not meet the requirements of CS 23.67(a)(1), must comply with CS 23.562(d).

SUBPART C - STRUCTURE

3. Amend CS 23.562 by inserting a new paragraph (d) and renumbering of CS 23.562(d) to CS 23.562(e) as follows:

(d) For all single-engined aeroplanes with a V_{SO} of more than 113 km/h (61 knots) at maximum weight, and those twin-engined aeroplanes of 2722 kg (6000 lb) or less maximum weight with a V_{SO} of more than 113 km/h (61 knots) at maximum weight that do not comply with CS 23.67(a)(1);

(1) The ultimate load factors of CS 23.561(b) must be increased by multiplying the load factors by the square of the ratio of the increased stall speed to 113 km/h (61 knots). The increased ultimate load factors need not exceed the values reached at a V_{SO} of 146 km/h (79 knots). The upward ultimate load factor for aerobatic category aeroplanes need not exceed 5·0g.

(2) The seat/restraint system test required by sub-paragraph (b)(1) of this paragraph must be conducted in accordance with the following criteria:

(i) The change in velocity may not be less than 9·4 m (31 feet) per second.

(ii) (A) The peak deceleration (g_p) of 19g and 15g must be increased and multiplied by the square of the ratio of the increased stall speed to 113 km/h (61 knots):

$g_p = 19{\cdot}0\ (V_{SO}/113)^2$ or $g_p = 15{\cdot}0\ (V_{SO}/113)^2$

(B) The peak deceleration need not exceed the value reached at a V_{SO} of 146 km/h (79 knots).

(iii) The peak deceleration must occur in not more time than time (t_r) which must be computed as follows:

$$t_r = \frac{31}{32{\cdot}2\ (g_p)} = \frac{0{\cdot}96}{g_p}$$

Where g_p = the peak deceleration calculated in accordance with paragraph (d)(2)(ii) of this section and t_r = the rise time (in seconds) to the peak deceleration.

(~~d~~e) An alternative approach that achieves an equivalent, or greater, level of occupant protection to that required by this paragraph may be used if substantiated on a rational basis.