



COMMENT RESPONSE DOCUMENT

EASA ELOS-VLA.49-01 is.1 for CS-VLA Aeroplanes with stall speed higher than 45 kts
[Published on the 18-07-2016 and officially closed for comments on the 12-08-2016]

Commenter 1 : CAA NL (Mr. Eelco Bakker) – date 20-07-2016

Comment # 1

Paragraph No: ELOS-VLA.49.01-49 c)

Comment: Add speed in km/h

Justification: -

Proposed Text (if applicable): modify the text “61 knots (CAS)” with the text “113 km/h (61 knots) (CAS)”

EASA response: *Accepted*

Proposed text will be used.

Comment # 2

Paragraph No: ELOS-VLA.49-01-561 c):

Comment: Question's if load factor refers to Ultimate load?

Justification: -

Proposed Text (if applicable): -

EASA response: *Accepted –*

It is clarified that this refers to the Ultimate load factor and the following text will be used:

...“must be designed for the Ultimate Inertia Load Factors”:

Comment # 3

Paragraph No: ELOS-VLA.49-01-785 k)

Comment: Modify reference from CS-23.562 to ELOS-VLA.49-01-562

Justification: -

Proposed Text (if applicable): “ELOS-VLA.49-01-562”

EASA response: *Accepted*

Proposed text will be used.

Comment # 4

Paragraph No: ELOS-VLA.49-01-967 e)

Comment: To add proposed text.

Justification: -

Proposed Text (if applicable): “Add the following text at the end of the existing CS-VLA 967 (e)”

EASA response: *Accepted*

Proposed text will be used.

Commenter 2 : LBA (Mr. Helmut Fendt) – date 09-08-2016**Comment # 5****Paragraph No:** ELOS-VLA.49-01-49 c)

Comment: The increase of speed is as much as 35%. In comparison the increase of MTOW within the CS 22 is mentioned. When increasing the MTOW of powered sailplanes within the CS 22 only 5% were accepted. An increase of the MTOW of sailplanes to the value (850 kg) was refused with the argument that this was more than 10% and could not be accepted. Please refer to: SC-A22.1.01 “Increase in maximum mass for sailplanes and powered sailplanes”.

Justification: -**Proposed Text (if applicable):** -**EASA response: Noted**

The comment does not provide a clear proposal nor raises a clear concern so it will be replied as a statement/acknowledgment.

The proposed ELOS is aimed to provide a level of safety equivalent to the safety target as set by CS-VLA, for aeroplanes not able to meet the stall speed requirement of CS-VLA 49 b).

The comparison proposed (5% vs 35%) cannot be set as such, since the categories of aeroplanes are different and, the increase of weight in sailplanes has different implications with respect to an increase of stall speed for CS-VLA aeroplanes, even if they both result in an increase of the energy at impact. The CS-VLA code is a simplification of the CS-23 code, for aeroplanes with simpler design, reduced speed, reduced weight, reduced number of passengers and engines. The ELOS is considered acceptable since it re-establishes those requirements which were removed from CS-23 due to the reduced stall speed, but maintains the overall safety target of CS-VLA (the other CS-23 requirements are not imposed).

On the other hand a limit to 61 kts is set since it is an existing “historical” limit for CS-23 (up to CS-23 amendment 2) and furthermore this was the limit that was in place at the time when the former JAR-VLA was derived from JAR-23. It should be noted that there are other limitations to the stall speed that are indirectly posed by other CS-VLA requirements, i.e. CS-VLA 51 that limits the take-off distance to 500m.

It was found during the review process that the requirement to which this comment refers to is CS-VLA 49b, therefore the number of this requirement will be changed to ELOS-VLA.49-01-49 b) accordingly.

Comment # 6**Paragraph No:** ELOS-VLA.49-01

Comment: We wonder, why this item is called “ELOS”. From our point of view, this is a typical “Special Condition”. The relevant requirements from CS 23 are applied.

Justification: -

Proposed Text (if applicable): -

EASA response: *Noted*

The ELOS is found more appropriate. see comment 5.

Comment # 7**Paragraph No:** ELOS-VLA.49-01-71

Comment: If the glide ratio should serve as alternative to a low stall speed it is not sufficient to establish the glide ratio but a min. value must be defined.

Justification: -

Proposed Text (if applicable): -

EASA response: *not accepted*

The requirement is aimed to provide the same level of protection of CS-23 (From which the CS-VLA is derived), by providing the pilot the gliding performance of the aeroplane. A minimum value would be an additional limit to the stall speed and as such this limit is already established through other requirements of the ELOS (i.e. ELOS-VLA.49-01-49 b).

Commenter 3 : FAA (Mr. Doug Rudolph) – date 09-08-2016

Comment # 8**Paragraph No:** ELOS-VLA.49-01**Comment:** The FAA agrees with this proposed ELOS since it applies 23.562 and the pertinent parts of 23.561.**Justification:** -**Proposed Text (if applicable):** -**EASA response:** *Noted*

Commenter 4 : TCCA (Mr. Ngassam) – date 23-08-2016**Comment # 9****Paragraph No:** ELOS-VLA.49-01:

Comment: General: our usual practice is to define an ELOS when a requirement is not met in a literal way, yet the safety intent of the requirement is fully met. We believe that in this case the safety intent of the 45kts stall speed requirement does not appear to be met, and therefore an ELOS is difficult to define. We would therefore have viewed this noncompliance addressed with an Exemption from the 45kts stall speed requirement, subject to mitigating conditions recovering the level of safety intended by the underlying standard.

Justification: -**Proposed Text (if applicable):** -**EASA response:** *see comment 5*

Comment # 9**Paragraph No:** ELOS-VLA.49-01-785 b)**Comment:** there appears to be a typographical error, where SC-VLA.562 should read ELOS-VLA.49-01-562.**Justification:** -**Proposed Text (if applicable):** -***EASA response: Accepted***

Proposed text will be used.