

SC CSTMG01
Powered Sailplane CSTMG01 – 01
Public Consultation for Special Condition
EASA

Commentor:	UK CAA
Comment:	The acceptance of a maximum take off weight of 900 kg for this powered sailplane (i.e. above the MTOW limit of 850kg given in CS22) is considered to be an erosion of the differences between airworthiness codes. Also, an increase in MTOW for powered sailplanes may lead to pressure for a similar increase for gliders.
Response:	Not accepted The certification specifications of CS22 have been reviewed and are considered applicable with the additional SC for this design exceeding the applicability of CS22. In due time this special condition could lead to a rulemaking activity, but this would not be available for this TC application.
Commentor:	Mr. De Florio
	<p>Subject: Comments to “CSTMG01 Special Condition in accordance to Part 21A.16 B (a) (1); Increased Maximum Take-Off Mass”.</p> <p>In the par. 21A. 16B is stated that <i>(a) The Agency shall prescribe special detailed technical specifications, named special conditions, for a product, if the related airworthiness code does not contain adequate or appropriate safety standards for the product, because:</i></p> <p><i>1. The product has novel or unusual design features relative to the design practices on which the applicable airworthiness code is based; or [...]</i></p> <p>In your document we have: <i>The applicant has applied for an EASA Type Certificate for a powered sailplane. The applied MTOM of 900 kg exceeds the limit of CS 22 for powered sailplanes of 850 kg. The increased maximum take off mass is a novel and unusual design feature for an aeroplane certified under CS 22.</i></p> <p>Your document does not explain the motivations (and justifications) for exceeding the MTOM....it could be the size of the aircraft, more fuel, more water ballast, a heavier structure, a heavier engine.....I don't know. In any case, taking one by one these possible features, there is nothing unusual relative to the design practices on which the CS 22 is based. (For example, special conditions were issued in the 1980s for composite primary structures in FAR 23 aeroplanes (new and unusual features) till the amendment in 1993 to include appropriate standards for using composites as primary structural components)</p> <p>Although the FAR documents cannot be deemed binding for EASA, in the absence of a CS 11 and inherent advisory material, it could be useful to mention what can be seen as basic airworthiness philosophy.</p> <p>In the FAA Order 8110.4B in par. 2-10 you can read: <i>The phrase "novel or unusual" applies to design features of the product to be certificated when compared to the applicable airworthiness standards. Special conditions will not be used to upgrade the</i></p>

	<p><i>applicable airworthiness standards when novel or unusual design features are not involved. A special condition contains only such airworthiness standards as are necessary to establish a level of safety equivalent to that established by the applicable regulations. Whenever the FAA determines that an upgrading of the airworthiness standards is warranted, the upgrading should be accomplished through the rulemaking process to amend the Federal Aviation Regulations.</i></p> <p>In other words and in our case, if the weight limits of an airworthiness standard are no more adequate for the type certification of products that manufactures and technical progress are able to offer to the market, this limits might (or should) be upgraded through an amendment of the standard according to the applicable rulemaking process.</p> <p>CONCLUSIONS</p> <ul style="list-style-type: none"> ○ It is inappropriate to state that a heavier MTOM can be considered a novel and unusual design feature. ○ On this basis, a special condition cannot be granted. ○ The MTOM might be upgraded through a rulemaking process leading to an amendment of the CS 22.
Response	<p>Not accepted</p> <p>The referenced FAA order is not contradicting the application of this SC. The FAA order only excludes “upgrading” of requirements by SC, or in other words increasing the safety level by SC is not acceptable.</p> <p>According to Part 21.A16B (b) the Agency can use special conditions containing such safety standards as the Agency finds necessary to establish a level of safety equivalent to that established in the applicable airworthiness code.</p> <p>The SC is specifically written for this TC application. The certification specifications of CS22 have been reviewed and are considered applicable with the additional SC for this design exceeding the applicability of CS22. In due time this special condition could lead to a rulemaking activity, but this would not be available for this TC application.</p>