CSTMG01 Special Condition in accordance to Part 21A.16 B (a) (1); Increased Maximum Take-Off Mass;

1. Introductory note:

The hereby presented Special Condition has been classified as an important Special Condition and as such shall be subject to public consultation, in accordance with EASA Management Board decision 02/04 dated 30 March 2004, Article 3 (2.) of which states:

"2. Deviations from the applicable airworthiness codes, environmental protection certification specifications and/or acceptable means of compliance with Part 21, as well as important special conditions and equivalent safety findings, shall be submitted to the panel of experts and be subject to a public consultation of at least 3 weeks, except if they have been previously agreed and published in the Official Publication of the Agency. The final decision shall be published in the Official Publication of the Agency."

2. Background

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. It has to be defined that the applicable airworthiness requirements do contain adequate or appropriate safety standards and if additional requirements have to be applied for this project. A Special Condition will be applied to ensure a level of safety equivalent according to Annex I of the basic regulation 1582/2002. A public consultation is needed according to EASA procedures.

a. Identification of issue

The CSTMG01 powered sailplane is a self launching sailplane. The design maximum mass exceeds the applicability upper limit of 850 kg stated in CS22.1 General for powered sailplanes.

b. EASA position

After considering the data provided by the applicant EASA agrees that the application of the requirements of the CS 22 is applicable for this self launching powered sailplane with an MTOM of 900 kg. By exceeding the mass limit of CS 22 by approximately 6 % the requirements of CS 22 were still applicable in general. As the MTOM influences the kinetic energy and concerning the ongoing rulemaking activity NPA 2007-12 EASA proposes to apply CS 22.561 - General as written in NPA 2007-12 - Cockpit crashworthiness.

3. Proposed Special Condition

1. Apply CS 22 as type certification basis for this self launching powered sailplane with an MTOW of 900 kg

2. Apply Emergency Landing Conditions CS 22.561 General as modified by NPA 2007-12. The proposed changes are :

CS 22.561 General

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(b)…….

(1)……

Upward	~~4.5~~ g	7.5 g
Forward	~~9.0~~ g	15.0 g
Sideward	~~3.0~~ g	6.0 g
Downward	~~4.5~~ g	9.0 g

(2) An ultimate load of ~~6~~ 9 times the maximum weight of the sailplane acting rearwards and upwards at an angle of 45° to the longitudinal axis of the sailplane and sideward at an angle of 5° acts on the forward portion of the fuselage at ~~the foremost point(s) suitable for the application of such a load~~ a suitable point not behind the pedals.

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Comments are invited on those special conditions and should be sent by mail or electronic mail (preferred means), before 16 November 2007, to:

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