Proposed Special Conditions to STC Project "A310 'Zero-G' Cabin Layout <u>Modification</u>

Introductory note:

The following Special Conditions have been classified as an important Special Conditions and as such shall be subject to public consultation, in accordance with EASA Management Board decision 12/2007 dated 11 September 2007, 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."

Statement of Issue

EASA received an application for an STC about, inter alia, the installation of a new cabin layout for an Airbus A310-300 series aeroplane. The new cabin layout features a door #1 area (forward of frame 19) and an aft area (aft of frame 61) which are comparable to airliners' configurations. Between these two areas, an 'empty area' is created. 'Empty area' means that this cabin zone is padded, but deprived of seats, monuments and any other installation to transport passengers or house any luggage or cargo. (this zone is to be used - under specific operating conditions - to house instrumentation material for scientific experiments, and persons, who will be experiencing the micro-gravity environment.) The STC cabin layout will have a novel or unusual design feature – a large padded empty cabin area.

The applicable airworthiness regulations do not contain adequate or appropriate safety standards for this design feature. These special conditions contain the additional safety standards that the European Aviation Safety Agency considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

Airbus A310 - Special Conditions D-01 – STC project A310 'Zero-g' Cabin Layout -

- 1. The means to prohibit access in flight to the empty area must be supported by appropriate design and adequately controlled.
- 2. The means to ensure accessibility of the forward emergency exits during Taxi Takeoff & Landing in case of emergency evacuation must be supported by appropriate design and adequately controlled.
- 3. An obvious and usable access path from the passenger area to the forward emergency exits must be provided, and over-wing exits deactivation should not introduce confusion in case of emergency evacuation.
- 4. The flammability performance of the protective padding materials in the empty area of the cabin should be established by appropriate testing method selected from FAR 25 Appendix F in order to comply with FAR 25.853(a) at Amdt 32.