Deviations request #87 for an ETSO approval for CS-ETSO applicable to Unit Load Device (ULD) (ETSO-C90d)
Consultation Paper

1. Introductory note

The hereby presented deviation requests shall be subject to public consultation, in accordance with EASA Management Board Decision No 7-2004 as amended by EASA Management Board Decision No 12-2007[1] products certification procedure dated 11th September 2007, Article 3 (2.) of which states:

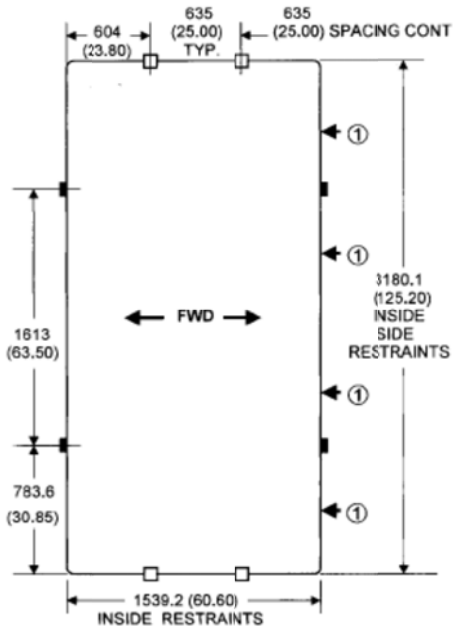
"2. Deviations from the applicable airworthiness codes, environmental protection certification specifications and/or acceptable means of compliance with Part 21, as well as important special conditions and equivalent safety findings, shall be submitted to the panel of experts and be subject to a public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

2. ETSO-C90d Cargo Pallets, Nets and Containers

Deviate from ETSO-C90d and SAE AS36100A section 8 by using different testing restraint conditions.

Requirements:

SAE AS36100A 8. TESTING RESTRAINT CONDITIONS {(RC) **L**}



①: During fore and aft testing, an evenly distributed horizontal force equal to 6 times the forward load shall be applied alongside the opposite pallet or container base edge to simulate a possible stack of up to 7 units.

[1] Cf. EASA Web: http://easa.europa.eu/management-board/docs/management-board-meetings/2007/04/MB%20Decision%2012-2007%20amending%20the%20certification%20procedure.pdf

Industry:

Performed the fore and aft testing using 4 (instead of 2) stopper blocks on each side of the ULD.

Equivalent level of Safety:
The restraint condition in AS36100A with two stopper blocks and a possible stack of seven units is based on conditions not used by the Industry. Indeed, one cargo aircraft manufacturer (Boeing) is allowing stacking up to seven units but using four stopper blocks; meanwhile, another cargo aircraft manufacturer (Airbus) allows the use of only two stopper blocks, but without stacking of ULDs.
Testing in the fore and aft directions using four stopper blocks represents the practical worst case scenario.
Note: This inconsistency has been brought up and discussed in SAE committee AGE-2A with various ULD manufacturers, Boeing, Airbus as well as FAA and EASA in order to amend the current standard and the (E)TSO.

EASA:
We accept the deviation limited to size K and L bases as that is all that was addressed by SAE in order to correct a discrepancy in the standard AS36100A.