B04: TSO for Temperature Controlled Container (TCC)



New Technical Standard Order for Temperature Controlled Containers (TCC).



FAA approached the SAE AGE2 committee to develop a new standard for "Temperature Controlled Containers ". That will be utilized as the point of reference in a new TSO (ETSO for EASA).

SAEAerospace

The new Aerospace Standard (AS) will be:

AS 6163 – Temperature Controlled Container – Performance Requirements & Test Parameters.



Container Classification

Due to the variability in design configuration, operational and transportation modes of current TCC, the following classifications within AS 6163 will be used to differentiate the certification requirements for each.

The classification of the container will be identifiable via a 2 digit code. The first digit will identify the container type, the second digit will identify the system type.

Container Type			System Type	
Α	Aircraft Temperature controlled		1	Active System
В	Container. (TSO C90) Non-Aircraft Temperature	DASH	2	Stored Energy System
	Controlled Container. (Palletized)		3	Stored Energy & Ground Active System



Non-Aircraft Container Restraint

- As an Airlines, what will I need to do differently for type B non-aircraft TCC?
- Follow a loading scheme that has been approved by the regulatory authority for each specific TCC. This will include a list of acceptable net, straps and pallet configurations that may be used as an acceptable means of restraint.





Image courtesy of CoolContainers LLC.

TCC Unique Marking

Currently Active TCC approved by the FAA require a decal to be affixed to the unit to verify to FAA Principal Inspectors that the unit is approved to fly on US air carriers.





Image courtesy of CSafe Global

TCC Approval Identification

Its is proposed that approved TCC's shall display one of the following decals dependant on its mode of operation, this will signify to the airlines that it is a regulatory approved device:





System Type 1: Aircraft Active

System Type 2: Stored Energy System Type 3: Stored Energy/Ground Active



Document Status:

- A draft of the standard has been through the AGE2A committee ballot.
- An updated draft of the document has been circulated to the working group that addressed comments received from the ballot and items discussed at the SAE meeting last month in Amsterdam.
- FAA & EASA have been requested to jointly evaluating the requirements and method of compliance for the TCC associated with the determining no impact to the aircrafts Smoke Detection and Fire Suppression system.



Next Steps

AS 6163 Document Process (6 – 12 months):

- 1. Approval by SAE AGE2 Committee.
- 2. Approval by SAE Council.
- 3. Publish Standard.

FAA Process (1-2 Years):

- 1. Create draft TSO referencing AS 6163.
- 2. Release draft for public comments.
- 3. Address public comments.
- 4. Publish TSO.

EASA – Review & create reciprocal ETSO (TBD)



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