

SUBJECT	:	Interconnected Fuel Tanks without Interconnected Tank Airspaces
REQUIREMENTS incl. Amdt.	:	CS 23.975 (a)(4) Amdt. 04
ASSOCIATED IM/AMC <sup>1</sup>	:	Yes□ / No ⊠
ADVISORY MATERIAL	:	none

## **INTRODUCTORY NOTE:**

The following Equivalent Safety Finding has been classified as important 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.) 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."

## **IDENTIFICATION OF ISSUE:**

The provision CS 23.975(a)(4) requires that airspaces of tanks with interconnected outlets must be interconnected. In previous time, this was traditionally complied with, by providing a physical interconnection line.

With the new technologies, the applicant might propose other means than physical interconnection line.

The intent of the provision CS 23.975(a)(4 is:

1. To prevent fuel flow from one tank to the other one due to a difference in pressure between the tanks potentially resulting in an imbalance.

2. The interconnection line provides a second vent source for each tank, in the event that the primary venting device is blocked.

3. To prevent the introduction of air into the fuel feed line due to a single vent failure, when multiple fuel tanks are interconnected, which may potentially lead to engine stoppage.

Considering all the above, the following Equivalent Safety Finding is proposed:

<sup>&</sup>lt;sup>1</sup> In case of SC, the associated Interpretative Material and/or Acceptable Means of Compliance may be published for awareness only and they are not subject to public consultation.





## Equivalent Safety Finding to CS 23.975 (a)(4) Amdt. 04

## Interconnected Fuel Tanks without Interconnected Tank Airspaces

It is acceptable to have no physical interconnection line, if the following compensating factors are met by design.

- 1. Fuel flow from one tank to another one, due to a difference in pressure between the tanks potentially resulting in an imbalance, shall be prevented.
- 2. A second vent source for each tank shall be installed.
- 3. Introduction of air into the fuel feed line due to a single vent failure shall be prevented, if multiple fuel tanks are interconnected.

