

SUBJECT : Interconnected Fuel Tanks without Interconnected Tank Airspaces

REQUIREMENTS incl. Amdt. : CS 23.975 (a)(4) Amdt. 04

ASSOCIATED IM/AMC¹ : 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:

¹ 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.

