

Proposed Deviation to JAR 25.813(e) : Emergency Exit Access – Applicable to Large Aeroplanes

Introductory note:

The hereby presented Deviation to the EASA Certification Basis 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. The final decision shall be published in the Official Publication of the Agency."

Statement of issue

JAR 25 813(e) states "No door may be installed in any partition between passenger compartments."

Whilst some of the doors must be considered to be "between passenger compartments" i.e. must be traversed in order to move between two compartments both of which may contain passengers during taxi, take-off and landing, others do not meet this description.

Doors in the latter category must be traversed in order to access an emergency exit or isolate compartments in which no seats approved for taxi, take-off and landing are installed (e.g. bedroom, bathroom).

Considering the differences between commercial and non-commercial operations, EASA has in the past issued deviations, with certain restrictions, allowing the installation of internal doors between passenger compartments.

The main justification for the deviation from JAR 25.813(e) is that private aeroplanes usually transport a limited number of passengers that are likely to be familiar with the specific layout of the cabin and with the safety features of each isolated compartment.

With the alternative use of non-commercial operation configuration (private) or usual commercial configurations (public transport) proposed by ACJC, the maximum seating capacity of the A330-300 (200 pax), on which the project is embodied, is not consistent with the assumptions of significant reduction of the seating capacity with respect to commercial operation and of passenger familiarity with the design features of the aeroplane.

Based on the similarity to the 'generic' Deviation used on previous Cabin lay-out modifications, the new or modified text in the below Deviation is highlighted in yellow. Even though the full Deviation text is presented for this public consultation in order to keep the context for understanding, only the highlighted parts are subject of consultation and commenting.

Airbus A330-300 – Deviation D-3301-001
Installation of interior door – JAR 25.813(e)

Therefore, the terms of the deviation, related to the installation of internal doors traditionally issued by EASA for non-commercial operation, is not considered strictly applicable to this specific project.

Proposed Deviation

EASA is ready to allow installation of internal doors on the A330-300, whenever use in commercial operations, provided that the following specific requirements are met :

- a) **There must be at least one longitudinal aisle where no internal doors are installed.**
- b) Each door between passenger compartments must be frangible. The frangible part of the door may be limited to the blow-out portion of the door for decompression. Frangibility should be demonstrated using the 5%ile female and the resulting aperture demonstrated to be large enough for a 95%ile male to escape.
- c) Each door between passenger compartments must have dual means to retain it in the open position, each of which is capable of reacting the inertia loads specified in JAR 25.561.
- d) In case of public transportation, the use of a door between passenger compartments is not acceptable. If the door remains installed, a separate feature must be installed to block the door in the open position. Setting of the blocked open configuration must be a duly documented maintenance action requiring the use of specific tools. It should be reminded that, in blocked open position, the door becomes part of the aircraft structure and shall therefore comply with all pertinent regulations.
- e) Each door between passenger compartments must have a means to signal to the flight crew in a timely manner when the cabin door is not latched in the proper take-off and landing configuration. Appropriate procedures/limitations to ensure that take-off and landing is prohibited, when any such door is not in the proper take-off and landing configuration, must be established.
- f) Each door between passenger compartments must be operable from either side and if a latch is installed, it must be capable of being unlatched from either side without the aid of a tool or key.
- g) A supplement to the Aeroplane Flight Manual shall be developed containing:
 - i. instructions on the operation of the internal doors, including their frangibility features;

- ii. a limitation specifying that the aeroplane can be operated only for non-commercial transportation and that the door shall be blocked in open position in the specific case of commercial transportation;
- iii. an instruction requiring the crew to deliver a detailed briefing to the passengers on the information from the AFM Supplement required at (g)(i) above.
- iv. the number of cabin crew members required to sit in the passenger exit areas near the internal doors, which will be equal to the minimum number of cabin crew members required in this area when complying with CS 25.803(c), plus one. The AFM shall explicitly state that the tasks of the additional cabin attendant seated at the passenger exit area is to monitor the status of the internal doors during taxi, take-off and landing (TT&L) and, in case any door jams closed during or before a crash, to create an evacuation path using the available door frangibility features.

Moreover, it must be noted that based on the above considerations, EASA will not allow any deviation from JAR 25.815 for the A330-300, whenever alternatively use in commercial and non-commercial operations.