



U.S. Department
of Transportation

**Federal Aviation
Administration**

Memorandum

Subject: Action: Review and Concurrence, Equivalent Level of Safety Finding for the Alenia Aeronautica Model C-27J
FAA Project Number TC03711B-T

Date: December 15, 2009

Reg Ref: § 25.791(b)

From: Manager, TSS Airframe and Cabin Safety, ANM-115

Reply to: Dan Jacquet
Attn of: ANM-115

To: Manager, International Branch, ANM-116

ELOS Memo #: TC03711B-T-C-5

Background

Title 14 Code of Federal Regulations (14 CFR) section 25.791(b) requires signs to notify persons seated in the cabin when seat belts should be fastened. Advisory Circular (AC) 25-17A, paragraph 143.b.(3), notes that "In remote areas, such as the lavatory or lower lobe galley, a sign with the words 'RETURN TO SEAT' is acceptable." (for compliance with § 25.791(b)). The C-27J lavatory, located in the Class E cargo compartment, does not include a sign to notify an occupant to return to their seat in the event of smoke/fire or turbulence.

Applicable regulation(s)

§ 25.791(b)

Regulation(s) requiring an ELOS

§ 25.791(b)

Description of compensating design features or alternative standards that allow the granting of the ELOS (including design changes, limitations or equipment need for equivalency)

In consideration of the absence of a lavatory "RETURN TO SEAT" information sign, Alenia proposes to limit the airplane occupancy to crew members only (two pilots plus one flight deck observer). The Airplane Flight Manual (AFM) procedures will include procedures to ensure a lavatory occupant is notified to return to their seat in the event of smoke/fire or turbulence. The AFM will also include procedures to ensure that all occupants have returned to the flight deck prior to initiating decompression of the Class E cargo compartment in the event of fire/smoke.

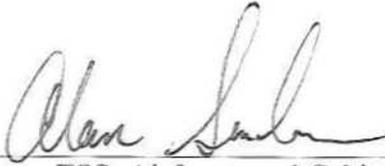
Explanation of how design features or alternative standards provide an equivalent level of safety to the level of safety intended by the regulation

The Return to Seat signage, installed in aircraft lavatories, has been used to alert aircraft occupants in the event of fire/smoke and/or turbulence. These occupants include aircraft passengers that generally do not have the training that crew members receive with regard to these types of events. The AFM voice alerting procedures, plus airplane occupancy limited to crew members only will provide an equivalent level of safety to the signage requirements of § 25.791(b).

FAA approval and documentation of the ELOS

The FAA has approved the aforementioned Equivalent Level of Safety Finding as documented in Issue Paper C-5. This memorandum provides standardized documentation of the ELOS that is non-proprietary and can be made available to the public. The Transport Directorate has assigned a unique ELOS Memorandum number (see front page) to facilitate archiving and retrieval of this ELOS. This ELOS Memorandum number should be listed in the Type Certificate Data Sheet under the Certification Basis section. [e.g. Equivalent Safety Findings have been made for the following regulation(s):

§ 25.791(b) Lavatory Passenger Information Signs (documented in TAD ELOS Memo TC03711B-T-C-5)



Manager, TSS, Airframe and Cabin Safety Branch,
ANM-115

12/28/09

Date

ELOS Originated by: Standards Staff, Airframe and Cabin Safety Branch	Project Engineer Dan Jacquet	Routing Symbol ANM-115
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