

Safety Regulation Group
Requirements and Policy Unit



VIA <http://dms.dot.gov>

Our Ref: 9/61/10CD

3rd April 2003

Docket Management System
US Department of Transportation
Docket No. FAA-2003-14193
Room Plaza 401
400 Seventh Street SW
Washington DC 20590-0001

Dear Sir,

Attention Rules Docket No: FAA-2003-14193 Design Standards for Fuselage Doors on Transport Category Airplanes

Please accept the attached comments on the Notice of Proposed Rulemaking.

Thank you for the opportunity to take part in your rulemaking process.

Yours faithfully,

Michael Poole
Surveyor

Civil Aviation Authority

Aviation House Floor 1E Gatwick Airport South Crawley West Sussex England RH6 0YR www.caa.co.uk
Direct Line 01293 573067 Fax 01293 573838 michael.poole@srg.caa.co.uk

Comments to Docket Number FAA-2003-14193
"Design Standards for Fuselage Doors on Transport Category Airplanes"

§ 25.783 Fuselage doors

The proposed new § 25.783 is a great improvement over the existing § 25.783. However, we feel that the existing JAR 25.783 (h) is a valuable requirement that should not be lost. Therefore we propose that the current text of JAR 25.783(h) should be introduced as a new § 25.807 (k), as follows:

"(k) Each passenger entry door in the side of the fuselage must qualify as a Type A, Type I, or Type II passenger emergency exit and must meet the requirements of § 25.807 to § 25.813 that apply to that type of emergency exit."

§ 25.783 (a) (2) General

This section states "Each door that could be a hazard if it unlatches must be designed so that opening is extremely improbable." As highlighted by underlining, the first part of the sentence associates the hazard with unlatching, but the latter part of the sentence associates the probability with opening. This is inconsistent. For consistency it is proposed that the section should state:

"Each door that could be a hazard if it unlatches must be designed so that *unlatching* is extremely improbable."

§ 25.783 (d) (3) (iii) Latching and locking

It is proposed that the word "as" in the final part of this section is unnecessary grammatically and potentially confusing. The section should be improved as follows:
"be designed so that, during pressurized flight, no single failure in the locking system would prevent the locks from restraining the latches necessary to secure the door."

§ 25.783 (d) Latching and locking

Many existing door designs incorporate features that prevent the latches from moving to the latched position if the door is not closed. This is an important feature that prevents the latched and locked functions being completed and correctly indicated even though the door is open, the only safeguard against dispatch being possibly one switch input to the indication system. It is a basic design philosophy for door security that each function should have independent integrity without reliance on the indication system to make good a shortfall in the design integrity of such functions.

It is therefore proposed that a new requirement be introduced as a new section § 25.783 (d) (8) as follows:

"(8) Each door that could result in a hazard if not closed must have means to prevent the latches from being moved to the latched position unless the door is closed."

§ 25.783 (e) (2) Warning, caution, and advisory indications

We suggest that it would provide a grammatical improvement if the text were amended to eliminate the repetitive reference to 'each door', as follows:

"There must be a positive means clearly visible from the operator station for each door that could be a hazard if unlatched, to indicate if the door is not fully closed, latched, and locked."

§ 25.783 (h) (5) Doors that are not a hazard

The second sentence of this section makes a reference to "this subpart". This is not an appropriate reference since the subject requirement (§ 25.783) is in subpart D whereas the structural design requirements are in subpart C. Therefore, it is proposed to amend this sentence as follows:

"This assessment must include the aeroelastic stability requirements of § 25.629, as well as the strength requirements of *subpart C*."