

Title 14—AERONAUTICS AND SPACE

Chapter I—Federal Aviation Administration, Department of Transportation

[Docket 10115, Amdt. 25-33, 121-98]

PART 25—AIRWORTHINESS STANDARDS: TRANSPORT CATEGORY AIRPLANES

PART 121—CERTIFICATION AND OPERATIONS: DOMESTIC, FLAG, AND SUPPLEMENTAL AIR CARRIERS AND COMMERCIAL OPERATORS OF LARGE AIRCRAFT

Emergency Exit Arrangement

The purpose of these amendments to the Federal Aviation Regulations is to provide for improved emergency exit configurations of transport category airplanes that are required by Part 121 to have a lockable door installed between the pilot and passenger compartments.

This amendment is based on a notice of proposed rule making (Notice 70-5) published in the FEDERAL REGISTER on February 3, 1970 (35 F.R. 2412). A number of comments were received in response to the notice, most of which were favorable. Some comments, however, suggested further changes or clarifications and the FAA's disposition of such comments is set forth hereinafter.

As explained in Notice 70-5, the proposal would assure that airplanes type certificated under Part 25 with a lockable door installed between the pilot compartment and the passenger compartment to meet the requirements of Part 121 have emergency exit configurations that do not require the flight crews or the passengers to use that door in order to reach the emergency exits provided for them. It was further proposed that the new exit requirements be made

retroactively applicable to all type certificates issued under Part 25 after the effective date of the amendment irrespective of the date of application.

Several commentators objected to the retroactive requirement proposed as new § 25.4 in Notice 70-5. It was stated that for the smaller transport category airplanes nearing type certification, compliance with the proposed standards would require a substantial redesign of the fuselages to add the necessary space in the cockpit area for the installation of a crew compartment emergency exit. Another commentator asserted that the retroactive requirement would place on a manufacturer of smaller transport category airplanes an impossible burden which is not commensurate with any safety benefit that might result. In this connection, the FAA has made a survey of the transport category airplanes in the process of type certification. We agree that for the manufacturers of those airplanes that are not yet certificated, but are relatively far along in the design program and "hardened" in configuration, the retroactive requirement would impose an unreasonable penalty. With respect to the large transport category airplanes and the large jumbo jets for which type certificate applications have been filed, it appears that all have been designed to meet the proposed requirement. In view of the foregoing and upon further consideration, the FAA has determined that the proposed new § 25.4 should be withdrawn.

A number of commentators recommended that certain of the smaller transport category airplanes be excepted from the proposed requirement. One contended that because of the fewer passengers carried, the shorter range, and the widespread use of such airplanes as business aircraft, the proposed standards were unnecessary and would restrict design by forcing the construction of larger airplanes. Another commentator, reading into the proposal an FAA intent to regulate only the "ultra-large" airplanes operated by CAB certificated air carriers,

recommended that large airplanes operated by air taxi and commercial operators under Part 135 be excepted from the rule. The FAA does not agree that there is justification for an exception to the emergency exit requirement merely because an airplane is operated under Part 135 rather than Part 121. The safety objectives of cockpit security and unobstructed evacuation paths are applicable to all airplanes required to comply with § 121.313(f). However, the FAA agrees that the proposed emergency exit configuration requirement need not be applied to transport category airplanes that have a passenger seating capacity of 20 seats or less. The exclusion of those airplanes from the proposed requirement is consistent with the exception provided in § 25.805 which recognizes the unreasonably difficult design problems associated with providing emergency exits in crew compartments of these airplanes. Accordingly, proposed § 25.772 has been revised to except from its applicability airplanes having a maximum passenger seating configuration of 20 seats or less.

The FAA does not agree with the comment recommending that further action on the proposal be withheld pending outcome of a CAB investigation of airplane weight limitations for air taxi operators. This proposal is based on the safety aspects of emergency evacuation and flight deck security which are not a part of the referenced CAB investigation.

In response to another comment, it should be noted that the intent of Amendment 121-67, adopted subsequent to the issuance of Notice 70-5, was to amend § 121.583(a) to provide an exception from the requirements of § 121.313(f) for airplanes carrying only those persons specified in that regulation. However, the comment has called to our attention an inadvertent reference to § 121.313(i) rather than to § 121.313(f) in the text of § 121.583 as made by Amendment 121-67. Accordingly, § 121.583(a) is amended to make this correction. In addition, at the request of industry, in order to assure

(As published in the Federal Register [37 F.R. 19607] on September 21, 1972)

that this operating exception to § 121.313(f) is clearly recognized, § 25.772 has been enlarged to cite § 121.583(a) specifically.

One commentator expressed concern that the proposal would tend to isolate the flight crew from the passengers and thus prevent the crew from having overall command of an emergency evacuation. The proposed rule is an aircraft certification requirement intended to provide improved evacuation capability for both crew and passengers without impairing cockpit security. Nothing in the proposal would prevent flight crew entry into the passenger compartment or preclude the flight crew from taking command during an emergency evacuation.

Several commentators suggested that an exception to the proposed emergency exit requirement be allowed by the installation of automatic unlocking doors, or doors that lock on the passenger side but are freely operable on the crew side, or by use of special hinges or knock-out panels, or by demonstration of freedom of movement through the door. It is the intent of the rule that under any foreseeable conditions of damage or malfunction of the crew compartment door, no airplane occupant be denied access to his required emergency exit. Since none of the conditions suggested provide for the contingency of a jammed door, the FAA does not agree that they provide acceptable alternatives.

One further comment recommended that reference to flight crew members be deleted in proposed § 25.772 because of the difficulties encountered in providing escape devices for descent from the high cockpits of the large jumbo jet airplanes. The contention was that since the volume of such devices makes it impractical to stow them in the cockpit area, the flight crew should be allowed egress through the pilot compartment door. However, the intent of the proposal, to insure flight crew egress in the event of an emergency evacuation, is as applicable to the jumbo jet category as to any other transport category airplanes. Moreover, because of the dimensions involved, it is even more important that the flight crews of the larger airplanes have readily accessible exits. With deletion of the proposed retroactivity requirement, no undue redesign burden is being placed on the manufacturers of airplanes now in the process of certification. For future airplanes, there appears no reason why suitable escape devices may not be incorporated at the initial design conception.

Interested persons have been afforded an opportunity to participate in the making of this amendment and due consideration has been given to all relevant matter presented.

In consideration of the foregoing, Parts 25 and 121 of the Federal Aviation Regulations are amended as follows,

effective October 21, 1972.

1. Part 25 is amended by adding a new § 25.772, following § 25.771, to read as follows:

§ 25.772 Pilot compartment doors.

(a) Except as provided in paragraph (b) of this section, if a lockable door is installed between the pilot compartment and the passenger compartment to comply with § 121.313(f) of this chapter, the emergency exit configuration of the airplane must be designed so that neither crewmembers nor passengers need use that door in order to reach the emergency exits provided for them.

(b) The provisions of paragraph (a) of this section do not apply to an airplane that—

(1) Has a maximum passenger seating configuration of 20 seats or less; or

(2) Is excepted from the equipment requirements of § 121.313(f) under the provisions of § 121.583(a) of this chapter.

2. Part 121 is amended by amending the lead-in sentence of paragraph (a) of § 121.583 by striking out the reference "121.313(f)" and substituting "121.313(f)" in place thereof.

(Secs. 313(a), 601, 603, 604, 605, Federal Aviation Act of 1958, 49 U.S.C. 1354(a), 1421, 1423, 1424, 1425; sec. 6(c), Department of Transportation Act, 49 U.S.C. 1655(c))

Issued in Washington, D.C., on September 14, 1972.

J. H. SHAFFER,
Administrator.