

to execute established emergency evacuation procedures, and to ensure realistic assignments of crewmember functions.

Amendment 25-15, effective October 24, 1967, introduced the emergency evacuation requirements into part 25. Newly created § 25.803 required airplane manufacturers to conduct an emergency evacuation demonstration for airplanes with a passenger seating capacity of 44 or more. The purpose of this demonstration was to establish the evacuation capability of the airplane. The time limit for this demonstration was established at 90 seconds. Concurrently, the time limit for the part 121 demonstration was reduced to 90 seconds by Amendment 121-30, also effective October 24, 1967. This reduction was primarily attributable to significant gains made in the efficacy of devices, such as inflatable slides, to assist in the evacuation. The purpose of the part 121 demonstration still focused on crew training and crew procedures so that demonstration conditions remained somewhat different between the two parts.

Section 25.803(d) listed conditions under which analysis could be used in lieu of a full-scale demonstration to demonstrate compliance with the regulation. The section stated that the full-scale demonstration did not have to be repeated for a change in the interior arrangement, or for an increase in passenger capacity of less than five percent, if it could be substantiated by analysis that all occupants could be evacuated in less than 90 seconds.

Amendment 25-46, effective December 1, 1978, revised § 25.803 to allow means other than actual demonstration to show the evacuation capability of the airplane and to replace the existing part 25 demonstration conditions with conditions that would satisfy both part 25 and part 121. In this way, one demonstration could be used to satisfy both requirements. In addition, Amendment 25-46 revised § 25.803 to allow analysis to be used to substantiate compliance for an increase in seating capacity of more than five percent. Part 121 was revised, by Amendment 121-149, effective December 1, 1978, to accept the results of demonstrations conducted in compliance with § 25.803 as of Amendment 25-46.

Amendment 25-72, effective August 20, 1990, placed the demonstration conditions previously listed in § 25.803(c) into a new Appendix J to part 25. This change was done for clarity and editorial consistency with part 121. In addition, emergency escape route requirements formerly contained

in § 25.803(e) were transferred to a new § 25.810(c).

Amendment 25-79, effective September 27, 1993, revised Appendix J to part 25 by revising the age/gender mix to be used when conducting an emergency evacuation demonstration, by allowing the use of stands or ramps for descending from overwing exits only when the airplane is not equipped with an off-wing descent means, and by prohibiting the flight crew from taking an active role in assisting in the passenger cabin.

Amendment 121-233, effective September 27, 1993, revised § 121.291(a), (a)(1), and (a)(2) to remove the requirement that the certificate holder conduct a full-scale evacuation demonstration if the airplane type and model had been shown to be in compliance with § 121.219(a) in effect on or after October 24, 1967, or, if during type certification the airplane had been shown to be in compliance with § 25.803 in effect on or after December 1, 1978. Additionally, an actual demonstration could be conducted in accordance with Appendix D to part 121 in effect on or after September 27, 1993, or in accordance with § 25.803 in effect on or after that date.

The Aviation Rulemaking Advisory Committee

The ARAC was formally established by the FAA on January 22, 1991 (56 FR 2190) to provide advice and recommendations to the FAA concerning the full range of the FAA's safety-related rulemaking activity. This advice was sought to develop better rules in less overall time using fewer FAA resources than are currently needed. The committee provides the opportunity for the FAA to obtain firsthand information and insight from interested parties regarding proposed new rules or revisions of existing rules.

There are approximately 60 member organizations on the committee, representing a wide range of interests within the aviation community. Meetings of the committee are open to the public, except as authorized by Section 10(d) of the Federal Advisory Committee Act.

The ARAC establishes working groups to develop proposals to recommend to the FAA for resolving specific issues. Tasks assigned to working groups are published in the **Federal Register**. Working group meetings are not generally open to the public; however, all interested persons are invited to become working group members when the group is formed. Working groups report directly to ARAC, and the ARAC

must adopt a working group proposal before that proposal can be presented to the FAA as an ARAC recommendation.

The activities of the ARAC do not, however, circumvent the public rulemaking procedures. After an ARAC recommendation is received and found acceptable by the FAA, the agency proceeds with the normal public rulemaking procedures. Any ARAC participation in a rulemaking package will be fully disclosed in the public docket.

Activities of the Performance Standards Working Group

On May 23, 1991, the first meeting of the ARAC was held in Baltimore, Maryland, pursuant to a notification in the **Federal Register** (56 FR 2190, January 22, 1991).

Members of the ARAC interested in issues involving emergency evacuation met on May 24, 1991, in Baltimore. At that meeting the charter for a working group that would report to ARAC was established as well as the group membership, which includes representatives from airplane and parts manufacturers, pilot, flight attendant and machinist unions, airlines, airworthiness authorities, passenger associations and other public interest groups. This diverse working group includes representatives from the United States, Canada, and Europe. The charter of the working group is to recommend to the ARAC whether new or revised emergency evacuation standards can and should be stated in terms of performance standards rather than design standards. The first meeting of the new PSWG was held on June 26, 1991, and the group has continued to meet on a bi-monthly basis since then.

Following two unsuccessful emergency evacuation demonstrations of an airplane on October 26, 1991, for which increased seating capacity was sought, and during which a participant was seriously injured, the ARAC was tasked by the FAA to work on recommendations for revising the emergency evacuation demonstration requirements and compliance methods to eliminate or minimize the potential for injury to demonstration participants. The ARAC decided to add this task to the charter of the PSWG.

In response to this additional task, the PSWG created a draft report for discussion. The draft report consisted primarily of two significant parts: recommendations of changes that could be made to the current demonstration that would improve participant safety, but that would not alter the basic character of the demonstrations; and, recommendations for when analysis