

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Parts 25 and 121****[Docket No. 28637; Notice No. 96-9]****RIN 2120-AF77****Miscellaneous Cabin Safety Changes****AGENCY:** Federal Aviation Administration (FAA), DOT.**ACTION:** Notice of proposed rulemaking.

SUMMARY: This document proposes to revise the airworthiness standards for transport category airplanes relating to flight attendant assist space, flight attendant assist handles, door hold open features, outside viewing means, interior compartment doors and portable oxygen equipment. With one exception, these proposals are not the result of any specific incident or recommendation, but are part of the Agency's continuing effort to upgrade the regulations to improve the overall level of safety in areas where the state-of-the-art and good design practice have indicated that such upgrades are warranted. These proposals would result in both new type design regulations as well as retroactive requirements implemented via the operating rules.

DATES: Comments must be received on or before November 21, 1996.

ADDRESSES: Comments on this notice may be mailed in triplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attn: Rules Docket (AGC-200), Docket No. 28637, 800 Independence Avenue SW., Washington, DC 20591; or delivered comments in triplicate to: Federal Aviation Administration, Room 915G, 800 Independence Avenue SW., Washington, DC 20591. Comments must be marked Docket No. 28637. Comments may also be submitted electronically to nprmcmts@mail.hq.faa.gov.

Comments may be examined in the Rules Docket weekdays, except Federal holidays, between 8:30 a.m. and 5 p.m. In addition, the FAA is maintaining an information docket of comments in the Transport Airplane Directorate (ANM-100), Federal Aviation Administration, 1601 Lind Avenue SW, Renton, Washington 98055-4056. Comments in the information docket may be examined in the Transport Airplane Directorate weekdays, except Federal holidays, between 7:30 a.m. and 4 p.m.

FOR FURTHER INFORMATION CONTACT: Jeffrey C. Gardlin, Regulations Branch, ANM-114, Transport Airplane Directorate, Aircraft Certification

Service, FAA, 1601 Lind Avenue SW, Renton, Washington 98055-4056; telephone (206) 227-2136.

SUPPLEMENTARY INFORMATION:**Comments Invited**

Interested persons are invited to participate in this proposed rulemaking by submitting such written data, views, or arguments as they may desire. Comments relating to any environmental, energy, federalism, or economic impacts that might result from adoption of the proposal contained in this notice are also invited. Substantive comments should be accompanied by cost estimates. Commenters should identify the regulatory docket or notice number and submit comments in triplicate to the Rules Docket address above. All comments received on or before the closing date for comments will be considered by the Administrator before taking action on this proposed rulemaking. The proposal contained in this notice may be changed in light of comments received. All comments received will be available in the Rules Docket, both before and after the closing date for comments, for examination by interested persons. A report summarizing each substantive public contact with FAA personnel concerning this rulemaking will be filed in the docket. Persons wishing the FAA to acknowledge receipt of their comments must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 28637." A postcard will be date/time stamped and returned to the commenter.

Availability of NPRM

An electronic copy of this document may be downloaded using a modem and suitable communications software from the FAA regulations section of the Fedworld electronic bulletin board service (telephone: 703-321-3339), the Federal Register's electronic bulletin board service (telephone: 202-512-1661), or the FAA's Aviation Rulemaking Advisory Committee Bulletin Board service (telephone: 202-267-5948).

Internet users may reach the FAA's web page at <http://www.faa.gov> or the Federal Register's web page at http://www.access.gpo.gov/su_docs for access to recently published rulemaking documents.

Any person may obtain a copy of this NPRM by submitting a request to the Federal Aviation Administration, Office Rulemaking, ARM-1, 800 Independence Avenue SW., Washington, DC 20591; or by calling (202) 267-9680.

Communications must identify the notice number of this NPRM. Persons interested in being placed on the mailing list for future NPRM's should also request a copy of Advisory Circulator No. 11-2A, Notice of Proposed Rulemaking Distribution System, which describes the application procedure.

Background

Primarily as a result of accidents during the 1960's, several amendments (25-15, 25-17, 25-20, and 25-32) to part 25 pertaining to cabin safety and crashworthiness were enacted. These amendments were designed to correct certain deficiencies identified during the investigations of the aforementioned accidents, and were, in many cases, made retroactive for airplanes already in service. Recent amendments pertaining to cabin safety have resulted from research and development in the areas of fire safety and evacuation slide performance, among others. As a result of the Public Technical Conference on Evacuation held in Seattle, Washington, in September 1985, several regulatory and advisory actions have been taken by the FAA to further upgrade standards in the cabin safety area. In a continuing effort to upgrade these standards the FAA is proposing to make several additional amendments which would further improve cabin safety. These proposals are not directly a result of the public conference but are actions deemed appropriate by the FAA considering the current state-of-the-art and existing design practice. One of the proposals follows a National Transportation Safety Board (NTSB) recommendation. Although nearly all existing installations already comply, the proposed rulemaking would ensure that any others comply as well.

Current policy for FAA rulemaking projects is to endeavor to achieve harmonization with the Joint Airworthiness Authorities (JAA) and other airworthiness authorities through the Aviation Rulemaking Advisory Committee (ARAC) and its harmonization working groups. This rulemaking project has not been the subject of a harmonization working group activity because it was initiated prior to the time that harmonization became the policy with the FAA and JAA. The proposals contained in this notice have, however, been coordinated with the Joint Aviation Authorities (JAA), during specialist meetings between the FAA and JAA. The JAA is in agreement with the proposals, but may provide comments on the detailed regulatory language. The JAA intends to incorporate these proposals into

paragraph 25 of the Joint Aviation Requirements (JAR-25) after they are finalized by the FAA.

Discussion

Section 25.813 requires that each non-overwing exit equipped with an assist means also have adequate space next to the exit for a flight attendant to stand and assist occupants while evacuating. The size of this "assist space" is not specified in the regulations. Guidance material in Civil Aeronautics Manual (CAM) 4b.362-6(b) states that the assist space should be a 12x20-inch rectangle on the floor and be useable. A rectangle of this size is generally recognized as the minimum size acceptable for compliance with § 25.813 or its predecessor § 4b.362(g) of the Civil Air Regulations (CAR). Deviations are, however, permitted if the efficacy of the assist space is demonstrated. Demonstrations of a smaller or irregular shaped assist space usually take place in controlled evacuation tests conducted under conditions similar to those specified in Appendix J to Part 25 for emergency evacuation demonstrations. While these demonstrations have value, they do not account for the potentially adverse conditions likely to be encountered in service. A minimum size for assist spaces needs to be established in the regulations to provide more standardized application of the requirement and give additional margins of safety under adverse conditions which may be encountered in service.

Service experience, both in tests and actual incidents, indicates that the assist space recommended in CAM 4b.362-6(b) is adequate; therefore, this notice proposes to amend § 25.813 to require that the assist space be a minimum of 12x20 inches on the floor with the 12-inch dimension parallel to the exit opening. The current requirement that the assist space must not obstruct the required passageway would be retained. The proposal does not specify the location of the assist space relative to the exit opening, since the best location may vary from one installation to another. In any case, the assist space should be located to provide the maximum benefit to evacuation. The minimum dimensions specified assume that a flight attendant would be able to stand upright, and installations which do not provide adequate headroom to enable a 95 percentile male to stand upright would probably need an increase in the fore and aft dimension of the assist space to provide the same level of efficacy as a full height installation. (Information on anthropometry can be found in NASA

reference publication 1024, Anthropometric Source Book Volume I, Anthropometry for Designers.) The amount of increase required in these instances would be dependent on the details of the installation and will not be specified in the regulation.

As proposed, the assist space requirement would apply to all of the larger exit types (i.e., Types I, II, and A) regardless of whether or not they are over the wing. Except for Type A exits, the current regulations do not require an assist space for exits over the wing. The need for an assist space at these exits is dependent primarily on the presence of an assist means where the rate of egress is critical. Future airplane designs, as well as current regulatory activity (Notice 90-4 (55 FR 6344, February 22, 1990)), may make the installation of overwing floor level exits an attractive option, so it is proposed to account for their use here. In addition, the current regulations only require an assist space for the larger exits when there is an assist means required. For airplanes of relatively small passenger capacity, service experience indicates that this is a reasonable standard. However, for airplanes with a larger passenger capacity, an assist space should be required whether or not an assist means is required. This proposal would also correct a longstanding editorial error in part 121, that states that assist spaces are required at all Type I or II exits, regardless of whether or not an assist means is installed. Therefore, this notice proposes to also require an assist space at all Type II or larger exits on airplanes with a passenger capacity of 79 or greater. (If a change proposed in Notice of Proposed Rulemaking 90-4 (55 FR 6344, February 22, 1990) is adopted, this would become 80 passengers in lieu of 79). This includes tailcone exits that are qualified for 25 additional passenger seats under the provisions of § 25.807(d)(3)(ii) and are required by § 25.810(a) to have such assist means, since these can become primary exits under certain evacuation scenarios and will require the assistance of a flight attendant to perform at their potential.

Conversely, the current regulations would require an assist space for a non-floor level, non-overwing exit which incorporates an assist means. There is at present one airplane with exits that fall into this category. Given the design difficulties presented by such a design, the prospects for such exits in the future do not seem likely. Furthermore the appropriateness of the current standards for such exits appears questionable (the one example currently in existence was approved by special conditions). This existing provision in the regulations

would, therefore, be removed by this proposal. In the unlikely event a design of this nature were proposed, the FAA would develop criteria appropriate for that design in the form of special conditions.

Most existing installations currently comply with this proposal, however for the few that do not, the economic penalty for direct compliance would be quite high. It is also difficult to quantify the benefit that might be gained from reconfiguring airplanes already manufactured and placed in service to comply with this proposal; therefore, no retroactive action is proposed. For newly manufactured airplanes, the economic burden of compliance is minimal. Therefore, it is proposed to amend § 121.310(f)(2) to require that the assist spaces of all airplanes manufactured two years after the effective date of this amendment comply with these criteria.

One common design feature of large transport airplanes has been an assist handle to enable flight attendants to steady themselves while assisting passengers in evacuating. The assist handle can be crucial in permitting the flight attendant to perform his or her duties efficiently. This, in turn, can have a direct bearing on the success of an emergency evacuation. There is, at present, no requirement for assist handles and most if not all installations incorporate them. Although an assist handle may not always be necessary due to the unpredictable nature of an emergency evacuation, it is a valuable tool that should be available to the flight attendant when it is needed. In addition, the assist handle is an integral part of flight attendant training. The addition of the requirement in part 25 would eliminate incompatibilities between the type design and operational requirements.

In some cases a handle designed to provide leverage when opening, or more commonly, closing passenger and service doors is installed. Often, this handle is not located at the designated assist space. Service experience has shown that the presence of the handle at another location can mislead a flight attendant into standing in a location that could obstruct the required passageway. Service experience also indicates that there is a need for assist handles to enable flight attendants to steady themselves while actuating the manual inflation handle on escape slides. The manual handle is located on the door sill, and essentially requires the attendant to straddle the door opening when pulling the handle. The attendant is quite vulnerable to the possibility of being pushed out of the

exit. The FAA expects that it would be possible for one handle to serve both purposes; however, two different handles might be needed at the same exit in some instances. The assist handle(s) should be usable by the range of flight attendants encompassing the 5th percentile female to the 95th percentile male.

This notice proposes to require that assist handles be installed at the designated assist space for all floor level exists that require an assist space. In addition, a companion change to § 121.310(l) is proposed that would be applicable to newly manufactured airplanes entering the fleet and require retrofit of the existing in-service fleet. A two year retrofit period is proposed.

Emergency evacuations are frequently necessary either due to, or in combination with, a hazard such as a fire outside the airplane. Because the hazard may pose an immediate threat to the occupants of the airplane, it is often necessary to avoid opening certain otherwise useable emergency exits to prevent injury to the evacuees. In this context, a viewing window or other means of assessing the outside conditions and determining whether an exit should be opened is extremely valuable. A viewing window is commonly provided in most exists in service; however, it is not required, and some exits in service do not incorporate one. The proposal would require a means (for example, either a window in the exit itself, or in an adjacent frame bay) that provides a view of the ground area where evacuees will make contact upon leaving the airplane. The means should provide visibility taking into account all conditions of landing gear collapse. Details such as size and prismatic characteristics of the viewing means are not specified. The FAA considers that sufficient design latitude should be available to permit several acceptable concepts. The viewing means would be required to be available to a person preparing to open an exit. Thus, if a window were in an adjacent frame bay, there could not be a partition or divider between the exit and the window to meet the intent of the proposal. For some exits, two windows might be installed at each exit in order to provide sufficient viewing coverage. This proposed viewing requirement would only apply to airplanes for which an application for type certificate is made after the effective date. Due to the technical difficulties and resultant cost of modifying existing airplanes, no retroactive requirement is proposed.

Also important is the capability of an exit to remain open during an evacuation without threat of premature

closing. Adverse attitude, wind or contact by evacuating passengers could cause an unsecured door to close during an evacuation, and jeopardize the safety of subsequent passengers. Most passenger emergency exits currently incorporate a feature which holds the door open and requires a positive action to disengage. This notice proposes to require a means to prevent an emergency exit from inadvertently closing once it has been opened in an emergency. The means must automatically engage when the exit is opened and require positive action to disengage. A removable hatch would be considered to comply, by definition. This proposal would amend § 25.809 for new type certificates. It is proposed to create a new § 121.310(l), and redesignate existing paragraph (l) as a new paragraph (n), which would require that airplanes in service after a date two years after the effective date of the amendment comply with the provisions of the part 25 requirement.

Following accident experience in the 1960's the FAA amended part 25 in Amendment 25-15, to prohibit the installation of doors "between passenger compartments." At the time of the amendment, it was common practice to divide the first class and tourist class cabins with a solid door. It was determined in the course of accident investigations that this door could be detrimental in evacuation of passengers, who tended not to recognize that there was an exit beyond the door, even if it were the closest available. The resulting regulatory change was geared specifically at preventing this occurrence. However, the current regulation is worded such that doors may be installed between passengers and exits provided there are not passengers on both sides of the door. For example, a door could be installed across the main passenger aisle at the end of a cabin. The current regulations only require that the door be open for takeoff and landing. It is now considered undesirable to permit the installation of a door between any passenger and an exit. Should such a door (either through omission or mechanical failure) become jammed in the event of an emergency evacuation, persons could be prevented or delayed in evacuating which could result in fatalities or injuries that would not otherwise have occurred. The hazards associated with a jammed door are still present whether or not passengers are on both sides of the door, and the recognition factor has not been mitigated. Either could result in the same consequences—failure of some

passengers to evacuate the airplane. This notice proposes to prohibit the installation of any door between any passenger and any passenger emergency exit. This would include doors that close off galley areas as passageways or crossaisles, doors across emergency exits (frequently used on "VIP" airplanes), and doors into rooms that are occupiable for takeoff and landing. This would also include a door across one of the aisles on a multi-aisle airplane, since this closes off the most direct route to an exit for some of the passengers.

In the past there has been considerable discussion regarding what constituted a "door." One common proposal has been to install a fabric diaphragm bounded by a metal frame which is movable, usually much like a pocket door. This type of installation has been accepted provided the frame provides no more resistance to a person passing through it than a normal curtain tie back. Such installations do, however, create the same recognition problem as do "solid" doors and would no longer be acceptable.

The proposed change to § 25.813(e) would apply to all transport category airplanes for which an application for type certificate is made after the effective date regardless of whether they are used in air carrier service. Section 25.813(f) would also be modified to account for seats that might be occupied by crew outside of the flight deck. In addition, § 121.310(f)(6) would make the new standards applicable to all other transport category airplanes manufactured after two years after the effective date of this amendment.

These requirements would not be applied retroactively to non air-carrier operations, i.e., corporate airplanes where the number of passengers involved is much smaller and there has been no demonstrated unsafe condition.

Finally, the FAA proposes to require that oxygen masks be connected to portable oxygen equipment. This proposal follows NTSB Safety Recommendation No. A-90-54. During the decompression experienced in the February 1989 United Airlines Flight 811 accident, the NTSB determined that flight attendants had difficulty in using the portable oxygen bottles. These bottles are intended to enable them to move about the cabin, with an adequate oxygen supply, after a decompression. The oxygen masks were not connected to the dispensing terminal of the oxygen bottle, thus requiring an additional action by the flight attendant before the unit was useable. The NTSB recommended that all such masks be connected to the oxygen supply, to

minimize the time and dexterity necessary for flight attendants to don and use the portable oxygen. The FAA agrees with this recommendation, and therefore proposes to change § 25.1447(c)(4) accordingly. In addition, a companion change is made to § 121.333(d), with a one year compliance time. A one year compliance time is chosen in this case because the modification required is a simple connection of the oxygen mask to the supply bottle. This can be done on an overnight visit, or any short interval maintenance visit. One year is considered more than enough time to achieve compliance.

A two year compliance time for incorporation of these changes into the existing fleet is used throughout this proposal, with the exception noted above. This approximates the "C" check maintenance cycles for most airplanes affected. This time period is sufficient to accomplish the relatively minor modifications required by this proposal, and offers operators some flexibility in scheduling. For newly manufactured airplanes, two years is considered sufficient to develop the necessary engineering and parts availability on airplanes which do not already incorporate the features described here. However, as previously noted, the majority of airplanes currently being delivered do incorporate these proposals, and so will not be affected by the compliance time.

An ambiguity in the provisions of § 25.853(d) concerning ash trays has been brought to the attention of the FAA. As presently worded, the second sentence could be misinterpreted to require ash trays in all areas of the cabin instead of just the designated smoking areas. Section 25.853(d) would be revised to require that all seated occupants in designated smoking areas are provided with ashtrays. Since designated smoking areas can vary from flight to flight, an adequate number of ashtrays would probably need to be installed at delivery to account for the largest smoking section anticipated by the airline. Alternatively, the size of the smoking section would be limited by the number and location of the ashtrays.

The introductory phrase in § 25.855, which contains safety standards for cargo and baggage compartments, states, "For each cargo and baggage compartment not occupied by crew or passengers, the following apply." It has been brought to the attention of the FAA that this phrase may also cause confusion. By definition, some compartments must be accessible to crewmembers to fight fires in flight; therefore, the exception made by the

introductory phrase can not (and has not been interpreted to) apply to compartments that are only occupied occasionally by crew or passengers. Furthermore, crew and passengers are not permitted to be seated or stationed on a full-time basis in cargo or baggage compartments. Since the exception does not apply to occasional occupancy and since crew and passengers do not occupy cargo or baggage compartments in flight on a full-time basis, the exception made in the phrase has no applicability. Using the present wording of the introductory phrase, it was alleged, in at least one instance, that the standards of § 25.855 did not apply because the cockpit was part of the cargo or baggage compartment. That allegation was unfounded regardless of the degree or method of separation, the cockpit can not be considered part of a cargo or baggage compartment. Nevertheless, it does show that the phrase can easily be misinterpreted. Since the exception has no applicability and may cause confusion, the introductory phrase would be reworded to simply state, "For each cargo or baggage compartment, the following apply." This would be a nonsubstantive change that would place no additional burden on any person.

Finally, as a result of the extensive changes to part 25 adopted in Amendment 25-72, many referenced sections were changed. Some of the references to these sections were inadvertently retained, however, and are no longer correct. Therefore, the FAA proposes to correct these references to correspond to the current structure of part 25. These changes are purely editorial in nature and affect §§ 25.807(d)(3)(ii), 25.812(g)(l)(ii), 25.812(g)(2), 25.812(h), 25.819(f) and 25.1411(c).

Regulatory Evaluation Summary

Regulatory Evaluation, Regulatory Flexibility Determination, and Trade Impact Assessment

Changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 directs Federal agencies to promulgate new regulations or modify existing regulations only if the potential benefits to society justify its costs. Second, the Regulatory Flexibility Act of 1980 requires agencies to analyze the economic impact of regulatory changes on small entities. Finally, the Office of Management and Budget directs agencies to assess the effects of regulatory changes on international trade. In conducting these assessments, the FAA has determined that this

proposed rule: (1) Would generate benefits exceeding its costs and is not "significant" as defined in Executive Order 12866; (2) is not "significant" as defined in DOT's Policies and Procedures; (3) would not have a significant impact on a substantial number of small entities; and (4) would not constitute a barrier to international trade. These analyses, available in the docket, are summarized as follows.

Costs and Benefits

The proposed rule would impose minimal incremental compliance costs on existing airplanes and airplanes manufactured under existing type-certificate because it would codify existing industry practices and clarify FAA requirements concerning cabin configuration and equipment specifications. With one exception, this proposed rule is expected to impose minimal compliance costs on future part 25 type certificated airplanes. The one exception would arise from the proposed part 25 requirement for a viewing window at each emergency exit door or adjacent bay. In order for a tailcone emergency exit to meet this proposed requirement, considerable engineering redesign may be needed. The FAA specifically requests public comment on the technical and economic feasibility of this proposed provision.

Similarly, the proposed rule would generate minimal real incremental benefits because it would codify current industry practices. The fact that the proposed rule reflects current industry practice indicates that airplane manufacturers and air carriers have determined that the proposals are warranted means of enhancing passenger and flight attendant survivability of a post-accident fire.

Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (RFA) was enacted by Congress to ensure that small entities are not unnecessarily and disproportionately burdened by government regulations. The RFA requires a Regulatory Flexibility Analysis if the proposed or final rule would have a significant economic impact, either detrimental or beneficial, on a substantial number of small entities. FAA Order 2100.14A, Regulatory Flexibility Criteria and Guidance, prescribes standards for complying with RFA review requirements in FAA rulemaking actions. The Order defines "small entities" in terms of thresholds, "significant economic impact" in terms of annualized cost thresholds, and "substantial number" as a number which is not less than eleven and which

is more than one-third of the small entities subject to the proposed or final rule.

Order 2100.14A specifies a size threshold for classification as a small manufacturer as 75 or fewer employees. No transport category airplane manufacturer has 75 or fewer employees. Therefore, the proposed rule would not have a significant economic impact on a substantial number of small manufacturers. Since the proposed rule would impose little or no incremental costs, there would not be a significant impact on a substantial number of small operators.

International Trade Impact Assessment

The proposed rule would not constitute a barrier to international trade, including the export of U.S. airplanes to foreign countries and the import of foreign airplanes into the United States.

Federalism Implications

The regulations proposed herein would not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

International Compatibility

The FAA has reviewed the corresponding International Civil Aviation Organization regulations, where they exist, and had identified no differences in these proposed amendments and the foreign regulations. The FAA has also reviewed the Joint Airworthiness Authority Regulations and has discussed similarities and differences in these proposed amendments and the foreign regulations.

Paperwork Reduction Act

In accordance with the Paperwork Reduction Act of 1980 (Pub. L. 96-511), there are no requirements for information collection associated with this proposed rule.

Conclusion

Because the proposed revised standards for airplane cabin safety are not expected to result in a substantial economic cost, the FAA has determined that this proposed regulation is not a significant regulation under Executive Order 12866. The FAA has also determined that this action is not

significant as defined in Department of Transportation Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). Since the airplanes involved are not manufactured by small entities, it is certified under the criteria of the Regulatory Flexibility Act that this proposed regulation, if adopted, will not have a significant economic impact, positive or negative, on a substantial number of small entities. A copy of the initial regulatory evaluation prepared for this proposal may be examined in the public docket or obtained from the person identified under the caption, **FOR FURTHER INFORMATION CONTACT.**

List of Subjects

14 CFR Part 25

Air transportation, Aircraft, Aviation safety, Safety.

14 CFR Part 121

Aviation safety, Safety, Air carrier, Air traffic control, Air transportation, Aircraft, Aircraft pilots, Airmen, Airplanes, Airports, Airspace, Cargo, Chemicals, Children, Narcotics, Flammable materials, Handicapped, Hazardous materials, Common carriers.

The Proposed Amendments

Accordingly, the Federal Aviation Administration (FAA) proposes to amend parts 25 and 121 of the Federal Aviation Regulations (FAR) (14 CFR parts 25 and 121) as follows:

PART 25—AIRWORTHINESS STANDARDS: TRANSPORT CATEGORY AIRPLANES

1. The authority citation for part 25 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701, 44702, 44704.

§ 25.807 [Amended]

By amending § 25.807, paragraph (d)(3)(ii) by removing the reference to “§ 25.809(h)” and inserting “§ 25.810(a)” in its place.

3. By amending § 25.809 by revising paragraph (a), and by adding a new paragraph (i) to read as follows:

§ 25.809 Emergency exit arrangement.

(a) Each emergency exit, including each flightcrew emergency exit, must be moveable door or hatch in the external walls of the fuselage, allowing unobstructed opening to the outside. In addition, each emergency exit must have means to permit viewing of the outside conditions when the exit is closed, so that likely areas of evacuee ground contact are visible. The likely areas of evacuee ground contact must be viewable with the landing gear extended

as well as in all conditions of landing gear collapse. The viewing means may be on the exit, or adjacent to it provided no obstructions exist between the exit and the viewing means.

* * * * *

(i) Each emergency exit must have a means to retain the exit in the open position, once the exit is opened in an emergency. The means must be automatically engaged when the exit is fully opened, and must require positive action to disengage.

4. By amending § 25.812 by revising paragraphs (g)(1)(ii), (g)(2), and (h), introductory kit, to read as follows:

§ 25.812 Emergency Lighting

* * * * *

(g) * * *

(1) * * *

(i) * * *

(ii) Not less than 0.05 foot-candle (measured normal to the direction of the incident light) for a minimum width of 42 inches for a Type A overwing emergency exit and of 2 feet for all other overwing emergency exits along the 30 percent of the slip-resistant portion of the escape route required in § 25.810(c) that is farthest from the exit; and

* * * * *

(2) At each non-overwing emergency exit not required by § 25.810(a) to have descent assist means the illumination must be not less than 0.03 foot-candle (measured normal to the direction of the incident light) on the ground surface with the landing gear extended where an evacuee is likely to make first contact with the ground outside the cabin.

(h) the means required in §§ 25.810(a) and (d) to assist the occupants in descending to the ground must be illuminated so that the erected assist means is visible from the airplane.

* * * * *

5. By amending § 25.813 by revising paragraphs (b)(1)(i) and (ii), (b)(2), (b)(3), by Adding new paragraphs (b)(4) and (b)(5) and by revising paragraphs (e) and (f) to read as follows:

§ 25.813 Emergency exit access

* * * * *

(b) * * *

(1) * * *

(i) Each assist space must be a rectangle 12 X 20-inches on the floor (or the minimum size necessary to enable a crewmember, standing erect, to effectively assist evacuees, whichever is greater) with the 12-inch dimension parallel to the exit opening, and

(ii) There must be a handle, or handles, at each assist space, located to enable the crewmember to steady himself or herself while manually

activating the assist means and while assisting passengers during an evacuation.

(2) For each Type A exit, assist space must be provided at each side of the exit regardless of whether a means is required by § 25.810(a).

(3) For each Type I or II exit installed in an airplane with seating for 79 or more passengers, an assist space must be provided at one side of the passageway regardless of whether a means is required by § 25.810(a).

(4) For each Type I or II exit, an assist space must be provided at one side of the passageway if a means is required by § 25.810(a).

(5) For any tailcone exit that qualifies for 25 additional passenger seats under the provisions of § 25.807(d)(3)(ii), an assist space must be provided, if a means is required by § 25.810(a).

(e) No door may be installed between any passenger seat occupiable for takeoff and landing and any passenger emergency exit, such that the door crosses any egress path (including aisles, crossaisles and passageways).

(f) If it is necessary to pass through a doorway separating any seat, occupiable for takeoff and landing (except those seats on the flight deck), from any emergency exit, the door must have a means to latch it in the open position.

§ 25.819 [Amended]

6. By amending § 25.819, paragraph (f), by removing the reference to "§ 25.785(c)" and inserting "§ 25.785(d)" in its place.

7. By amending § 25.853 by revising paragraph (d) to read as follows:

§ 25.853 Compartment interiors.

(d) Smoking is not to be allowed in lavatories. If smoking is to be allowed in any area occupied by the crew or passengers, an adequate number of self-contained, removable ashtrays must be provided in designated smoking sections for all seated occupants.

8. By amending the introductory text in § 25.855 to read as follows:

§ 25.855 Cargo or baggage compartments.

For each cargo or baggage compartment, the following apply:

9. By amending § 25.1411 by revising paragraph (c) to read as follows:

§ 25.1411 General

(c) *Emergency exit descent device.*

The stowage provisions for the emergency exit descent device required

by § 25.810(a) must be at each exit for which they are intended.

10. By amending § 25.1447 by revising paragraph (c)(4) to read as follows:

§ 25.1447 Equipment standards for the oxygen distributing units.

(c) * * *

(4) Portable oxygen equipment must be immediately available for each cabin attendant. The portable oxygen equipment must have the oxygen dispensing unit connected to the portable oxygen supply.

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

11. The authority citation for part 121 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 40119, 44101, 44701–44702, 44705, 44709–44711, 44713, 44716–44717, 44722, 44901, 44903–44904, 44912, 46105.

12. By amending § 121.310 by revising paragraph (f)(2), by redesignating paragraph (f)(6) as (f)(7); by adding a new paragraph (f)(6); by redesignating existing paragraph (l) as paragraph (n); by adding a new paragraph (l); and by republishing newly redesignated paragraphs (f)(7) and (n) to read as follows:

§ 121.310 Additional emergency exit equipment.

(f) * * *

(2) For each Type I or Type II emergency exit equipped with an assist means, there must be enough space next to the exit to allow a crewmember to assist in the evacuation of passengers without reducing the unobstructed width of the passageway below that in paragraph (f)(1) of this section. In addition, all airplanes manufactured on or after [insert a date two years after the effective date of this amendment] must comply with the provisions of §§ 25.813 (b)(1), (b)(2) and (b)(3) in effect on [insert the effective date of this amendment.] However, the Administrator may authorize a deviation from this requirement for an airplane certificated under the provisions of part 5b of the Civil Air Regulations in effect before December 30, 1951, if he finds that special circumstances exist that provide an equivalent level of safety.

(6) No person may operate a transport category airplane after a date two years

after the effective date of this amendment, that incorporates a door installed between any passenger seat occupiable for takeoff and landing and any passenger emergency exit, such that the door crosses any egress path (including aisles, crossaisles and passageways).

(7) If it is necessary to pass through a doorway separating the passenger cabin for other areas to reach required emergency exit from any passenger seat, the door must have a means to latch it in the open position, and the door must be latched open during each takeoff and landing. The latching means must be able to withstand the loads imposed upon it when the door is subjected to the ultimate inertia forces, relative to the surrounding structure, listed in § 25.561(b) of this chapter.

(l) After [insert a date two years after the effective date of this amendment] each airplane must comply with the provisions of §§ 25.809(i) and 25.813(b)(l)(ii) in effect on [insert the effective date of this amendment].

(n) *Portable lights.* After December 1, 1980, no person may operate a passenger-carrying airplane unless it is equipped with flashlight stowage provisions accessible from each flight attendant seat.

13. By amending § 121.333 by revising paragraph (d) as follows:

§ 121.333 Supplemental oxygen for emergency descent and for first aid; turbine engine powered airplanes with pressurized cabins.

(d) *Use of portable oxygen equipment by cabin attendants.* After a date one year after the effective date of this amendment each mask used for portable oxygen equipment must be connected to its oxygen supply. Above flight level 250, one of the following is required:

(1) Each attendant shall carry portable oxygen equipment with a 15 minute supply of oxygen; or

(2) There must be sufficient portable oxygen equipment (including masks and spare outlets) throughout the cabin so that such equipment is immediately available to each attendant, regardless of their location in the cabin.

Issued in Washington, D.C., on July 16, 1996.

Ava L. Robinson,
Special Assistant to Director, Aircraft
Certification Service.

[FR Doc. 96-18824 Filed 7-23-96; 8:45 am]

BILLING CODE 4910-13-M