

assumed to be static loads, and the hinge moments H must be computed from the formula:

$$H = K (1/2) \rho_o V^2 c S$$

Where—

- K = hinge moment factor for ground gusts derived in paragraph (c) of this section;
- ρ_o = density of air at sea level;
- V = 65 knots relative to the aircraft;
- S = area of the control surface aft of the hinge line;
- c = mean aerodynamic chord of the control surface aft of the hinge line.

(c) The hinge moment factor K for ground gusts must be taken from the following table:

Surface	K	Position of controls
(1) Aileron	0.75	Control column locked or lashed in mid-position.
(2) Aileron	*±0.50	Ailerons at full throw.
(3) Elevator	*±0.75	Elevator full down.
(4) Elevator	*±0.75	Elevator full up.
(5) Rudder	0.75	Rudder in neutral.
(6) Rudder	0.75	Rudder at full throw.

* A positive value of K indicates a moment tending to depress the surface, while a negative value of K indicates a moment tending to raise the surface.

(d) The computed hinge moment of paragraph (b) of this section must be used to determine the limit loads due to ground gust conditions for the control surface. A 1.25 factor on the computed hinge moments must be used in calculating limit control system loads.

(e) Where control system flexibility is such that the rate of load application in the ground gust conditions might produce transient stresses appreciably higher than those corresponding to static loads, in the absence of a rational analysis substantiating a different dynamic factor, an additional factor of 1.6 must be applied to the control system loads of paragraph (d) of this section to obtain limit loads. If a rational analysis is used, the additional factor must not be less than 1.2.

(f) For the condition of the control locks engaged, the control surfaces, the control system locks, and the parts of any control systems between the surfaces and the locks must be designed to the resultant limit loads. Where control locks are not provided, then the control surfaces, the control system stops nearest the surfaces, and the parts of any control systems between the surfaces and the stops must be designed to the resultant limit loads. If the control system design is such as to allow any

part of the control system to impact with the stops due to flexibility, then the resultant impact loads must be taken into account in deriving the limit loads due to ground gust.

(g) For the condition of taxiing with the control locks disengaged, or where control locks are not provided, the following apply:

(1) The control surfaces, the control system stops nearest the surfaces, and the parts of any control systems between the surfaces and the stops must be designed to the resultant limit loads.

(2) The parts of the control systems between the stops nearest the surfaces and the flight deck controls must be designed to the resultant limit loads, except that the parts of the control system where loads are eventually reacted by the pilot need not exceed:

(i) The loads corresponding to the maximum pilot loads in § 25.397(c) for each pilot alone; or

(ii) 0.75 times these maximum loads for each pilot when the pilot forces are applied in the same direction.

■ 13. Revise 25.1517 to read as follows:

§ 25.1517 Rough air speed, V_{RA} .

(a) A rough air speed, V_{RA} , for use as the recommended turbulence penetration airspeed, and a rough air Mach number, M_{RA} , for use as the recommended turbulence penetration Mach number, must be established. V_{RA}/M_{RA} must be sufficiently less than V_{MO}/M_{MO} to ensure that likely speed variation during rough air encounters will not cause the overspeed warning to operate too frequently.

(b) At altitudes where V_{MO} is not limited by Mach number, in the absence of a rational investigation substantiating the use of other values, V_{RA} must be less than $V_{MO}-35$ KTAS.

(c) At altitudes where V_{MO} is limited by Mach number, M_{RA} may be chosen to provide an optimum margin between low and high speed buffet boundaries.

Appendix G to Part 25 [Removed and Reserved]

■ 14. Remove and reserve appendix G to part 25.

Issued under authority provided by 49 U.S.C. 106(f) and 44701(a) in Washington, DC, on November 14, 2014.

Michael P. Huerta,
Administrator.

[FR Doc. 2014-28938 Filed 12-10-14; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 25

[Docket No. FAA-2014-0668; Special Conditions No. 25-572-SC]

Special Conditions: AAR Engineering Services, Boeing 757-200 Series Airplane; Seats With Non-Traditional, Large, Non-Metallic Panels

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special condition; request for comments.

SUMMARY: These special conditions are issued for the Boeing 757-200 series airplane. This airplane, as modified by AAR Engineering Services, will have novel or unusual design features when compared to the state of technology envisioned in the airworthiness standards for transport-category airplanes. This design feature includes seats with non-traditional, large, non-metallic panels on Boeing 757-200 series airplanes. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for this design feature. These special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

DATES: This action is effective on AAR Engineering Services on December 11, 2014. We must receive your comments by January 26, 2015.

ADDRESSES: Send comments identified by docket number FAA-2014-0668 using any of the following methods:

- *Federal eRegulations Portal:* Go to <http://www.regulations.gov/> and follow the online instructions for sending your comments electronically.
- *Mail:* Send comments to Docket Operations, M-30, U.S. Department of Transportation (DOT), 1200 New Jersey Avenue SE., Room W12-140, West Building Ground Floor, Washington, DC 20590-0001.
- *Hand Delivery or Courier:* Take comments to Docket Operations in Room W12-140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 8 a.m. and 5 p.m., Monday through Friday, except federal holidays.
- *Fax:* Fax comments to Docket Operations at 202-493-2251.

Privacy: The FAA will post all comments it receives, without change, to <http://www.regulations.gov/>, including any personal information the commenter provides. Using the search

function of the docket Web site, anyone can find and read the electronic form of all comments received into any FAA docket, including the name of the individual sending the comment (or signing the comment for an association, business, labor union, etc.). DOT's complete Privacy Act Statement can be found in the **Federal Register** published on April 11, 2000 (65 FR 19477–19478), as well as at <http://DocketsInfo.dot.gov/>.

Docket: Background documents or comments received may be read at <http://www.regulations.gov/> at any time. Follow the online instructions for accessing the docket or go to the Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except federal holidays.

FOR FURTHER INFORMATION CONTACT: John Shelden, FAA, Airframe and Cabin Safety Branch, ANM–115, Transport Airplane Directorate, Aircraft Certification Service, 1601 Lind Avenue SW., Renton, Washington 98057–3356; telephone 425–227–2785; facsimile 425–227–1320.

SUPPLEMENTARY INFORMATION: The FAA has determined that notice of, and opportunity for prior public comment on, these special conditions are impracticable because these procedures would significantly delay issuance of the design approval and thus delivery of the affected aircraft. In addition, the substance of these special conditions has been subject to the public-comment process in several prior instances with no substantive comments received. The FAA therefore finds that good cause exists for making these special conditions effective upon publication in the **Federal Register**.

Comments Invited

We invite interested people to take part in this rulemaking by sending written comments, data, or views. The most helpful comments reference a specific portion of the special conditions, explain the reason for any recommended change, and include supporting data.

We will consider all comments we receive on or before the closing date for comments. We may change these special conditions based on the comments we receive.

Background

On May 28, 2014, AAR Engineering Services applied for a supplemental type certificate for an interior reconfiguration that includes seats containing non-traditional, large, non-metallic panels on Boeing 757–200

series airplanes. The Boeing Model 757–200 series airplane, currently approved under Type Certificate No. A2NM, is a swept-wing, conventional-tail, twin-engine, turboprop-powered, single-aisle, medium-sized transport-category airplane.

The applicable regulations to airplanes currently approved under Type Certificate No. A2NM do not require seats to meet the more-stringent flammability standards required of large, non-metallic panels in the cabin interior. At the time the applicable rules were written, seats were designed with a metal frame covered by fabric, not with large, non-metallic panels. Seats also met the then-recently adopted standards for flammability of seat cushions. With the seat design being mostly fabric and metal, their contribution to a fire in the cabin had been minimized and was not considered a threat. For these reasons, seats did not need to be tested to heat-release and smoke-emission requirements.

Seat designs have now evolved to occasionally include large, non-traditional, non-metallic panels. Taken in total, the surface area of these panels is on the same order as the sidewall and overhead-stowage-bin interior panels. To provide the level of passenger protection established by the airworthiness standards, these large, non-traditional, non-metallic panels in the cabin must meet the standards of Title 14, Code of Federal Regulations (CFR) part 25, Appendix F, parts IV and V, heat-release and smoke-emission requirements.

Type Certification Basis

Under the provisions of § 21.101, AAR Engineering Services must show that the Boeing Model 757–200, as changed, continues to meet the applicable provisions of the regulations listed in Type Certificate No. A2NM, or the applicable regulations in effect on the date of application for the change, except for earlier amendments as agreed upon by the FAA.

The regulations incorporated by reference in the type certificate are commonly referred to as the “original type-certification basis.” The regulations incorporated by reference in A2NM are as follows:

Part 25, as amended by Amendment 25–1 through Amendment 25–45. In addition, an equivalent safety finding exists with respect to § 25.853(c), Compartment interiors.

In addition, the certification basis includes certain special conditions, exemptions, or later amended sections of the applicable part that are not relevant to these special conditions.

If the Administrator finds that the applicable airworthiness regulations (e.g., 14 CFR part 25) do not contain adequate or appropriate safety standards for the Boeing 757–200 series airplane because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16.

Special conditions are initially applicable to the model for which they are issued. Should the applicant apply for a supplemental type certificate to modify any other model included on the same type certificate to incorporate the same or similar novel or unusual design feature, these special conditions would also apply to the other model under § 21.101.

In addition to the applicable airworthiness regulations and special conditions, the Boeing 757–200 series airplane must comply with the fuel-vent and exhaust-emission requirements of 14 CFR part 34, and the noise-certification requirements of 14 CFR part 36.

The FAA issues special conditions, as defined in 14 CFR 11.19, in accordance with § 11.38, and they become part of the type-certification basis under § 21.101.

Novel or Unusual Design Features

The Boeing 757–200 series airplane will incorporate the following novel or unusual design feature:

These models offer interior arrangements that include passenger seats that incorporate large, non-traditional, non-metallic panels in lieu of the traditional metal frame covered by fabric. The flammability properties of these panels have been shown to significantly affect the survivability of cabin occupants in the event of fire. These seats are considered a novel design for transport-category airplanes that include Amendment 25–61 and Amendment 25–66 in the certification basis, and were not considered when those airworthiness standards were established.

The existing regulations do not provide adequate or appropriate safety standards for seat designs that incorporate large, non-traditional, non-metallic panels in their designs. To provide a level of safety that is equivalent to that afforded to the balance of the cabin, additional airworthiness standards, in the form of special conditions, are necessary. These special conditions supplement § 25.853. The requirements contained in these special conditions consist of applying the identical test conditions, required of all other large panels in the cabin, to

seats with large, non-traditional, non-metallic panels.

Discussion

In the early 1980s, the Federal Aviation Administration (FAA) conducted extensive research on the effects of post-crash flammability in the passenger cabin. As a result of this research and service experience, the FAA adopted new standards for interior surfaces associated with larger surface-area parts. Specifically, the rules require measurement of heat release and smoke emission (part 25, Appendix F, parts IV and V) for the affected parts. Heat release has been shown to have a direct correlation to post-crash fire-survival time. The materials that comply with the standards (e.g., § 25.853, "Compartment Interiors," as amended by Amendments 25-61 and 25-66) were found to extend survival time by approximately two minutes over materials that do not comply.

At the time Amendment 25-61 was written, the potential application of the requirement to seats was explored. The seat frame itself was not a concern because it was primarily made of aluminum and incorporated only small amounts of non-metallic materials (for example, a food-tray table and armrest closeout). The FAA determined that the overall effect on survivability was negligible, whether or not these panels met the heat-release and smoke-emission requirements. The requirements therefore did not address seats, and the preambles to both Notice of Proposed Rule Making (NPRM) 85-10 and the final rule (Amendment 25-61) specifically note that they were excluded ". . . because the recently adopted standards for flammability of seat cushions will greatly inhibit involvement of the seats" in their post-crash fire.

In the late 1990s, when it became clear that seat designs were evolving to include large non-metallic panels with surface area that would impact survivability during a cabin-fire event compared to partitions or galleys, the FAA issued Policy Memorandum 97-112-39. This memo noted that large surface-area panels must comply with heat-release and smoke-emission requirements, even if they were attached to a seat. If the FAA had not issued such policy, seat designs would have been an exception to the airworthiness standards, which could result in an unacceptable decrease in survivability during a cabin-fire event.

Definition of "Large, Non-Traditional, Non-Metallic panel"

A large, non-traditional panel, in this case, is defined as a panel with exposed-surface areas greater than 1.5 square feet installed per seat place. The panel may consist of either a single component or multiple components in a concentrated area. Examples of non-traditional areas include, but are not limited to, seat backs, bottoms and leg/foot rests, kick panels, back shells, and associated furniture. Examples of traditional, exempted areas include, but are not limited to, arm caps, armrest close-outs, and items such as end-bays and center consoles, food trays, video monitors, and shrouds.

Clarification of "Exposed"

"Exposed" is considered to include those panels directly exposed to the passenger cabin in the traditional sense, plus those panels enveloped, such as by a dress cover. Traditional fabrics or leathers currently used on seats are excluded from the special conditions. These materials must still comply with § 25.853(a) and (c) if used as a covering for a seat cushion, or § 25.853(a) if installed elsewhere on the seat. Large, non-metallic panels covered with traditional fabrics or leathers will be tested without their coverings or covering attachments.

Due to the way the aircraft industry manufactures seats and airplanes, the FAA recognizes that seat procurement is a long lead-time process. The FAA also recognizes that airplane operators value fleet commonality when buying airplane seats. However, special conditions, by definition, apply to the novel product and become effective on or shortly after their **Federal Register** publication date. The FAA has determined the applicability of these special conditions to be focused on new-seat certification programs. Because of the unique nature of the seats with non-traditional, large, non-metallic panels, the FAA has developed a unique definition of "new-seat certification program" and of "previously certified." This latter definition is unique because it has to be made at the seat type-design level, not at the aircraft type-design level.

In the context of this special condition only, not to be extended to other areas of aircraft certification for the reasons stated above, the FAA defines "new seat certification program" and "previously certified" as follows:

New-Seat Certification Program

Seats presented for new-installation certification, and that are newly designed and manufactured, must

comply with the special conditions. Any modification (change) to an existing or new non-traditional large non-metallic panel on a seat would be considered a new program, and all non-traditional panels on the seat would need to comply with the special conditions.

Previously Certified

Seats that have previously been designed, manufactured, and are in service or presented to go into service would not have to comply with this special condition, unless the large panels were being modified.

Applicability

As discussed above, these special conditions are applicable to the Boeing 757-200 series airplane as modified by AAR Aircraft Services. Should AAR Aircraft Services apply at a later date for a supplemental type certificate to modify any other model included on Type Certificate No. A2NM to incorporate the same novel or unusual design feature, these special conditions would apply to that model as well.

Conclusion

This action affects only certain novel or unusual design features on one model of airplane. It is not a rule of general applicability and affects only the applicant who applied to the FAA for approval of these features on the airplane.

The substance of these special conditions has been subjected to the notice and comment period in several prior instances and has been derived without substantive change from those previously issued. It is unlikely that prior public comment would result in a significant change from the substance contained herein. Therefore, because a delay would significantly affect the certification of the airplane, the FAA has determined that prior public notice and comment are unnecessary and impracticable, and good cause exists for adopting these special conditions upon publication in the **Federal Register**. The FAA is requesting comments to allow interested persons to submit views that may not have been submitted in response to the prior opportunities for comment described above.

List of Subjects in 14 CFR Part 25

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

The authority citation for these special conditions is as follows:

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

The Special Conditions

Accordingly, pursuant to the authority delegated to me by the Administrator, the following special conditions are issued as part of the type-certification basis for Boeing Model 757-200 airplanes modified by AAR Engineering Services:

1. Compliance with 14 CFR part 25, Appendix F, parts IV and V, heat release and smoke emission, is required for seats that incorporate large, non-traditional, non-metallic panels that may either be a single component or multiple components in a concentrated area in their design.

2. The applicant may designate up to and including 1.5 square feet of non-traditional, non-metallic panel material per seat place that does not have to comply with No. 1. A triple seat assembly may have a total of 4.5 square feet excluded on any portion of the assembly (e.g., outboard seat place 1 sq. ft., middle 1 sq. ft., and inboard 2.5 sq. ft.).

3. Seats need not meet the test requirements of part 25 Appendix F, parts IV and V when installed in compartments that are not otherwise required to meet these requirements. Examples include:

a. Airplanes with passenger capacities of 19 or fewer.

b. Airplanes that do not have smoke emission and heat release in their certification basis and do not need to comply with the requirements of 14 CFR 121.312.

c. Airplanes exempted from heat-release and smoke-emission requirements.

4. Only airplanes associated with new-seat certification programs approved after the effective date of these special conditions will be affected by the requirements in these special conditions. Previously certificated interiors on the existing airplane fleet and follow-on deliveries of airplanes with previously certificated interiors are not affected.

Issued in Renton, Washington, on November 13, 2014.

Jeffrey E. Duven,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2014-29029 Filed 12-10-14; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 95

[Docket No. 30994; Amdt. No. 517]

IFR Altitudes; Miscellaneous Amendments

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts miscellaneous amendments to the required IFR (instrument flight rules) altitudes and changeover points for certain Federal airways, jet routes, or direct routes for which a minimum or maximum en route authorized IFR altitude is prescribed. This regulatory action is needed because of changes occurring in the National Airspace System. These changes are designed to provide for the safe and efficient use of the navigable airspace under instrument conditions in the affected areas.

DATES: *Effective Date:* 0901 UTC, January 8, 2015.

FOR FURTHER INFORMATION CONTACT: Harry Hodges, Flight Procedure Standards Branch (AMCAFS-420), Flight Technologies and Programs Division, Flight Standards Service, Federal Aviation Administration, Mike Monroney Aeronautical Center, 6500 South MacArthur Blvd., Oklahoma City, OK 73169 (Mail Address: P.O. Box 25082, Oklahoma City, OK 73125) telephone: (405) 954-4164.

SUPPLEMENTARY INFORMATION: This amendment to part 95 of the Federal Aviation Regulations (14 CFR part 95) amends, suspends, or revokes IFR altitudes governing the operation of all aircraft in flight over a specified route or any portion of that route, as well as the changeover points (COPs) for Federal airways, jet routes, or direct routes as prescribed in part 95.

The Rule

The specified IFR altitudes, when used in conjunction with the prescribed changeover points for those routes, ensure navigation aid coverage that is adequate for safe flight operations and free of frequency interference. The reasons and circumstances that create the need for this amendment involve matters of flight safety and operational efficiency in the National Airspace System, are related to published

aeronautical charts that are essential to the user, and provide for the safe and efficient use of the navigable airspace. In addition, those various reasons or circumstances require making this amendment effective before the next scheduled charting and publication date of the flight information to assure its timely availability to the user. The effective date of this amendment reflects those considerations. In view of the close and immediate relationship between these regulatory changes and safety in air commerce, I find that notice and public procedure before adopting this amendment are impracticable and contrary to the public interest and that good cause exists for making the amendment effective in less than 30 days.

Conclusion

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore—(1) is not a “significant regulatory action” under Executive Order 12866; (2) is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. For the same reason, the FAA certifies that this amendment will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 95

Airspace, Navigation (air).

Issued in Washington, DC, on December 5, 2014.

John Duncan,

Director, Flight Standards Service.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, part 95 of the Federal Aviation Regulations (14 CFR part 95) is amended as follows effective at 0901 UTC, January 8, 2015.

■ 1. The authority citation for part 95 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40103, 40106, 40113, 40114, 40120, 44502, 44514, 44719, 44721.

■ 2. Part 95 is amended to read as follows: