The Federal credit union must meet the requirements of this subpart. This includes a 
description of how the Federal credit union will ensure that Senior Executive 
Officers, the board of directors, and 
personnel have the knowledge and 
experience in accordance with the 
requirements of this subpart; 
(5) A description of how the Federal 
credit union intends to use External 
Service Providers as part of its 
Derivatives program, and a list of the 
name(s) of and service(s) provided by the 
External Service Providers, as 
described in §703.107 of this subpart, it 
tends to use; 
(6) A description of how the Federal 
credit union will support the operations of Margining and collateral, as described 
in §703.104 of this subpart; 
(7) A description of how the Federal 
credit union will comply with the 
accounting and financial reporting in 
GAAP; and 
(8) Any additional information 
requested by the Regional Director. 
(c) Application review. (1) After the 
applicable Regional Director has 
completed his or her review, including 
any requests for additional information, 
the Regional Director will notify the 
Federal credit union in writing of his or 
her decision. Any denials will include 
the reason(s) for such denial. A Federal 
credit union subject to paragraph (b) of 
this section may not enter into any 
Derivative transactions under this 
subpart until it receives approval from 
the applicable Regional Director. At a 
Regional Director’s discretion, a Federal 
credit union may reapply if its initial 
application is denied. 
(2) A Federal credit union that 
receives a denial of its application may 
appeal such decision in accordance with 
part 746 of this chapter. 
(d) Change in condition—(1) Negative 
change in condition. A Federal 
credit union that at any time, experiences a 
change in negative condition such that it 
no longer meets the requirements of 
paragraph (a) of this section or renders 
its approved application inaccurate must 
immediately: 
(i) Cease entering into any new 
Derivatives; and 
(ii) Notify the applicable Regional 
Director. 
(2) Remedial action for a Federal 
credit union that experiences a negative 
change in condition. The applicable 
Regional Director may take all necessary 
actions, including, but not limited to, 
revoking a Federal credit union’s 
authority to engage in Derivatives and/ 
or requiring divesture of current 
Derivatives. A Federal credit union 
subject to this paragraph may not enter 
into new Derivatives unless notified in 
writing by the applicable Regional 
Director of its authority to do so. 
(3) Positive change in condition for a 
Federal credit union subject to 
paragraph (b) of this section. A Federal 
credit union that is required to submit 
an application under paragraph (b) of 
this section that, at any time after 
approval of such application, meets the 
requirements of paragraph (a) of this 
section shall no longer be subject to the 
requirements included in its approved 
application, but will continue to be 
subject to the requirements of this 
subpart. 

§703.109 Regulatory violation or unsafe 
and unsound condition. 
(a) Upon determination by the 
applicable Regional Director, and 
written notice by the same, a Federal 
credit union that no longer meets the 
requirements of this subpart; if 
applicable, fails to comply with its 
approved application; or is operating in 
an unsafe or unsound condition must 

immediately stop entering into any new 
Derivative transactions until the Federal 
credit union is notified by the 
applicable Regional Director in writing 
that it is permitted to resume engaging in 
Derivative transactions under this 
subpart. 
(b) If the applicable Regional Director 
determines a Federal credit union must 
take any action under paragraph (a) of 
this section, he or she will provide the 
Federal credit union with written notice 
including the reason(s) for such 
determination and the remedial actions 
that are required. 
(c) During this period, however, the 
Federal credit union may terminate 
eexisting Derivative transactions. A 
Regional Director may permit a Federal 
credit union to enter into offsetting 
transactions if he or she determines 
such transactions are part of a corrective 
action strategy; and 
(d) A Federal credit union that 
receives written notice under this 
section may appeal such determination 
in accordance with part 746 of the 
NCUA’s regulations. 

PART 741—REQUIREMENTS FOR 
INSURANCE 

7. The authority citation for part 741 
continues to read as follows: 

[Authority: 12 U.S.C. 1757, 1766(a), 1781– 
1790, and 1790d; 31 U.S.C. 3717.]

8. Amend §741.219 by revising 
paragraph (b) to read as follows: 

§741.219 Investment requirements. 

(b) Any credit union that is insured 
pursuant to title II of the Act must notify 
the applicable NCUA Regional Director in 
writing within five business days 
after entering into its first Derivatives 
transaction. Such transactions do not 
include those included in §703.14 of 
this chapter. 

PART 746—APPEALS PROCEDURES 

9. The authority citation for part 746 
continues to read as follows: 

[Authority: 12 U.S.C. 1766, 1787, and 1789.]

10. Amend §746.201 by revising 
paragraph (c) to read as follows: 

§746.201 Authority, purpose, and scope. 

(c) Scope. This subpart covers the 

appeal of initial agency determinations 
by a program office which the petitioner 
have a right to appeal to the NCUA Board 
under the following regulations: 
§§701.14(e), 701.21(h)(3), 701.22(c), 
701.23(h)(3), 701.32(b)(5), and 
701.34(a)(4), appendix A to part 701 of 
this chapter, appendix B to part 701 of 
this chapter, Chapters 1–4, §§703.20(d), 
703.108(b), 705.10(a), 708a.108(d), 
708a.304(b), 708a.308(d), 709.7, 
741.11(d), and 745.201(c), subpart J to 
part 747 of this chapter, and §750.6(b).

DEPARTMENT OF TRANSPORTATION 

Federal Aviation Administration 

14 CFR Part 25 

Special Conditions: Haeco Cabin 
Solutions, Boeing Commercial 
Airplanes Model 737–800 Airplane; 
Structure-Mounted Airbags 

AGENCY: Federal Aviation 
Administration (FAA), DOT. 
ACTION: Final special conditions. 

SUMMARY: These special conditions are 
issued for the Boeing Commercial 
Airplanes (Boeing) Model 737–800 
airplane. This airplane, as modified by 
Haeco Cabin Solutions (Haeco), will 
have a novel or unusual design feature 
when compared to the state of 
technology envisioned in the 
airworthiness standards for transport 
category airplanes. This design feature 
is structure-mounted airbags designed to 
protect each occupant from serious head 
injury in the event of an emergency 
landing. 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: Effective May 26, 2021.


SUPPLEMENTARY INFORMATION:

Background

On September 1, 2020, Haeco applied for a supplemental type certificate for structure-mounted airbags in the Boeing Model 737–800 airplane. The Boeing Model 737–800 airplane, which is a derivative of the Boeing Model 737 airplane currently approved under Type Certificate No. A16WE, is a twin-engine, transport-category airplane with seating for 189 passengers and a maximum takeoff weight of 174,200 pounds.

Type Certification Basis

Under the provisions of title 14, Code of Federal Regulations (14 CFR) 21.101, Haeco must show that the Boeing Model 737–800 airplane, as changed, continues to meet the applicable airworthiness regulations listed in Type Certificate No. A16WE or the applicable regulations in effect on the date of application for the change, except for earlier amendments as agreed upon by the FAA.

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 Model 737–800 airplane because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.18.

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 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 Model 737–800 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 Model 737–800 airplane will incorporate the following novel or unusual design features:

- Airbags mounted to structure to prevent head injury.

Discussion

Haeco will install structure-mounted airbags instead of inflatable lap belts as a means to protect each occupant from serious injury in the event of an emergency landing, as required by § 25.562(c)(5), on 737–800 airplanes. Such use of airbags to provide injury protection for the occupant is a novel or unusual feature for this airplane model, and the applicable airworthiness regulations do not contain adequate or appropriate airworthiness standards for these design features. Therefore, special conditions are needed to address requirements particular to installation of airbags in this manner.

Special conditions exist for airbags installed on seat belts, known as inflatable lap belts, which have been installed on transport airplane passenger seats. Structure-mounted airbags, although a novel design, were first introduced on Jetstream Aircraft Limited Model 4100 series airplanes, which resulted in issuance of Special Conditions 25–ANM–127 on May 14, 1997. These special conditions supplemented 14 CFR part 25 and, more specifically, §§ 25.562 and 25.785.

The structure-mounted airbag, similar to the inflatable lap belt, is designed to limit occupant forward excursion in the event of an emergency landing. These airbags will reduce the potential for serious injury, including reducing the head-injury criterion measurement defined in part 25. However, structure-mounted airbags function similarly as automotive airbags, where the airbag deploys from furniture located in front of the passenger, relative to the airplane’s direction of flight, forming a barrier between the structure and occupant. Also, unlike the inflatable lap belt, the structure-mounted airbag does not move with the occupant. To account for out-of-position and brace-position occupants, the airbag is designed to conform to the curvature of the exposed structure in the head-strike zone.

Because the airbag system is essentially a single-use device, it could deploy under crash conditions that are not sufficiently so severe as to require the injury protection the airbag system provides. Because an actual crash is frequently composed of a series of impacts before the airplane comes to rest, a larger impact following the initial impact could render the airbag system unavailable. This potential situation does not exist with standard upper-torso restraints, which tend to provide continuous protection regardless of impact severity, or number of impacts, in a crash event. Therefore, the airbag system installation should be such that it provides protection, when it is required, by not expending its protection when it is not required. If the airbag deployment threshold is unnecessarily low, the airbag would need to continue to provide protection when an impact requiring protection occurs.

These special conditions are based upon Special Conditions 25–605–SC for the Boeing Model 787–9 airplanes equipped with B/E Aerospace Super-Diamond model business-class passenger seats and associated furniture. Additionally, the special conditions address protection of the occupant’s neck and spine for the structure-mounted airbag deployment. When using the HIC15 head-injury method for airbag impacts (calculated in accordance with 49 CFR 571.208) the neck and spine limits are included as part of the allowance.

These additional conditions are based on special conditions issued previously on oblique seats. The proposed 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.

Discussion of Comments

The FAA issued Notice of Proposed Special Conditions No. 25–21–01–SC for the Boeing Model 737–800 series airplane, which was published in the Federal Register on March 16, 2021 (86 FR 14387). No comments were received, and the special conditions are adopted as proposed.

Applicability

As discussed above, these special conditions are applicable to the Boeing Model 737–800 airplane as modified by Haeco. Should Haeco apply at a later date for a supplemental type certificate to modify any other model included on Type Certificate No. A16WE to incorporate the same novel or unusual design feature, these special conditions would apply to that model as well.

Under standard practice, the effective date of final special conditions would be 30 days after the date of publication in the Federal Register. However, as the
certification date is imminent, the FAA finds that good cause exists to make these special conditions effective upon publication.

**Conclusion**

This action affects only a 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.

**List of Subjects in 14 CFR Part 25**

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

**Authority Citation**

The authority citation for these special conditions is as follows:

Authority: 49 U.S.C. 106(f), 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 737–800 airplanes, as modified by Haeco Cabin Solutions:

1. The applicant must demonstrate by test that the structure-mounted airbag will deploy and provide protection under crash conditions where it is necessary to prevent serious injury to a 50th percentile occupant, as specified in § 25.562. The means of protection must provide a consistent approach to energy absorption for a range of occupants, from a two-year-old child to a 95th percentile male. In addition, the following situations should be considered:

   1. The seat occupant is holding an infant.
   2. The seat occupant is a child in a child restraint device.
   3. The seat occupant is a child not using a child restraint device.
   4. The seat occupant is a pregnant woman.

a. **Head-Injury Criteria**

   Compliance with § 25.562(c)(5) is required, except that, if the ATD has no apparent contact with the seat/structure but has contact with an airbag, a head-injury criterion (HIC) unlimited score in excess of 1000 is acceptable, provided the HIC15 score (calculated in accordance with 49 CFR 571.208) for that contact is less than 700.

b. **Body-to-Wall/Furnishing Contact**

   If a seat is installed aft of structure (e.g., an interior wall or furnishing) that does not provide a homogenous contact surface for the expected range of occupants and yaw angles, then additional analysis or tests may be required to demonstrate that the injury criteria are met for the area that an occupant could contact. For example, if different yaw angles could result in different airbag performance, then additional analysis or separate tests may be necessary to evaluate performance.

c. **Neck-Injury Criteria**

   The seating system must protect the occupant from experiencing serious neck injury. The assessment of neck injury must be conducted with the airbag device activated, unless there is reason to also consider that the neck-injury potential would be higher for impacts below the airbag-device deployment threshold.

   (1) The $N_j$ (calculated in accordance with 49 CFR 571.208) must be below 1.0, where $N_j = F_{ij} / M_{ij} + M_{ij} / M_{ij}$, and $N_j$ critical values are:

   - (a) $F_{ij} = 1.530$ lb for tension
   - (b) $F_{ij} = 1.385$ lb for compression
   - (c) $M_{ij} = 229$ lb-ft in flexion
   - (d) $M_{ij} = 100$ lb-ft in extension

   (2) In addition, peak $F_{ij}$ must be below 937 lb in tension and 899 lb in compression.

   (3) Rotation of the head about its vertical axis, relative to the torso, is limited to 105 degrees in either direction from forward-facing.

   (4) The neck must not impact any surface that would produce concentrated loading on the neck.

d. **ATD and Test Conditions**

   Longitudinal tests conducted to measure the injury criteria above must be performed with the FAA Hybrid III ATD, as described in SAE 1999–01–1609, “A Lumbar Spine Modification to the Hybrid III ATD for Aircraft Seat Tests.” The tests must be conducted with an undeformed floor, at the most-critical yaw cases for injury, and with all lateral structural supports (e.g., armrests or walls) installed.

   **Note:** Applicant must demonstrate that the installation of seats via plinths or pallets meets all applicable requirements. Compliance with the guidance contained in policy memorandum PS–ANM–100–2000–00123, “Guidance for Demonstrating Compliance with Seat Dynamic Testing for Plinths and Pallets,” dated February 2, 2000, is acceptable to the FAA.

   2. The structure-mounted airbag must provide adequate protection for each occupant regardless of the number of occupants of the seat assembly.

   3. The structure-mounted airbag system must not be susceptible to inadvertent deployment as a result of wear and tear, or inertial loads resulting from in-flight or ground maneuvers (including gusts and hard landings) likely to be experienced in service.

   4. The applicant must demonstrate that an inadvertent deployment that could cause injury to a standing or sitting person is improbable. Inadvertent deployment must not cause injury to anyone who may be positioned close to the structure-mounted airbag (e.g., seated in an adjacent seat, or standing adjacent to the airbag installation or the subject seat). Cases where a structure-mounted airbag is inadvertently deployed near a seated occupant or an empty seat must be considered.

   5. Inadvertent deployment of the structure-mounted airbag during the most critical part of flight will either not cause a hazard to the airplane or is extremely improbable.

   6. Deployment of the structure-mounted airbag must not introduce hazards or injury mechanisms to the seated occupant, including occupants in the brace position. Deployment of the structure-mounted airbag must also not result in injuries that could impede rapid exit from the airplane.

   7. Effects of the deflection and deformation of the structure to which the airbag is attached must be taken into account when evaluating deployment and location of the inflated airbag. The effect of loads imposed by airbag deployment, or stowed components where applicable, must also be taken into account.

   8. The applicant must demonstrate that the structure-mounted airbag, when deployed, does not impair access to the seatbelt- or harness-release means, and must not hinder evacuation. This will include consideration of adjacent seat places and the aisle.

   9. The airbag, once deployed, must not adversely affect the emergency-lighting system, and must not block escape-path lighting to the extent that the light(s) no longer meet their intended function.

   10. The structure-mounted airbag must not impede occupants’ rapid exit from the airplane 10 seconds after its deployment.

   11. Where structure-mounted airbag systems are installed in or close to passenger evacuation routes (other than for the passenger seat for which the airbag is installed), possibility of impact on emergency evacuation (e.g., hanging in the aisle, potential trip hazard, etc.) must be evaluated.

   12. The airbag electronic system must be designed to be protected from lightning per § 25.1316(b), and high-
intensity radiated fields per § 25.1317(c).

13. The structure-mounted airbag system must not contain or release hazardous quantities of gas or particulate matter into the cabin.

14. The structure-mounted airbag installation must be protected from the effects of fire such that no hazard to occupants will result.

15. The inflatable bag material must meet the 2.5-inches-per-minute horizontal flammability test defined in 14 CFR part 25, appendix F, part I, paragraph (a)(1)(iv).

16. The design of the structure-mounted airbag system must protect the mechanisms and controls from external contamination associated with that which could occur on or around passenger seating.

17. The structure-mounted airbag system must have a means to verify the integrity of the structure-mounted airbag activation system.

18. The applicant must provide installation limitations to ensure installation compatibility between the seat design and opposing monument or structure.

Issued in Kansas City, MO, on May 21, 2021.

Patrick R. Mullen,
Manager, Technical Innovation Policy Branch, Policy and Innovation Division, Aircraft Certification Service.

[FR Doc. 2021–11136 Filed 5–25–21; 8:45 am]
BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

14 CFR Part 95
[Docket No. 31372; Amdt. No. 559]

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 0901 UTC, June 17, 2021.

FOR FURTHER INFORMATION CONTACT:

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 May 19, 2021.

Thomas J. Nichols,

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, June 17, 2021.

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: