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 the Boeing Model 777–300ER airplane as modified by TIMCO Aerosystems.

Side-Facing Seats Special Conditions

In addition to the requirements of § 25.562:

1. Head-Injury Criteria

   Compliance with § 25.562(c)(5) is required, except that, if the anthropomorphic test device (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.

2. 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 and/or test(s) 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 test(s) may be necessary to evaluate performance.

3. 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.

   a. The Nij (calculated in accordance with 49 CFR 571.208) must be below 1.0, where \( N_{ij} = F_{ij}/F_{uc} + M_{ij}/M_{uc} \), and \( N_{ij} \) critical values are:

      i. \( F_{uc} = 1530 \text{ lb for tension} \)
      ii. \( F_{uc} = 1385 \text{ lb for compression} \)
      iii. \( M_{uc} = 229 \text{ lb-ft in flexion} \)
      iv. \( M_{uc} = 100 \text{ lb-ft in extension} \)

   b. In addition, peak upper-neck \( F_{z} \) must be below 937 lb of tension and 899 lb of compression.

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

   d. The neck must not impact any surface that would produce concentrated loading on the neck.

4. Spine and Torso Injury Criteria

   a. The shoulders must remain aligned with the hips throughout the impact sequence, or support for the upper torso must be provided to prevent forward or lateral flailing beyond 45 degrees from the vertical during significant spinal loading. Alternatively, the lumbar spine tension \( (F_{z}) \) cannot exceed 1200 lb.

   b. Significant concentrated loading on the occupant’s spine, in the area between the pelvis and shoulders during impact, including rebound, is not acceptable. During this type of contact, the interval for any rearward (X-direction) acceleration exceeding 20g must be less than 3 milliseconds as measured by the thoracic instrumentation specified in 49 CFR part 572, subpart E, filtered in accordance with SAE International (SAB) 211–1.

   c. Occupant must not interact with the armrest or other seat components in any manner significantly different than would be expected for a forward-facing seat installation.

5. Longitudinal test(s), conducted to measure the injury criteria above, must be performed with the FAA Hybrid III ATD, as described in SAE 1999–01–1609. The test(s) must be conducted with an undeformed floor, at the most-critical yaw case(s) for injury, and with all lateral structural supports (armrests/walls) installed.

   Note: TIMCO Aerosystems must demonstrate that the installation of seats via plinths or pallets meets all applicable requirements. Compliance with the guidance contained in FAA Policy Memorandum PS–ANM–100–2000–00123, dated February 2, 2000, titled “Guidance for Demonstrating Compliance with Seat Dynamic Testing for Plinths and Pallets,” is accepted by the FAA.

Inflatable Lap Belt Special Conditions

If inflatable lap belts are installed on single-place side-facing seats, the lap belts must meet Special Conditions no. 25–187A–SC.

Issued in Renton, Washington, on October 28, 2015.

Michael Kaszycki,
Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2015–27936 Filed 11–2–15; 8:45 am]

DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

14 CFR Part 25

[Docket No. FAA–2015–3368; Special Conditions No. 25–603–SC]

Special Conditions: Embraer Model EMB–545 and EMB–550 Airplanes; Occupant Protection For Side-Facing Seats Forward of Aft-Facing Seats

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions; request for comments.

SUMMARY: These special conditions are issued for Embraer Model EMB–545 and EMB–550 airplanes. These airplanes will have a novel or unusual design feature associated with a seat configuration of side-facing seats positioned forward of aft-facing seats, and with a structural armrest between the side-facing and aft-facing seats. 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: The effective date of these special conditions is November 3, 2015. We must receive your comments by December 18, 2015.

ADDRESSES: Send comments identified by docket number FAA–2015–3368 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 9 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 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:  

**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 airplane. The FAA therefore finds that good cause exists for making these special conditions effective upon issuance.

**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 by the closing date for comments. We may change these special conditions based on the comments we receive.

**Background**

On October 14, 2010, Embraer S.A. applied for an amendment to type certificate no. TC00062IB to include the new Embraer Model EMB–545 airplane. These special conditions allow installation of side-facing seats forward of aft-facing seats in Embraer Model EMB–545 and EMB–550 airplanes.

The Embraer Model EMB–545 airplane is a derivative of the Model EMB–550 airplane currently approved under type certificate no. TC00062IB. As compared to the Model EMB–550, the Model EMB–545 fuselage is one meter shorter. The Model EMB–545 airplane is designed for an eight-passenger configuration and a maximum of nine passengers (including lavatory seat).

**Type Certification Basis**

Under the provisions of 14 CFR 21.101, Embraer must show that the Model EMB–545 and EMB–550 airplanes meet the applicable provisions of the regulations listed in type certificate no. TC00062IB, 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 listed in the type certificate are commonly referred to as the “original type certification basis.” The regulations incorporated by reference in type certificate no. TC00062IB are as follows:

- **Title 14, Code of Federal Regulations** part 25, effective February 1, 1965, including Amendments 25–1 through 25–129, in their entirety. 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 (i.e., 14 CFR part 25) do not contain adequate or appropriate safety standards for Embraer Model EMB–545 and EMB–550 airplanes because of a novel or unusual design feature, special conditions are prescribed under §21.16.

Special conditions are initially applicable to the model for which they are issued. Should the type certificate for that model be amended later to include any other model that incorporates the same novel or unusual design feature, or should any other model already included on the same type certificate be modified 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, Embraer Model EMB–545 and EMB–550 airplanes 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**

Embraer Model EMB–545 and EMB–550 airplanes will incorporate the following novel or unusual design feature: Side-facing seats installed forward of aft-facing seats.

**Discussion**

This issuance of special conditions for side-facing seats installed forward of aft-facing seats requires dynamic seat testing. Such tests are required of all applicants who plan to install side-facing and oblique seating in passenger airplanes.
The intent of the dynamic seat testing is to evaluate airplane seats, restraints, and related interior systems to demonstrate their structural strength and their ability to protect an occupant from serious injuries in a survivable crash. The current regulations (14 CFR 25.561, 25.562, and 25.785) address occupant-injury protection for forward- and aft-facing seats. The FAA has issued special conditions no. 25–495–SC for Embraer Model EMB–545 and EMB–550 airplanes to address the additional occupant-injury protection concerns raised by for side-facing seats. However, the aft occupant of the side-facing seat (see Figure 1 in these special conditions) may interact with the aft-facing seat, a scenario that the regulations do not specifically address.

The aft-facing seat back could deform during the dynamic-test event, and could contact the occupant in the aft-facing seat. The point that the seat back contacts the occupant could be in an area of the body that has no defined, acceptable, injury-evaluation method, such as the shoulder. This type of contact is addressed in the aforementioned side-facing-seat special conditions, which prohibit body-to-body contact.

The applicant proposed installing a structural armrest between the side-facing seat and the aft-facing seat to help prevent contact between the aft-facing seat and the aft occupant of the side-facing seat. The FAA believes that this contact would be likely to occur if the structural armrest failed to perform as intended in an emergency landing. Therefore, the purpose of these special conditions is to define the specific structural requirements of the proposed structural armrest, and the additional requirements necessary to protect the seated occupant from both the side-facing seat and the adjacent aft-facing seat.

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.

Applicability
These special conditions are applicable to Embraer Model EMB–545 and EMB–550 airplanes. Should Embraer apply at a later date for a change to the type certificate to include another model that incorporates the same novel or unusual design feature, or should any other model already included on the same type certificate be modified to incorporate the same novel or unusual design feature, these special conditions would apply to the other model as well.

Conclusion
This action affects only certain novel or unusual design features on Embraer Model EMB–545 and EMB–550 airplanes. It is not a rule of general applicability, and it affects only those airplanes listed on amended type certificate no. TC000621B.

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 Embraer Model EMB–545 and EMB–550 airplanes with side-facing seats installed forward of aft-facing seats.

The applicant must propose a certification strategy for the structural armrest. This strategy must address the structural integrity of the structural armrest, and occupant protection, after a survivable crash. The strategy must define how the applicant will ensure that the installation, when deformed due to the application of static, dynamic, and interaction (with aft-facing seat) loads, and while complying with the applicable 14 CFR 25.561 and 25.562 requirements:
1. The proposed structural armrest will not touch the side-facing seat’s aft occupant, and the occupant will not act as an “human cushion;”
2. The backrest of the aft-facing seat will not touch the side-facing seat’s aft occupant;
3. The proposed structural armrest will not impose loads to the side-facing seat structure, and;
4. The seat back of the aft-facing seat will not, as a result of contact with the structural armrest, result in damage or deformation of the seat back that could be injurious to the occupant of the aft-facing seat.

In addition, the applicant must:
1. Test the structural armrest with pitch and roll of the seat track to ensure that the armrest continues to protect the occupant of the side-facing seat.
2. Conduct at least two 16G forward-structural tests with the combination of the side-facing seat, structural armrest, and the aft-facing seat. For these tests, the applicant must account for all structural requirements and post-test conditions.
4. Address the worst-case floor deformation that:
   a. Produces the maximum load into the structural armrest. This includes the load caused by the floor deformation and the load from the aft-facing seat back.
   b. allows the aft-facing seat back the most forward dynamic deformation in the area of the side-facing seat’s aft occupant. No contact between the aft-facing seat and the side-facing seat aft occupant is acceptable.

Issued in Renton, Washington, on October 27, 2015.

Michael Kaszycki,
Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2015–27937 Filed 11–2–15; 8:45 am]
BILLING CODE 4910–13–P

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

24 CFR Part 570
[Docket No. FR–5767–F–03]
RIN 2506–AC35

Section 108 Loan Guarantee Program: Payment of Fees To Cover Credit Subsidy Costs

AGENCY: Office of the Assistant Secretary for Community Planning and Development, HUD.

ACTION: Final rule.

SUMMARY: This final rule amends HUD’s Section 108 Loan Guarantee Program (Section 108 Program) regulations to permit HUD to collect fees from Section 108 borrowers to offset the credit subsidy costs of Section 108 loan guarantees. The Department of Housing and Urban Development Appropriations Acts of 2014 and 2015 authorize HUD, for each of those fiscal years, to collect fees from borrowers to offset the credit subsidy costs for the guaranteed loans. This final rule amends HUD’s Section 108 Program regulations to ensure that HUD can begin to make Section 108 loan guarantee commitments without appropriated credit subsidy budget authority, in accordance with applicable law. This final rule follows publication of the February 5, 2015, proposed rule and adopts the proposed rule with minor, clarifying changes to how HUD will determine and announce the amount of the fee. Elsewhere in today’s Federal Register, HUD is publishing a document that sets the fee that it will charge borrowers under the Section 108 Program for loan guarantee commitments awarded in Fiscal Year (FY) 2016.

DATES: Effective Date: December 3, 2015.

FOR FURTHER INFORMATION CONTACT: Paul Webster, Director, Financial Management Division, Office of Block Grant Assistance, Office of Community Planning and Development, Department of Housing and Urban Development, 451 7th Street SW., Room 7180, Washington, DC 20410; telephone number 202–708–1798 (this is not a toll-free number). Individuals with speech or hearing impairments may access this number through TTY by calling the Federal Relay Service, toll-free, at 800–877–8339. Faxed inquiries (but not comments) may be sent to Mr. Webster at 202–708–1798 (this is not a toll-free number).

SUPPLEMENTARY INFORMATION:

I. Background

A. The February 5, 2015, Proposed Rule

On February 5, 2015, HUD published a rule in the Federal Register, at 80 FR 6470, proposing to amend the Section 108 regulations at 24 CFR part 570, subpart M, to permit HUD, in accordance with statutory authority, to collect fees from Section 108 borrowers to offset the cost of Section 108 loan guarantees. HUD published its proposal in anticipation of annual appropriations that do not include budget authority for a credit subsidy and require HUD to collect fees from borrowers to cover the credit subsidy costs for guaranteeing the loans.

HUD’s February 5, 2015, rule proposed establishing a new section, §570.712, entitled “Collection of fees; procedure to determine amount of the fee,” that would provide for the collection of fees for the Section 108 Loan Guarantee Program. Specifically, §570.712 would provide that when HUD has been authorized to collect a fee for the Section 108 Program and Congress has not appropriated a subsidy for the Section 108 Program or the appropriated subsidy is insufficient to offset the costs of the Section 108 loan guarantees, HUD will collect a fee for the program. When such conditions occur, HUD stated that it would announce through notice published in the Federal Register its intent to impose a fee and explain the basis and amount of the fee imposed. The fee that would be imposed would be expressed as a percentage of the principal amount of the guaranteed loan. Recognizing that the amount of the fee would be dependent upon the authority provided by HUD’s annual appropriations to issue loan guarantee commitments and could vary from year to year, HUD proposed announcing the fee through notice published in the Federal Register rather than codifying it in §570.712. HUD stated that the amount of the fee would reduce the credit subsidy cost to the Federal Government to a level that eliminates the need for appropriated credit subsidy budget authority.

In addition to establishing the new §570.712, the February 5, 2015, rule proposed related amendments to other sections of part 570, subpart M, to implement the authority to charge Section 108 borrowers a fee. Specifically, HUD proposed amending §570.701 (Definitions) to add a definition of “credit subsidy cost” to mean the estimated long-term cost to the Federal Government of a Section 108 loan guarantee or a modification thereof, calculated on a net present value basis, excluding administrative costs and any incidental effects on governmental receipts or outlays. HUD based this definition on the definition of “cost” in the Federal Credit Reform Act of 1990 (2 U.S.C. 661–661f at §661a), modified to exclude direct loans, which are not authorized under the Section 108 Program. HUD also proposed amending §570.705(g) to add, as a loan requirement, that each public entity, or its designated public agency, and each State issuing debt obligations pay any and all fees charged by HUD for the purpose of paying the credit subsidy costs of the loan guarantee.

To facilitate the payment of these charges, HUD’s February 5, 2015, rule proposed permitting the payment of these fees from guaranteed loan proceeds. HUD proposed amending §570.703 (Eligible activities) to provide that guaranteed loan funds may be used for the payment of fees charged by HUD, when the fees are paid from the disbursement of guaranteed loan funds. In addition, to notify the public of plans to use grant funds or loan proceeds to pay the fee, HUD proposed changes to §570.704 (Application requirements) to require that applicants include the estimated amount of the fee to be paid in the application for loan guarantee assistance. Use of grant funds for fees or payments of principal and interest would also need to be included in each applicant’s consolidated plan.

Finally, HUD proposed amending §570.200(a)(3)(iii) to clarify that when the fee is paid from the proceeds of a guaranteed loan, grant funds used to repay that loan would not be subject to the requirement that the fee be no less than 70% of the estimated cost.