DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 25

[Docket No. FAA–2014–0078; Special Conditions No. 25–543–SC]

Special Conditions: Embraer S.A. Model ERJ–170 Airplanes; Seats With Large, Non-Traditional, Non-Metallic Panels

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions; request for comments; correction.

SUMMARY: This document corrects an error that appeared in Federal Docket no. FAA–2014–0078, Special Conditions no. 25–543–SC, which was published in the Federal Register on March 3, 2014 (79 FR 11679). The error is in the type-certificate number referenced in the Background and Type Certification Basis sections of the special conditions. It is being corrected herein.

DATES: The effective date of this correction is March 17, 2017.


SUPPLEMENTARY INFORMATION:

Background

Special Conditions no. 25–543–SC was published in the Federal Register on March 3, 2014 (79 FR 11679). The document issued special conditions pertaining to seats with large, non-traditional, non-metallic panels.

As published, the document contained four errors, each referring to the type-certificate number for the Embraer S.A. Model ERJ–170 airplane.

Because no other part of the regulatory information has been changed, the special conditions document is not being re-published.

Correction

In the Final Special Conditions, Request for Comments document [FR Doc. 2017–05334 Filed 3–16–17; 8:45 am] published on March 3, 2014 (79 FR 11679), make the following correction:

On page 11679, column 3, in the first and second paragraphs of the Background section; and on page 11680, column 1, in the first paragraph of the Type Certification Basis section, change “A57NM” to “A56NM.”


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

[FR Doc. 2017–05328 Filed 3–16–17; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 25

[Docket No. FAA–2016–8247; Special Conditions No. 25–652–SC]

Special Conditions: Aerocon Engineering Company, Boeing Model 777–200 Airplane; Access Hatch Installed Between the Cabin and the Class C Cargo Compartment To Allow In-Flight Access to the Cargo Compartment

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions.

SUMMARY: These special conditions are issued for the Boeing Model 777–200 airplane, as modified by Aerocon Engineering Company (Aerocon), 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 an access hatch, installed between the cabin and the Class C cargo compartment, to allow in-flight access to the Class C cargo compartment. 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 April 17, 2017.


SUPPLEMENTARY INFORMATION:

Background

On June 26, 2015, Aerocon applied for a supplemental type certificate to install an access hatch between the cabin and Class C cargo compartment in the Boeing Model 777–200 airplane. This airplane is a twin-engine, transport-category airplane with a VIP interior configuration. The Model 777–200 has a maximum passenger capacity of 440, and a maximum takeoff weight of 535,000 pounds.

Type Certification Basis

Under the provisions of Title 14, Code of Federal Regulations (14 CFR) 21.101, Aerocon must show that the Boeing Model 777–200 airplane, as changed, continues to meet the applicable provisions of the regulations listed in Type Certificate No. T00001SE, 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 (i.e., 14 CFR part 25) do not contain adequate or appropriate safety standards for the Boeing Model 777–200 airplane, as changed, 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 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 777–200 airplane, as modified by Aerocon, 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 777–200 airplane, as modified by Aerocon, will incorporate the following novel or unusual design feature: An access hatch installed between the cabin and the Class C cargo compartment, to allow in-
flight access to the Class C cargo compartment.

Discussion

The VIP operator requests to have access to the aft lower-deck Class C cargo compartment on their Boeing Model 777–200 airplane to store trash during flight. The installation consists of an access hatch from the main passenger cabin, with an access ladder, and a trash container mounted on its own standard airliner pallet in the lower-deck Class C cargo compartment.

The FAA considers that the access hatch may impact the isolation of the passenger cabin from the cargo compartment. Isolation is necessary to protect the passengers, as required by §25.857(c), from fire and smoke that may start within the cargo compartment. In addition, the in-flight access to the lower-deck Class C cargo compartment creates unique hazards resulting from passengers having access to cargo and baggage in compartment. These hazards include the safety of the persons entering the cargo compartment, possible hazards to the airplane as a result of the access, and security concerns with access to the checked baggage and cargo. The special conditions defined herein provide additional requirements necessary to ensure sufficient cabin isolation from fire and smoke in this unusual design configuration, and for passenger safety while occupying the Class C cargo compartment.

The current rules relating to Class C cargo compartments do not address provisions for in-flight accessibility. The intent of the Class C cargo compartment was that it be a self-contained and isolated compartment intended to carry baggage and cargo, but not intended for human habitation. The FAA gave no consideration to an in-flight-accessible Class C cargo compartment when the classification was first developed, as no manufacturer had ever incorporated such a feature into their design. Inherently, a “cargo compartment” was not intended for in-flight access, especially by the traveling public. An allowance has been made specifically for crew access into a Class B cargo compartment for the express purpose of firefighting. Access into a cargo compartment carries with it an increased level of risk to the occupant entering the compartment, and to the airplane, as baggage or cargo could shift, a decompression could occur in the compartment, or a fire could develop during flight.

The FAA has determined that the existing airworthiness standards do not contain adequate or appropriate safety standards relative to passenger access to cargo compartments. As a result, special conditions are the appropriate means to address this and all future in-flight-accessible Class C cargo compartments.

Based upon the above discussion, the cargo-compartment isolation criterion is the main concern related to the access hatch design, which is intended to be installed between the cabin and the Class C cargo compartment. 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.

Discussion of Comments

Notice of Proposed Special Conditions No. 25–16–08–SC for the Boeing Model 777–200 airplane, as modified by Aerocon, was published in the Federal Register on October 26, 2016 (81 FR 74350). The FAA received 6 comments from two commenters.

The Boeing Company (Boeing) comment 1 states, in pertinent part, that, “In addition to items 1 through 9, the following additional features should be considered in providing the necessary protection to passengers as required by Sec. 25.857(c): Amount of time hatch to be left in the open condition—with the hatch open it is conceivable that the smoke detection system could be disrupted due to the change in air flow.

Similar access to class E compartments has required that the door/hatch remain closed while the occupant is in the compartment to minimize the time that the barrier between cargo compartment and occupied areas is compromised.

The FAA concurs that the airflow in the Class C cargo compartment would be affected during the time the access door is open. However, the intended provision of access to the lower-deck Class C cargo compartment is to enable a crewmember (in this case, a flight attendant) to place trash in a palletized container. The duration during which the access door is open is expected to be very brief. If a fire occurs in the Class C cargo compartment during the time the crewmember is present, then the crew procedure requires vacating the compartment immediately and informing the flight crew after closing the access door. After the door is closed, the normal ventilation flow in the compartment should be reestablished, and the built-in fire detection system should provide annunciation of a fire to the flight deck within the required time, per 14 CFR 25.856.

The duration of the occupant needs to consider distance from opening to occupant, noise level of compartment.

Means of communication from hatch to occupant needs to consider distance from opening to occupant, noise level of compartment.

In addition to items 1 through 9, the following additional features should be considered in providing the necessary protection to occupants entering the Class C cargo compartment. Required lighting for visibility of cargo compartment hazards (shifting cargo, open holes in floor, trip hazards, etc.)

The FAA concurs that the Class C cargo compartment should have lighting installed to mitigate the hazards that may be encountered. We have added this requirement to these final special conditions.

Boeing comment 3 states, in pertinent part, that, “Means of communication from hatch to occupant needs to consider distance from opening to occupant, noise level of compartment.”

The FAA concurs that adequate communication procedures must be established when the crew is accessing the Class C cargo compartment. We have added this requirement to these final special conditions.

Boeing comment 4 states, in pertinent part, that, “[14] CFR 25.1439 requires the installation of protective breathing equipment in each isolated separate compartment in which crew member occupancy is permitted during flight for the maximum number of crew members expected to be in the area during any operation.”

The FAA concurs that the crew should have protective breathing equipment available and carried into the compartment if the compartment is occupied for a significant amount of time. However, as stated previously, the intended use of the compartment is to place trash in a palletized container.

The duration of cargo-compartment access required by the applicant for these special conditions is considered minimal, and therefore the installation
of protective breathing equipment is not required. The FAA made no changes to the proposed special conditions in response to this comment.

Boeing comment 5 states, in pertinent part, that:

[14] CFR 121.309 requires at least one fire extinguisher for each class C cargo compartment that is accessible to crew members during flight. Crew members entering class C cargo compartments should have similar protection to occupants entering class E cargo compartments.

The FAA acknowledges the intent of Boeing’s comment. The fire-safety design features in a Class C cargo compartment include a total-flooding fire suppression system that does not rely upon the presence of a crewmember to fight a fire.

The FAA has stated in different sources, and most recently in a preamble to Amendment 25–142, that the effectiveness of a crewmember fighting a fire is limited to small compartments where the crewmember must be able to reach any part of the compartment using the contents of a hand-held fire extinguisher, and that access should be a function of how the compartment is configured, rather than according to compartment volume.

Considering the volume and configuration of Class C cargo compartments, the FAA finds that the appropriate procedure for a crewmember present in a Class C cargo compartment, in the event of a fire, is to vacate the compartment immediately and inform the flight crew after closing the access door. In addition, carrying a hand-held fire extinguisher into the Class C cargo compartment may impede the crewmember’s movements, such as during escape from a Class C cargo compartment in the event of a fire, and may increase the time the crewmember is accessing the compartment; both of those scenarios may increase crewmember risk in the event of a fire. The FAA made no changes to the proposed special conditions in response to this comment.

Embraer S. A. (Embraer) states, in pertinent part, that:

The proposed special condition for access hatch installed between the cabin and the class C cargo compartment to allow in-flight access to the cargo compartment has several requirements that are different from those used in a similar past special condition (25–273–SC). The preamble of this special condition notice does not indicate why these additional requirements are deemed necessary, so it would be helpful if some explanation was provided for why additional requirements are now being proposed for this project since we are unaware of any adverse service history or other evidence that shows that the requirements used in previous special conditions are now inadequate. The relevant additional requirements are:

1. The airplane must be operated as private, not for hire, not for common carriage; and to have a cabin crewmember present in a Class C cargo compartment.

2. One cabin crewmember must be present to monitor the hatch from the main cabin when another cabin crewmember is using the access hatch to access the aft lower-deck Class C cargo compartment.

3. Means must be provided to keep the access hatch open while the aft lower-deck Class C cargo compartment is occupied during flight.

4. Access to the aft lower-deck Class C cargo compartment or using the access hatch is not allowed during:
   a. Taxi, takeoff, and landing,
   b. When the fasten-seat-belt sign is illuminated,
   c. In the event of emergency not limited to smoke and fire detected in the cargo compartment.

5. Access to the aft lower-deck Class C cargo compartment must be located outside of, and on or near the access hatch of, the aft lower-deck Class C cargo compartment.

6. A placard stating, “Do Not Enter During Taxi, Takeoff, Landing, or Emergency” (or similar wording) must be located outside of, and on or near the access hatch of, the aft lower-deck Class C cargo compartment.

7. The airplane must be operated as private, not for hire, not for common carriage. This provision does not preclude the operator from receiving remuneration to the extent consistent with 14 CFR parts 125 and 91, subpart F, as applicable.

8. Use of the access hatch, and access to the aft Class C cargo compartment, is limited to the crew only.

9. A placard stating, “Crew Only Access” must be located outside of, and on or near the access hatch of, the aft lower-deck Class C cargo compartment.

10. The Airplane Flight Manual must instruct the crew to close the access hatch when crew are not accessing the aft lower-deck Class C cargo compartment.

11. Special conditions 5, 7, 8, and 10 must be documented in the Limitations section of the Airplane Flight Manual.

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 777–200 airplanes modified by Aerocon.

1. The flight deck must contain an indicator to advise the flightcrew when the access hatch for the Class C cargo compartment is opened.

2. One crewmember must be present to monitor the hatch from the main cabin when another cabin crewmember is using the access hatch to access the aft lower-deck Class C cargo compartment. Adequate communication procedures must be established between the crewmembers to maintain verbal contact between the main cabin and the Class C cargo compartment. These procedures must be included in the Cabin Crew Operating Manual.

3. Means must be provided to keep the access hatch open while the aft lower-deck Class C cargo compartment is occupied during flight.

The authority citation for these special conditions is as follows:

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

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.
ADDITIONAL CONDITIONS: This design, and related operational procedures, comply with TSA requirements.

Issued in Renton, Washington, on March 2, 2017.

Michael Kaszyczyk,
Assistant Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2017–05325 Filed 3–16–17; 8:45 am]
BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 25

[Docket No. FAA–2016–9297; Special Conditions No. 25–648–SC]

Special Conditions: Textron Aviation Inc. Model 700 Airplane; Airplane Electronic-System Security Protection From Unauthorized External Access

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions; request for comments.

SUMMARY: These special conditions are issued for the Textron Aviation Inc. (Textron) Model 700 airplane. This airplane 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 airplane electronic systems and networks that allow access from external sources (e.g., wireless devices, Internet connectivity) to the airplane's internal electronic components. 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 Textron on March 17, 2017. We must receive your comments by May 1, 2017.

ADDRESSES: Send comments identified by docket number FAA–2016–9297 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.

- 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 is impracticable because these procedures would significantly delay issuance of the design approval, and thus delivery, of the affected airplane.

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

Background
On November 20, 2014, Textron applied for a type certificate for their new Model 700 airplane. The Textron Model 700 airplane is a twin-engine, transport-category executive airplane with seating for 2 crewmembers and 12 passengers, and a maximum takeoff weight of 38,514 lbs.

Type Certification Basis

If the Administrator finds that the applicable airworthiness regulations (i.e., 14 CFR part 25) do not contain adequate or appropriate safety standards for the Textron Model 700 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 type certificate for that model be amended later to include any other model that incorporates 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 Textron Model 700 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 § 21.17(a)(2).

Novel or Unusual Design Features
The Textron Model 700 airplane will incorporate the following novel or unusual design feature: A digital-systems network architecture composed of several connected networks. This network architecture and network configuration will have the capability to allow access to or by external network sources, and may be used for or