Special Conditions: Qantas Airways Limited, Boeing Model 737-800 Airplane; Personal Electronic-Device Straps Installed on Seat Backs

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed special conditions.

SUMMARY: This action proposes special conditions for the Boeing Model 737-800 airplane. This airplane, as modified by Qantas Airways Limited (Qantas), 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 personal electronic-device (PED) retention straps installed on the backs of passenger seats. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for this design feature. These 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.

DATES: Send comments on or before [INSERT DATE 45 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Send comments identified by Docket No. FAA-2019-1102 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).

**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:** John Shelden, Airframe and Cabin Safety Section, AIR-675, Transport Standards Branch, Policy and Innovation Division, Aircraft Certification Service, Federal Aviation Administration, 2200 South 216th Street,
SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites 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.

The FAA will consider all comments received by the closing date for comments. The FAA may change these special conditions based on the comments received.

Background

On June 12, 2019, Qantas applied for a supplemental type certificate to install PED retention straps on passenger seat backs in Boeing Model 737-800 airplanes. The Boeing Model 737-800 airplane is a twin-engine transport 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, Qantas must show that the Boeing Model 737-800 series airplane, as changed, continues to meet the applicable provisions of the regulations incorporated by reference in Type Certificate No. A16WE, or the applicable regulations in effect on the date of application for the change.

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 § 21.16.

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 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, as modified by Qantas, will incorporate the following novel or unusual design feature:

Personal electronic-device (PED) retention straps installed on the backs of passenger seats.

**Discussion**

In recent years, PEDs have been known to cause smoke and fires inside the fuselage due to the PED falling into areas of the cabin where it cannot be retrieved. The installation of a PED retention strap is intended to reduce the possibly of smoke or fire in flight due to PED loss throughout the cabin.
The addition of a PED strap on the backs of passenger seats will be a functional design feature to enable passengers to view their own device without losing them throughout the cabin. The PED strap’s practical use is envisaged particularly during the meal service where meal tray space is limited.

Tablet devices and related PED designs are continually evolving, so it is challenging to find a suitable method of retention. These special conditions address the design and integration of a PED strap installed onto the back of the headrest cover of the B/E Aerospace Millennium (J class) and B/E Aerospace Innovator II (Y class) seats. The PED strap will allow passengers to view a tablet device without having to hold the device during the inflight phase. The PED strap must not be used during taxi, takeoff, and landing. The PED strap is also subject to certain load limits to ensure the strap can accommodate different PED sizes.

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.

**Applicability**

As discussed above, these special conditions are applicable to the Boeing Model 737-800 airplane, as modified by Qantas. Should Qantas 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.
Conclusion

This action affects only a certain novel or unusual design feature on one model of airplanes. 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 Proposed Special Conditions

Accordingly, the FAA proposes the following special conditions as part of the type certification basis for Boeing Model 737-800 airplanes, as modified by Qantas.

1. The PED strap must meet the requirements of § 3.1 (Abuse Loads) of SAE International Aerospace Recommended Practice “Aircraft Seat Design Guidance and Clarifications” document no. ARP5526C.

2. The limitations section of the airplane flight manual must prohibit use of PED straps during taxi, takeoff, and landing phases of flight. Operational procedures may be used to achieve this.

3. A means must be provided to limit the use of the PED strap to passenger tablets and related PEDs. Placards may be used to achieve this.

4. The PED strap must be designed to support a 2.2-pound (1.0 Kg) PED.

5. Placards indicating the 2.2-pound (1.0 Kg) load limit of the PED straps must be conspicuously posted.
6. The PED straps must not impede egress, including in emergency-exit passageways.

7. Instructions for Continued Airworthiness (ICA) must be incorporated into the design, including wear and stretch limitations, to ensure that strap wear is detected.
   a. PED straps must be inspected every 4,000 flight hours to ensure that strap retraction and PED retention are maintained.
   b. The strap must not protrude beyond the dress cover by more than 1 inch (2.54 cm) to ensure that passengers do not use the strap as a handle.

Issued in Des Moines, Washington, on March 20, 2020.

James E. Wilborn,
Acting Manager, Transport Standards Branch,
Policy and Innovation Division,
Aircraft Certification Service.
[FR Doc. 2020-06362 Filed: 3/30/2020 8:45 am; Publication Date: 3/31/2020]