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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 25

[Docket No. FAA–2020–0519; Special Conditions No. 25–773–SC]

Special Conditions: Aerospace Design and Compliance, LLC, Bombardier, Inc. Model CL–600–2B19 Airplane; Installation of a Therapeutic Oxygen System for Medical Use

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions.

SUMMARY: These special conditions are issued for the Bombardier Inc. (Bombardier) Model CL–600–2B19 airplane. This airplane, as modified by Aerospace Design and Compliance, LLC (Aerospace Design and Compliance), will have a novel or unusual design feature when compared to the state of technology envisioned in the airworthiness standards for transport category airplanes. The design feature is an installation of a therapeutic oxygen system for medical use. 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 August 12, 2020.

FOR FURTHER INFORMATION CONTACT: Robert Hettman, Propulsion & Mechanical Systems, AIR–672, Transport Standards Branch, Policy and Innovation Division, Aircraft Certification Service, Federal Aviation Administration, 2200 South 216th Street, Des Moines, Washington 98198; telephone and fax 206–231–3171; email *Robert.Hettman@faa.gov.*

SUPPLEMENTARY INFORMATION:

Background

On November 20, 2019, Aerospace Design and Compliance applied for a supplemental type certificate for the installation of a therapeutic oxygen system for medical use in the executive interiors of the Bombardier Model CL–600–2B19 airplane. The Model CL–600–2B19 airplane, which is currently approved under Type Certificate No. A21EA, is a twin-engine transport airplane with a maximum takeoff weight of 47,450 lbs. The Model CL–600–2B19 airplane will have 55 seats approved for taxi, takeoff, and landing.

Type Certification Basis

Under the provisions of title 14, Code of Federal Regulations (14 CFR) 21.101, Aerospace Design and Compliance must show that the Bombardier Model CL–600–2B19 airplane, as changed, continues to meet the applicable provisions of the regulations listed in Type Certificate No. A21EA, 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 Bombardier Model CL–600–2B19 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 Bombardier Model CL–600–2B19 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 Bombardier Model CL–600–2B19 airplane will incorporate the following novel or unusual design features:

A therapeutic oxygen system for medical use.

As a part of the executive interior installation, the gaseous passenger-oxygen system will be outfitted with a therapeutic oxygen system. The therapeutic oxygen system shares the same supply of oxygen with the existing passenger oxygen system and consists of multiple constant-flow oxygen outlets located throughout the cabin. The flightcrew can turn the therapeutic oxygen system on and off from the flightdeck to allow use at any point during the flight, and to preserve a sufficient remaining oxygen reserve, in the event therapeutic oxygen is used for medical purposes, to accommodate the passengers in the event of an emergency oxygen situation.

Discussion

No specific regulations address the design and installation of required passenger oxygen systems that share a supply source with an optional oxygen system used specifically for therapeutic applications. Therapeutic oxygen systems have been previously certified, and were generally considered an extension of the passenger oxygen system for the purpose of defining the applicable regulations. As a result, existing requirements, such as §§ 25.1309, 25.1441(b) and (c), 25.1451, and 25.1453, in the Bombardier Model CL–600–2B19 airplanes' certification basis applicable to this STC project, provide some design standards appropriate for oxygen system installations. In addition, § 25.1445 includes standards for oxygen distribution systems when oxygen is supplied to flightcrew and passengers. If a common source of supply is used, § 25.1445(a)(2) requires a means to separately reserve the minimum supply required by the flightcrew.

Section 25.1445 is intended to protect the flightcrew by ensuring that an adequate supply of oxygen is available to complete a descent and landing following a loss of cabin pressure. When the regulation was written, the only passenger oxygen system designs were supplemental oxygen systems intended to protect passengers from hypoxia in the event of a decompression. Existing

passenger oxygen systems did not include design features that would allow the flightcrew to control oxygen to passengers during flight. There are no similar requirements in § 25.1445 when oxygen is supplied from the same source to passengers for use during a decompression, and for discretionary or first-aid use any time during the flight. In the design, the passenger and therapeutic oxygen systems use the same source of oxygen. These special conditions contain additional design requirements for the equipment involved in this dual therapeutic oxygen plus gaseous oxygen installation.

Furthermore, the potential hazard that can exist when the oxygen content of an enclosed area becomes too high because of system leaks, malfunction, or damage from external sources, make it necessary to ensure that adequate safety standards are applied to the design and installation of the oxygen system in Bombardier Model CL–600–2B19 airplanes. These potential hazards also necessitate development and application of appropriate additional design and installation standards.

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

The FAA issued Notice of Proposed Special Conditions No. 25–20–06–SC for the Bombardier Model CL–600–2B19 airplane, which was published in the **Federal Register** on June 16, 2020 (85 FR 36351). No substantive comments were received, and the special conditions are adopted as proposed.

Applicability

As discussed above, these special conditions are applicable to the Bombardier Model CL–600–2B19 airplane. Should Aerospace Design and Compliance apply at a later date for a supplemental type certificate to modify any other model included on Type Certificate No. A21EA 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 for the Bombardier Model CL–600–2B19 airplane 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 feature 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 Bombardier Model CL–600–2B19 airplanes, as modified by Aerospace Design and Compliance, LLC.

The distribution system for the passenger therapeutic oxygen systems must be designed and installed to meet requirements as follows:

1. When oxygen is supplied to passengers for both supplemental and therapeutic purposes, the distribution system must be designed for either—

a. A source of supplemental oxygen for protection following a loss of cabin pressure, and a separate source for therapeutic purposes: Or

b. A common source of supply with means to separately reserve the minimum supply required by the passengers for supplemental use following a loss of cabin pressure.

Issued in Des Moines, Washington, on July 22, 2020.

James E. Wilborn,

Acting Manager, Transport Standards Branch, Policy and Innovation Division, Aircraft Certification Service.

[FR Doc. 2020–16280 Filed 8–11–20; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 29

[Docket No. FAA–2020–0756; Special Conditions No. 29–050–SC]

Special Conditions: Leonardo S.p.A. (Leonardo) Model AW189, Search and Rescue (SAR) Automatic Flight Control System (AFCS)

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions; request for comments.

SUMMARY: These special conditions are issued for the Leonardo Model AW189 helicopters. This model of helicopter, as modified by Leonardo, will have the novel or unusual design feature associated with installing an optional SAR AFCS. The applicable airworthiness standards 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 show a level of safety equivalent to that established by the existing airworthiness standards.

DATES: The effective date of these special conditions is August 27, 2020. The FAA must receive your comments by September 11, 2020.

ADDRESSES: Send comments identified by docket number FAA–2020–0756 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 of 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://regulations.gov,* including any personal information the commenter provides. Using the search function of the docket website, 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,