

of the regulations listed in type certificate no. T00003NY, 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 BD-700-2A12 and BD-700-2A13 airplanes 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, 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, the Model BD-700-2A12 and BD-700-2A13 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**

The Bombardier Inc. Model BD-700-2A12 and BD-700-2A13 airplanes will have a novel or unusual design feature associated with sidestick controllers designed to be operated with only one hand.

**Discussion**

The Bombardier Aerospace Model BD-700-2A12 and BD-700-2A13 airplanes are equipped with sidestick controllers instead of the conventional wheel or control stick. This controller is designed to be operated using only one hand. The requirements of § 25.397(c), which define limit pilot forces and torques for conventional wheel or stick controls, are not adequate for sidestick controllers because pilot forces are applied to sidestick controllers with only the wrist, not arms. Special conditions are necessary to specify the appropriate loading conditions for sidestick controllers.

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**

As discussed above, these special conditions are applicable to the Model BD-700-2A12 and BD-700-2A13 airplanes. Should Bombardier apply at a later date for a change to the type certificate to include another model incorporating 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 two model series of airplanes. It is not a rule of general applicability.

The substance of these special conditions has been subjected to the notice and comment period in several prior instances and has been derived without substantive change from those previously issued. It is unlikely that prior public comment would result in a significant change from the substance contained herein. Therefore, the FAA has determined that prior public notice and comment are unnecessary, and good cause exists for adopting these special conditions upon publication in the **Federal Register**. The FAA is requesting comments to allow interested persons to submit views that may not have been submitted in response to the prior opportunities for comment described above.

**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 Bombardier Model BD-700-2A12 and BD-700-2A13 airplanes.

In lieu of the pilot forces specified in § 25.397(c), for airplanes equipped with sidestick controls designed for force application by one wrist and not arms, the limit pilot forces are as follows:

1. For all components between and including the handle and its control stops.

Pitch	Roll
Nose up: 200 pounds force (lbf).	Nose left: 100 lbf.

Pitch	Roll
Nose down: 200 lbf .....	Nose right: 100 lbf.

2. For all other components of the sidestick control assembly, excluding the internal components of the electrical sensor assemblies, to avoid damage as a result of an in-flight jam.

Pitch	Roll
Nose up: 125 lbf .....	Nose left: 50 lbf.
Nose down: 125 lbf .....	Nose right: 50 lbf.

Issued in Renton, Washington, on August 23, 2016.

**John P. Piccola, Jr.,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 2016-21123 Filed 8-31-16; 8:45 am]

**BILLING CODE 4910-13-P**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 25**

[Docket No. FAA-2015-6363; Special Conditions No. 25-637-SC]

**Special Conditions: Bombardier Inc. Model BD-700-2A12 and BD-700-2A13 Airplanes; Hydrophobic Coatings in Lieu of Windshield Wipers**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

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

**SUMMARY:** These special conditions are issued for the Bombardier Inc. (Bombardier) Model BD-700-2A12 and BD-700-2A13 airplanes. These airplanes will have a novel or unusual feature when compared to the state of technology envisioned in the airworthiness standards for transport category airplanes. This design feature is hydrophobic coatings in lieu of windshield wipers. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for these design features. 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 Bombardier on September 1, 2016. We must receive your comments by October 17, 2016.

**ADDRESSES:** Send comments identified by docket number FAA–2015–6363 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:** Bob Hettman, FAA, Propulsion and Mechanical Systems Branch, ANM–112, Transport Airplane Directorate, Aircraft Certification Service, 1601 Lind Avenue SW., Renton, Washington, 98057–3356; telephone 425–227–2683; facsimile 425–227–1232.

#### **SUPPLEMENTARY INFORMATION:**

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

##### **Background**

On May 30, 2012, Bombardier applied for an amendment to type certificate no. T00003NY to include the new Model BD–700–2A12 and BD–700–2A13 airplanes. These airplanes are derivatives of the Model BD–700 series of airplanes currently approved under type certificate no. T00003NY, and are marketed as the Bombardier Global 7000 (Model BD–700–2A12) and Global 8000 (Model BD–700–2A13). These airplanes are ultra-long-range, executive-interior business jets.

##### **Type Certification Basis**

Under the provisions of Title 14, Code of Federal Regulations (14 CFR) 21.101, Bombardier must show that the Model BD–700–2A12 and BD–700–2A13 airplanes meet the applicable provisions of the regulations listed in type certificate no. T00003NY, 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 BD–700–2A12 and BD–700–2A13 airplanes 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, 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, the Model BD–700–2A12 and BD–700–2A13 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**

The Bombardier Model BD–700–2A12 and BD–700–2A13 airplanes will have a novel or unusual design feature associated with flightdeck design, which incorporates a hydrophobic windshield coating to provide adequate pilot compartment view in the presence of precipitation. Sole reliance on such a coating, without windshield wipers, constitutes a novel or unusual design feature for which the applicable airworthiness regulations do not contain adequate or appropriate safety standards.

##### **Discussion**

14 CFR 25.773(b)(1) requires a means to maintain a sufficiently clear portion of the windshield for both pilots to have an extensive view along the flight path during precipitation conditions. The regulations require this means to maintain such an area during precipitation in heavy rain at speeds up to 1.5  $V_{SR1}$ . Hydrophobic windshield coatings may depend to some degree on airflow to maintain a clear vision area. The heavy rain and high speed conditions specified in the current rule do not necessarily represent the limiting condition for this new technology. For example, airflow over the windshield, which may be necessary to remove moisture from the windshield, may not be adequate to maintain a sufficiently clear area of the windshield in low-speed flight or during surface operations. Alternatively, airflow over the windshield may be disturbed during such critical times as the approach to land, where the airplane is at a higher-than-normal pitch attitude. In these cases, areas of airflow disturbance or separation on the windshield could cause a failure to maintain a clear vision area on the windshield.

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**

As discussed above, these special conditions are applicable to the Model BD–700–2A12 and BD–700–2A13 airplanes. Should Bombardier apply at a later date for a change to the type certificate to include another model incorporating 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 two

model series of airplanes. It is not a rule of general applicability.

The substance of these special conditions has been subjected to the notice and comment period in several prior instances and has been derived without substantive change from those previously issued. It is unlikely that prior public comment would result in a significant change from the substance contained herein. Therefore, the FAA has determined that prior public notice and comment are unnecessary, and good cause exists for adopting these special conditions upon publication in the **Federal Register**. The FAA is requesting comments to allow interested persons to submit views that may not have been submitted in response to the prior opportunities for comment described above.

#### 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 Bombardier Model BD-700-2A12 and BD-700-2A13 airplanes.

1. In addition to meeting the requirements of § 25.773(b)(1), the airplane must have a means to maintain a clear portion of the windshield, during precipitation conditions, such that both pilots to have a sufficiently extensive view along the ground or flight path in taxi and flight. This means must be designed to function, without continuous attention on the part of the crew, in conditions from light misting precipitation to heavy rain, at speeds from fully stopped in still air to 1.5  $V_{SR1}$  with lift and drag devices retracted, and in icing conditions specified in § 25.1419 if certification for flight in icing conditions is requested.

2. The precipitation removal system must comply with § 25.773.

3. Instructions to maintain the precipitation-removal system must comply with § 25.1529.

4. The materials used in the precipitation removal system must comply with § 25.603.

Issued in Renton, Washington, on August 23, 2016.

**John P. Piccola, Jr.,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

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## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

**[Docket No. FAA-2016-7048; Directorate Identifier 2016-CE-014-AD; Amendment 39-18635; AD 2016-18-05]**

**RIN 2120-AA64**

#### **Airworthiness Directives; PILATUS AIRCRAFT LTD. Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for PILATUS AIRCRAFT LTD. Models PC-12, PC-12/45, PC-12/47, and PC-12/47E airplanes installed with an affected engine mounting frame assembly. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as longitudinal material separation on the internal surface of the engine mounting frame assembly tubes. We are issuing this AD to detect and correct this condition, which could lead to partial or complete failure of the structural joint and possibly result in in-flight detachment of the engine with consequent loss of control.

**DATES:** This AD is effective October 6, 2016.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of October 6, 2016.

**ADDRESSES:** You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-7048; or in person at Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

For service information identified in this AD, contact Pilatus Aircraft Ltd., Customer Support PC-12, CH-6371 Stans, Switzerland; phone: +41 41 619

33 33; fax: +41 41 619 73 11; email: [SupportPC12@pilatus-aircraft.com](mailto:SupportPC12@pilatus-aircraft.com); Internet: [www.pilatus-aircraft.com](http://www.pilatus-aircraft.com). For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the Internet at <http://www.regulations.gov> by searching for Docket No. FAA-2016-7048.

#### FOR FURTHER INFORMATION CONTACT:

Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; fax: (816) 329-4090; email: [doug.rudolph@faa.gov](mailto:doug.rudolph@faa.gov).

#### SUPPLEMENTARY INFORMATION:

##### Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to PILATUS AIRCRAFT LTD. Models PC-12, PC-12/45, PC-12/47, and PC-12/47E airplanes installed with an affected engine mounting frame assembly. The NPRM was published in the **Federal Register** on June 13, 2016 (81 FR 38115). The NPRM proposed to correct an unsafe condition for the specified products and was based on mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country. The MCAI states:

The PC-12 Engine Mounting Frame Assembly (hereafter referred to as "EMF" in this AD), Part Number (P/N) 571.20.12.036, is a welded structure including three special tubes, P/N 571.20.12.073, P/N 571.20.12.074 and P/N 571.20.12.107, the ends of which are subject to a special swaging process during manufacturing. Longitudinal material separation on the internal surface of the special tubes was detected on few EMFs on new production aeroplanes. Investigations identified the root cause to be an incorrect accomplishment of the swaging process.

This condition, if not detected and corrected, could lead to growth of the material separation and subsequent partial or complete failure of the structural joint, possibly resulting in in-flight detachment of the engine and consequent reduced control, or loss of control, of the aeroplane.

To address this potential unsafe condition, Pilatus issued Service Bulletin (SB) No. 71-009, now at Revision 2 (hereafter referred to as "the SB" in this AD), to provide inspection instructions for the affected EMF to detect indications of material separation.

For the reason described above, this AD requires identification and inspection of the affected EMF and, depending on the findings, their replacement with serviceable EMF.

The MCAI can be found in the AD docket on the Internet at: <https://www.regulations.gov/document?D=FAA-2016-7048-0002>.