

reliability of the remaining system. As far as reasonably practicable, the flight crew must be made aware of these failures before flight. Certain elements of the fuel system, such as mechanical and hydraulic components, may use special periodic inspections, and electronic components may use daily checks, in lieu of detection and indication systems to achieve the objective of this requirement. These identified inspections must be limited to components that are not readily detectable by normal detection and indication systems and where service history shows that inspections will provide an adequate level of safety.

(2) The existence of any failure condition, not extremely improbable, during flight that could significantly affect the structural capability of the airplane and for which the associated reduction in airworthiness can be minimized by suitable flight limitations, requires a caution level alert for immediate flightcrew awareness and a warning level alert for immediate flightcrew awareness and corrective action. For example, a flightcrew alert during flight is required for failure conditions that result in a factor of safety between the airplane strength and the loads of subpart C below 1.25, or flutter margins below  $V''$ , because it could significantly affect the structural capability of the airplane.

d. *Dispatch with known failure conditions.* If the airplane is to be dispatched in a known fuel system failure condition that affects structural performance, or affects the reliability of the remaining system to maintain structural performance, then the provisions of these special conditions must be met, including the provisions of paragraph 2a for the dispatched condition, and paragraph 2b for subsequent failures. Expected operational limitations may be taken into account in establishing  $P_f$  as the probability of failure occurrence for determining the safety margin in Figure 1. Flight limitations and expected operational limitations may be taken into account in establishing  $Q_f$  as the combined probability of being in the dispatched failure condition and the subsequent failure condition for the safety margins in Figures 2 and 3. These limitations must be such that the probability of being in this combined failure state and then subsequently encountering limit load conditions is extremely improbable. No reduction in these safety margins is allowed if the subsequent system failure rate is greater than  $10^{-3}$  per hour.

Issued in Renton, Washington, on June 17, 2014.

**Michael Kaszycki,**

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

[FR Doc. 2014–15526 Filed 7–1–14; 8:45 am]

**BILLING CODE 4910–13–P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 25

[Docket No. FAA–2014–0420; Notice No. 25–14–06–SC]

#### **Special Conditions: Bombardier Aerospace, Models BD–500–1A10 and BD–500–1A11 Series Airplanes; Automatic Speed Protection for Design Dive Speed**

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

**ACTION:** Notice of proposed special conditions.

**SUMMARY:** This action proposes special conditions for the Bombardier Aerospace Models BD–500–1A10 and BD–500–1A11 series airplanes. These airplanes will have a novel or unusual design feature associated with a reduced margin between design cruising speed,  $V_C/M_C$ , and design diving speed,  $V_D/M_D$ , based on the incorporation of a high speed protection system that limits nose down pilot authority at speeds above  $V_D/M_D$ . 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 your comments on or before August 18, 2014.

**ADDRESSES:** Send comments identified by docket number FAA–2014–0420 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 the 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:** Mark Freisthler, FAA, Airframe and Cabin Safety Branch, ANM–115, Transport Airplane Directorate, Aircraft Certification Service, 1601 Lind Avenue SW., Renton, Washington 98057–3356; telephone 425–227–1119; 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 December 10, 2009, Bombardier Aerospace applied for a type certificate for their new Models BD–500–1A10 and BD–500–1A11 series airplanes (hereafter collectively referred to as “C-Series”). The C-Series airplanes are swept-wing monoplanes with an aluminum alloy fuselage sized for 5-abreast seating. Passenger capacity is designated as 110

for the Model BD-500-1A10 and 125 for the Model BD-500-1A11. Maximum takeoff weight is 131,000 pounds for the Model BD-500-1A10 and 144,000 pounds for the Model BD-500-1A11.

Bombardier Aerospace proposes to reduce the margin between  $V_C/M_C$  and  $V_D/M_D$  required by Title 14, Code of Federal Regulations (14 CFR) 25.335(b) based on the incorporation of a high speed protection system in the airplane's flight control laws. The airplane is equipped with a high speed protection system that limits nose down pilot authority at speeds above  $V_C/M_C$  and prevents the airplane from actually performing the maneuver required under § 25.335(b)(1).

These special conditions are necessary to address the proposed high speed protection system. These proposed special conditions identify various symmetric and non-symmetric maneuvers that will ensure that an appropriate design dive speed is established. Symmetric (pitching) maneuvers are specified in § 25.331, "Symmetric maneuvering conditions." Non-symmetric maneuvers are specified in § 25.349, "Rolling conditions," and § 25.351, "Yaw maneuver conditions."

#### Type Certification Basis

Under the provisions of 14 CFR 21.17, Bombardier Aerospace must show that the CSeries airplanes meet the applicable provisions of part 25 as amended by Amendments 25-1 through 25-129.

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 CSeries 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 or similar novel or unusual design feature, the special conditions would also apply to the other model under § 21.101.

In addition to the applicable airworthiness regulations and special conditions, the CSeries 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, and the FAA must issue a finding of regulatory adequacy under section 611 of Public Law 92-574, the "Noise Control Act of 1972."

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 CSeries airplanes will incorporate the following novel or unusual design features: Bombardier Aerospace proposes to reduce the margin between  $V_C/V_C$  and  $V_D/V_D$  required by 14 CFR 25.335(b) based on the incorporation of a high speed protection system in the airplane's flight control laws. The high speed protection system limits nose down pilot authority at speeds above  $V_C/M_C$  and prevents the airplane from actually performing the maneuver required under § 25.335(b)(1).

#### Discussion

Section 25.335(b)(1) is an analytical envelope condition that was originally adopted in Part 4b of the Civil Air Regulations in order to provide an acceptable speed margin between design cruise speed and design dive speed. Flutter clearance design speeds and airframe design loads are impacted by the design dive speed. While the initial condition for the upset specified in the rule is 1g level flight, protection is afforded for other inadvertent overspeed conditions as well. Section 25.335(b)(1) is intended as a conservative enveloping condition for potential overspeed conditions, including non-symmetric ones. To establish that potential overspeed conditions are enveloped, Bombardier Aerospace needs to demonstrate that any reduced speed margin, based on the high speed protection system, will not be exceeded in inadvertent or gust-induced upsets resulting in initiation of the dive from non-symmetric attitudes; or that the airplane is protected by the flight control laws from getting into non-symmetric upset conditions. Bombardier Aerospace needs to conduct a demonstration that includes a comprehensive set of conditions, as described below.

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.

#### Applicability

As discussed above, these special conditions are applicable to the Model BD-500-1A10 and BD-500-1A11 series airplanes. Should Bombardier Aerospace apply at a later date for a change to the type certificate to include another model incorporating the same novel or unusual design feature, the

special conditions would apply to that 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.

#### 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 Proposed Special Conditions

Accordingly, the Federal Aviation Administration (FAA) proposes the following special conditions as part of the type certification basis for Bombardier Aerospace Models BD-500-1A10 and BD-500-1A11 (CSeries) airplanes.

#### Automatic Speed Protection for Design Dive Speed

1. In lieu of compliance with § 25.335(b)(1), if the flight control system includes functions that act automatically to initiate recovery before the end of the 20-second period specified in § 25.335(b)(1),  $V_D/M_D$  must be determined from the greater of the speeds resulting from conditions (a) and (b) below. The speed increase occurring in these maneuvers may be calculated, if reliable or conservative aerodynamic data are used.

(a) From an initial condition of stabilized flight at  $V_C/M_C$ , the airplane is upset so as to take up a new flight path 7.5 degrees below the initial path. Control application, up to full authority, is made to try and maintain this new flight path. Twenty seconds after initiating the upset, manual recovery is made at a load factor of 1.5g (0.5 acceleration increment), or such greater load factor that is automatically applied by the system with the pilot's pitch control neutral. Power, as specified in § 25.175(b)(1)(iv), is assumed until recovery is initiated, at which time power reduction and the use of pilot-controlled drag devices may be used.

(b) From a speed below  $V_C/M_C$ , with power to maintain stabilized level flight at this speed, the airplane is upset so as to accelerate through  $V_C/M_C$  at a flight path 15 degrees below the initial path (or at the steepest nose down attitude that the system will permit with full control authority if less than 15 degrees). The pilot's controls may be in the neutral position after reaching  $V_C/M_C$  and before recovery is initiated. Recovery may be initiated three seconds

after operation of the high speed warning system by application of a load of 1.5g (0.5 acceleration increment), or such greater load factor that is automatically applied by the system with the pilot's pitch control neutral. Power may be reduced simultaneously. All other means of decelerating the airplane, the use of which is authorized up to the highest speed reached in the maneuver, may be used. The interval between successive pilot actions must not be less than one second.

2. The applicant must also demonstrate that the speed margin, established as above, will not be exceeded in inadvertent or gust-induced upsets resulting in initiation of the dive from non-symmetric attitudes, unless the airplane is protected by the flight control laws from getting into non-symmetric upset conditions. The upset maneuvers described in Advisory Circular 25-7C, *Flight Test Guide for Certification of Transport Category Airplanes*, section 8, paragraph 32, subparagraphs c(3)(a) and (b) may be used to comply with this requirement.

3. The probability of any failure of the high speed protection system that would result in an airspeed exceeding those determined by paragraphs 1 and 2 must be less than  $10^{-5}$  per flight hour.

4. Failures of the system must be annunciated to the pilots. Flight manual instructions must be provided that reduce the maximum operating speeds,  $V_{MO}/M_{MO}$ . With the system failed, the operating speed must be reduced to a value that maintains a speed margin between  $V_{MO}/M_{MO}$  and  $V_D/M_D$  that is consistent with showing compliance with § 25.335(b) without the benefit of the high speed protection system.

5. Dispatch of the airplane with the high speed protection system inoperative could be allowed under an approved MEL that would require flight manual instructions to indicate reduced maximum operating speeds, as described in paragraph (4). In addition, the cockpit display of the reduced operating speeds, as well as the overspeed warning for exceeding those speeds, must be equivalent to that of the normal airplane with the high speed protection system operative. Also, it must be shown that no additional hazards are introduced with the high speed protection system inoperative.

Issued in Renton, Washington, on June 17, 2014.

**Michael Kaszycki,**

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

[FR Doc. 2014-15539 Filed 7-1-14; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2014-0344; Directorate Identifier 2014-NM-034-AD]

RIN 2120-AA64

#### Airworthiness Directives; The Boeing Company Airplanes

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to supersede Airworthiness Directive (AD) 2013-24-13, which applies to certain The Boeing Company Model 737-100, -200, -200C, -300, -400, -500, -600, -700, -700C, -800, and -900 series airplanes. AD 2013-24-13 currently requires replacing the pivot link assembly for certain airplanes, replacing the seat track link assemblies or modifying the existing seat track link assembly for certain airplanes, or modifying the existing seat track link assembly fastener for certain airplanes. AD 2013-24-13 also requires inspecting, changing, or repairing the seat track link assembly for certain other airplanes. Since we issued AD 2013-24-13, a paragraph reference was found to be mis-identified. This proposed AD would correct this paragraph reference. We are proposing this AD to prevent seat detachment in an emergency landing, which could cause injury to occupants of the passenger compartment and affect emergency egress.

**DATES:** We must receive comments on this proposed AD by August 18, 2014.

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- **Federal eRulemaking Portal:** Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- **Fax:** 202-493-2251.
- **Mail:** U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- **Hand Delivery:** Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1;

fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

#### Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0344; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

#### FOR FURTHER INFORMATION CONTACT:

Sarah Piccola, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6483; fax: 425-917-6590; email: [sarah.piccola@faa.gov](mailto:sarah.piccola@faa.gov).

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2014-0344; Directorate Identifier 2014-NM-034-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

#### Discussion

On November 19, 2013, we issued AD 2013-24-13, Amendment 39-17687 (78 FR 72558, December 3, 2013), for certain The Boeing Company Model 737-100, -200, -200C, -300, -400, -500, -600, -700, -700C, -800, and -900 series