



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2017-0528; Product Identifier 2017-NM-028-AD; Amendment 39-19091; AD 2017-22-11]**

**RIN 2120-AA64**

**Airworthiness Directives; Bombardier, Inc., Airplanes**

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

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc., Model CL-600-2B16 (CL-604 Variant) airplanes. This AD was prompted by reports of in-service incidents regarding the loss of all air data system information provided to the flightcrew. This AD requires revising the airplane flight manual (AFM) to provide “Unreliable Airspeed” procedures to the flightcrew to stabilize the airplane’s airspeed and attitude for continued safe flight and landing. We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone: 514-855-5000; fax: 514-855-7401; email: thd.crj@aero.bombardier.com; Internet: <http://www.bombardier.com>. You may view this referenced service information at the FAA, Transport Standards Branch, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0528.

#### **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-2017-0528; 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 AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone 800-647-5527) is Docket 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 FURTHER INFORMATION CONTACT:** Assata Dessaline, Aerospace Engineer, Avionics and Administrative Services Section, FAA, New York ACO Branch,

1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone: 516-228-7301; fax: 516-794-5531.

## **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 certain Bombardier, Inc., Model CL-600-2B16 (CL-604 Variant) airplanes. The NPRM published in the Federal Register on June 5, 2017 (82 FR 25746) (“the NPRM”). The NPRM was prompted by reports of in-service incidents regarding the loss of all air data system information provided to the flightcrew. The NPRM proposed to require revising the AFM to provide “Unreliable Airspeed” procedures to the flightcrew to stabilize the airplane’s airspeed and attitude for continued safe flight and landing. We are issuing this AD to provide the flightcrew with procedures for “Unreliable Airspeed” that stabilize the airplane’s airspeed and attitude for continued safe flight and landing.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2017-01, dated January 6, 2017 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Bombardier, Inc., Model CL-600-2B16 (CL-604 Variant) airplanes. The MCAI states:

A number of in-service incidents have been reported on CL-600-2C10 aeroplanes regarding a loss of all air data information provided to the crew. The air data information was recovered as the aeroplane descended to lower altitudes. An investigation determined that the root cause in both events was high altitude icing (ice crystal contamination). If not recognized and addressed, this condition may affect continued safe flight and landing.

Due to similarities in the air data systems, similar events could happen on Bombardier Inc. CL-600-2B16 aeroplanes.

This [Canadian] AD mandates the incorporation of Aircraft Flight Manual (AFM) procedures to guide the crew to stabilize the aeroplanes airspeed and attitude for continued safe flight and landing.

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0528.

### **Comments**

We gave the public the opportunity to participate in developing this AD. We considered the comment received.

### **Request to Clarify Introduction of “Unreliable Airspeed” AFM Procedures**

The commenter, Marjolaine Bourget, stated that the “unreliable airspeed” procedures, while provided in the AFM revisions identified in the proposed requirements, were actually introduced in the previous revision of the identified AFMs.

From this statement, we infer that the commenter was requesting that we add a statement that the “unreliable airspeed” procedures were introduced in the previous revision of the identified AFMs. The commenter provided no justification for this request. We acknowledge that the “unreliable airspeed” procedures were introduced in an

earlier revision of the identified AFMs. We have revised this AD by adding new paragraph (h) to this AD that provides credit to operators for previously completing the actions required by paragraph (g) of this AD if they used the applicable previous AFM revision.

### **Conclusion**

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this AD as proposed, except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

### **Related Service Information under 1 CFR part 51**

Bombardier, Inc., has issued Unreliable Airspeed, of Section 03-15, Instruments System, of Chapter 3, Emergency Procedures, of the following AFMs:

- Bombardier Challenger 604 AFM, Publication No. CH 604 AFM, Revision 103, dated November 28, 2016.
- Bombardier Challenger 605 AFM, Publication No. CH 605 AFM, Revision 41, dated November 28, 2016.
- Bombardier Challenger 650 AFM, Publication No. CH 650 AFM, Revision 6, dated November 28, 2016.

This service information provides revisions to the Emergency Procedures section of the AFM to incorporate a procedure for “Unreliable Airspeed.” These documents are distinct since they apply to different airplane configurations. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **Costs of Compliance**

We estimate that this AD affects 128 airplanes of U.S. registry.

We also estimate that it takes about 1 work-hour per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$10,880, or \$85 per product.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. “Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority

because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

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

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2017-22-11 Bombardier, Inc.:** Amendment 39-19091; Docket No. FAA-2017-0528; Product Identifier 2017-NM-028-AD.

#### **(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to Bombardier, Inc., Model CL-600-2B16 (CL-604 Variant) airplanes, certificated in any category; serial numbers 5301 through 5665 inclusive; 5701 through 5988 inclusive; and 6050 through 6080 inclusive.

#### **(d) Subject**

Air Transport Association (ATA) of America Code 34, Navigation.

**(e) Reason**

This AD was prompted by reports of in-service incidents regarding the loss of all air data system information provided to the flightcrew. We are issuing this AD to provide the flightcrew with procedures for “Unreliable Airspeed” that stabilize the airplane’s airspeed and attitude for continued safe flight and landing.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Revision of the Airplane Flight Manual (AFM)**

Within 30 days after the effective date of this AD: Revise the Emergency Procedures section of the AFM to include the information in Unreliable Airspeed, of Section 03-15, Instruments System, of Chapter 3, Emergency Procedures, of the applicable AFM specified in paragraph (g)(1), (g)(2), or (g)(3) of this AD. These revisions incorporate a procedure for “Unreliable Airspeed.” Thereafter, operate the airplane according to the limitation and procedure in the applicable revision.

(1) For airplanes having serial numbers 5301 through 5665 inclusive: Bombardier Challenger 604 AFM, Publication No. CH 604 AFM, Revision 103, dated November 28, 2016.

(2) For airplanes having serial numbers 5701 through 5988 inclusive (marketing designation – Challenger 605): Bombardier Challenger 605 AFM, Publication No. CH 605 AFM, Revision 41, dated November 28, 2016.

(3) For airplanes having serial numbers 6050 through 6080 inclusive (marketing designation – Challenger 650): Bombardier Challenger 650 AFM, Publication No. CH 650 AFM, Revision 6, dated November 28, 2016.

**(h) Credit for Previous Actions**

This paragraph provides credit for the actions specified in paragraph (g) of this AD, if those actions were performed before the effective date of this AD using the applicable AFM revision specified in paragraphs (h)(1), (h)(2), and (h)(3) of this AD.

(1) For airplanes having serial numbers 5301 through 5665 inclusive: Bombardier Challenger 604 AFM, Publication No. CH 604 AFM, Revision 102, dated August 30, 2016.

(2) For airplanes having serial numbers 5701 through 5988 inclusive (marketing designation – Challenger 605): Bombardier Challenger 605 AFM, Publication No. CH 605 AFM, Revision 40, dated August 30, 2016.

(3) For airplanes having serial numbers 6050 through 6080 inclusive (marketing designation – Challenger 650): Bombardier Challenger 650 AFM, Publication No. CH 650 AFM, Revision 5, dated August 30, 2016.

**(i) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as

appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone: 516-228-7300; fax: 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(2) Contacting the Manufacturer:** For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

**(j) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2017-01, dated January 6, 2017, for related information for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0528.

(2) For more information about this AD, contact Assata Dessaline, Aerospace Engineer, Avionics and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone: 516-228-7301; fax: 516-794-5531.

(3) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (k)(3) and (k)(4) of this AD.

**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Bombardier Challenger 604 Airplane Flight Manual (AFM), Publication No. CH 604 AFM, Revision 103, dated November 28, 2016.

(ii) Bombardier Challenger 605 AFM, Publication No. CH 605 AFM, Revision 41, dated November 28, 2016.

(iii) Bombardier Challenger 650 AFM, Publication No. CH 650 AFM, Revision 6, dated November 28, 2016.

(3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone: 514-855-5000; fax: 514-855-7401; email: thd.crj@aero.bombardier.com; Internet: <http://www.bombardier.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the

availability of this material at NARA, call 202-741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on October 20, 2017.

Dionne Palermo,  
Acting Director,  
System Oversight Division,  
Aircraft Certification Service.

[FR Doc. 2017-23996 Filed: 11/14/2017 8:45 am; Publication Date: 11/15/2017]