

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. FAA-2016-3990; Directorate Identifier 2015-NM-153-AD; Amendment 39-18622; AD 2016-17-09]

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 all Bombardier, Inc. Model CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900) airplanes. This AD was prompted by two in-service incidents reported on Bombardier, Inc. Model CL-600-2C10 (Regional Jet Series 700, 701, & 702) airplanes regarding a loss of all air data information in the flight deck. This AD requires revision of the airplane flight manual (AFM) to provide procedures to guide the crew to stabilize the airplane's airspeed and attitude for continued safe flight. We are issuing this AD to prevent loss of air data information that may affect continued safe flight.

**DATES:** This AD is effective September 30, 2016.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of September 30, 2016.

**ADDRESSES:** For service information identified in this final rule, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; Widebody Customer Response Center North America toll-free telephone: 1-866-538-1247 or direct-dial telephone: 1-514-855-2999; fax 514-855-7401; email: [ac.yul@aero.bombardier.com](mailto:ac.yul@aero.bombardier.com); Internet: <http://www.bombardier.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. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-3990.

**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-2016-

3990; 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 Services Branch, ANE-172, FAA, New York Aircraft Certification Office (ACO), 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 all Bombardier, Inc. Model CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900) airplanes. The NPRM published in the **Federal Register** on March 4, 2016 (81 FR 11467) ("the NPRM"). The NPRM was prompted by two in-service incidents reported on Bombardier, Inc. Model CL-600-2C10 (Regional Jet Series 700, 701, & 702) airplanes regarding a loss of all air data information in the flight deck. The NPRM proposed to require revision of the airplane flight manual (AFM) to provide procedures to guide the crew to stabilize the airplane's airspeed and attitude for continued safe flight. We are issuing this AD to prevent loss of air data information that may affect continued safe flight.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian AD CF-2015-08, dated April 28, 2015 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for all Bombardier, Inc. Model CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900) airplanes. The MCAI states:

Two in-service incidents have been reported on CL-600-2C10 aeroplanes regarding a loss of all air data information in the cockpit. 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 addressed, this condition may affect continued safe flight.

Due to similarities in the air data systems, such events could happen on all Bombardier CRJ models, CL-600-2B19, CL-600-2C10, CL-600-2D15, CL-600-2D24 and CL-600-2E25. Therefore, the corrective actions for these models will be mandated once their respective Airplane Flight Manual (AFM) revisions become available.

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

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-2016-3990.

**Comments**

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM and the FAA's response to each comment.

**Request for Further Investigation**

The Air Line Pilots Association stated that the AFM revision will not address the root cause of the high-altitude icing (ice crystal contamination), and requested that further investigation be done for the ice crystal contamination issue and remedies be provided in addition to the AFM amendments.

We agree that the AFM revision will not address the root cause of the high-altitude icing (ice crystal contamination). The manufacturer is investigating the issue, but there is no timetable for a final resolution. Should the manufacturer develop modifications to prevent this problem, the FAA will consider further rulemaking. The incorporation of the AFM procedures is meant to be used to guide the crew on how to stabilize the airplane airspeed and altitude for continued safe flight in icing conditions. However, further investigation into this matter extends beyond the scope of this AD.

**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 14 CFR Part 51**

Bombardier, Inc. has issued Emergency Procedure 1., Unreliable

Airspeed, of Section 03–19, Emergency Procedures—Unreliable Airspeed, of Chapter 3, Emergency Procedures, in Volume 1 of the Bombardier CRJ Series Regional Jet CL–600–2D15 and CL–600–2D24 Airplane Flight Manual CSP C–012, Revision 11A, dated May 25, 2015. The service information describes procedures to guide the crew to stabilize the airplane’s airspeed and attitude for continued safe flight. 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.

**Interim Action**

Required actions in this AD apply only to Bombardier, Inc. Model CL–600–2D15 (Regional Jet Series 705) and CL–600–2D24 (Regional Jet Series 900)

airplanes. We may consider issuing further rulemaking on the other Bombardier airplane models identified previously.

**Costs of Compliance**

We estimate that this AD affects 230 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

**ESTIMATED COSTS**

Action	Labor cost	Cost per product	Cost on U.S. operators
AFM revision .....	1 work-hour × \$85 per hour = \$85 .....	\$85	\$19,550

**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.

**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):

**2016–17–09 Bombardier, Inc.:** Amendment 39–18622; Docket No. FAA–2016–3990; Directorate Identifier 2015–NM–153–AD.

**(a) Effective Date**

This AD is effective September 30, 2016.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to all Bombardier, Inc. Model CL–600–2D15 (Regional Jet Series 705) and CL–600–2D24 (Regional Jet Series 900) airplanes, certificated in any category.

**(d) Subject**

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

**(e) Reason**

This AD was prompted by reports of two in-service incidents on Bombardier, Inc. Model CL–600–2C10 (Regional Jet Series 700, 701, & 702) airplanes regarding a loss of all air data information in the flight deck. We are issuing this AD to prevent air data information loss that may affect continued safe flight.

**(f) Compliance**

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

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

Within 30 days after the effective date of this AD, revise the Emergency Procedures section of the AFM to include the information in Emergency Procedure 1., Unreliable Airspeed, of Section 03–19, Emergency Procedures—Unreliable Airspeed, of Chapter 3, Emergency Procedures, in Volume 1 of the Bombardier CRJ Series Regional Jet CL–600–2D15 and CL–600–2D24 AFM CSP C–012, Revision 11A, dated May 25, 2015.

**(h) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs):* The Manager, New York Aircraft Certification Office (ACO), ANE–170, 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 ACO, send it to ATTN: Assata Dessaline, Aerospace Engineer, Avionics and Services Branch, ANE 172, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone: 516–228–7301; 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. The AMOC approval letter must specifically reference this AD.

(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, ANE–170, Engine and Propeller Directorate, 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.

**(i) Related Information**

Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2015-08, dated 28 April, 2015, 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-2016-3990.

**(j) 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) Section 03-19, Emergency Procedures—Unreliable Airspeed, of Chapter 3, Emergency Procedures, in Volume 1 of the Bombardier CRJ Series Regional Jet CL-600-2D15 and CL-600-2D24 Airplane Flight Manual CSP C-012, Revision 11A, dated May 25, 2015.

(ii) Reserved.

(3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; Widebody Customer Response Center North America toll-free telephone: 1-866-538-1247 or direct-dial telephone: 1-514-855-2999; fax 514-855-7401; email: [ac.yul@aero.bombardier.com](mailto:ac.yul@aero.bombardier.com); Internet: <http://www.bombardier.com>.

(4) You may view this 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.

(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 August 17, 2016.

**Dorr M. Anderson,**

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

[FR Doc. 2016-20376 Filed 8-25-16; 8:45 am]

**BILLING CODE 4910-13-P**

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. FAA-2016-6983; Directorate Identifier 2016-CE-012-AD; Amendment 39-18618; AD 2016-17-05]

**RIN 2120-AA64**

**Airworthiness Directives; RUAG Aerospace Services GmbH Airplanes**

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

**ACTION:** Final rule.

**SUMMARY:** We are superseding Airworthiness Directive (AD) 2009-13-04 for RUAG Aerospace Services GmbH Models 228-100, 228-101, 228-200, 228-201, 228-202, and 228-212 airplanes. 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 excessive wear on the guide pin of the power lever or condition lever, which could cause functional loss of the flight idle stop. We are issuing this AD to require actions to address the unsafe condition on these products.

**DATES:** This AD is effective September 30, 2016.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of September 30, 2016.

**ADDRESSES:** You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6983; or in person at the 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 service information identified in this AD, contact RUAG Aerospace Services GmbH, Dornier 228 Customer Support, P.O. Box 1253, 82231 Wessling, Federal Republic of Germany, telephone: +49 (0) 8153-30-2280; fax: +49 (0) 8153-30-3030; email: [custsupport.dornier228@ruag.com](mailto:custsupport.dornier228@ruag.com);

Internet: <http://www.ruag.com/>. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. 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-2016-6983.

**FOR FURTHER INFORMATION CONTACT:** Karl Schletzbaum, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4123; fax: (816) 329-4090; email: [karl.schletzbaum@faa.gov](mailto:karl.schletzbaum@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 RUAG Aerospace Services GmbH Models 228-100, 228-101, 228-200, 228-201, 228-202, and 228-212 airplanes. That NPRM was published in the **Federal Register** on June 1, 2016 (81 FR 34927), and proposed to supersede AD 2009-13-04, Amendment 39-15943 (74 FR 29116; June 19, 2009) (“AD 2009-13-04”).

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 (EASA AD No.: 2009-0031R1) states that:

Excessive wear on a guide pin of a power lever was detected during inspections. The failure of a power lever or condition lever guide pin could cause functional loss of the flight idle stop.

This condition, if not corrected, could lead to inadvertent activation of the beta mode in flight, possibly resulting in loss of control of the aeroplane.

Prompted by this finding, RUAG issued Alert Service Bulletin (ASB) ASB-228-279 to provide inspection instructions. Consequently, EASA issued AD 2009-0031 to require repetitive detailed inspections of the guide pins of the power levers and condition levers, and replacement of any pin that exceeds the allowable wear-limits.

Since that AD was issued, further analysis has determined that the inspection interval, in case of no pin replacement, can be extended and RUAG published Revision 1 of ASB-228-279, which also included landings (expressed in this AD as flight cycles—FC) as a determining factor.

For the reason described above, this AD revises EASA AD 2009-0031, amending the compliance times without changing the technical requirements, and also introducing some editorial changes for standardization.

EASA revised the MCAI (EASA AD No.: 2009-0031R2) to incorporate changes to the applicability. The FAA had already incorporated these changes in the NPRM so no changes to the final rule are necessary.

The MCAI can be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6983.

**Comments**

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (74 FR 29116; June 19, 2009) or on the determination of the cost to the public.

**Conclusion**

We reviewed the relevant data and determined that air safety and the public interest require adopting the AD as proposed except for minor editorial