



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-7427; Directorate Identifier 2016-NM-041-AD]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede Airworthiness Directive (AD) 2013-02-08, for all Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes.

AD 2013-02-08 currently requires inspecting the trunnions and upper and lower pins of the horizontal stabilizer trim actuator (HSTA), and replacement or re-identification if necessary; and revising the maintenance program to include safe life limits and inspection requirements for the HSTA. Since we issued AD 2013-02-08, we determined that not all affected attachment pins and trunnions were included in the required inspections. In addition, for certain airplanes on which the replacement in AD 2013-02-08 was done, incorrect attachment hardware may have been used. This proposed AD would require measuring the diameter of certain bolts and attach holes, and, as applicable, measuring the diameter of the attach holes in the trunnions and pins, doing detailed visual inspections of the trunnions, pins, and spacers, doing corrective actions, and re-identifying trunnions and pins. This proposed AD also requires revising the maintenance or inspection program. This proposed AD also removes certain airplanes from the

applicability. We are proposing this AD to prevent failure of the attachment pins and trunnions of the HSTA. This condition could result in separation of the horizontal stabilizer, and consequent loss of control of the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments 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: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, 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 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-2016-7427; 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 Operations office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Cesar Gomez, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7318; fax (516) 794-5531.

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-2016-7427; Directorate Identifier 2016-NM-041-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 based on 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, January 16, 2013, we issued AD 2013-02-08, Amendment 39-17329 (78 FR 7647, February 4, 2013) (“AD 2013-02-08”). AD 2013-02-08 requires actions intended to address an unsafe condition on all Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes.

Since we issued AD 2013-02-08, we have determined that not all affected attachment pins and trunnions were included in the required inspections of AD 2013-02-08. In addition, for airplanes on which certain service information was incorporated, incorrect attachment hardware may have been used to re-install the HSTA attachment pins and trunnions.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2016-08, dated March 30, 2016 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes. The MCAI states:

After the issuance of [Canadian] AD CF-2011-45, it was discovered that the [Canadian] AD did not address all affected Horizontal Stabilizer Trim Actuator (HSTA) attachment pins and trunnions. In addition, it is possible that aeroplanes having incorporated the Initial issue or Revision A, of Bombardier Service Bulletin (SB)

601R-27-160 used incorrect attachment hardware to re-install the HSTA attachment pins or trunnions.

This [Canadian] AD mandates the inspection and rectification, as required, and the re-identification, as required, of the HSTA pins and trunnions and incorporation of a revised Airworthiness Limitation task.

The required actions include measuring the diameter of the bolts that attach the trunnions and pins, measuring the diameter of the attach holes in the aircraft structure, and, as applicable, measuring the diameter of the attach holes in the trunnions and pins, doing detailed visual inspections for gouges, scratches, and corrosion of the trunnions and pins, doing detailed visual inspections for damage of the spacers, doing corrective actions, and re-identifying trunnions and pins. Corrective actions include replacing bolts, trunnions, pins, and spacers, increasing the diameter of the attach holes, and repairing trunnions and pins.

This proposed AD also removes certain airplanes from the applicability to correspond with the MCAI, which removed them from its applicability.

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-2016-7427.

Related Service Information under 1 CFR part 51

Bombardier has issued Service Bulletin 601R-27-160, Revision D, dated October 22, 2015. The service information describes procedures for measuring the diameter of certain bolts and attach holes, and, as applicable, measuring the diameter of the attach holes in the trunnions and pins, doing detailed visual inspections of the trunnions, pins, and spacers, doing corrective actions, and re-identifying trunnions and pins.

Bombardier has also issued Bombardier Temporary Revision 2B-2245, dated October 17, 2014, to Appendix B – Airworthiness Limitations, of Part 2, Airworthiness Requirements, of the Bombardier CL-600-2B19 Maintenance Requirements Manual to incorporate a revised Airworthiness Limitation task. The service information describes safe life limits for the HSTA trunnion support and attaching hardware.

Bombardier has also issued Bombardier Temporary Revision 2B-2186, dated August 8, 2011, to Appendix B–Airworthiness Limitations, Part 2, Airworthiness Requirements, of the Bombardier CL-600-2B19 Maintenance Requirements Manual to incorporate a revised Airworthiness Limitation task. The service information describes an inspection of the upper and lower installation pins of the horizontal stabilizer pitch trim actuator.

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.

FAA’s Determination and Requirements of this Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

Costs of Compliance

We estimate that this proposed AD affects 489 airplanes of U.S. registry.

We estimate that it would take about 8 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$332,520, or \$680 per product.

In addition, we estimate that any necessary follow-on actions would take about 20 work-hours and require parts costing \$4,391, for a cost of \$6,091 per product. We have no way of determining the number of products that may need these actions.

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 proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed regulation:

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.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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 removing Airworthiness Directive AD 2013-02-08, Amendment 39-17329 (78 FR 7647, February 4, 2013), and adding the following new AD:

Bombardier, Inc.: Docket No. FAA-2016-7427; Directorate Identifier 2016-NM-041-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2013-02-08, Amendment 39-17329 (78 FR 7647, February 4, 2013) (“AD 2013-02-08”).

(c) Applicability

This AD applies to Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, certificated in any category, serial numbers 7003 through 8113 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 27: Flight controls.

(e) Reason

This AD was prompted by a determination that not all affected attachment pins and trunnions were included in the inspections required by AD 2013-02-08. In addition, for certain airplanes on which the replacement in AD 2013-02-08 was done, incorrect

attachment hardware may have been used. We are issuing this AD to prevent failure of the attachment pins and trunnions of the horizontal stabilizer trim actuator (HSTA). This condition could result in separation of the horizontal stabilizer, and consequent loss of control of the airplane.

(f) Compliance

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

(g) Inspection

(1) For airplanes on which the detailed inspection specified in Bombardier Service Bulletin 601R-27-160, dated September 29, 2011; or Bombardier Service Bulletin 601R-27-160, Revision A, dated October 3, 2012, has not been done as of the effective date of this AD: At the earliest of the times specified in paragraphs (g)(1)(i), (g)(1)(ii), and (g)(1)(iii) of this AD, measure the diameter of the bolts that attach the trunnions and pins, measure the diameter of the attach holes in the aircraft structure, and, as applicable, measure the diameter of the attach holes in the trunnions and pins, do detailed visual inspections for gouges, scratches, and corrosion of the trunnions and pins, do detailed visual inspections for damage of the spacers, do corrective actions, and re-identify trunnions and pins, in accordance with Part A of the Accomplishment Instructions of Bombardier Service Bulletin 601R-27-160, Revision D, dated October 22, 2015; except as required by paragraph (h) of this AD. Do all applicable corrective actions before further flight.

(i) Within 5,000 flight hours after March 11, 2013 (the effective date of AD 2013-02-08).

(ii) Within 60 months after March 11, 2013 (the effective date of AD 2013-02-08).

(iii) Before the accumulation of 40,000 total flight cycles, or within 60 days after March 11, 2013 (the effective date of AD 2013-02-08), whichever occurs later.

(2) For airplanes on which the detailed inspection specified in Bombardier Service Bulletin 601R-27-160, dated September 29, 2011; or Bombardier Service Bulletin 601R-27-160, Revision A, dated October 3, 2012, has been done as of the effective date of this AD: Within 9,600 flight hours or 60 months after the effective date of this AD, whichever occurs first; measure the diameter of the bolts that attach the trunnions and pins, measure the diameter of the attach holes in the aircraft structure, and, as applicable, measure the diameter of the attach holes in the trunnions and pins, do detailed visual inspections for gouges, scratches, and corrosion of the trunnions and pins, do detailed visual inspections for damage of the spacers, do corrective actions, and re-identify trunnions and pins, in accordance with Part B of the Accomplishment Instructions of Bombardier Service Bulletin 601R-27-160, Revision D, dated October 22, 2015, except as required by paragraph (h) of this AD. Do all applicable corrective actions before further flight.

(h) Exception to Service Information

Where Bombardier Service Bulletin 601R-27-160, Revision D, dated October 22, 2015, specifies to contact Bombardier for disposition, before further flight, repair using a method approved by the Manager, New York Aircraft Certification Office (ACO),

ANE-170, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO).

(i) 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 service information identified in paragraphs (i)(1) and (i)(2) of this AD, which are not incorporated by reference in this AD.

(1) Bombardier Service Bulletin 601R-27-160, Revision B, dated February 20, 2015.

(2) Bombardier Service Bulletin 601R-27-160, Revision C, dated May 3, 2015.

(j) Revision of Maintenance or Inspection Program

(1) Within 30 days after March 11, 2013 (the effective date of AD 2013-02-08), revise the maintenance or inspection program, as applicable, to incorporate the information specified in Bombardier Temporary Revision 2B-2186, dated August 8, 2011, to Appendix B–Airworthiness Limitations, Part 2, Airworthiness Requirements, of the Bombardier CL-600-2B19 Maintenance Requirements Manual. The compliance time for doing the initial inspection of the upper and lower installation pins of the horizontal stabilizer pitch trim actuator is before the accumulation of 40,000 landings or within 60 days after March 11, 2013, whichever occurs later.

(2) Within 30 days after the effective date of this AD, revise the maintenance or inspection program, as applicable, to incorporate the information specified in Bombardier Temporary Revision 2B-2245, dated October 17, 2014; to Appendix B–Airworthiness

Limitations, Part 2, Airworthiness Requirements, of the Bombardier CL-600-2B19 Maintenance Requirements Manual. The compliance time for doing the initial replacement for the HSTA trunnion support and attaching hardware is before the accumulation of 80,000 landings or within 60 days after the effective date of this AD, whichever occurs later.

(k) No Alternative Actions or Intervals

After accomplishing the revision required by paragraph (j) of this AD, no alternative actions (e.g., inspections) or intervals may be used unless the actions or intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (l)(1) of this AD.

(l) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York 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: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York 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. The AMOC approval letter must specifically reference this AD.

(2) Contacting the Manufacturer: As of the effective date of this AD, 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 TCCA; or Bombardier, Inc.'s TCCA DAO. If approved by the DAO, the approval must include the DAO-authorized signature.

(m) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2016-08, dated March 30, 2016, 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-2016-7427.

(2) 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>. 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.

Issued in Renton, Washington, on July 8, 2016.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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