

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

[Docket No. FAA-2019-0186; Product Identifier 2018-NM-153-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 adopt a new airworthiness directive (AD) for all Bombardier, Inc., Model CL-600-2B16 (601-3A, 601-3R, and 604 Variants) airplanes. This proposed AD was prompted by a report that main landing gear (MLG) side stay actuators have been assembled using nonconforming split ball bearings. This proposed AD would require verification of the serial numbers of the installed MLG side stay actuator assemblies, and replacement of the affected parts. We are proposing this AD to address the unsafe condition on these products.

**DATES:** We must receive comments on this proposed AD by June 28, 2019.

**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 NPRM, 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 service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

**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-2019-0186; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations (phone: 800-647-5527) is listed above. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Darren Gassetto, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7323; fax 516-794-5531; email [9-avs-nyaco-cos@faa.gov](mailto:9-avs-nyaco-cos@faa.gov).

**SUPPLEMENTARY INFORMATION:****Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2019-0186; Product Identifier 2018-NM-153-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM 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 NPRM.

**Discussion**

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian AD CF-2018-26, dated October 5, 2018 (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 (601-3A, 601-3R, and 604 Variants) airplanes. The MCAI states:

The landing gear supplier has informed Bombardier Inc. about a quality escape involving Main Landing Gear (MLG) side stay actuators that have been assembled using non-conforming split ball bearings. The affected bearings are manufactured from material that does not meet the required material properties. If not corrected, this

condition can result in potentially asymmetric MLG gear extension or retraction and subsequent gear collapse during landing.

This [Canadian] AD mandates verification of the installed MLG side stay actuator assemblies and replacement of the affected parts.

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-2019-0186.

**Related Service Information Under 14 CFR Part 51**

Bombardier has issued the following service information.

- Bombardier Service Bulletin 604-32-029, Revision 02, dated May 10, 2018.
- Bombardier Service Bulletin 605-32-006, Revision 02, dated May 10, 2018.
- Bombardier Service Bulletin 650-32-002, Revision 02, dated May 10, 2018.

The service information describes procedures to verify the serial numbers of the installed MLG side stay actuator assemblies and to replace the affected parts. These documents are distinct since they apply to the airplane model in different 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.

**FAA's Determination**

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 the relevant information and determined the unsafe condition described previously is likely to exist or develop on other products of the same type design.

**Proposed Requirements of This NPRM**

This proposed AD would require accomplishing the actions specified in the service information described previously.

**Differences Between This Proposed AD and the MCAI or Service Information**

The applicability of the MCAI is limited to Bombardier, Inc., Model CL-600-2B16 (601-3A, 601-3R, and 604 Variants) airplanes, serial numbers 5301 through 5665 inclusive, 5701 through

5988 inclusive, and 6050 through 6091 inclusive, equipped with MLG side stay actuator assembly containing split ball bearing part number 104467672. However, the applicability of this proposed AD includes all Bombardier, Inc., Model CL-600-2B16 (601-3A, 601-3R, and 604 Variants) airplanes and prohibits the installation of any MLG

side stay actuator with a serial number identified in the service information. Because the affected part is a rotatable part, we have determined that this part could later be installed on airplanes that were initially delivered with the acceptable part, thereby subjecting those airplanes to the unsafe condition. We

have coordinated this difference with TCCA.

**Costs of Compliance**

We estimate that this proposed AD affects 384 airplanes of U.S. registry. We estimate the following costs to comply with this proposed AD:

**ESTIMATED COSTS FOR REQUIRED ACTIONS**

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
1 work-hour × \$85 per hour = \$85 .....	\$0	\$85	\$32,640

We estimate the following costs to do any necessary on-condition action that would be required based on the results

of any required actions. We have no way of determining the number of aircraft

that might need this on-condition action:

**ESTIMATED COSTS OF ON-CONDITION ACTIONS**

Labor cost	Parts cost	Cost per product
Up to 7 work-hours × \$85 per hour = \$595 .....	Up to \$1,820 ..	Up to \$2,415.

According to the manufacturer, some or all of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all known costs in our cost estimate.

**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 proposed 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 and associated appliances to the Director of the System Oversight Division.

**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 adding the following new airworthiness directive (AD):

**Bombardier, Inc.:** Docket No. FAA-2019-0186; Product Identifier 2018-NM-153-AD.

**(a) Comments Due Date**

We must receive comments by June 28, 2019.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to all Bombardier, Inc., Model CL-600-2B16 (601-3A, 601-3R, and 604 Variants) airplanes, certificated in any category.

**(d) Subject**

Air Transport Association (ATA) of America Code 32, Main landing gear.

**(e) Reason**

This AD was prompted by a report that main landing gear (MLG) side stay actuators have been assembled using nonconforming

split ball bearings. We are issuing this AD to address the affected bearings, which could potentially result in asymmetric MLG gear extension or retraction, and subsequent gear collapse during landing.

**(f) Compliance**

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

**(g) Inspection to Verify the Serial Number**

For airplane serial numbers 5301 through 5665 inclusive, 5701 through 5988 inclusive, and 6050 through 6091 inclusive, equipped with any MLG side stay actuator assembly containing split ball bearing part number (P/N) 104467672: For the left and right MLG side stay actuator assemblies having P/Ns 19011-103 and 19011-105, at the applicable

time specified in figure 2 to paragraph (g) of this AD, perform an inspection to verify the serial number, in accordance with paragraphs 2.A. and 2.B. of the Accomplishment Instructions of the applicable service information specified in figure 1 to paragraph (g) of this AD.

**BILLING CODE 4910-13-P**

**Figure 1 to paragraph (g) of this AD – Service information for verifying serial number**

Model	Airplane S/N	Service Information
CL-600-2B16 (601-3A, 601-3R, and 604 Variants) airplanes	5301 through 5665 inclusive	Bombardier Service Bulletin 604-32-029, Revision 02, dated May 10, 2018
	5701 through 5988 inclusive	Bombardier Service Bulletin 605-32-006, Revision 02, dated May 10, 2018
	6050 through 6091 inclusive	Bombardier Service Bulletin 650-32-002, Revision 02, dated May 10, 2018

**Figure 2 to paragraph (g) of this AD – Compliance times**

Total Flight Cycles	Compliance Time
As of the effective date of this AD: 3,350 total flight cycles or fewer on an MLG side stay actuator assembly	Before the MLG side stay actuator assembly reaches 3,750 total flight cycles or 48 months from the effective date of this AD, whichever occurs first.
As of the effective date of this AD: more than 3,350 total flight cycles on an MLG side stay actuator assembly	Within 400 flight cycles or 12 months from the effective date of this AD, whichever occurs first.

**BILLING CODE 4910-13-C**

**(h) Replacement**

If, during the inspection specified in paragraph (g) of this AD, the identified serial number of the MLG side stay actuator assembly is listed in table 1 or table 2 of paragraph 2.B. of the Accomplishment Instructions of the applicable service information specified in figure 1 to paragraph (g) of this AD: At the applicable time specified in figure 2 to paragraph (g) of this AD, replace the split ball bearing having P/N 104467672, in accordance with paragraph 2.C. of the Accomplishment Instructions of the applicable service information specified in figure 1 to paragraph (g) of this AD. If the identified serial number of the MLG side stay actuator assembly is not listed in table 1 or table 2 of paragraph 2.B. of the

Accomplishment Instructions of the applicable service information specified in figure 1 to paragraph (g) of this AD, no further action is required by this paragraph.

**(i) Parts Installation Limitation**

As of the effective date of this AD, no person may install, on any Bombardier, Inc., Model CL-600-2B16 (601-3A, 601-3R, and 604 Variants) airplanes, an MLG side stay actuator assembly with a serial number listed in table 1 or table 2 of paragraph 2.B. of the Accomplishment Instructions of the applicable service information specified in figure 1 to paragraph (g) of this AD, unless the split ball bearing having P/N 104467672 has been previously replaced as specified in paragraph (h) of this AD.

**(j) Credit for Previous Actions**

This paragraph provides credit for actions required by paragraphs (g) of this AD, if those actions were performed before the effective date of this AD using the service information in paragraphs (j)(1) through (j)(3) of this AD.

- (1) Bombardier Service Bulletin 604-32-029, Revision 01, dated February 5, 2018.
- (2) Bombardier Service Bulletin 605-32-006, Revision 01, dated February 5, 2018.
- (3) Bombardier Service Bulletin 650-32-002, Revision 01, dated February 5, 2018.

**(k) 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.

#### (I) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2018-26, dated October 5, 2018, 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-2019-0186.

(2) For more information about this AD, contact Darren Gassetto, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7323; fax 516-794-5531; email [9-avs-nyaco-cos@faa.gov](mailto:9-avs-nyaco-cos@faa.gov).

(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>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

Issued in Des Moines, Washington, on May 3, 2019.

#### Michael Kaszycki,

*Acting Director, System Oversight Division, Aircraft Certification Service.*

[FR Doc. 2019-09643 Filed 5-13-19; 8:45 am]

BILLING CODE 4910-13-P

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2019-0256; Product Identifier 2019-NM-027-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 adopt a new airworthiness directive (AD) for all Bombardier, Inc., Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes; Model CL-600-2C10 (Regional Jet Series 700, 701 & 702) airplanes; Model CL-600-2D15 (Regional Jet Series 705) airplanes; Model CL-600-2D24 (Regional Jet Series 900) airplanes; and Model CL-600-2E25 (Regional Jet Series 1000) airplanes. This proposed AD was prompted by a report that during Automatic Flight Control System (AFCS) ALTS CAP or (V) ALTS CAP mode the flight guidance/autopilot does not account for engine failure while capturing an altitude. This proposed AD would require revising the airplane flight manual (AFM) to include a limitation and abnormal operating procedure for the AFCS. We are proposing this AD to address the unsafe condition on these products.

**DATES:** We must receive comments on this proposed AD by June 28, 2019.

**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.

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For service information identified in this NPRM, 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 service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

#### 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-2019-0256; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations (phone: 800-647-5527) is listed above. Comments will be available in the AD docket shortly after receipt.

#### FOR FURTHER INFORMATION CONTACT:

Steven Dzierzynski, Aerospace Engineer, Avionics and Electrical Systems Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7367; fax 516-794-5531; email [9-avs-nyaco-cos@faa.gov](mailto:9-avs-nyaco-cos@faa.gov).

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2019-0256; Product Identifier 2019-NM-027-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM 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 NPRM.

#### Discussion

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian AD CF-2018-32, dated December 10, 2018 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for all Bombardier, Inc., Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes; Model CL-