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 the attention of the person identified in paragraph (k)(1) of this AD and email to: *9-AVS-AIR-730-AMOC@faa.gov.*

(2) 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.

(k) Related Information

(1) For more information about this AD, contact Gregory Johnson, Aviation Safety Engineer, FAA, General Aviation & Rotorcraft Section, International Validation Section, 901 Locust, Room 301, Kansas City, MO 64106; phone: (720) 626–5462; email: *gregory.johnson@faa.gov.*

(2) Refer to European Union Aviation Safety Agency (EASA) AD 2020–0262, dated November 30, 2020, for more information. You may examine the EASA AD in the AD docket at *https://www.regulations.gov* by searching for and locating Docket No. FAA–2021–0871.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference 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 the AD specifies otherwise.

(i) Vulcanair S.p.A. P.68 Variants Service Bulletin No. 263, dated October 20, 2020.

(ii) [Reserved]

(3) For service information identified in this AD, contact Vulcanair S.p.A., Fulvio Oloferni, via Giovanni Pascoli, 7, Naples, 80026, Italy; phone: +39 081 5918 135; email: *airworthiness@vulcanair.com;* website: *www.vulcanair.com.*

(4) You may view this service information at FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222–5110.

(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, email: *fr.inspection@nara.gov,* or go to: *https://www.archives.gov/federal-register/cfr/ibr-locations.html.*

Issued on December 10, 2021.

Lance T. Gant,

Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2022–00056 Filed 1–10–22; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2021–0567; Project Identifier AD–2021–00663–E; Amendment 39–21865; AD 2021–26–06]

RIN 2120–AA64

Airworthiness Directives; General Electric Company Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain General Electric Company (GE) GE90 model turbofan engines. This AD was prompted by two separate in-flight shutdowns (IFSDs) resulting from failure of the transfer gearbox (TGB) radial bevel gear (TGB radial gearshaft). This AD requires visual inspection of the TGB radial gearshaft and, depending on the results of the inspection, replacement of the TGB radial gearshaft. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective February 15, 2022.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of February 15, 2022.

ADDRESSES: For service information identified in this final rule, contact General Electric Company, GE Aviation, Room 285, 1 Neumann Way, Cincinnati, OH 45215; phone: (513) 552–3272; email: *aviation.fleetsupport@ge.com;* website: *https://www.ge.com.* You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (817) 222–5110. It is also available at *https://www.regulations.gov* by searching for and locating Docket No. FAA–2021–0567.

Examining the AD Docket

You may examine the AD docket at *https://www.regulations.gov* by searching for and locating Docket No. FAA–2021–0567; 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 final rule, any comments received, and other information. The address for Docket Operations is 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: Stephen Elwin, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238–7236; fax: (781) 238–7199; email: *Stephen.L.Elwin@faa.gov.*

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all GE GE90–76B, GE90–85B, GE90–90B, GE90–94B, GE90–110B1, and GE90–115B model turbofan engines with a certain TGB radial gearshaft installed. The NPRM published in the **Federal Register** on August 12, 2021 (86 FR 44321). The NPRM was prompted by notification of two separate IFSDs resulting from the failure of the TGB radial gearshaft. After further investigation, the manufacturer determined that rework on the TGB radial gearshaft teeth chamfers during manufacturing may have caused local burrs and micro-cracks which led to high-cycle fatigue failure. GE subsequently issued service information to provide instructions for a one-time visual inspection of the affected radial gearshafts for the presence of burrs or rework on TGB radial gearshaft teeth chamfers. In the NPRM, the FAA proposed to require visual inspection of the TGB radial gearshaft and, depending on the results of the inspection, replacement of the TGB radial gearshaft. The FAA is issuing this AD to address the unsafe condition on these products.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from 5 commenters. The commenters were Air Line Pilots Association, International, The Boeing Company, FedEx Express, Japan Airlines (JAL), and United Airlines. The following presents the comments received on the NPRM and the FAA's response to each comment.

Question on the Difference Between This AD and the Service Information

JAL asked why there is a difference between the affected serial numbers (S/Ns) in this AD and the related service bulletins (SBs).

The FAA notes that the applicable SBs include several populations of TGB radial gearshafts. The FAA determined that TGB radial gearshafts with S/Ns starting with prefix FIAAXXXX, FIA05XXX to FIA09XXX, or FIA0AXXX to FIA0NXXX are not subject to the

unsafe condition in this AD. Although this AD does not require that these TGB radial gearshafts be inspected and removed, operators may still elect to inspect these TGB radial gearshaft at the next scheduled engine shop visit.

Request To Clarify Engine Shop Visit Definition

JAL requested that the FAA clarify disassembly of the compressor discharge pressure (CDP) seal joint in the definition of ''engine shop visit.'' JAL indicated that they understand that disassembly of the CDP seal joint is the same as disassembly of the CDP seal flange bolt, but not the same as removal of the CDP seal.

The FAA notes that any disassembly of the CDP seal joint meets the definition of an engine shop visit.

Request To Clarify if Inspection Occurs During Quick Turn Workscope (QTW)

JAL asked if the TGB radial gearshaft is required to be inspected during engine QTW. JAL indicated that GE GE90–100 Service Bulletin (SB) 72–0857 R01, dated April 28, 2021 (GE90–100 SB 72–0857 R01), excludes the performance of the inspection during QTW. The proposed AD, however, did not reference QTW in the required inspection. JAL suggested that the FAA update this AD to either exclude QTW from the compliance requirement for inspection or clarify the difference between the service information and this AD.

The FAA understands that the CDP seal joint, in some cases, may require disassembly during a QTW; however, in this scenario the appropriate provisions would exist to perform the required actions of this AD. A QTW that does not disassemble the CDP seal joint would not meet the definition of an engine shop visit, per this AD.

Addition of Interim Action Paragraph

The FAA determined the need to add the Interim Action paragraph to this AD. The manufacturer is investigating if an additional population of TGB radial gear shafts are affected by the unsafe condition of this AD.

Support for the AD

Air Line Pilots Association, International, The Boeing Company, FedEx Express, and United Airlines expressed support for the AD as written.

Conclusion

The FAA reviewed the relevant data, considered any comments received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. Except for minor editorial changes, and any other changes described previously, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Related Service Information Under 1 CFR Part 51

The FAA reviewed GE GE90 Service Bulletin (SB) 72–1201 R01, dated April 28, 2021 (GE90 SB 72–1201 R01), and GE90–100 SB 72–0857 R01, dated April 28, 2021. GE90 SB 72–1201 R01 specifies procedures for performing a one-time inspection of the TGB radial gearshaft for presence of burrs or rework on teeth chamfers on GE90–76B, GE90–85B, GE90–90B, and GE90–94B model turbofan engines. GE90–100 SB 72–0857 R01 specifies procedures for performing a one-time inspection of the TGB radial gearshaft for presence of burrs or rework on teeth chamfers on GE90–110B1 and GE90–115B model turbofan engines. 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 **ADDRESSES**.

Interim Action

The FAA considers this AD to be an interim action. If final action is later identified, the FAA may consider additional rulemaking.

Costs of Compliance

The FAA estimates that this AD affects 126 engines installed on airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

ESTIMATED COSTS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspect TGB radial gearshaft	1 work-hour × $85 per hour = $85	$0	$85	$10,710

The FAA estimates the following costs to do any necessary replacement that would be required based on the results of the inspection. The agency has no way of determining the number of aircraft that might need this replacement:

ON-CONDITION COSTS

Action	Labor cost	Parts cost	Cost per product
Replace TGB radial gearshaft	60 work-hours × $85 per hour = $5,100	$24,520	$29,620

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.

The FAA is 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

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) Will not affect intrastate aviation in Alaska, and

(3) 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 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:

2021–26–06 General Electric Company: Amendment 39–21865; Docket No. FAA–2021–0567; Project Identifier AD–2021–00663–E.

(a) Effective Date

This airworthiness directive (AD) is effective February 15, 2022.

(b) Affected ADs

None.

(c) Applicability

This AD applies to General Electric Company (GE) GE90–76B, GE90–85B, GE90–90B, GE90–94B, GE90–110B1, and GE90–115B model turbofan engines with a transfer gearbox (TGB) radial bevel gear (TGB radial gearshaft) serial number listed in paragraph 4., APPENDIX—A, Table 1 of GE GE90 Service Bulletin (SB) 72–1201 R01, dated April 28, 2021 (GE90 SB 72–1201 R01) or paragraph 4., APPENDIX—A, Table 1 of GE GE90–100 SB 72–0857 R01, dated April 28, 2021 (GE90–100 SB 72–0857 R01).

(d) Subject

Joint Aircraft System Component (JASC) Code 7260, Turbine Engine Accessory Drive.

(e) Unsafe Condition

This AD was prompted by two separate in-flight shutdowns resulting from the failure of the TGB radial gearshaft. The FAA is issuing this AD to prevent failure of the TGB radial gearshaft. The unsafe condition, if not addressed, could result in failure of one or more engines, loss of thrust control, and damage to the aircraft.

(f) Compliance

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

(g) Required Actions

(1) At the next engine shop visit after the effective date of this AD, perform a visual inspection of the affected TGB radial gearshaft using Figure 1 to paragraph (g)(1) of this AD.

Figure 1 to Paragraph (g)(1) – Visual Inspection of TGB Radial Gearshaft

Model Engine	Use
GE90-76B, GE90-85B, GE90-90B, and GE90-94B	Paragraph 3.A.(3)(a)1 through 3, of GE90 SB 72-1201 R01
GE90-110B1 and GE90-115B	Paragraph 3.A.(3)(a)1 through 3, of GE90-100 SB 72-0857 R01

(2) If, during the visual inspection required by paragraph (g)(1) of this AD, discrepancies are found that meet the criteria in the Accomplishment Instructions, paragraph 3.A.(4)(a) or 3.A.(4)(b), of GE90 SB 72–1201 R01 or GE90–100 SB 72–0857 R01, before further flight, replace the TGB radial gearshaft with a part eligible for installation.

(h) Definitions

(1) For the purpose of this AD, an ''engine shop visit'' is when the compressor discharge pressure seal joint is disassembled.

(2) For the purpose of this AD, a ''part eligible for installation'' is a TGB radial gearshaft that does not have raised material or rework on the teeth chamfers as described in the Accomplishment Instructions, paragraph 3.A.(4)(a) or 3.A.(4)(b), of GE90 SB 72–1201 R01 or GE90–100 SB 72–0857 R01.

(i) Credit for Previous Actions

You may take credit for the inspection of the affected TGB radial gearshaft required by paragraph (g)(1) of this AD if you performed the inspection before the effective date of this AD using GE GE90 SB 72–1201 R00, dated January 5, 2021, or GE GE90–100 SB 72–0857 R00, dated January 5, 2021.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, ECO 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 the attention of the person identified in paragraph (k) of this AD. You may email your request to *ANE-AD-AMOC@faa.gov.*

(2) 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.

(k) Related Information

For more information about this AD, contact Stephen Elwin, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238–7236; fax: (781) 238–7199; email: *Stephen.L.Elwin@faa.gov.*

(l) 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 the AD specifies otherwise.

(i) General Electric Company (GE) GE90 Service Bulletin (SB) 72–1201 R01, dated April 28, 2021.

(ii) GE GE90–100 SB 72–0857 R01, dated April 28, 2021.

(3) For GE service information identified in this AD, contact General Electric Company, GE Aviation, Room 285, 1 Neumann Way, Cincinnati, OH 45215; phone: (513) 552–3272; email: *aviation.fleetsupport@ge.com;* website: *https://www.ge.com.*

(4) You may view this service information at FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For

information on the availability of this material at the FAA, call (817) 222–5110.

(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, email: *fr.inspection@nara.gov,* or go to: *https://www.archives.gov/federal-register/cfr/ibr-locations.html.*

Issued on December 9, 2021.

Lance T. Gant,

Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2022–00049 Filed 1–10–22; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2021–0784; Project Identifier MCAI–2020–01455–T; Amendment 39–21857; AD 2021–25–13]

RIN 2120–AA64

Airworthiness Directives; Bombardier, Inc. Airplanes

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

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Bombardier, Inc., Model CL–600–1A11 (600), CL–600–2A12 (601), and CL–600–2B16 (601–3A, 601–3R, and 604 Variants) airplanes. This AD was prompted by a determination that new or more restrictive airworthiness limitations are necessary. This AD requires revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective February 15, 2022.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of February 15, 2022.

ADDRESSES: For service information identified in this final rule, contact Bombardier Business Aircraft Customer Response Center, 400 Côte Vertu Road West, Dorval, Québec H4S 1Y9, Canada; 514–855–2999; email *ac.yul@aero.bombardier.com;* internet *https://www.bombardier.com.* You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206–231–3195. It is also available on the internet at *https://www.regulations.gov* by searching for and locating Docket No. FAA–2021–0784.

Examining the AD Docket

You may examine the AD docket on the internet at *https://www.regulations.gov* by searching for and locating Docket No. FAA–2021–0784; 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 final rule, any comments received, and other information. The address for Docket Operations is 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: Elizabeth Dowling, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516–228–7300; fax 516–794–5531; email *9-avs-nyaco-cos@faa.gov.*

SUPPLEMENTARY INFORMATION:

Background

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued TCCA AD CF–2020–44, dated October 23, 2020 (referred to after this as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition for certain Bombardier, Inc., Model CL–600–1A11 (600), CL–600–2A12 (601), and CL–600–2B16 (601–3A, 601–3R, and 604 Variants) airplanes. You may examine the MCAI in the AD docket on the internet at *https://www.regulations.gov* by searching for and locating Docket No. FAA–2021–0784.

The FAA 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–600–1A11 (600), CL–600–2A12 (601), and CL–600–2B16 (601–3A, 601–3R, and 604 Variants) airplanes. The NPRM published in the **Federal Register** on September 14, 2021 (86 FR 51029). The NPRM was prompted by a determination that new or more restrictive airworthiness limitations are necessary. The NPRM proposed to require revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations. The FAA is issuing this AD to address fatigue cracking and loss of structural integrity of the circumferential splice joint, which could result in reduced structural integrity of the airplane. See the MCAI for additional background information.

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The FAA received no comments on the NPRM or on the determination of the cost to the public.

Conclusion

The FAA reviewed the relevant data and determined that air safety and the public interest require adopting this final rule as proposed, except for minor editorial changes. The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing 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

The FAA reviewed the following Bombardier service information, which describes new or more restrictive airworthiness limitations (a special detailed inspection for cracking of the skin circumferential splice at fuselage station (FS) 559.00, between stringer (STR) 10L and STR10R). Note: The asterisk (or ''one star'') with the last three digits of the task number indicates that the task is an airworthiness limitation task.

- Bombardier Challenger 600 Time Limits/Maintenance Checks (TLMC), Product Support Publication (PSP) 605, Temporary Revision (TR) 5–163, dated April 30, 2020, which includes Task 53–30–00–165*, ''Skin Circumferential Splice at FS559.00, between STR10L and STR10R.''
- Bombardier Challenger 601 TLMC, PSP 601–5, TR 5–267, dated April 30, 2020, which includes Task 53–30–00–188*, ''Skin Circumferential Splice at FS559.00, between STR10L and STR10R.''
- Bombardier Challenger 601 TLMC, PSP 601A–5, TR 5–281, dated April 30, 2020, which includes Task 53–30–00–191*, ''Skin Circumferential Splice at FS559.00, between STR10L and STR10R.''
- Section 5–10–30, Airworthiness Limitation Items, Bombardier Challenger 604 TLMC, Publication No. CH 604 TLMC, Part 2, Revision 32, dated December 18, 2019, which includes Task 53–20–00–192*, ''Special Detailed Inspection of the Skin