DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2019-0665; Project Identifier 2019-NE-25-AD; Amendment 39-21107; AD 2020-08-01]

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) CF34-1A, CF34-3A, CF34-3A1, CF34-3A2, CF34-3B, and CF34-3B1 model turbofan engines. This AD was prompted by an in-flight failure of a fan blade that led to an in-flight shutdown. This AD requires removal and replacement of the affected fan blades. The FAA is 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 General Electric Company, GE Aviation, Room 285, 1 Neumann Way, Cincinnati, OH, 45215; phone: 513-552-3272; email: aviation.fleetsupport@ge.com. You may view this service information at the FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA, 01803. For information on the availability of this material at the FAA,
call 781-238-7759. It is also available on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2019-0665.

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-2019-0665; 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, the regulatory evaluation, 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: Christopher McGuire, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone: 781-238-7120; fax: 781-238-7199; email: chris.mcguire@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain GE CF34-1A, CF34-3A, CF34-3A1, CF34-3A2, CF34-3B, and CF34-3B1 model turbofan engines. The NPRM published in the Federal Register on October 15, 2019 (84 FR 55073). The NPRM was prompted by an in-flight failure of a fan blade that led to an in-flight shutdown. The NPRM proposed to require removal and replacement of the affected fan blades. The FAA is issuing this AD to address the unsafe condition on these products.

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The FAA considered the comment received. An individual commenter supported the NPRM.
Conclusion

The FAA reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule as proposed.

Related Service Information under 1 CFR part 51

The FAA reviewed GE Service Bulletin (SB) CF34-BJ S/B 72-0306, dated September 27, 2017, and GE SB CF34-AL S/B 72-0314, dated September 27, 2017. GE SB CF34-BJ S/B 72-0306 describes procedures for removal and replacement of affected fan blades installed on CF34-1A, -3A, -3A1, -3A2, and -3B model turbofan engines. GE SB CF34-AL S/B 72-0314 describes procedures for removal and replacement of affected fan blades installed on CF34-3A1 and -3B1 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 the ADDRESSES section.

Other Related Service Information


Costs of Compliance

The FAA estimates that this AD affects 121 engines installed on airplanes of U.S. registry.

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

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove and replace fan blade</td>
<td>2 work-hours X $85 per hour = $170</td>
<td>$11,000</td>
<td>$11,170</td>
<td>$1,351,570</td>
</tr>
</tbody>
</table>

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.

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):


(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 General Electric Company (GE) CF34-1A, CF34-3A, CF34-3A1, CF34-3A2, CF34-3B, and CF34-3B1 model turbofan engines having a fan blade with a part number listed in Planning Information, paragraph 1.A., of GE Service Bulletin (SB) CF34-AL S/B 72-0314, dated September 27, 2017 or of GE SB CF34-BJ S/B 72-
0306, dated September 27, 2017, and with any serial number listed in paragraph 4., Appendix A, of GE SB CF34-AL S/B 72-0314 or of GE SB CF34-BJ S/B 72-0306.

(d) Subject

Joint Aircraft System Component (JASC) Code 7220, Turbine Engine Inlet Section.

(e) Unsafe Condition

This AD was prompted by an in-flight failure of a fan blade that led to an in-flight shutdown. The FAA is issuing this AD to prevent failure of the fan blade. The unsafe condition, if not addressed, could result in failure of one or more engines, loss of thrust control, and loss of the airplane.

(f) Compliance

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

(g) Required Actions

Remove the affected fan blades from service within 90 days after the effective date of this AD and replace with a part eligible for installation.

(h) Definition

A part that is eligible for installation is any fan blade other than those identified by paragraph (c) of this AD or a fan blade that has been repaired per GE SB CF34-AL S/B 72-0148, Revision 05, dated July 23, 2015; or GE SB CF34-BJ S/B 72-0123, Revision 04, dated October 21, 2015.

(i) 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 (j) 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.

(j) Related Information

For more information about this AD, contact Christopher McGuire, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone: 781-238-7120; fax: 781-238-7199; email: chris.mcguire@faa.gov.

(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 the AD specifies otherwise.


(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.

(4) You may view this service information at FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA, 01803. For information on the availability of this material at the FAA, call 781-238-7759.

(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 fedreg.legal@nara.gov, or go to:

Issued on April 3, 2020.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.
[FR Doc. 2020-07451 Filed: 4/9/2020 8:45 am; Publication Date: 4/10/2020]