[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2019-0394; Product Identifier 2017-NE-36-AD;]

RIN 2120-AA64

Airworthiness Directives; General Electric Company Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede Airworthiness Directive (AD) 2017-23-06, which applies to certain General Electric Company (GE) CF34-8C1, CF34-8C5, CF34-8C5A1, and CF34-8C5B1 engines. AD 2017-23-06 requires an inspection of the bleed air manifold link rod assemblies and the supply, return, and drain fuel fittings on the operability bleed valve (OBV). Since the FAA issued AD 2017-23-06, the manufacturer developed improved inspection techniques and determined these inspections should be applied to additional engine models. This proposed AD would require repetitive inspections of the OBV fuel tubes, OBV bleed air manifold link rod assemblies, and the OBV fuel fittings and replacement of OBVs or related hardware that fail inspection. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA 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, 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 General Electric Company, GE-Aviation, Room 285, 1 Neumann Way, Cincinnati, OH 45215, phone: 513-552-3272; fax: 513-552-3329; email: geae.aoc@ge.com. You may view this service information at the FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

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-2019-0394; 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 is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Michael Richardson-Bach, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone: 781-238-7747; fax: 781-238-7199; email: michael.richardson-bach@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites 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-2019-0394; Product Identifier 2017-NE-36-AD" at the beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. The FAA will consider all comments received by the closing date and may amend this NPRM because of those comments.

The FAA will post all comments, without change, to http://www.regulations.gov, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

The FAA issued AD 2017-23-06, Amendment 39-19100 (82 FR 52830, November 15, 2017), ("AD 2017-23-06"), for certain General Electric Company (GE) CF34-8C1, CF34-8C5, CF34-8C5A1, and CF34-8C5B1 engines. AD 2017-23-06 requires an inspection of the bleed air manifold link rod assemblies and the supply, return, and drain fuel fittings on the OBV. AD 2017-23-06 resulted from reports that significant fuel leaks, some resulting in engine fires, occurred on multiple occasions due to malfunctions related to the OBVs. The FAA issued AD 2017-23-06 to address the unsafe condition on these products.

Actions Since AD 2017-23-06 Was Issued

Since the FAA issued AD 2017-23-06, the manufacturer has developed improved inspections of the OBV bleed air manifold link rod assemblies and OBV fuel fittings, added an inspection of the OBV fuel tubes, and determined that these inspections should be applied to additional engine models. GE published these improved inspections in GE Service Bulletin (SB) CF34-8C-AL S/B 75-0020, R04, dated May 10, 2019.

Related Service Information under 1 CFR part 51

The FAA reviewed GE SB CF34-8C-AL S/B 75-0020, R04, dated May 10, 2019. The SB describes procedures for inspecting the bleed air manifold link rod assemblies;

the supply, return, and drain fuel fittings; and the fuel tubes on the OBV. 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

The FAA is proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would retain all the requirements of AD 2017-23-06. This proposed AD would revise the inspections of the OBV bleed air manifold link rod assemblies and OBV fuel fittings and require inspections of the OBV fuel tubes. In addition, this proposed AD would expand the applicability of these inspections to include additional GE CF34-8C model turbofan engines.

Interim Action

The FAA considers this proposed AD interim action. The FAA will consider further rulemaking based on the continued investigation and development of corrective action by the manufacturer.

Costs of Compliance

The FAA estimates that this proposed AD affects 1,297 engines installed on airplanes of U.S. registry.

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

Estimated Costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection of OBV fuel tubes, assemblies, and fittings	1 work-hour x $85 per hour = $85	$0	$85	$110,245

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

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Replace OBV	2 work-hours X $85 per hour = $170	$17,230	$17,400
Replace OBV support hardware	2.25 work-hours X $85 per hour = $191.25	$3,595	$3,786.25

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.

This 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 engines, propellers, and associated appliances to the Manager, Engine and Propeller Standards Branch, Policy and Innovation Division.

Regulatory Findings

The FAA has 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 that the proposed regulation:

(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 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) 2017-23-06, Amendment 39-19100 (82 FR 52830, November 15, 2017), and adding the following new AD:

General Electric Company: Docket No. FAA-2019-0394; Product Identifier 2017-NE-36-AD.

(a) Comments Due Date

The FAA must receive comments on this AD action by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2017-23-06, Amendment 39-19100 (82 FR 52830, November 15, 2017).

(c) Applicability

This AD applies to all General Electric Company (GE) CF34-8C1, CF34-8C5, CF34-8C5A1, CF34-8C5B1, CF34-8C5A2, and CF34-8C5A3 model turbofan engines.

(d) Subject

Joint Aircraft System Component (JASC) Code 7531, Compressor bleed governor.

(e) Unsafe Condition

This AD was prompted by multiple engine fires that have occurred as a result of malfunctions related to the operability bleed valve (OBV). The FAA is issuing this AD to prevent failure of the OBV. The unsafe condition, if not addressed, could result in engine fire and damage to the airplane.

(f) Compliance

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

(g) Required Actions

(1) For CF34-8C1, CF34-8C5, CF34-8C5A1, and CF34-8C5B1 model turbofan engines with serial numbers (S/Ns): 965101 through 965670 inclusive; 194101 through 194999 inclusive; and 195101 through 195653 inclusive:

(i) Perform an inspection of the OBV bleed air manifold link rod assemblies and the OBV fuel fittings within 500 flight hours after November 30, 2017 (effective date of AD 2017-23-06), or before next flight after the effective date of this AD, whichever occurs later.

(ii) Within 880 flight hours since the previous inspection, 500 flight hours from the effective date of this AD, or 6,880 flight hours since new, whichever occurs later, inspect the OBV bleed air manifold link rod assemblies, the OBV fuel fittings, and the OBV fuel tubes.

(iii) Thereafter, perform additional repeat inspections of the OBV bleed air manifold link rod assemblies, the OBV fuel fittings, and the OBV fuel tubes within every 880 flight hours since the previous inspection.

(iv) Use the Accomplishment Instructions, Paragraph 3.B., of GE CF34-8C-AL S/B 75-0020, R04, dated May 10, 2019 ("the SB"), to perform the inspections in paragraphs (g)(1)(i) through (iii) of this AD and, per the criteria for the results of inspections in Paragraph 3.B. of the SB, do the following:

(A) Replace any OBV or fuel tube that is leaking and tighten or replace any loose OBV fuel tube clamps with a part eligible for installation before further flight.

(B) Replace any worn OBV link rod assembly hardware within 50 flight cycles after the inspection required by paragraphs (g)(1)(i), (g)(1)(ii), or (g)(1)(iii) of this AD. The engine can be returned to service each day for up to the 50 flight cycles if the OBV

fittings are inspected each day for fuel leaks and looseness and, if they do not require removal based on the criteria in Table 1, "OBV Inspection," of GE SB CF34-8C-AL S/B 75-0020, R04, dated May 10, 2019.

(2) For CF34-8C5B1 model turbofan engines with S/Ns not listed in paragraph (g)(1) of this AD and for all CF34-8C5A2 and CF34-8C5A3 model turbofan engines, perform the following:

(i) For engines with 6,000 flight hours or more since new on the effective date of this AD, perform an initial inspection of the OBV bleed air manifold link rod assemblies, OBV fuel fittings, and OBV fuel tubes within 880 flight hours after the effective date of this AD.

(ii) For engines with less than 6,000 flights hours since new on the effective date of this AD, perform an initial inspection of the OBV bleed air manifold link rod assemblies, OBV fuel fittings, and OBV fuel tubes within 880 flight hours time in service or 6,880 flight hours since new, whichever occurs later

(iii) Thereafter, repeat the inspection of the OBV bleed air manifold link rod assemblies, OBV fuel fittings, and OBV fuel tubes within 880 flight hours since the last inspection.

(iv) Use the Accomplishment Instructions, Paragraph 3.B., of GE CF34-8C-AL S/B 75-0020, R04, dated May 10, 2019, to perform the inspections in paragraphs (g)(2)(i) through (iii) of this AD.

(v) Replace any parts according to the criteria in paragraph (g)(1)(iv) of this AD after the inspection required by paragraphs (g)(2)(i), (g)(2)(ii), or (g)(2)(iii) of this AD.

(3) For all affected engines, the reporting instructions in GE SB CF34-8C-AL S/B 75-0020, R04, dated May 10, 2019, are not required by this AD.

(h) Credit for Previous Actions

(1) For engines identified in paragraph (g)(1) of this AD, you may take credit for the inspection of the OBV bleed air manifold link rod assemblies and the OBV fuel fittings required by paragraph (g)(1)(i) of this AD if you performed this inspection before November 30, 2017 (the effective date of AD 2017-23-06) using GE SB CF34-8C SB 75-0019, Revision 01, dated October 24, 2017, or R00, dated August 4, 2017;

(2) For all affected engines, you may take credit for the inspection of the OBV bleed air manifold link rod assemblies and the OBV fuel fittings required by paragraph (g)(1)(i) or (g)(2)(i) of this AD if you performed this inspection before the effective date of this AD using GE SB CF34-8C SB 75-0020, Revision 03, dated December 14, 2018.

(3) You are still required to perform the repeat inspections and any replacements, as needed, required by paragraphs (g)(1)(ii) through (g)(1)(iv) of this AD.

(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

(1) For more information about this AD, contact Michael Richardson-Bach, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone: 781-238-7747; fax: 781-238-7199; email: michael.richardson-bach@faa.gov.

(2) For service information identified in this AD, contact General Electric Company, GE-Aviation, Room 285, 1 Neumann Way, Cincinnati, OH 45215, phone: 513-552-3272; fax: 513-552-3329; email: geae.aoc@ge.com. You may view this service information at the FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on June 24, 2019.

Robert J. Ganley,
Manager, Engine and Propeller Standards Branch,
Aircraft Certification Service.

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