[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-0016; Directorate Identifier 2016-NE-31-AD; Amendment 39-18917; AD 2017-12-02]

RIN 2120-AA64

Airworthiness Directives; General Electric Company Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain General Electric Company (GE) GEnx-1B64, -1B64/P1, -1B64/P2, -1B67, -1B67/P1, -1B67/P2, -1B70, -1B70/P1, -1B70/P2, -1B70/75/P1, -1B70/75/P2, -1B70C/P1, -1B70C/P2, -1B74/75/P1, -1B74/75/P2, -1B76A/P2 turbofan engines. This AD was prompted by a fracture of the fuel manifold which led to an in-flight shutdown of the engine. This AD requires replacement of the outer left side signal fuel manifold with a part eligible for installation. We are 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].

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; fax: 513-552-3329; email: geae.aoc@ge.com. You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125. It is also available on the internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2017-0016.

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-2017-0016; 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 final rule, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, 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, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7120; fax: 781-238-7199; email: chris.mcguire@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all GEnx-1B64, -1B64/P1, -1B64/P2, -1B67, -1B67/P1, -1B67/P2, -1B70, -1B70/P1, -1B70/P2, -1B70/75/P1, -1B70/75/P2, -1B70C/P1, -1B70C/P2, -1B74/75/P1, -1B74/75/P2, -1B76A/P2 engines with outer left side signal fuel manifold, part number (P/N) 2403M46G01, and CAGE code 05813, installed. The NPRM published in the Federal Register on February 28, 2017 (82 FR 12070) ("the NPRM"). The NPRM was prompted by a fracture of the fuel manifold which led to an in-flight shutdown of the engine. The NPRM proposed to require replacement of the outer left side signal fuel manifold with a part eligible for installation. We are issuing this AD to prevent fracture of the fuel manifold, engine fire, and damage to the airplane.

Comments

We gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA's response to each comment.

Request to Reduce Compliance Time

The Air Line Pilots Association (ALPA) requested that the FAA reduce the compliance time in this AD from 12 months to 60 days. ALPA commented that the service bulletin (SB) recommends replacement of the left side signal fuel manifold within 60 days of issuance of the SB.

We disagree. Our risk assessment of the potential for additional fuel manifold fractures indicates that 12 months represents an acceptable level of risk for replacement of the affected fuel manifolds. We did not change this AD.

Request to Withdraw NPRM

United Airlines (United) requested that the NPRM be withdrawn. United commented that they have already accomplished the requirements of this AD and removed all affected parts from stock. United noted that GE has reported that this issue has been resolved by all operators. United indicated that this AD will therefore only generate unnecessary work.

We disagree. This AD includes an installation prohibition that prevents any non-conforming parts from being re-installed into engines. Without this prohibition, a non-conforming part could be installed into an engine and re-enter service. We did not change this AD.

Request to Revise Applicability

Japan Airlines (JAL) requested that the applicability of this AD be revised so that it lists affected engine serial numbers instead of applicable engines with the affected part

installed. JAL indicated that GE no longer delivers engines with the affected parts installed.

We disagree. This AD includes an installation prohibition to prevent the affected outer left side signal fuel manifold from being re-installed in any engine. By defining applicability according to the affected engine with the outer left side signal fuel manifold, P/N 2403M46G01, and CAGE code 05813, installed, we ensure that all the affected parts are removed from service and not re-installed in any engine. We did not change this AD.

Request to Clarify Compliance Using SB

JAL commented that they believe the AD should allow replacement of the affected outer left side signal fuel manifold using GE GEnx-1B SB 73-0053 R00, dated November 15, 2016.

We agree. This AD does not specify which service material to use when replacing the outer left side signal fuel manifold. This AD lists GE service bulletins, including GEnx-1B SB 73-0053 R00, dated November 15, 2016, as guidance when inspecting, repairing, and replacing the outer left side signal fuel manifold. Therefore, this AD already allows use of GEnx-1B SB 73-0053 R00 when complying with this AD. We did not change this AD.

Request that AD not Apply to New Engines

JAL requested that newly-delivered engines, which are not covered by GEnx-1B SB 73-0053 R00, dated November 15, 2016, should be considered as "not applicable to this AD."

We partially agree. We agree that this AD does not apply to new engines that do not have the affected fuel manifold installed. We disagree with changing the applicability of this AD because we do not want to allow an affected part to be installed later on a new engine. We did not change this AD.

Support for the NPRM

GE expressed support for the NPRM as written.

Conclusion

We 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

We reviewed GE GEnx-1B SB 73-0051 R00, dated November 4, 2016; GE GEnx-1B SB 73-0052 R00, dated October 28, 2016; and GE GEnx-1B SB 73-0053 R00, dated November 15, 2016. These SBs describe, respectively, procedures for inspecting, repairing, and replacing the outer left side signal fuel manifold, part number 2403M46G01, and CAGE code 05813.

Costs of Compliance

We estimate that this AD affects 109 engines installed on airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated Costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Replacement of fuel manifold	2 work-hours x $85 per hour = $170	$16,000	$16,170	$1,762,530

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

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) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, 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.

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):

2017-12-02 **General Electric Company**: Amendment 39-18917; Docket No. FAA-2017-0016; Directorate Identifier 2016-NE-31-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 all GEnx-1B64, -1B64/P1, -1B64/P2, -1B67, -1B67/P1, -1B67/P2, -1B70, 1B70/P1, -1B70/P2, -1B70/75/P1, -1B70/75/P2, -1B70C/P1, -1B70C/P2, -1B74/75/P1, -1B74/75/P2, -1B76A/P2 engines with outer left side signal fuel manifold, part number (P/N) 2403M46G01, and CAGE code 05813, installed.

(d) Subject

Joint Aircraft System Component (JASC) Code 7313, Fuel Injector Nozzle.

(e) Unsafe Condition

This AD was prompted by fracture of the fuel manifold which led to an in-flight shutdown of the engine. We are issuing this AD to prevent fracture of the fuel manifold, engine fire, and damage to the airplane.

(f) Compliance

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

(1) Inspect the outer left side signal fuel manifold, P/N 2403M46G01 and CAGE code 05813, to determine if the part has additional marking "XB," "INS," or "KB" adjacent to part number. If the part is marked with "XB," "INS," or "KB," then no further action is required.

(2) For parts without additional marking "XB," "INS," or "KB" adjacent to the part number, within 12 months after the effective date of this AD, replace the outer left side signal fuel manifold with a part eligible for installation.

(g) Installation Prohibition

After the effective date of this AD, do not install an outer left side signal fuel manifold, P/N 2403M46G01, and CAGE code 05813, onto an engine, unless additional marking "XB," "INS," or "KB" is adjacent to the part number.

(h) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

(i) Related Information

(1) For more information about this AD, contact Christopher McGuire, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7120; fax: 781-238-7199; email: chris.mcguire@faa.gov.

(2) GE GEnx-1B Service Bulletin (SB) 73-0051 R00, dated November 4, 2016; GE GEnx-1B SB 73-0052 R00, dated October 28, 2016; and GE GEnx-1B SB 73-0053 R00, dated November 15, 2016, can be obtained from GE using the contact information in paragraph (i)(3) of this AD. These SBs, respectively, describe procedures for inspecting, repairing, and replacing the outer left side signal fuel manifold.

(3) 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.

(4) You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(j) Material Incorporated by Reference

None.

Issued in Burlington, Massachusetts, on May 30, 2017.

Robert J. Ganley,
Acting Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

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