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[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2008-0808; Directorate Identifier 2008-NE-18-AD]

RIN 2120-AA64

Airworthiness Directives; General Electric Company CT58 Turboshaft Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede airworthiness directives (ADs) 2001-18-06 and 2008-22-16, which apply to certain General Electric Company (GE) CT58 turboshaft engines. ADs 2001-18-06 and 2008-22-16 require recalculating the lives of life-limited rotating parts using a Repetitive Heavy-Lift (RHL) multiplying factor and removal from service of parts that exceed the recalculated cyclic or hourly life limit. This proposed AD would consolidate ADs 2001-18-06 and 2008-22-16, and further reduce the life capability of certain parts. We are proposing this AD to prevent failure of life-limited rotating parts, uncontained part release, damage to the engine, and damage to the aircraft.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 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 proposed AD, contact General Electric Company, GE Aviation, Room 285, One Neumann Way, Cincinnati, OH, 45215; phone: 513- 552-3272; email: aviation.fleetsupport@ge.com. You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, 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-2008-0808; 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 proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Sanjana Murthy, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7750; fax: 781-238-7199; email: sanjana.murthy@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite 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-2008-0808; Directorate Identifier 2008-NE-18-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD 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 proposed AD.

Discussion

On August 24, 2001, we issued AD 2001-18-06, Amendment 39-12432 (66 FR 47575, September 13, 2001), (“AD 2001-18-06”), and on October 20, 2008, we issued AD 2008-22-16, Amendment 39-15712 (73 FR 63629, October 27, 2008), (“AD 2008-22-16”), for CT58 turboshaft engines. AD 2001-18-06 requires the use of an RHL multiplying factor in calculating the lives of life-limited rotating parts used in RHL missions. AD 2008-22-16 addressed a shortfall in the life capability of compressor spools used in RHL operations. We issued ADs 2001-18-06 and 2008-22-16 to prevent cracks in rotating parts that could result in an uncontained engine failure, damage to the engine, and damage to the aircraft.

Actions Since ADs 2001-18-06 and 2008-22-16 Were Issued

Since we issued ADs 2001-18-06 and 2008-22-16, GE updated the life limits of compressor spools. GE also updated how to calculate the life consumption of compressor

spools and of life-limited rotating parts flown in Utility operations. This update resulted in generally reduced lives for compressor spools and all other life-limited parts used in Utility operations. GE published their updated life calculations for all life-limited parts in GE Alert Service Bulletin (ASB) No. CT58 S/B 72-A0162, Revision 16, dated January 7, 2015.

Relevant Service Information under 1 CFR part 51

We reviewed GE ASB No. CT58 S/B 72-A0162, Revision 16, dated January 7, 2015. The service information describes procedures for calculating life limits for the affected life-limited rotating parts. This service information is reasonably available because the interested parties have access to it through their normal course of business or see ADDRESSES for other ways to access this service information.

FAA's Determination

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 in other products of the same type design.

Proposed AD Requirements

This proposed AD would reduce the life limits of certain compressor spools used in all operations and, through imposition of a new lifting methodology, increase the life consumption of all rotating parts used in Utility operations.

Costs of Compliance

We estimate that this proposed AD would affect about 60 engines installed on aircraft of U.S. registry. The average pro-rated cost of the life-limited rotating parts is \$20,000. The average labor rate is \$85 per hour. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$8,715,000.

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

We have 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) 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 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.

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:

a. Removing airworthiness directives (AD) 2001-18-06; Amendment 39-12432 (66 FR 47575, September 13, 2001); and AD 2008-22-16, Amendment 39-15712 (73 FR 63629, October 27, 2008), and

- b. Adding the following new AD:

General Electric Company: Docket No. FAA-2008-0808; Directorate Identifier 2008-NE-18-AD.

(a) Comments Due Date

The FAA must receive comments on this AD action by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2001-18-06, Amendment 39-12432 (66 FR 47575, September 13, 2001) and AD 2008-22-16, Amendment 39-15712 (73 FR 63629, October 27, 2008).

(c) Applicability

This AD applies to all General Electric Company (GE) CT58-100-2, CT58-110-1, CT58-110-2, CT58-140-1, and CT58-140-2 turboshaft engines.

(d) Unsafe Condition

This AD was prompted by recalculation of life for parts installed on engines used in Utility operations, and a reduced life for compressor spools in all operations. We are issuing this AD to prevent failure of life-limited rotating parts, uncontained part release, damage to the engine, and damage to the aircraft.

(e) Compliance

Do the actions required by this AD, unless already done.

(1) Calculating Cyclic Life Consumption

Re-calculate the cycles-since-new for all compressor spools, and for life-limited rotating parts other than compressor spools used in Utility operations. Use paragraphs 3.A.(1) and 3.B.(1) in the Accomplishment Instructions of GE Alert Service Bulletin (ASB) No. CT58 S/B 72-A0162, Revision 16, dated January 7, 2015, to perform the calculations.

(2) Removal of Compressor Spools

After the effective date of this AD, remove compressor spools, part numbers (P/Ns) 5124T94G02, 6010T57G04, 6010T57G07, and 6010T57G08 from service, before reaching the life limits specified in paragraph 4.(1), Appendix A, in GE ASB No. CT58 S/B 72-A0162, Revision 16, dated January 7, 2015, as re-calculated per paragraph (e)(1) in this AD.

(3) Removal of Rotating Parts used in Utility Operations other than Compressor Spools

After the effective date of this AD, remove from service any life-limited rotating part used in Utility operations other than the compressor spools with P/Ns listed in paragraph (e)(2) of this AD that exceeds its life limit, as re-calculated per paragraph (e)(1) in this AD. Use Tables I, II, III, and IV in paragraphs 3.D. through 3.G. in the Accomplishment Instructions in GE ASB No. CT58 S/B 72-A0162, Revision 16, dated

January 7, 2015, and paragraph 4.(4), Appendix A, of this GE ASB, to determine when to remove these parts.

(4) Removal of Rotating Parts not used in Utility Operations other than Compressor Spools

After the effective date of this AD, remove from service any life-limited rotating part not used in Utility operations other than the compressor spools with P/Ns listed in paragraph (e)(2) of this AD that exceeds its life limits. Use Tables I, II, III, and IV in paragraphs 3.D. through 3.G. in the Accomplishment Instructions in GE ASB No. CT58 S/B 72-A0162, Revision 16, dated January 7, 2015, and paragraph 4.(3), Appendix A of this GE ASB to determine when to remove these parts.

(f) 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.

(g) Related Information

(1) For more information about this AD, contact Sanjana Murthy, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7750; fax: 781-238-7199; email: sanjana.murthy@faa.gov.

(2) GE ASB No. CT58 S/B 72-A0162, Revision 16, dated January 7, 2015, can be obtained from GE using the contact information in paragraph (g)(3) of this proposed AD.

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

(4) You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on April 17, 2015.

Thomas A. Boudreau,
Acting Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

[FR Doc. 2015-09932 Filed: 4/30/2015 08:45 am; Publication Date: 5/1/2015]