

Proposed Rules

Federal Register

Vol. 69, No. 96

Tuesday, May 18, 2004

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2003-NE-67-AD]

RIN 2120-AA64

Airworthiness Directives; GE Aircraft Engines (GE) CF34-3A, CF34-3A2, CF34-1A, CF34-3A1, CF34-3B, and CF34-3B1 Series Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for GE CF34-3A, CF34-3A2, CF34-1A, CF34-3A1, CF34-3B, and CF34-3B1 series turbofan engines. This proposed AD would require removal from service of certain high pressure compressor (HPC) forward spools, at the first piece-part level exposure after 6,000 cycles since new (CSN), but not later than 20,000 CSN for CF34-3B engines and 22,000 CSN for CF34-3A, CF34-3A2, CF34-1A, CF34-3A1, and CF34-3B1 engines. This proposed AD results from an updated low-cycle fatigue (LCF) analysis performed on certain HPC forward spools. We are proposing this AD to prevent LCF cracks and failure of the HPC forward spool, which could result in an uncontained engine failure and damage to the airplane.

DATES: We must receive any comments on this proposed AD by July 19, 2004.

ADDRESSES: Use one of the following addresses to submit comments on this proposed AD:

- By mail: Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 2003-NE-67-AD, 12 New England Executive Park, Burlington, MA 01803-5299.
- By fax: (781) 238-7055.
- By e-mail: 9-ane-adcomment@faa.gov.

You can get the service information identified in this proposed AD from General Electric Company via Lockheed Martin Technology Services, 10525 Chester Road, Suite C, Cincinnati, Ohio 45215; telephone (513) 672-8400; fax (513) 672-8422.

You may examine the AD docket, by appointment, at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA.

FOR FURTHER INFORMATION CONTACT:

Robert Grant, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7757; fax (781) 238-7199.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to submit any written relevant data, views, or arguments regarding this proposal. Send your comments to an address listed under **ADDRESSES**. Include "AD Docket No. 2003-NE-67-AD" in the subject line of your comments. If you want us to acknowledge receipt of your mailed comments, send us a self-addressed, stamped postcard with the docket number written on it; we will date-stamp your postcard and mail it back to you. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the proposed AD. If a person contacts us verbally, and that contact relates to a substantive part of this proposed AD, we will summarize the contact and place the summary in the docket. We will consider all comments received by the closing date and may amend the proposed AD in light of those comments.

We are reviewing the writing style we currently use in regulatory documents. We are interested in your comments on whether the style of this document is clear, and your suggestions to improve the clarity of our communications that affect you. You can get more information about plain language at <http://www.faa.gov/language> and <http://www.plainlanguage.gov>.

Examining the AD Docket

You may examine the AD Docket (including any comments and service information), by appointment, between 8 a.m. and 4:30 p.m., Monday through

Friday, except Federal holidays. See **ADDRESSES** for the location.

Discussion

In October 2003, GE made the FAA aware of its updated LCF analysis of HPC forward spools, P/Ns 6078T56P03 and 6078T56P04, used in CF34-3A, CF34-3A2, CF34-1A, CF34-3A1, CF34-3B, CF34-3B1 turbofan engines. HPC forward spools, P/Ns 6078T56P03 and 6078T56P04, installed in CF34-3A, CF34-3A2, CF34-1A, CF34-3A1, and CF34-3B1 turbofan engines, must be replaced before accumulating 22,000 CSN. The highest time HPC forward spool has accumulated fewer than 21,500 CSN in CF34-3A, CF34-3A2, CF34-1A, CF34-3A1, or CF34-3B1 turbofan engines, to date.

HPC forward spools, P/Ns 6078T56P03 and 6078T56P04, installed in CF34-3B engines, must be replaced before accumulating 20,000 CSN. The highest time HPC forward spool has accumulated fewer than 4,500 CSN in a CF34-3B engine, to date.

We are proposing this AD to prevent LCF cracks and failure of the HPC forward spool, which could result in an uncontained engine failure and damage to the airplane.

Relevant Service Information

We have reviewed and approved the technical contents of GE Alert Service Bulletins (ASBs) No. 72-A0165 and No. 72-A0140, that describe procedures for disassembly and replacement of HPC compressor rotor spool stages 3-8.

FAA's Determination and Requirements of the Proposed AD

We have evaluated all pertinent information and identified an unsafe condition that is likely to exist or develop on other products of this same type design. We are proposing this AD, which would require replacing HPC forward spools, P/Ns 6078T56P03 and 6078T56P04, before accumulating 22,000 CSN on CF34-3A, CF34-3A2, CF34-1A, CF34-3A1, and CF34-3B1 engines, and 20,000 CSN on CF34-3B engines.

Costs of Compliance

There are about 2,681 GE CF34-3A, CF34-3A2, CF34-1A, CF34-3B and CF34-3B1 series turbofan engines of the affected design in the worldwide fleet. We estimate that 1,826 engines installed on airplanes of U.S. registry would be

affected by this proposed AD. We also estimate that 59% of the replacements will not be done at piece-part exposure, and will require approximately 650 work hours per engine to perform the proposed actions, and that the average labor rate is \$65 per work hour. Required parts would cost about \$16,000 per engine (a prorated cost of the unused spool life to the original life). Based on these figures, we estimate the total cost of the proposed AD to U.S. operators to be \$74,420,000.

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); and
3. Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a summary of the costs to comply with this proposal and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under **ADDRESSES**. Include "AD Docket No. 2003-NE-67-AD" in your request.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration 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 adding the following new airworthiness directive:

GE Aircraft Engines (GE): Docket No. 2003-NE-67-AD.

Comments Due Date

- (a) The Federal Aviation Administration (FAA) must receive comments on this airworthiness directive (AD) action by July 19, 2004.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to GE CF34-3A, CF34-3A2, CF34-1A, CF34-3A1, CF34-3B, and CF34-3B1 series turbofan engines with high pressure compressor (HPC) forward spool, part number (P/N) 6078T56P03 or 6078T56P04, installed. These engines are installed on, but not limited to, Bombardier series Business Jet Model CL-600-2A12 (CL-601), Bombardier series Business Jet Model CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604), and Bombardier series Regional Jet Model CL-600-2B19 (Regional Jet Series 100 and 440) airplanes.

Unsafe Condition

- (d) This AD results from an updated low-cycle fatigue (LCF) analysis performed on certain HPC forward spools by GE. We are issuing this AD to prevent LCF cracks and failure of the HPC forward spool, which could result in an uncontained engine failure and damage to the airplane.

Compliance

- (e) You are responsible for having the actions required by this AD performed within the compliance times specified unless the actions have already been done.

HPC Spool Replacement

- (f) For HPC forward spools, P/Ns 6078T56P03 and 6078T56P04, with more than 6,000 cycles-since-new (CSN), installed on CF34-3B engines, remove the spool from service and replace with a serviceable spool at next piece-part exposure, but no later than 20,000 CSN.

- (g) For HPC forward spools, P/Ns 6078T56P03 and 6078T56P04, with more than 6,000 CSN, installed in CF34-3A, CF34-3A2, CF34-1A, CF34-3A1, and CF34-3B1 engines, remove the spool from service and replace with a serviceable spool at next piece-part exposure, but no later than 22,000 CSN.

Definitions

- (h) For the purpose of this AD, the definition of piece-part exposure for the HPC forward spool is when the spool is completely disassembled.

- (i) For purposes of this AD, a spool with P/N 6078T56P03 is not a serviceable spool, and a spool with P/N 6078T56P04 and more than 0 CSN is not a serviceable spool. All other spools are serviceable.

Alternative Methods of Compliance

- (j) The Manager, Engine Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

Material Incorporated by Reference

- (k) None.

Related Information

- (l) GE Alert Service Bulletins No. ASB 72-A0165 and No. ASB 72-A0140, pertain to the subject of this AD.

Issued in Burlington, Massachusetts, on May 11, 2004.

Francis A. Favara,

Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 04-11199 Filed 5-17-04; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2004-NE-19-AD]

RIN 2120-AA64

Airworthiness Directives; Rolls-Royce plc RB211-524 Series Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede an existing airworthiness directive (AD) for Rolls-Royce plc (RR) RB211-524 series turbofan engines. That AD currently requires initial and repetitive borescope inspections of the head section and meterpanel assembly of the combustion liner, and replacement, if necessary, with serviceable parts. In addition, that AD allows an optional installation of a front combustion liner with a strengthened head section as a terminating action to the inspection requirements. This proposed AD would require initial and repetitive borescope inspections of the head section and meterpanel assembly of the combustion liner, and replacement, if necessary, with serviceable parts, reduction of the inspection intervals of certain RB211-524 engine models that have not been repaired to RR Field Repair Scheme FRS5367/B, and a mandatory terminating action to be completed by a certain date. This proposed AD results from five events that are directly attributed to combustor head break-up and meterpanel failure which were found at overhaul inspection. At least one of these events resulted in a combustion case burn-through. We are proposing this AD to prevent engine combustion liner deterioration, which can result in combustion liner breakup, case burn-through, and engine fire.

DATES: We must receive any comments on this proposed AD by July 19, 2004.