Proposed Rules

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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. 95–ANE–64]

Airworthiness Directives; CFM International CFM56–5C Series Turbofan Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to CFM International (CFMI) CFM56–5C2/G, –5C3/G, and –5C4 series turbofan engines. This proposal would require a reduction of the low cycle fatigue (LCF) retirement lives for certain high pressure turbine rotor (HPTR) front shafts, HPTR front air seals, HPTR disks, booster spools, and low pressure turbine rotor (LPTR) stage 3 disks. This proposal is prompted by the results of a refined life analysis performed by the manufacturer which revealed minimum calculated LCF lives lower than published LCF retirement lives. The actions specified by the proposed AD are intended to prevent an LCF failure of the HPTR front shaft, HPTR front air seal, HPTR disk, booster spool, and LPTR stage 3 disk, which could result in an uncontained engine failure and damage to the aircraft.

DATES: Comments must be received by May 28, 1996.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), New England Region, Office of the Assistant Chief Counsel, Attention: Rules Docket No. 95– ANE–64, 12 New England Executive Park, Burlington, MA 01803–5299. Comments may be inspected at this location between 8:00 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Robert J. Ganley, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803–5299; telephone (617) 238–7138, fax (617) 238–7199.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: ''Comments to Docket Number 95–ANE–64.'' The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, New England Region, Office of the Assistant Chief Counsel, Attention: Rules Docket No. 95–ANE–64, 12 New England Executive Park, Burlington, MA 01803–5299.

Discussion

This proposed airworthiness directive (AD) is applicable to CFM International (CFMI) CFM56–5C2/G, –5C3/G, and –5C4 series turbofan engines. The manufacturer performed a study using updated lifing analyses that revealed certain high pressure turbine rotor (HPTR) front shafts, HPTR front air seals, HPTR disks, booster spools, and low pressure turbine rotor (LPTR) stage 3 disks have minimum calculated low cycle fatigue (LCF) lives which are lower than published LCF retirement lives. These reduced LCF lives are due to changes in component operating environments, which are associated with the incorporation of the takeoff mach bump in the analysis. This condition, if not corrected, could result in an LCF failure of the HPTR front shaft, HPTR front air seal, HPTR disk, booster spool, and LPTR stage 3 disk, which could result in an uncontained engine failure and damage to the aircraft..

Since an unsafe condition has been identified that is likely to exist or develop on other products of this same type design, the proposed AD would require a reduction of the LCF retirement lives for certain HPTR front shafts, HPTR front air seals, HPTR disks, booster spools, and LPTR stage 3 disks.

There are approximately 10 engines of the affected design in the worldwide fleet. The manufacturer has advised the FAA that there are no engines installed on U.S. registered aircraft that would be affected by this AD. Therefore, there is no associated cost impact on U.S. operators as a result of this AD. However, should an affected engine be imported on an aircraft and placed on the U.S. registry in the future, it would not take any additional work hours per engine to accomplish the proposed actions. Assuming that the parts cost is proportional to the reduction of the LCF retirement lives, the required parts would cost approximately $25,736 per engine. Based on these figures, the total cost impact of the AD is estimated to be $25,736 per engine.

The regulations proposed herein would not have substantial direct effects 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. Therefore, in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this 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) if promulgated, 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. A copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption **ADDRESSES**.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by adding the following new airworthiness directive:

CFM International: Docket No. 95–ANE–64.

Applicability: CFM International (CFMI) CFM56–5C2/G, –5C3/G, and –5C4 series turbofan engines, installed on but not limited to Airbus A340 series aircraft.

Note: This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must use the authority provided in paragraph (h) to request approval from the Federal Aviation Administration (FAA). This approval may address either no action, if the current configuration eliminates the unsafe condition, or different actions necessary to address the unsafe condition described in this AD. Such a request should include an assessment of the effect of the changed configuration on the unsafe condition addressed by this AD. In no case does the presence of any modification, alteration, or repair remove any engine from the applicability of this AD.

Compliance: Required as indicated, unless accomplished previously.

To prevent a low cycle fatigue (LCF) failure of the high pressure turbine rotor (HPTR) front shaft, HPTR front air seal, HPTR disk, booster spool, and low pressure turbine rotor (LPTR) stage 3 disk, which could result in an uncontained engine failure and damage to the aircraft, accomplish the following:

(a) Remove from service HPTR front shafts, Part Numbers (P/N's) 1498M40P03, 1498M40P05, and 1498M40P06, prior to accumulating 8,400 cycles since new (CSN), and replace with a serviceable part.

(b) Remove from service HPTR front air seals, P/N's 1523M34P02 and 1523M34P03, prior to accumulating 4,000 CSN, and replace with a serviceable part.

(c) Remove from service HPTR disks, P/N 1498M43P04, prior to accumulating 6,200 CSN, and replace with a serviceable part.

(d) Remove from service booster spools, P/N 337–005–210–0, prior to accumulating 13,800 CSN, and replace with a serviceable part.

(e) Remove from service LPTR stage 3 disks, P/N's 337–001–602–0 and 337–001–605–0, prior to accumulating 8,630 CSN, and replace with a serviceable part.

(f) This action establishes the new LCF retirement lives stated in paragraphs (a) through (e) of this AD, which are published in Chapter 05 of the CFM56 Engine Shop Manual, CFMI–TP.SM.8.

(g) For the purpose of this AD, a ''serviceable part'' is one that has not exceeded its respective new life limit as set out in this AD.

(h) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office. The request should be forwarded through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Engine Certification Office.

Note: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Engine Certification Office.

(i) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.

Issued in Burlington, Massachusetts, on March 12, 1996.

Jay J. Pardee,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 96–7243 Filed 3–25–96; 8:45 am]

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14 CFR Part 39

[Docket No. 95–ANE–01]

Airworthiness Directives; AlliedSignal, Inc. AL5512 Series Turboshaft Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to AlliedSignal, Inc. (formerly Textron Lycoming) AL5512 series turboshaft engines. This proposal would require a one-time eddy current inspection of the second stage turbine disk, reduced service lives for the second, third, and fourth stage turbine disks, reduced service lives for the first and third through seventh stage compressor rotor disks, and a reduced service life for the gas producer turbine spacer. This proposal would also require a new, more conservative minor cycle counting factors table for repetitive heavy lift operations, and provides a method for prorating past utilization for all gas producer and compressor components based on the new cycle counting factors. For those components that exceed their new published life limits, this proposal would implement a drawdown for safe removal of time-expired components. This proposal is prompted by reports of cracks in certain AlliedSignal, Inc. ALF502R series turbofan engine disks, which are identical in design and construction to those within the AlliedSignal, Inc. AL5512 series turboshaft engines. The actions specified by the proposed AD are intended to prevent disk failure, which could result in an uncontained engine failure, inflight shutdown, or possible damage to the rotorcraft.

DATES: Comments must be received by May 28, 1996.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), New England Region, Office of the Assistant Chief Counsel, Attention: Rules Docket No. 95–ANE–01, 12 New England Executive Park, Burlington, MA 01803–5299. Comments may be inspected at this location between 8:00 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from AlliedSignal, Inc., 550 Main St., Stratford, CT 06497–7593. This information may be examined at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA.

FOR FURTHER INFORMATION CONTACT: Daniel Kerman, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA