(c) Applicability

This AD applies to all Thielert Aircraft Engines GmbH TAE 125–02–99 and TAE–125–02–114 reciprocating engines with friction disk, part number (P/N) 05–7211–K010201, installed.

(d) Reason

This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

In-flight engine shutdown incidents have been reported on aeroplanes equipped with TAE 125 engines. Preliminary investigations showed that it was mainly the result of the sensitivity of friction disk Part Number (P/N) 05–7211–K010201 against possible misalignment of gearbox and core engine during assembly.

This condition, if not corrected, could result in further cases of engine in-flight shutdown and consequent loss of control of the aeroplane.

To address this unsafe condition, Thielert Aircraft Engines GmbH has developed a new friction disk.

We are issuing this AD to prevent in-flight engine shutdown, which could result in loss of control of the airplane.

(e) Actions and Compliance

Unless already done, do the following actions:

(1) TAE 125–02–99 Engines, P/Ns 05–7200–K000201; 05–7200–K000701; 05–7200–K00101; 05–7200–K000901; 05–7200–K00111; and 05–7200–K001301; and TAE 125–02–114 Engines, P/Ns 05–7200–K000501; 05–7200–K000801; and 05–7200–K001401

For TAE 125–02–99 engines, P/Ns 05–7200–K000201; 05–7200–K000701; 05–7200–K000901; 05–7200–K00101; 05–7200–K000901; 05–7200–K00111; and 05–7200–K001301; and TAE 125–02–114 engines, P/Ns 05–7200–K000501; 05–7200–K000801; and 05–7200–K001401, remove friction disk, P/N 05–7211–K010201, within 100 flight hours (FH) time-since-last (TSN) on the clutch or within 10 FH TIS after the effective date of this AD, whichever is later. Remove friction disk, P/N 05–7211–K010201 from the other engine within 300 FH TSN on the clutch or within 10 FH TIS after the effective date of this AD, whichever is later.

(f) Installation Prohibition

After the effective date of this AD:

(1) Do not install any friction disk, P/N 05–7211–K010201, into any engine.

(2) Do not install any TAE 125–02–99 engine, P/N 05–7200–K00201, 05–7200–K000101, or 05–7200–K000701, or TAE 125–02–114 engine, P/N 05–7200–K00801 or 05–7200–K00501, that has a friction disk, P/N 05–7211–K010201 installed, onto any airplane.

(g) Operating Prohibition

Do not operate any multi-engine aircraft after 300 FH TSN on the clutch or 10 FH TIS after the effective date of this AD, whichever is later, which has installed a friction disk, P/N 05–7211–K010201.

(h) FAA AD Differences

The MCAI mandates the replacement friction disk P/N. This AD does not.

(i) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

(j) Related Information

(1) Refer to MCAI EASA Airworthiness Directive 2011–0087–E, dated May 12, 2011, and Thielert Service Bulletin No. TM TAE 125–1013 P1, for related information. Contact Thielert Aircraft Engines GmbH, Plateneinstrasse 14 D–90350, Lichtenstein, Germany; telephone +49–37204–696–55; e-mail: info@centurion-engines.com, for a copy of this service information.

(2) Contact Alan Strom, Aerospace Engineer, Engine Certification Office, FAA, 12 New England Executive Park, Burlington, MA; phone: 781–238–7199; fax: 781–238–7199; e-mail: alan.strom@faa.gov, for more information about this AD.

Issued in Burlington, Massachusetts, on October 4, 2011.

Peter A. White
Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 2011–26827 Filed 10–17–11; 8:45 am]
BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; General Electric Company (GE) Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all GE CF6–80C2A1, CF6–80C2A2, CF6–80C2A3, CF6–80C2A5, CF6–80C2A5F, CF6–80C2AB, CF6–80C2B1, CF6–80C2B1F, CF6–80C2B7F, CF6–80C2B4F, CF6–80C2B5F, CF6–80C2B6, CF6–80C2B6F, CF6–80C2BFA, CF6–80C2B7F, CF6–80C2B8F, CF6–80C2D1F, CF6–80C2K1F, and CF6–80C2L1F turbofan engines, including engines marked on the engine data plate as CF6–80C2B7F1. This proposed AD was prompted by a report of a supplier shipping a batch of nonconforming No. 3 bearing packings that had incorrect cooling holes, and by subsequent reports of nonconforming No. 3 bearing packings being installed on engines in service. This proposed AD would require a one-time inspection of the No. 3 bearing packings for an incorrect cooling hole size and, if it is found nonconforming, removing the packing and removing certain engine rotating life-limited parts, if they were operated with the wrong packing for a specified number of cycles. We are proposing this AD to prevent an uncontained failure of the high-pressure compressor (HPC) rotor or the low-pressure turbine (LPT) rotor or both, which could cause damage to the airplane.

DATES: We must receive comments on this proposed AD by December 2, 2011.

 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 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 GE-Aviation M/D Rm. 285, One Neumann Way, Cincinnati, OH 45215, telephone 513–552–3272; e-mail: gea.aac@ge.com. You may review copies of the referenced 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, or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD
an address listed under the relevant data, views, or arguments about

ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT:

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSSES section. Include “Docket No. FAA–2011–0082; Directorate Identifier 2011–NE–09–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

We received a report that a supplier shipped a batch of nonconforming No. 3 bearing packings, part number (P/N) 1292M70P04, with undersized cooling holes. The No. 3 bearing packing design did not feature permanent part markings and parts could be confused when being installed. After GE changed the design to introduce part marking on all new-made parts and added secondary inspections to the CF6–80C2 engine manual section 72–23–00 Fan Frame Assembly, customers reported several nonconforming No. 3 bearing packings, various P/Ns, found installed on engines in-service outside of the known population of engines affected by the quality escape. The nonconformance of No. 3 bearing packings will result in incorrect HPC and LPT rotor bore cooling and, if not corrected, could result in a reduced parts life of the life-limited HPC rotor stage 10–through-stage 14 spool, the HPC rotor stage 11–through-stage 14 spool, the LPT rotor stage 3 disk, and the LPT rotor stage 4 disk. Because the problem exists beyond the known population of engines affected by the quality escape and the consequences represent an unsafe condition in all affected engines in service, it is necessary to inspect the No. 3 bearing packing configuration of the entire fleet. This condition, if not corrected, could result in failure of the HPC rotor or the LPT rotor or both, which could cause uncontained engine failure and damage to the airplane.

Relevant Service Information

We reviewed GE Service Bulletin (SB) CF6–80C2 S/B 72–1405, dated June 30, 2011. The SB describes procedures for inspecting and removing the nonconforming No. 3 bearing packing, and determining the effect of nonconforming packing on the HPC and LPT rotor bore cooling.

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 require:

• A one-time inspection of the No. 3 bearing packing at the next engine shop visit, but not later than 5,500 cycles-in-service (CIS) since the last engine shop visit where the fan was removed from the core.
• Removing the No. 3 bearing packing if it is found to be nonconforming within the above specified times.
• Removing certain rotating parts if they have operated more than 5,500 CIS with the wrong packing configuration.

Differences Between the Proposed AD and the Service Information

This proposed AD includes CF6 engine models CF6–80C2B1F1, CF6–80C2B1F2, CF6–80C2B3F, and CF6–C2B7F1 in the Applicability paragraph (c). The GE service information does not include these engine models.

Costs of Compliance

We estimate that this proposed AD would affect 688 engines installed on airplanes of U.S. registry. We also estimate that it would take about 1 work-hour per engine to perform the inspection and 1 work-hour to replace the No. 3 bearing packing, if found nonconforming. The average labor rate is $85 per work-hour. Required parts would cost about $48 per engine to replace an anticipated quantity of 21 No. 3 bearing packings. Based on these figures, we estimate the total cost of this proposed AD to U.S. operators to be $70,513. GE has informed us that they may cover these costs under warranty.

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 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 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), (3) Will not affect intrastate aviation in Alaska, 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 adding the following new airworthiness directive (AD):


(a) Comments Due Date

We must receive comments by December 2, 2011.

(b) Affected ADs

None.

(c) Applicability


(d) Unsafe Condition

This AD was prompted by a report of a supplier shipping a batch of nonconforming No. 3 bearing packings that had an incorrect size of cooling holes and by several subsequent reports of nonconforming No. 3 bearing packings being installed on engines in service. The nonconformance of No. 3 bearing packings will result in incorrect high-pressure turbine (LPT) rotor bore cooling and, if not corrected, could result in a reduced parts life of the life-limited rotating parts. We are issuing this AD to prevent an uncontrolled failure of the high-pressure compressor (HPC) rotor or the low-pressure turbine (LPT) rotor or both, which could cause damage to the airplane.

(e) Compliance

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

(f) One-Time Inspection of the No. 3 Bearing Packing and Disposition of Affected Rotating Parts

(1) Perform a one-time inspection of the No. 3 bearing packing at the next engine shop visit, but not later than 5,500 cycles-in-service (CIS) since the last engine shop visit, where the fan was removed from the core. Use paragraphs 3.A.(1) through 3.A.(1)(a) of the Accomplishment Instructions of GE Service Bulletin (SB) No. CF6–80C2 S/B 72–1405, dated June 30, 2011.

(2) If the packing part number (P/N) is determined not eligible for installation on the engine, then before further flight:

(i) Remove the nonconforming packing from service; and

(ii) Remove the following rotating parts from service, if they were operated for 5,500 CIS or more with a packing determined to be other than a “CORRECT FLOW” packing using paragraph 3.A.(1)(b) of the Accomplishment Instructions of SB No. CF6–80C2 S/B 72–1405, dated June 30, 2011:

(A) HPC rotor stage 10-through-14 spool, any P/N,

(B) HPC rotor stage 11-through-14 spool, any P/N,

(C) LPT rotor stage 3 disk, P/N 9373M5P05, and

(D) LPT rotor stage 4 disk, P/N 9373M5P03.

(g) Definition

For the purposes of this AD, an engine shop visit is the induction of an engine into the shop after the effective date of this AD, where the separation of a major engine flange occurs; except the following maintenance actions, or any combination, are not considered engine shop visits:

(1) Introduction of an engine into a shop solely for removal of the compressor top or bottom case for airfoil maintenance or variable stator vane bushing replacement.

(2) Introduction of an engine into a shop solely for replacement of the turbine rear frame.

(3) Introduction of an engine into a shop solely for replacement of the accessory gearbox or transfer gearbox, or both.

(h) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

(i) Related Information

(1) For more information about this AD, contact Tomasz Rakowski, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781–238–7739; fax: 781–238–7199; e-mail: tomasz.rakowski@faa.gov.

(2) For service information identified in this AD, contact GE-Aviation M/D Rm. 285, One Neumann Way, Cincinnati, OH 45215, phone 513–552–3272; e-mail: geae.aoc@ge.com. You may review copies of the referenced service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781–238–7123.

Issued in Burlington, Massachusetts, on October 6, 2011.

Peter A. White,
Manager, Engine & Propeller Directorate, Aircraft Certification Service.

BILING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; CFM International, S. A. Model CFM56–5B Series Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for the products listed above. This proposed AD would require removing from service certain serial number (S/N) fan blades, part number (P/N) 338–002–114–0. This proposed AD was prompted by a normal quality sampling at CFM that isolated a production batch of fan blades with nonconforming geometry of mid-span shroud tips of the fan blades. This defect would cause the upper panel of the fan blade to be liberated following foreign object damage (FOD) or bird strike, and likely result in an inflight shutdown (IFSD). We are proposing this AD to prevent an IFSD of one or more engines following FOD or a bird strike.

DATES: We must receive comments on this proposed AD by December 2, 2011.

ADDRESSES: You may send comments 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 Mailroom 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 CFM International, Inc., Aviation Operations Center, 1 Neumann Way, M/D Room 285, Cincinnati, OH 45125; International Phone: 1–513–552–3272; USA Phone: 877–432–3272; International Fax: 1–513–552–3329; USA Fax: 877–432–3329; e-mail: geae.aoc@ge.com; or CFM International SA, Customer Support Center, International Phone: 33 1 64 14 88 66; Fax: 33 1 64 79 85 55; e-mail: snecma.csc@snecma.fr.