

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2006-24261; Directorate Identifier 2006-NE-12-AD; Amendment 39-14566; AD 2006-06-51]

RIN 2120-AA64

Airworthiness Directives; General Electric Company Aircraft Engines (GEAE) CT7-8A Turboshaft Engines

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule; request for comments.

SUMMARY: This document publishes in the Federal Register an amendment adopting emergency airworthiness directive (EAD) 2006-06-51 that we sent previously to all known U.S. owners and operators of GEAE CT7-8A turboshaft engines installed on Sikorsky S92 helicopters. This AD requires initial and repetitive inspections of the electrical chip detectors for the No. 3 bearing. This AD results from two failures of the No. 3 bearing in GEAE CT7-8A engines. We are issuing this AD to prevent failures of the No. 3 bearings and possible dual in-flight shutdowns of the engines.

DATES: This AD becomes effective May 2, 2006 to all persons except those persons to whom it was made immediately effective by emergency AD 2006-06-51, issued on March 17, 2006, which contained the requirements of this amendment.

We must receive any comments on this AD by June 16, 2006.

ADDRESSES: Use one of the following addresses to comment on this AD.

- DOT Docket Web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.
- Government-wide rulemaking Web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.
- Mail: Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-0001.
 - Fax: (202) 493-2251.
 - Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Mark Bouyer, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7755; fax (781) 238-7199.

SUPPLEMENTARY INFORMATION: On March 17, 2006, the FAA issued emergency AD 2006-06-51, that applies to certain serial number GEAE CT7-8A turboshaft engines installed on Sikorsky S92 helicopters. That AD requires an initial inspection of the electrical chip detector for debris within 25 hours time-in-service after the effective date of that EAD, and thereafter, repetitive inspections within 25 hours time-since-last inspection. That AD resulted from reports of two failures of the No. 3 bearings on GEAE CT7-8A turboshaft engines. Bearing contamination by Aluminum Oxide caused the first failure. The Aluminum Oxide contamination is a hard-particle contamination, left in the air cavity of the front frame core after cleaning, that entered the bearing and caused damage and metal loss at the roller ball and race interface. The loss of metal caused a warning light for an electrical chip detector to illuminate in the cockpit. The pilot reduced power to the engine. Inspection found the bearing unserviceable. The engine accumulated 458 flight hours-since-new before the failure. Improper use of a bearing support tool at production assembly caused the second failure. Damage from improper use of a bearing support tool caused bearing metal loss at the roller ball and race interface. The loss of metal caused a warning light for an electrical chip detector to illuminate in the cockpit and signaled an impending oil bypass. The pilot performed an in-flight shutdown of the engine. The engine accumulated 686 hours-since-new. This condition, if not corrected, could result in failures of the No. 3 bearings and possible dual in-flight shutdowns of the engines.

FAA's Determination and Requirements of This AD

Since the unsafe condition described is likely to exist or develop on other engines of the same type design, we issued emergency AD 2006-06-51 to prevent failures of the No. 3 bearings and possible dual in-flight shutdowns of the engines. This AD requires:

- Within 25 hours time-in-service after the effective date of this AD, inspecting the electrical chip detector assembly.
- Staggering the inspection intervals so the chip detectors on both engines on the same helicopter are not inspected at the same time.
- Thereafter, within 25 hours time-since-last inspection, performing a repetitive inspection, and
- If the chip detector assembly contains any bearing material, replacing the engine.

FAA's Determination of the Effective Date

Since an unsafe condition exists that requires the immediate adoption of this AD, we have found that notice and opportunity for public comment before issuing this AD are impracticable. We found that good cause existed to make the AD effective immediately on March 17, 2006, to all known U.S. owners and operators of certain SN GEAE CT7-8A turboshaft engines installed on Sikorsky S92 helicopters. These conditions still exist, and we are publishing the AD in the Federal Register as an amendment to Section 39.13 of part 39 of the Code Federal Regulations (14 CFR part 39) to make it effective to all persons.

Interim Action

These actions are interim actions and we may take further rulemaking actions in the future.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, we invite you to send us any written relevant data, views, or arguments regarding this AD. Send your comments to an address listed under ADDRESSES. Include "AD Docket No. FAA-2006-24261; Directorate Identifier 2006-NE-12-AD" in the subject line of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify it.

We will post all comments we receive, without change, to <http://dms.dot.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this AD. Using the search function of the DMS Web site, anyone can find and read the comments in any of our dockets, including the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.).

Examining the AD Docket

You may examine the docket that contains the AD, any comments received, and any final disposition in person at the Docket Management Facility Offices between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Office (telephone (800) 647-5227) is located on the plaza level of the Department of Transportation Nassif Building at the street address stated in ADDRESSES. Comments will be available in the AD docket shortly after receipt.

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 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 the 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. 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.

We prepared a summary of the costs to comply with this AD and placed it in the AD Docket. You may get a copy of this summary at the address listed under ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

Under the authority delegated to me by the Administrator, the Federal Aviation Administration amends 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. The FAA amends § 39.13 by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

www.faa.gov/aircraft/safety/alerts/

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2006-06-51 General Electric Company Aircraft Engines: Amendment 39-14566. Docket No. FAA-2006-24261; Directorate Identifier 2006-NE-12-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective May 2, 2006, to all persons except those persons to whom it was made immediately effective by emergency AD 2006-06-51, issued March 17, 2006, which contained the requirements of this amendment.

Affected ADs

(b) None.

Applicability

(c) This AD applies to General Electric Company Aircraft Engines (GEAE) CT7-8A serial numbers (SNs) 947201 through 947204, 947209 through 947235, 947238 through 9472268, 947273 through 947281, and 947283 through 947285. These engines are installed on, but not limited to, Sikorsky S92 helicopters.

Unsafe Condition

(d) This AD results from two failures of the No. 3 bearing in GEAE CT7-8A engines. We are issuing this AD to prevent failures of the No. 3 bearings and possible dual in-flight shutdowns of the engines.

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.

Initial Inspection of the Electrical Chip Detector

- (f) Within 25 hours time-in-service after the effective date of this AD, do the following:
- (1) Remove the electrical chip detector assembly.
 - (2) If the chip detector assembly contains any bearing material, replace the engine.
 - (3) Stagger the inspection intervals so the chip detectors on both engines on the same helicopter are not inspected at the same time.

Repetitive Inspection of the Electrical Chip Detector

(g) Thereafter, within 25 hours time-since-last inspection, perform the inspection specified in paragraph (f)(1) through (f)(3) of this AD.

Alternative Methods of Compliance

(h) 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.

Related Information

(i) None.

Issued in Burlington, Massachusetts, on April 11, 2006.

Francis A. Favara,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 06-3616 Filed 4-14-06; 8:45 am]

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