

# Proposed Rules

Federal Register

Vol. 68, No. 218

Wednesday, November 12, 2003

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-46-AD]

RIN 2120-AA64

#### Airworthiness Directives; General Electric Company CF6-80C2 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 General Electric Company (GE) CF6-80C2 series turbofan engines. This proposed AD would require replacing certain high pressure turbine (HPT) stage 1 disks at or before reaching a new reduced life cycle limit. This proposed AD is prompted by an updated low-cycle-fatigue (LCF) analysis of the HPT stage 1 disk. We are proposing this AD to prevent LCF cracking and failure of the HPT stage 1 disk due to exceeding the life limit, which could result in an uncontained engine failure and damage to the airplane.

**DATES:** We must receive any comments on this proposed AD by January 12, 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-46-AD, 12 New England Executive Park, Burlington, MA 01803-5299.
- By fax: (781) 238-7055.
- By e-mail: [9-ane-adcomment@faa.gov](mailto:9-ane-adcomment@faa.gov).

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:

Karen Curtis, Aerospace Engineer, Aircraft Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Office Park, Burlington, MA 01803; telephone (781) 238-7192; 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-46-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

GE has completed an updated LCF analysis for the CF6-80C2A5F, CF6-80C2B5F, CF6-80C2B7F, and CF6-80C2D1F HPT stage 1 disks, part numbers (P/Ns) 1531M84G10 and 1531M84G12, and has established a new reduced life cycle limit of 10,720 cycles-since-new (CSN) for these disks. In January 2003, the FAA became aware of

GE's in-process analysis and material testing of HPT stage 1 disks, P/Ns 1531M84G10 and 1531M84G12. The FAA approved temporary revisions (TRs) to Chapter 5, Life Limits, of the engine manual (EM), to incorporate revised life limits for these disks based on initial analytical results. The original life limit of 13,200 CSN for these disks was last published in EM GEK 92451, Revision 57, dated March 1, 2003. TRs 05-0093 and 05-0094, dated May 15, 2003, revised this life limit from 13,200 CSN to 9,000 CSN. The FAA chose to wait for final analytical results before taking action to mandate a lower life limit. This wait was possible due to the young age of the affected disks. The high-cycle disk has accumulated fewer than 7,500 CSN at this time, which is well below the interim limit of 9,000 CSN and the final mandated limit. The FAA now approves GE's final analytical results and the reduced life limit of 10,720 CSN. GE issued TRs 05-0096 and 05-0097 on June 19, 2003 to revise the life limits section of the EM for CF6-80C2A5F, CF6-80C2B5F, CF6-80C2B7F, and CF6-80C2D1F HPT stage 1 disks, P/Ns 1531M84G10 and 1531M84G12, to 10,720 CSN. Although interim publications of the EM showed lower life limits for this part, those limits were not mandated by an AD. Therefore, an AD is now required to mandate the approved 10,720 CSN life limit.

#### 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. Therefore, we are proposing this AD, which would require replacing HPT stage 1 disks, P/Ns 1531M84G10 and 1531M84G12 at or before reaching a new reduced life cycle limit of 10,720 CSN.

#### Changes to 14 CFR Part 39—Effect on the Proposed AD

On July 10, 2002, we issued a new version of 14 CFR part 39 (67 FR 47998, July 22, 2002), which governs the FAA's AD system. This regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance. This material previously was included in each individual AD. Since this material