

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-43-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

On May 18, 2001, an uncontained engine failure and an in-flight shutdown occurred on a CF6-80C2 engine installed in an Airbus A300 airplane. The engine nacelle was penetrated, and damage occurred to wing skin panels and an inboard aileron. Investigation revealed that the uncontained engine failure was caused by cracking and sagging of HPT S2 NGVs, which resulted in multiple HPT stage 2 blade failure and uncontainment at the low pressure turbine case. To date, three uncontained failures of this type on CF6-80C2 engines have been reported. Additionally, twelve reports have been received of HPT S2 NGV outer airfoil fillet cracking, NGV sagging, and HPT stage 2 blade damage. Eleven of these report findings resulted in engine removal, and one finding was discovered during engine disassembly. Similar events have occurred on other

CF6 engine models with similar design HPT S2 NGVs, which have resulted in nacelle penetration and minor airplane damage. CF6-80C2 engines with pre-service bulletin (SB) No. S/B 72-0978 HPT S2 NGVs installed, are more susceptible to airfoil outer fillet cracking. This cracking can propagate to a condition where the nozzle segment sags backward and contacts the HPT stage 2 blade row. This contact can progress to notching of the blade airfoil at the root and lead to blade failure. The actions specified in this AD are intended to prevent blade failure from HPT S2 NGV distress, which could result in an uncontained engine failure.

Relevant Service Information

We have reviewed and approved the technical contents of GE SB No. CF6-80C2 S/B 72-0952, Revision 6, dated May 5, 2003, that describes procedures for initial and repetitive flex borescope inspections of affected HPT S2 NGVs.

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 flex borescope inspections of the following P/N HPT S2 NGVs installed in CF6-80C2A1, -80C2A2, -80C2A3, -80C2A5, -80C2A5F, -80C2A8, -80C2B1, -80C2B1F, -80C2B2, -80C2B2F, -80C2B4, -80C2B4F, -80C2B5F, -80C2B6, -80C2B6F, -80C2B6FA, -80C2B7F, and -80C2D1F turbofan engines:

- P/N 1347M66G03, P/N 1347M66G04, and P/Ns 1815M81G01 through 1815M81G07, if insert P/N 1957M40G01/G02 was installed during repair.
- P/Ns 9373M80G07 through 9373M80G22, and P/Ns 9373M80G25 through 9373M80G32, if insert P/N 1957M40G01/G02 was installed during repair, or if NGV was repaired by GE between April 1, 1998 through September 30, 1999.
- P/Ns 9373M80G33 through 9373M80G36.
- P/Ns 2080M38G01 through 2080M38G16, and P/Ns 2080M38G19 through 2080M38G24.
- P/Ns 2080M19G01 through 2080M19G04, P/Ns 2080M19G07 through 2080M19G16, P/Ns 2080M19G19 through 2080M19G46, P/Ns 2080M19G49 through 2080M19G70, and P/Ns 2080M19G73 through 2080M19G80.

The proposed AD would require you to use the service information described previously to perform these actions.

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 is included in 14 CFR part 39, we will not include it in future AD actions.

Costs of Compliance

There are about 1,100 GE CF6-80C2 turbofan engines of the affected design in the worldwide fleet. We estimate that 300 of these engines installed on airplanes of U.S. registry would be affected by this proposed AD. We also estimate that it would take approximately 2 work hours per engine to perform the proposed inspections on engines that exhibit no damage, and therefore require no mapping of damage, and that the average labor rate is \$65 per work hour. Based on these figures, we estimate the total cost of the proposed AD to U.S. operators to be \$39,000.

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-43-AD" in your request.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.