

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 95-ANE-10-AD; Amendment 39-14650; AD 2006-12-24]

RIN 2120-AA64

Airworthiness Directives; General Electric Company CF6 Series Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is superseding an existing airworthiness directive (AD) for General Electric Company (GE) CF6-45/-50 series turbofan engines. That AD currently requires an initial and repetitive on-wing visual inspection of the side links of the five-link forward mount assembly for cracks, and replacement of the side links and pylon attachment bolts and inspection of the fail-safe bolt and platform lug if the side links are cracked. That AD also requires a shop-level refurbishment of the side links as a terminating action to the on-wing inspection program. This ad requires inspecting and refurbishing the side link at every exposure of the side link. This AD also requires the same actions on certain part number side links installed on CF6-80A turbofan engines. This AD results from a report of a cracked side link. We are issuing this AD to prevent failure of the side links and possible engine separation from the airplane.

DATES: This AD becomes effective July 21, 2006. The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of July 21, 2006.

ADDRESSES: You can get the service information identified in this AD from General Electric Aircraft Engines, CF6 Distribution Clerk, Room 132, 111 Merchant Street, Cincinnati, OH 45246.

You may examine the AD docket at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA. You may examine the service information, 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, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; telephone (617) 238-7192; fax (617) 238-7199.

SUPPLEMENTARY INFORMATION: The FAA proposed to amend 14 CFR part 39 with a proposed AD. The proposed AD applies to GE CF6-45/-50 series turbofan engines. We published the proposed AD in the Federal Register on December 12, 2005 (70 FR 73391). That action proposed to require inspecting and refurbishing the side links of the five-link forward mount assembly at every exposure of the side link. That action also proposed to require the same actions on certain part number side links installed on CF6-80A turbofan engines.

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.

Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the comments received.

Definition of Exposure

One commenter proposes that the definition of exposure be revised as follows: " * * * removal of one or more bolts attaching the side links to the fan frame front HPC case or removal of the bolt attaching the side link to the mount platform while the engine is not installed." This commenter believes that the definition of exposure used in the proposed AD will create an undue burden on line maintenance operations, and will eliminate any on-wing maintenance on the link and associated hardware. They also believe the proposed definition will force operators to replace the link assembly even for bolt removal to facilitate other maintenance and unrelated minor discrepancies. We do not agree that the definition of exposure should be relaxed to facilitate on-wing maintenance. The opportunity for coating distress of the links occurs each time a bolt is removed, regardless of where or when the removal occurs. This definition of exposure protects against coating distress that can lead to stress corrosion cracking of the links. We did not change the AD.

Threshold Since Last Refurbishment

One commenter requests that a threshold since the last refurbishment be allowed and that exposure be further defined to allow for staggering of serviceable assemblies within a prescribed threshold since last refurbishment. This commenter believes that there may be instances where an operator staggers a serviceable mount assembly from one engine to another, without that assembly going into the shop. We do not agree that a threshold since the last refurbishment should be allowed to facilitate staggering of serviceable assemblies. The opportunity for coating distress occurs each time a side link bolt is removed, regardless of when the last refurbishment may have occurred. As noted above, this definition of exposure protects against coating distress that can lead to stress corrosion cracking of the links. We did not change the AD.

Clarification of Previous On-wing Inspection Requirement

One commenter requests clarification of the previous on-wing inspection requirement. This commenter notes that the original AD required an on-wing visual inspection and the proposed rule does not. They asked if this was intentional or an oversight. Although the proposed rule did not clearly state that the previous on-wing inspection requirement was being replaced by a shop-level inspection, the FAA's actions are intentional. The accomplishment instructions in the referenced service bulletins include fluorescent particle inspection or magnetic particle inspection as part of the

refurbishment process required at each exposure. Experience proves that these in-shop inspections are more effective in detecting distress in the links than the previous on-wing visual inspection requirement. The requirement for refurbishment at each exposure in this final rule will prevent stress corrosion cracking of the links. We did not change the AD.

Conclusion

We have carefully reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD as proposed.

Costs of Compliance

We estimate that this AD will affect 195 engines installed on U.S. registered airplanes per year. We also estimate that it will take 8.0 workhours per engine to perform the actions, and that the average labor rate is \$65 per workhour. This AD does not require parts. Based on these figures, we estimate the total cost of this AD to U.S. operators to be \$101,400 per year.

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 this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866;
- (2) Is not a "significant rule" under 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 by sending a request to us at the address listed under ADDRESSES. Include "AD Docket No. 95-ANE-10-AD" in your request.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends 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 removing Amendment 39-9346 (60 FR 46758, September 8, 1995) and by adding a new airworthiness directive, Amendment 39-14650, to read as follows:

AIRWORTHINESS DIRECTIVE

www.faa.gov/aircraft/safety/alerts/
www.gpoaccess.gov/fr/advanced.html

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



2006-12-24 General Electric Company: Amendment 39-14650. Docket No. 95-ANE-10-AD.

Effective Date

- (a) This AD becomes effective July 21, 2006.

Affected ADs

- (b) This AD supersedes AD 95-17-15, Amendment 39-9346.

Applicability

(c) This AD applies to General Electric (GE) CF6-45/-50 and CF6-80A turbofan engines with left-hand side links part numbers (P/Ns) 9204M94P01, 9204M94P03, and 9346M99P01, and right-hand side links, P/Ns 9204M94P02, 9204M94P04, and 9346M99P02, installed on the five-link forward engine mount assembly (also known as Configuration 2). These engines are installed on, but not limited to, Boeing DC10-15, DC10-30, 767, and 747 series airplanes and Airbus Industrie A300 and A310 series airplanes.

Unsafe Condition

(d) This AD results from a report of a cracked side link. We are issuing this AD to prevent failure of the side links and possible engine separation from the airplane.

Compliance

(e) You are responsible for having the actions required by this AD performed at every exposure of the side link.

Inspecting and Refurbishing the Side Links

(f) Inspect and refurbish each side link at every exposure of the side links. Use the following GE Aircraft Engines (GEAE) service bulletins (SBs):

- (1) For CF6-45/-50 series engines, use 3.A. through 3.E. of the Accomplishment Instructions of GEAE SB CF6-50 S/B 72-1255, dated January 26, 2005.
- (2) For CF6-80A series engines, use 3.A. through 3.E. of the Accomplishment Instructions of GEAE SB CF6-80A S/B 72-0797, dated January 26, 2005.

Definition of Exposure of Side Link

(g) A side link is exposed when one or more bolts that attach the side links to the fan frame—front high pressure compressor case are removed, or when the bolt attaching the side link to the mount platform is removed.

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.

Material Incorporated by Reference

(i) You must use General Electric Aircraft Engines Service Bulletins CF6-50 S/B 72-1255, dated January 26, 2005, and CF6-80A S/B 72-0797, dated January 26, 2005 to perform the actions required by this AD. The Director of the Federal Register approved the incorporation by reference of these service bulletins in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You can get a copy of this service information from General Electric Aircraft Engines, CF6 Distribution Clerk, Room 132, 111 Merchant Street, Cincinnati, OH 45246, or at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC.

Related Information

(j) None.

Issued in Burlington, Massachusetts, on June 8, 2006.
Thomas Boudreau,
Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.
[FR Doc. 06-5426 Filed 6-15-06; 8:45 am]
BILLING CODE 4910-13-P