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PŘÍKAZ K ZACHOVÁNÍ LETOVÉ ZPŮSOBILOSTI

Číslo: 2007-05-14
Datum účinnosti: 9. dubna 2007
General Electric Company (GE)
motor CF6-80C2

Tento PZZ je vydáván pro výrobek transferovaný pod působnost EASA

Na základě rozhodnutí EASA je následující Příkaz k zachování letové způsobilosti závazný pro všechny výrobky provozované v EU, na které se daný PZZ vztahuje.

Provedení PZZ, který se vztahuje podle typu a výrobního čísla na výrobek je pro provozovatele/vlastníka letadla zapsaného do leteckého rejstříku závazné. Neprovedením PZZ ve stanoveném termínu dojde ke ztrátě letové způsobilosti výrobku.

Poznámky:
- Provedení tohoto PZZ musí být zapsáno do provozní dokumentace letadla.
- Případné dotazy týkající se tohoto PZZ adresujte na ÚCL sekce technická.
- Pokud to vyžaduje povaha tohoto PZZ, musí být zapracován do příslušné části dokumentace pro obsluhu, údržbu a opravy letadla.

[Federal Register: March 5, 2007 (Volume 72, Number 42)]
[Rules and Regulations]
[Page 9662-9666]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr05mr07-7]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2006-23871; Directorate Identifier 2006-NE-01-AD; Amendment 39-14975; AD 2007-05-14]

RIN 2120-AA64

Airworthiness Directives; General Electric Company (GE) CF6-80C2 Turbofan Engines

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

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for GE CF6-80C2 series turbofan engines. This AD requires replacing certain installed part number (P/N) and serial number (SN) cast titanium weld-repaired forward engine mount platforms and cast titanium forward mount yokes, with a forged titanium or a non-welded cast titanium part. This AD results from the discovery of cracks, in a weld-repaired area on a forward engine mount platform and a forward engine mount yoke, found during a fluorescent penetrant inspection (FPI). These parts were weld-repaired during manufacture. We are issuing this AD to prevent cracks in the forward engine mount platform and forward engine mount yoke that could result in possible separation of the engine from the airplane.

DATES: This AD becomes effective April 9, 2007.

ADDRESSES: You can get the service information identified in this AD from General Electric Company via Lockheed Martin Technology Services, 10525 Chester Road, Suite C, Cincinnati, Ohio 45215, telephone (513) 672-8400, fax (513) 672-8422.

You may examine the AD docket on the Internet at http://dms.dot.gov or in Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC.

FOR FURTHER INFORMATION CONTACT: James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; telephone (781) 238-7176; fax (781) 238-7199.

SUPPLEMENTARY INFORMATION: The FAA proposed to amend 14 CFR part 39 with a proposed AD. The proposed AD applies to GE CF6-80C2 series turbofan engines. We published the proposed AD in the Federal Register on December 13, 2006 (71 FR 74873). That action proposed to require replacing certain installed part number (P/N) and serial number (SN) cast titanium weld-repaired forward engine mount platforms and cast titanium forward mount yokes, with a forged titanium or a non-welded cast titanium part.

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 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 the DMS receives them.

Comments

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

Add Airbus A310 and MD-11 Airplanes to the Applicability

Commenters from Lufthansa Technik, KLM Royal Dutch Airlines, Airbus and Alitalia state that this AD is also applicable to the engines installed in the A310 and MD-11 airplanes. We agree. We inadvertently omitted the Airbus A310 and MD-11 airplanes from the Applicability section of the proposed rule. These airplanes are included in the Applicability section of the AD.

Reference GE Service Bulletins

Commenters from Lufthansa Technik, KLM Royal Dutch Airlines, Airbus and Alitalia also state that because the AD mandates requirements contained in GE Service Bulletins, CF6-80C2 S/B 72-1206 and CF6-80C2 S/B 72-1207, the FAA should reference the service bulletins in the final rule. We agree. The service bulletins' accomplishment instructions contain information such as applicable Aircraft Maintenance Manual sections that would clarify requirements of the AD. A reference to the service bulletins is included in the Related Information Section of the AD.

Location of Weld Repair

Representatives from Lufthansa Technik and KLM Royal Dutch Airlines note that paragraph (h) of the applicability section identifies a weld repair in a redundant area of the yoke, but Table 3 identifies the weld repair in a non-redundant area of the yoke. The FAA needs to correct this inconsistency in the final rule. We agree and have changed the heading of Table 3 to read, “Weld-Repaired Forward Engine Mount Yokes Requiring Replacement That Have a Weld Repair in a Redundant Area of the Yoke.”

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 with the changes described previously. We have determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Costs of Compliance

There are 25 engines in service that contain the substandard forward engine mount platforms and 59 engines in service that contain the substandard forward engine mount yokes. We estimate that this proposed AD would affect 84 CF6-80C2 engines installed on airplanes of U.S. registry. We estimate that it would take 34 work-hours per engine to replace the weld-repaired cast titanium forward engine mount platforms and the weld-repaired cast titanium forward engine mount yokes.

The average labor rate is $80 per work-hour. Required forward engine mount parts would cost about $12,168 per engine. Required forward engine mount yoke parts would cost about $39,560 per engine. Based on these figures, we estimate the total cost of the proposed AD to U.S. operators to be $2,866,720.

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 at the address listed under ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, 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 adding the following new airworthiness directive:

2007-05-14 General Electric Company: Amendment 39-14975. Docket No. FAA-2006-23871; Directorate Identifier 2006-NE-01-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective April 9, 2007.

Affected ADs

(b) None.

Applicability

(c) This AD applies to the following General Electric Company (GE) turbofan engines with cast titanium assembly engine mount platforms part numbers (P/Ns) 1292M13G06, 1301M28G08, 1459M70G07, and 1846M24G04 and cast titanium assembly engine mount yokes P/Ns 9383M43G14 and 9383M43G16 installed.

CF6-80C2A1	CF6-80C2A5F	CF6-80C2B1F	CF6-80C2B6FA
CF6-80C2A2	CF6-80C2B1	CF6-80C2B2F	CF6-80C2B7F
CF6-80C2A3	CF6-80C2B2	CF6-80C2B4F	CF6-80C2B8F
CF6-80C2A5	CF6-80C2B4	CF6-80C2B5F	CF6-80C2D1F
CF6-80C2A8	CF6-80C2B6	CF6-80C2B6F	

These engines are installed on, but not limited to, Boeing 747, Boeing 767, MD-11 and Airbus A300-600 and A310 airplanes.

Unsafe Condition

(d) This AD results from the discovery of cracks in a forward engine mount platform and a forward engine mount yoke found during fluorescent penetrant inspection (FPI). We are issuing this AD to prevent cracks in the forward engine mount platform and forward engine mount yoke that could result in possible separation of the engine from the airplane.

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.

P/N and SN Weld-Repaired Forward Engine Mount Platforms and Forward Engine Mount Yokes Requiring Replacement

(f) Table 1 of this AD lists the P/Ns and serial numbers (SNs) of the weld-repaired forward engine mount platforms that have a weld repair in a non-redundant area of the mount and must be replaced.

Table 1 – Weld-Repaired Forward Engine Mount Platforms Requiring Replacement That Have a Weld Repair in a Non-Redundant Area of the Mount

P/Ns	SNs
1292M13G06 or 1846M24G04	WACHH228
	WACHH254
	WACHH285
	WACHH290
	WACHH292
	WACHH295
	WACHH299
	WACHH384
	WACHH427
	WACHH440
	WACHH604
1301M28G08	WACAR292
	WACAR354

(g) Table 2 of this AD lists the P/Ns and SNs of the weld-repaired forward engine mount platforms that have a weld repair in a redundant area of the mount. Because it is impossible to detect whether the mount is operating on the redundant feature, each of these mounts must be replaced. The compliance time for mounts in this category can be longer than for the mounts listed in Table 1 of this AD.

Table 2 – Weld-Repaired Forward Engine Mount Platforms Requiring Replacement That Have a Weld Repair in a Redundant Area of the Mount

P/Ns	SNs
1292M13G06 or 1846M24G04	WACHH173
	WACHH189
	WACHH274
	WACHH278
	WACHH314
	WACHH325
	WACHH486
1301M28G08	WACAR294
	WACAR304

P/Ns	SNs
	WACAR353
	WACAR372
1459M70G07	MTXT1282

(h) Table 3 of this AD lists the P/Ns and SNs of the weld-repaired forward engine mount yokes that have a weld repair in a redundant area of the yoke. Because it is impossible to detect whether the mount yoke is operating on the redundant feature, each of these mount yokes must be replaced. The compliance time for mounts in this category can be longer than for the mounts listed in Table 1 of this AD.

Table 3 – Weld-Repaired Forward Engine Mount Yokes Requiring Replacement That Have a Weld Repair in a Redundant Area of the Yoke

P/Ns	SNs
9383M43G14	WACV0388
	WACV0394
	WACV0405
	WACV0406
	WACV0477
	WACV0498
	WACV0529
	WACV0556
	WACV0579
	WACV0581
	WACV0582
	WACV0600
	WACV0605
	WACV0617
	WACV0625
	WACV0627
	WACV0633
	WACV0645
	WACV0683
	WACV0703
	WACV0733
	WACV0737

P/Ns	SNs
	WACV0759
	WACV0775
	WACV0791
	WACV0799
	WACV0875
	WACV0883
	WACV0885
	WACV0909
	WACV1097
	WACV1615
	WACV1713
	WACV1753
	WACV1797
	WACV1867
	WACV1987
	WACV2131
	WACV2159
	WACV2185
	WACV2343
	WACV2511
	WACV2695
	WACV2707
	WACV2881
	WACV2899
9383M43G16	WACV0511
	WACV0515
	WACV0518
	WACV0540
	WACV0542
	WACV0571
	WACV0689
	WACV0721
	WACV0727

P/Ns	SNs
	WACV0730
	WACV0786
	WACV0816
	WACV0954

(i) GE advises that forward engine mount platform, P/Ns 1292M13G06 and 1846M24G04, are the same, except that P/N 1846M24G04 incorporates a previously approved field rework. This rework allows the thrust pin hole in the forward engine mount platform to be bored out to accept installation of an oversized thrust pin. GE cannot identify which SN goes with which P/N, but all SNs are affected.

Welded Cast Titanium Forward Engine Mount Platform and Forward Engine Mount Yoke Removal

(j) If the P/N and SN of the forward engine mount platform listed in Table 1 and Table 2 and the forward engine mount yoke listed in Table 3 of this AD are not installed on the engine, no further action is necessary.

(k) If the P/N and SN of the forward engine mount platform listed in Table 1 of this AD is installed on the engine:

(1) Remove the forward engine mount platform from the engine within 500 cycles or 6 months, after the effective date of this AD, whichever occurs first.

(2) Information for removal of the forward engine mount platform from the engine can be found in the CF6-80C2 Engine Manual, 72-00-01, Disassembly.

(l) If the P/N and SN of the forward engine mount platform listed in Table 2 of this AD is installed on the engine:

(1) Remove the forward engine mount platform at the next shop visit, or within 4,800 cycles after the effective date of this AD, whichever occurs first.

(2) Information for removal of the forward engine mount yoke can be found in the CF6-80C2 Engine Manual, 72-00-01, Disassembly.

(m) If the P/N and SN of the forward engine mount yoke listed in Table 3 of this AD is installed on the engine:

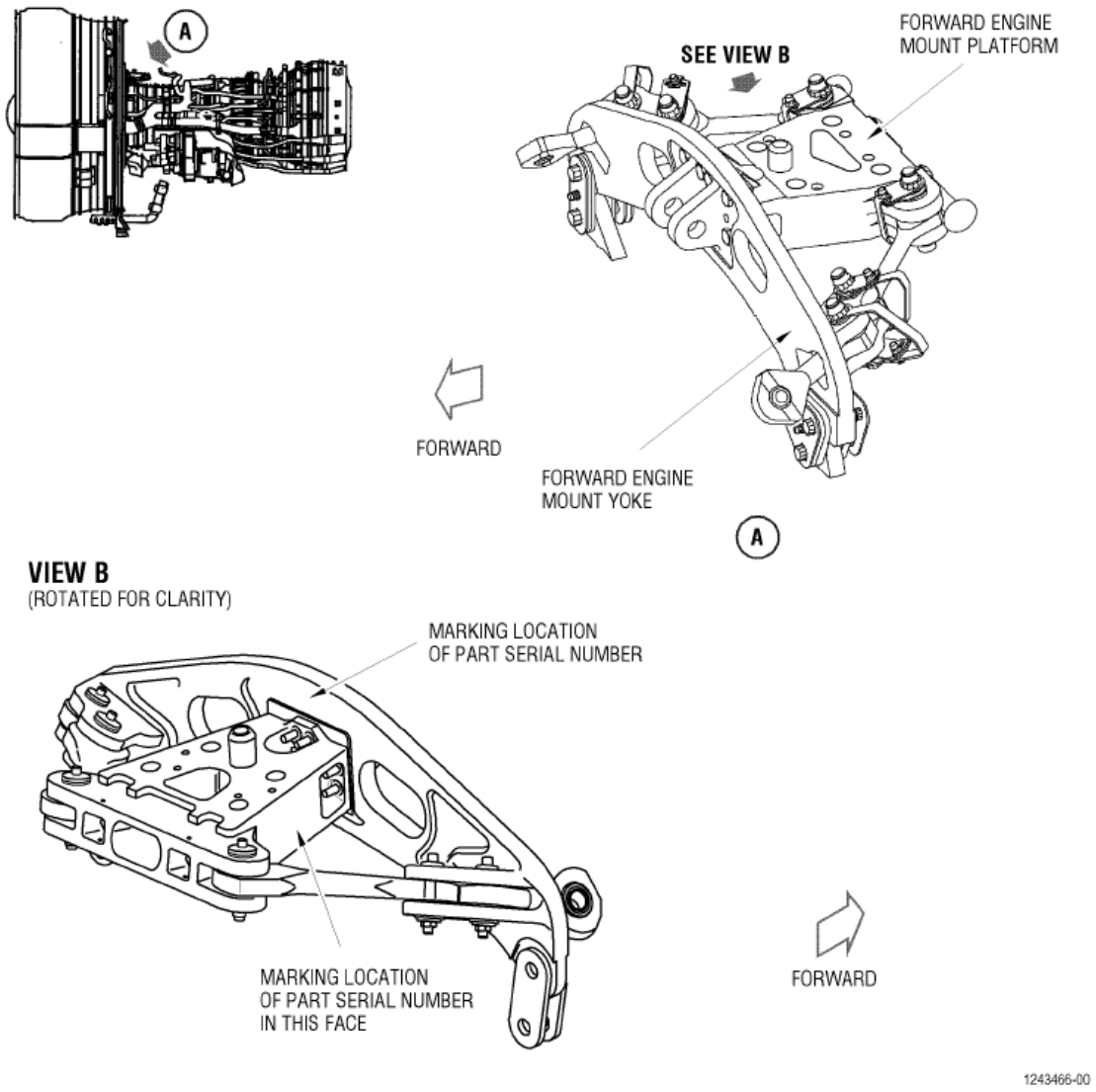
(1) Remove the forward engine mount yoke at the next shop visit, or within 4,800 cycles after the effective date of this AD, whichever occurs first.

(2) Information for removal of the forward engine mount yoke can be found in the CF6-80C2 Engine Manual, 72-00-01, Disassembly.

(n) Replace the affected forward engine mount platform and or the affected forward engine mount yoke with a non-weld-repaired cast titanium forward engine mount platform and or the forward engine mount yoke or a forged titanium forward engine mount platform or a forged titanium forward engine mount yoke.

(o) Information for installing the forward engine mount platform and forward engine mount yoke can be found in the CF6-80C2 Engine Manual, 72-00-01, Assembly.

(p) Location of the forward engine mount platform and forward engine mount yoke and SN are illustrated in the following Figure 1.



Location of Forward Engine Mount Platform and Forward Engine Mount Yoke
Figure 1

(q) After the effective date of this AD, do not install a weld-repaired, cast forward engine mount platform or a weld-repaired, cast forward engine mount yoke in any engine.

Alternative Methods of Compliance

(r) 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

(s) Contact James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; telephone (781) 238-7176; fax (781) 238-7199 for more information about this AD.

(t) General Electric Company Service Bulletins CF6-80C2 S/B 72-1206, dated December 23, 2005, and CF6-80C2 S/B 72-1207, Revision 01, dated July 05, 2006, pertain to the subject of this AD.

Issued in Burlington, Massachusetts, on February 27, 2007.
Peter A. White,
Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.
[FR Doc. 07-986 Filed 3-2-07; 8:45 am]