[Federal Register Volume 82, Number 193 (Friday, October 6, 2017)]
[Rules and Regulations]
[Pages 46669-46671]
From the Federal Register Online via the Government Publishing Office [www.gpo.gov]
[FR Doc No: 2017-21345]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-0254; Product Identifier 2017-NE-10-AD; Amendment 39-19066; AD 2017-20-09]

RIN 2120-AA64

Airworthiness Directives; General Electric Company Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all General Electric Company (GE) CF34-8E model turbofan engines. This AD was prompted by a report that using a certain repair procedure for the fan outlet guide vane (OGV) frame could alter the strength capability of the fan OGV frame. This AD requires replacement of all fan OGV frames repaired using this procedure. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective November 13, 2017.

ADDRESSES: For service information identified in this final rule, contact General Electric Company, GE-Aviation, Room 285, 1 Neumann Way, Cincinnati, OH 45215, phone: 513-552-3272; fax: 513-552-3329; email: geae.aoc@ge.com. You may view this service information at the FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125. It is also available on the internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2017-0254.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2017-0254; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: David Bethka, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7129; fax: 781-238-7199; email: david.bethka@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all GE CF34-8E model turbofan engines. The NPRM published in the Federal Register on June 8, 2017 (82 FR 26615). The NPRM was prompted by a report that using a certain repair procedure for the fan OGV frame could alter the strength capability of the fan OGV frame because the repair procedure included an improper heat cycle. The NPRM proposed to require replacement of all fan OGV frames repaired using this procedure. This condition, if not corrected, could result in failure of the fan OGV frame, engine separation, and loss of the airplane.

Comments

We gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA's response to each comment.

Support for the NPRM

The Air Line Pilots Association supports the NPRM.

Request To Change Applicability

Horizon Air requested we include a list of fan OGV frame affected serial numbers (S/Ns) in this AD. J-Air requested that this AD include GE Service Bulletin (SB) CF34-8E-AL S/B 72-0183, Revision 3, dated March 7, 2017, for a list of affected OGV frame S/Ns known to GE. Further, the two commenters explained that operators are not necessarily aware of which repairs have been performed. The changes were requested to take the burden off the operator to determine AD applicability.

We partially agree. We disagree that SB CF34-8E-AL S/B 72-0183 provides a list of all affected OGV frame S/Ns. The list of known affected part S/Ns is based on the best available data, but is not comprehensive. It may be possible that some OGV frames were repaired, but are not known to GE and are not included in GE SB CF34-8E-AL S/B 72-0183. Operators are responsible for checking engine records to determine AD applicability.

We agree to unburden operators to the maximum extent possible. In the interest of aiding operators to determine affected part S/Ns, we included GE SB CF34-8E-AL S/B 72-0183 in the Related Service Information section in the preamble of this final rule, with a note that GE SB CF34-8E-AL S/B 72-0183 does not include a comprehensive list of all affected parts. GE SB CF34-8E-AL S/B 72-0183 includes a list of OGV frame S/Ns known to GE that have been repaired to GEK 112031 72-00-23, REPAIR 006.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule with the change described previously. We have determined that these minor changes:

- [Agr]re consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and

- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

Related Service Information

We reviewed GE CF34-8E Engine Manual, GEK 112031, 72-00-23, REPAIR 006. The repair describes procedures for applying a dry-film lubricant to the fan OGV frame with heat curing.

We also reviewed GE SB CF34-8E-AL S/B 72-0183, Revision 3, dated March 7, 2017. The SB provides instructions to replace the fan OGV frames repaired as specified in GE CF34-8E Engine Manual, GEK 112031, 72-00-23, REPAIR 006. However, the SB does not provide a comprehensive list of affected parts. The SB provides a list of OGV frame S/Ns known to GE that have been repaired to GEK 112031 72-00-23 REPAIR 006.

Costs of Compliance

We estimate that this AD affects 42 engines installed on airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated Costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Fan OGV frame part—annual, prorated cost	0 work-hour × $85 per hour = $0.00	$12,300	$12,300	$516,600

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to engines, propellers, and associated appliances to the Manager, Engine and Propeller Standards Branch, Policy and Innovation Division.

Regulatory Findings

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),

(3) Will not affect intrastate aviation in Alaska, and

(4) 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.

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 FAA 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 (AD):

2017-20-09 General Electric Company: Amendment 39-19066; Docket No. FAA-2017-0254; Product Identifier 2017-NE-10-AD.

(a) Effective Date

This AD is effective November 13, 2017.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all General Electric Company (GE) CF34-8E2; CF34-8E2A1; CF34-8E5; CF34-8E5A1; CF34-8E5A2; CF34-8E6; and CF34-8E6A1 model turbofan engines.

(d) Subject

Joint Aircraft System Component (JASC), 7270, Turbine Engine Bypass Section.

(e) Unsafe Condition

This AD was prompted by a report that using a certain repair procedure for the fan outlet guide vane (OGV) frame could alter the strength capability of the fan OGV frame. We are issuing this AD to prevent failure of the fan OGV frame, engine separation, and loss of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

(1) For engines with a fan OGV frame installed that was repaired using GE CF34-8E Engine Manual, GEK 112031, 72-00-23, REPAIR 006:

(i) If the fan OGV frame has 24,900 cycles since new (CSN) or more on the effective date of this AD, remove the OGV frame from service within 100 cycles after the effective date of this AD.

(ii) If the OGV frame has less than 24,900 CSN on the effective date of this AD, remove the fan OGV frame from service at the next shop visit after the effective date of this AD, or before exceeding 25,000 CSN, whichever occurs earlier.

(2) After the effective date of this AD, do not install a fan OGV frame that was repaired using GE CF34-8E Engine Manual, GEK 112031, 72-00-23, REPAIR 006.

(h) Definition

For the purpose of this AD, an “engine shop visit” is the induction of an engine into the shop for maintenance involving the separation of pairs of major mating engine flanges.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, ECO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j)(1) of this AD. You may email your request to: ANE-AD-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(j) Related Information

(1) For more information about this AD, contact David Bethka, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7129; fax: 781-238-7199; email: david.bethka@faa.gov.

(2) For General Electric service information identified in this AD, contact General Electric Company, GE-Aviation, Room 285, 1 Neumann Way, Cincinnati, OH 45215, phone: 513-552-3272; fax: 513-552-3329; email: geae.aoc@ge.com. You may view this service information at the FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(k) Material Incorporated by Reference

None.

Issued in Burlington, Massachusetts, on September 28, 2017.
Robert J. Ganley,
Manager, Engine and Propeller Standards Branch,
Aircraft Certification Service.