

[Federal Register Volume 78, Number 33 (Tuesday, February 19, 2013)]
[Rules and Regulations]
[Pages 11563-11565]
From the Federal Register Online via the Government Printing Office [www.gpo.gov]
[FR Doc No: 2013-03266]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-1005; Directorate Identifier 2012-NE-27-AD; Amendment 39-17349; AD 2013-03-14]

RIN 2120-AA64

Airworthiness Directives; Pratt & Whitney Canada Corp Turboshaft Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Pratt & Whitney Canada Corp. (P&WC) PT6C-67C turboshaft engines. This AD requires initial and repetitive borescope inspections to verify the presence of a retaining ring securing the power turbine (PT) baffle located near the second stage PT disk. If the engine fails the inspection, this AD also requires removing the engine from service before further flight. This AD was prompted by five reported incidents of second stage PT disk damage. We are issuing this AD to prevent damage to the PT disk which, if undetected, could cause uncontained PT disk failure and loss of control of the helicopter.

DATES: This AD becomes effective March 26, 2013.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of March 26, 2013.

ADDRESSES: The Docket Operations office is located at Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

FOR FURTHER INFORMATION CONTACT: James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; email: james.lawrence@faa.gov; phone: 781-238-7176; fax: 781-238-7199.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on October 25, 2012 (77 FR 65142). That NPRM proposed to correct an unsafe condition for the specified products. The Mandatory Continuing Airworthiness Information states:

There have been 5 reported incidents of second stage Power Turbine (PT) disk damage caused by the PT baffle moving and contacting the downstream side of the second stage PT disk. In two of these incidents, the PT section of the engine failed to rotate (on ground) as a result of baffle interference.

An investigation has determined that the root cause for the PT baffle displacement and the resultant PT disk damage was due to the failure of the retaining ring that holds the PT baffle in its intended position.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (77 FR 65142, October 25, 2012).

Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed (77 FR 65142, October 25, 2012).

Costs of Compliance

Based on the service information, we estimate that this AD will affect about 220 engines of U.S. registry. We also estimate that it will take about six hours per engine to comply with this AD. The average labor rate is \$85 per work-hour. We anticipate that two engines will fail the initial inspection. Required parts will cost about \$224,636 per engine. Based on these figures, we estimate the cost of the AD on U.S. operators to be \$561,472. Our cost estimate is exclusive of possible warranty coverage.

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 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 this AD:

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. 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 regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (phone: (800) 647-5527) is provided in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

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 AD:



2013-03-14 Pratt & Whitney Canada Corp: Amendment 39-17349; Docket No. FAA-2012-1005; Directorate Identifier 2012-NE-27-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective March 26, 2013.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Pratt & Whitney Canada Corp. (P&WC) PT6C-67C turboshaft engines that have not had P&WC Service Bulletin (SB) No. PT6C-72-41056 incorporated.

(d) Reason

This AD was prompted by five reported incidents of second stage power turbine (PT) disk damage. We are issuing this AD to prevent damage to the PT disk which, if undetected, could cause uncontained PT disk failure and loss of control of the helicopter.

(e) Actions and Compliance

Unless already done, do the following actions.

(f) Borescope Inspections

(1) Borescope-inspect to verify the presence of a retaining ring securing the PT baffle located near the second stage PT disk, as follows:

(i) For engines with 2,200 PT cycles or more on the effective date of this AD, inspect within 100 operating hours or 150 PT cycles, whichever occurs first.

(ii) For engines with more than 1,400 PT cycles but fewer than 2,200 PT cycles on the effective date of this AD, inspect within 250 operating hours, 350 PT cycles, or before exceeding 2,350 PT cycles, whichever occurs first.

(iii) For engines with 1,400 PT cycles or fewer on the effective date of this AD, inspect within 500 operating hours, 750 PT cycles, or before exceeding 1,750 PT cycles, whichever occurs first.

(2) Thereafter, repetitively borescope-inspect to verify the presence of the retaining ring securing the PT baffle located near the second stage PT disk, on or before an additional 600 flight hours or 900 PT cycles, whichever occurs first.

(3) Use P&WC Alert SB No. PT6C-72-A41060, Revision 3, dated October 11, 2012, paragraphs 3.A.(1) through 3.A.(6) to do the borescope inspections required by this AD.

(4) If the retaining ring is missing or the PT baffle is out of position, then remove the engine from service before further flight.

(g) Optional Terminating Action

Performing the engine improvement modifications in P&WC SB No. PT6C-72-41056, Revision 5, dated January 17, 2013, paragraphs 3.A. through 3.C.(12) and 3.E.(1) through 3.E.(15), is an optional terminating action to the repetitive inspections required by this AD.

(h) Credit for Previous Actions

(1) If you performed the initial borescope inspection before the effective date of this AD using P&WC Special Instruction No. 45-2011R2, dated July 27, 2011, or P&WC Alert SB No. PT6C-72-A41060, dated August 12, 2011, or Revision 1, dated September 29, 2011, or Revision 2, dated February 10, 2012, you met the requirements of paragraph (f)(1) of this AD.

(2) If you performed the engine modification before the effective date of this AD using P&WC SB No. PT6C-72-41056, dated April 1, 2011, or Revision 1, dated June 17, 2011, or Revision 2, dated October 6, 2011, or Revision 3, dated February 3, 2012, or Revision 4, dated February 13, 2012, you met the requirements of this AD and no further action is required.

(i) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(j) Related Information

(1) For more information about this AD, contact James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; email: james.lawrence@faa.gov; phone: 781-238-7176; fax: 781-238-7199.

(2) Refer to Transport Canada AD CF-2012-24, dated August 2, 2012, for related information.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Pratt & Whitney Canada Corp (P&WC) Alert Service Bulletin (SB) No. PT6C-72-A41060, Revision 3, dated October 11, 2012.

(ii) P&WC SB No. PT6C-72-41056, Revision 5, dated January 17, 2013.

(3) For service information identified in this AD, contact Pratt & Whitney Canada Corp., 1000 Marie-Victorin, Longueuil, Quebec, Canada, J4G 1A1; phone: 800-268-8000; fax: 450-647-2888; Web site: <http://www.pwc.ca>.

(4) You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(5) You may view this service information at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on February 1, 2013.
Colleen M. D'Alessandro,
Assistant Manager, Engine & Propeller Directorate,
Aircraft Certification Service.