



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2013-1009; Directorate Identifier 2013-NE-35-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Pratt & Whitney Canada Corp. Turboprop Engines**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain Pratt & Whitney Canada Corp. (P&WC) turboprop engines. This proposed AD was prompted by in-service events involving the perforation of engine cases as a result of the liberation of power turbine (PT) blades and the fracture/displacement of the PT containment ring. This proposed AD would require installing a reinforcement liner to the PT containment ring and, for certain PT containment rings, adding scallops. We are proposing this AD to prevent uncontained engine failure and damage to the airplane.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.

- Mail: Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

- Fax: 202-493-2251.

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

### **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-2013-1009; 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 proposed AD, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (phone: 800-647-5527) is the same as the Mail address provided in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Robert Green, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England

Executive Park, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: robert.green@faa.gov.

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2013-1009; Directorate Identifier 2013-NE-35-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD. Using the search function of the Web site, anyone can find and read the comments in any of our dockets, including, if provided, the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78).

### **Discussion**

Transport Canada Civil Aviation, which is the aviation authority for Canada, has issued AD CF-2013-33R1, dated November 14, 2013 (referred to hereinafter as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

There have been in-service events involving the perforation of PT6A small series engine cases as a result of the loss of integrity of Power Turbine (PT) Containment Rings under failure loads. Perforation of engine cases has been seen to result from the liberation of PT blades and from fracture/displacement of the PT Containment Ring itself.

You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2013-1009.

### **Relevant Service Information**

P&WC has issued Service Bulletin (SB) No. PT6A-72-A1427, Revision 3, dated January 27, 2012. The SB describes procedures for reworking an affected PT containment ring by installing a reinforcement liner and, depending on the part number of the reworked ring, machining scallops into the ring.

### **FAA's Determination and Requirements of This Proposed AD**

This product has been approved by the aviation authority of Canada, and is approved for operation in the United States. Pursuant to our bilateral agreement with Canada, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information provided by Transport Canada Civil Aviation and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design. This proposed AD would require installing a reinforcement liner to the PT containment ring and, for certain PT containment rings, adding scallops.

### **Costs of Compliance**

We estimate that this proposed AD affects 1,000 engines of U.S. registry. We also estimate that it would take about 3 hours per engine to comply with this proposed AD.

The average labor rate is \$85 per hour. Required parts cost about \$1,655 per engine.

Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$1,910,000.

### **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 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 this 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),

(3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, 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.

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

#### **List of Subjects in 14 CFR Part 39**

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

#### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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):

**Pratt & Whitney Canada Corp.:** Docket No. FAA-2013-1009; Directorate Identifier 2013-NE-35-AD.

**(a) Comments Due Date**

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Pratt & Whitney Canada Corp. (P&WC) turboprop engines as follows: all model PT6A-20, PT6A-20A, PT6A-20B, PT6A-25, PT6A-28, PT6A-34B, PT6A-36, and PT6A-135 engines; model PT6A-21 engines, serial number (S/N) PCE-25361 and earlier; model PT6A-25A engines, S/N PCE-48757 and earlier; model PT6A-25C engines, S/N PCE-26258 and earlier; model PT6A-27 engines, S/N PCE-42523 and earlier as well as all engines converted to PT6A-27; model PT6A-34 engines, S/N PCE-57303 and earlier as well as all engines converted to PT6A-34; model PT6A-34AG engines, S/N PCE-57312 and earlier as well as all engines converted to PT6A-34AG; model PT6A-114 engines, S/N PCE-17218 and earlier; and model PT6A-135A engines, S/N PCE-35089 and earlier.

**(d) Reason**

This AD was prompted by in-service events involving the perforation of engine cases as a result of the liberation of power turbine (PT) blades and the fracture/displacement of the PT containment ring. We are issuing this AD to prevent uncontained engine failure and damage to the airplane.

**(e) Actions and Compliance**

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

(2) Within 24 months after the effective date of this AD, modify the existing PT containment ring. Use paragraph 3., Accomplishment Instructions, of P&WC Service Bulletin (SB) No. PT6A-72-A1427, Revision 3, dated January 27, 2012, to make the modification.

**(f) Credit for Previous Actions**

If you modified the PT containment ring before the effective date of this AD using P&WC SB No. PT6A-72-A1427, Revision 3, dated January 27, 2012, or earlier versions, you have met the requirements of this AD.

**(g) Alternative Methods of Compliance (AMOCs)**

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

**(h) Related Information**

(1) For more information about this AD, contact Robert Green, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: robert.green@faa.gov.

(2) Refer to MCAI Transport Canada Civil Aviation AD CF-2013-33R1, dated November 14, 2013, for more information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2013-1009.

(3) P&WC SB No. PT6A-72-A1427, Revision 3, dated January 27, 2012, pertains to the subject of this AD and can be obtained from P&WC, using the contact information in paragraph (h)(4) of this AD.

(4) 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; Internet: [www.pwc.ca](http://www.pwc.ca).

(5) 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.

Issued in Burlington, Massachusetts, on January 2, 2014.

Colleen M. D'Alessandro,  
Assistant Directorate Manager, Engine & Propeller Directorate,  
Aircraft Certification Service.

[FR Doc. 2014-00029 Filed 01/06/2014 at 8:45 am; Publication Date: 01/07/2014]