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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2008-0664; Directorate Identifier 2008-NE-04-AD; Amendment 39-15579; AD 2008-13-16]

RIN 2120-AA64

Airworthiness Directives; Pratt & Whitney Canada Corp. (P&WC) Models PW305A and PW305B Turbofan Engines

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

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

There have been two incidents of fan blade dislodgements due to blade fracture on relatively hi-time PW305 engines (over 5000 Hrs). The blade dislodgement in both cases was contained. However, engine installations sustained considerable collateral damage. The root cause of fan blade fracture was determined to be the under-minimum material condition at the fracture location.

This AD requires actions that are intended to address the unsafe condition described in the MCAI, which could result in an engine shutdown and damage to the airplane.

DATES: This AD becomes effective July 10, 2008.

The Director of the Federal Register approved the incorporation by reference of P&WC Alert Service Bulletin (ASB) PW300-72-A24588, Revision 2, dated November 27, 2007, listed in the AD as of July 10, 2008.

We must receive comments on this AD by July 25, 2008.

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: 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.

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 (telephone (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: Ian Dargin, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: ian.dargin@faa.gov; telephone (781) 238-7178; fax (781) 238-7199.

SUPPLEMENTARY INFORMATION:

Discussion

Transport Canada (TC), which is the aviation authority for Canada, has issued Airworthiness Directive CF-2008-08R1, dated March 18, 2008, (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

There have been two incidents of fan blade dislodgements due to blade fracture on relatively hi-time PW305 engines (over 5000 Hrs). The blade dislodgement in both cases was contained. However, engine installations sustained considerable collateral damage. The root cause of fan blade fracture was determined to be the under-minimum material condition at the fracture location.

P&WC has established that the subject under-minimum material condition is limited only to fan blades P/N 30B2855-01, manufactured under heat code: MCBWF. Accordingly, P&WC on 24 August 2007 issued Alert Service Bulletin (ASB) No. A24588, requiring, on priority bases, identification and removal of all such discrepant fan blades from service, in accordance with Special Instructions (SI) No. 37-2007. ASB No. A24588 was subsequently revised (Rev. 2) on 27 November 2007 to include clarification on the incorporation of another Service Bulletin (SB) No. 24595, on the same subject.

Considering the potentially hazardous consequence of possible uncontained dislodgement of discrepant blade and its impact on aircraft safety, this AD is issued to mandate the inspection of the affected engine low-pressure (LP) compressor fan blades in accordance with ASB A24588 requirements.

You may obtain further information by examining the MCAI in the AD docket.

Relevant Service Information

P&WC has issued ASB PW300-72-A24588, Revision 2, dated November 27, 2007. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

FAA's Determination and Requirements of This 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 issuing this AD because we evaluated all the information provided by Canada and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

FAA's Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because fan blades identified by this AD have been found to have an under-minimum material thickness condition which has caused failure and release of fan blades. In one event, the fan blade failure (contained) resulted in high engine vibrations causing the loss of the upper and lower engine cowls. Fan blade failure could result in an engine shutdown and damage to the airplane. Therefore, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in fewer than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2008-0664; Directorate Identifier 2008-NE-04-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of 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 we receive about this AD.

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.

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:



2008-13-16 Pratt & Whitney Canada Corp. (P&WC) (Formerly Pratt & Whitney Canada, Inc.)
: Amendment 39-15579.; Docket No. FAA-2008-0664; Directorate Identifier 2008-NE-04-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective July 10, 2008.

Affected ADs

(b) None.

Applicability

(c) This AD applies to P&WC models PW305A and PW305B turboprop engines that have a serial number (SN) listed in Table 1 of this AD. These engines are installed on, but not limited to, Bombardier Learjet M60 and Hawker Beechcraft 1000 series airplanes.

Table 1 – Affected Engines by SN

CA0192	CA0206	CA0214	CA0228	CA0244
CA0195	CA0207	CA0215	CA0231	CA0246
CA0197	CA0208	CA0216	CA0232	CA0247
CA0199	CA0209	CA0217	CA0234	CA0257
CA0200	CA0210	CA0218	CA0235	CA0259
CA0202	CA0211	CA0220	CA0240	CA0260
CA0203	CA0212	CA0221	CA0241	CA0280
CA0204	CA0213	CA0223	CA0243	CA0300

Reason

(d) There have been two incidents of fan blade dislodgements due to blade fracture on relatively hi-time PW305 engines (over 5000 Hrs). The blade dislodgement in both cases was contained. However, engine installations sustained considerable collateral damage. The root cause of fan blade fracture was determined to be the under-minimum material condition at the fracture location.

This AD requires actions that are intended to address the unsafe condition described in the MCAI, which could result in an engine shutdown and damage to the airplane.

Actions and Compliance

(e) Unless already done, do the following actions on all affected engines as specified in the applicability section of this AD, accomplish in accordance with P&WC Alert Service Bulletin (ASB) PW300-72-A24588, Revision 2, dated November 27, 2007:

(1) For engines with more than 5,000 hours of operating time, before next flight, inspect low-pressure (LP) compressor fan blades and replace any blade that is found to be under-minimum material condition.

(2) For engines with 5,000 or less, but more than 4,000 hours of operating time, within 30 hours of operating time from the effective date of this AD, but not later than September 30, 2008, inspect LP compressor fan blades and replace any blade that is found to be under-minimum material condition.

(3) For engines with 4,000 or less, but more than 2,500 hours of operating time, no later than September 30, 2008, inspect LP compressor fan blades and replace any blade that is found to be under-minimum material condition, in accordance with one of the following schedules, whichever occurs first:

(i) At the next first stage high-pressure compressor rotor inspection (Ref 05-20-00 scheduled maintenance checks), or

(ii) At the next scheduled opportunity where the LP compressor fan is removed (Ref. Hot Section Inspection or Overhaul Shop Visit), or

(iii) Within 300 hours of operating time from August 24, 2007.

(4) For engines with 2,500 or less hours of operating time, before it accumulates 4,000 hours of operating time, but not later than September 30, 2008, inspect LP compressor fan blades and replace any blade that is found to be under-minimum material condition.

Previous Credit

(f) Inspection of the fan blades for an under-minimum material condition done before the effective date of this AD that used P&WC ASB PW300-72-A24588, dated August 24, 2007; or Revision 1, dated October 26, 2007; or P&WC SB PW300-72-24595, dated October 26, 2007; or Revision 1, dated November 28, 2007, comply with the requirements specified in this AD.

Other FAA AD Provisions

(g) The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, Engine Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

(2) Special Flight Permits: We are limiting Special Flight Permits to one repositioning maintenance flight to facilitate the subject inspection.

Related Information

(h) Refer to Transport Canada Airworthiness Directive CF-2008-08R1, dated March 18, 2008; P&WC ASB PW300-72-A24588, Revision 2, dated November 27, 2007; and P&WC SB PW300-72-24595, Revision 1, dated November 28, 2007, for related information.

(i) Contact Ian Dargin, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: ian.dargin@faa.gov; telephone (781) 238-7178; fax (781) 238-7199, for more information about this AD.

Material Incorporated by Reference

(j) You must use Pratt & Whitney Canada Corp. Alert Service Bulletin PW300-72-A24588, Revision 2, dated November 27, 2007, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact Pratt & Whitney Canada Corp., 1000 Marie-Victorin, Longueuil, Quebec, Canada J4G 1A1, telephone: (800) 268-8000.

(3) You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or 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 June 13, 2008.

Peter A. White,

Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. E8-13854 Filed 6-24-08; 8:45 am]