

**2010-17-01 Pratt & Whitney Canada Corp.** (formerly Pratt & Whitney Canada, Inc.): Amendment 39-16391. Docket No. FAA-2010-0246; Directorate Identifier 2010-NE-16-AD.

### **Effective Date**

(a) This airworthiness directive (AD) becomes effective September 27, 2010.

### **Affected ADs**

(b) None.

### **Applicability**

(c) This AD applies to Pratt & Whitney Canada Corp. PW617F-E turbofan engines with fuel/oil heat exchanger (FOHE) part number (P/ N) 35C4540-01 installed. These engines are installed on, but not limited to, Empresa Brasileira de Aeron[acute]utica S.A (EMB) 500 airplanes.

### **Reason**

(d) 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:

A PW617F-E engine powered twin engined aircraft had recently experienced an uncommanded power reduction on one of its engines. Investigation showed that the Fuel Filter Bypass Valve poppet in the FOHE on that engine had worn through the housing seat, allowing unfiltered fuel and debris to contaminate the Fuel Metering Unit, resulting in fuel flow drop and subsequent power reduction. Pratt & Whitney Canada Corp. issued an Alert Service Bulletin (ASB) No. PW600-72-A66019 to inspect and replace any discrepant valve with the same type new valve. The inspection results confirmed that failure of a worn through poppet is dormant and it can affect both engines at the same time that could result in an unsafe condition on PW617F-E powered aircraft.

We are issuing this AD to prevent uncommanded power reduction, which could result in the inability to continue safe flight and safe landing.

### **Actions and Compliance**

(e) Unless already done, replace the FOHE fuel filter bypass poppet valve with a larger fuel filter bypass poppet valve within 25 hours of the effective date of the AD. Use paragraph 3.A. of the Accomplishment Instructions of Pratt & Whitney Canada Corp. ASB No. PW600-72-A66021, Revision 1, dated January 7, 2010, to do the replacement.

### **Previous Credit**

(f) A fuel filter bypass poppet valve replacement performed before the effective date of this AD using Pratt & Whitney Canada Corp. ASB No. PW600-72-A66021, dated November 23, 2009, satisfies the replacement requirement of this AD.

## **Alternative Methods of Compliance**

(g) 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.

## **Related Information**

(h) Refer to MCAI Transport Canada Airworthiness Directive CF- 2010-02, dated January 20, 2010, for related information.

(i) Contact James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park; Burlington, MA 01803; e-mail: james.lawrence@faa.gov; telephone (781) 238-7176; fax (781) 238- 7199, for more information about this AD.

## **Material Incorporated by Reference**

(j) You must use Pratt & Whitney Canada Corp. ASB No. PW600-72- A66021, Revision 1, dated January 7, 2010 to do the replacement required by this AD.

(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 Contact Pratt & Whitney Canada Corp., 1000 Marie-Victorin, Longueuil, Quebec, Canada, J4G 1A1; telephone 800-268-8000; fax 450-647-2888; Web site: [http:// www.pwc.ca](http://www.pwc.ca).

(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>.