



No.	<b>CF-2010-02</b>	1/1
Issue Date	<b>20 January 2010</b>	

# AIRWORTHINESS DIRECTIVE

The following airworthiness directive (AD) may be applicable to an aircraft which our records indicate is registered in your name. ADs are issued pursuant to **Canadian Aviation Regulation (CAR) 521 Division X**. Pursuant to **CAR 605.84** and the further details of **CAR Standard 625, Appendix H**, the continuing airworthiness of a Canadian registered aircraft is contingent upon compliance with all applicable ADs. Failure to comply with the requirements of an AD may invalidate the flight authorization of the aircraft. Alternative means of compliance shall be applied for in accordance with **CAR 605.84** and the above-referenced **Standard**.

This AD has been issued by the Continuing Airworthiness Division (AARDG), National Aircraft Certification Branch, Transport Canada, Ottawa, telephone 613 952-4357.

**Number:** CF-2010-02

**Subject:** Fuel Oil Heat Exchanger (FOHE) Fuel Filter Bypass Valve Wear

**Effective:** 25 January 2010

**Applicability:** All Pratt and Whitney Canada (P&WC) PW617F-E Engines equipped with FOHE P/N 35C4540-01.

**Compliance:** Is required as indicated, unless already accomplished

**Background:** 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 Fuel Oil Heat Exchanger (FOHE) on that engine had worn through the housing seat, allowing unfiltered fuel and debris to contaminate the Fuel Metering Unit (FMU), resulting in fuel flow drop and subsequent power reduction.

P&WC issued an alert Service Bulletin (SB) 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.

On 23 November 2009, P&WC issued an alert SB A66021 that introduced a new Fuel Filter Bypass Valve assembly, with an improved design poppet to help alleviate the subject poppet wear problem. This Airworthiness Directive (AD) is issued to mandate replacement of FOHE Fuel Filter Bypass Valve on all PW617F-E engines as per P&WC SB A66021 instructions.

**Corrective Actions:** Incorporate P&WC Alert SB A66021, dated 23 November 2009 or later revisions approved by the Chief, Continuing Airworthiness, National Aircraft Certification, Transport Canada, per the following schedule:

1. **For engines installed on aircraft with more than 25 hours of air time since new:**  
Within 25 hours of air time from the effective date of this AD.
2. **For engines installed on aircraft with 25 or less hours of air time since new:**  
Within 50 hours of total air time since new.

**Authorization:** For Minister of Transport, Infrastructure and Communities

ORIGINAL SIGNED BY

Philip Tang for  
Derek Ferguson  
Chief, Continuing Airworthiness

**Contact:** Mr. A K Durrani, Continuing Airworthiness, Ottawa, telephone 613-952-4357, facsimile 613-996-9178 or e-mail [CAW WEB Feedback](mailto:CAW_WEB_Feedback) or any Transport Canada Centre.

Pursuant to **CAR 202.51** the registered owner of a Canadian aircraft shall, within seven days, notify the Minister in writing of any change of his or her name or address.

To request a change of address, contact the **Civil Aviation Communications Centre (AARC)** at **Place de Ville, Ottawa, Ontario K1A 0N8**, or **1-800-305-2059**, or [www.tc.gc.ca/civilaviation/communications/centre/address.asp](http://www.tc.gc.ca/civilaviation/communications/centre/address.asp)

