



No.	CF-2010-03	1/2
Issue Date	20 January 2010	

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-2010-03

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

Effective: 25 January 2010

Applicability: All Pratt and Whitney Canada (P&WC) PW615F-A Engines equipped with FOHE P/N 35C3778-01 or P/N 35C3778-02

Compliance: Is required as indicated, unless already accomplished

Background: A PW617F-E engine powered twin engined aircraft had recently experienced an un-commanded power reduction on one of its engines. Investigation showed that 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 has confirmed that this is a dormant failure that could result in an unsafe condition.

The PW615F-A engine Fuel Filter Bypass Valve installation is very similar to that of PW617F-E, but so far there have been no operational abnormalities reported due to subject valve failure on PW615F-A engines. However, evaluation by P&WC has confirmed similar dormant failure of worn through poppets of the subject valve on some PW615F-A engine installations, which could affect both engines at the same time on an aircraft and may result in an unsafe condition.

P&WC on 9 December 2009, issued an alert Service Bulletin (SB) A63071 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 PW615F-A engines as per the P&WC SB A63071 instructions.

Corrective Actions: Incorporate P&WC Alert SB A63071, dated 9 December 2009 or later revisions approved by the Chief, Continuing Airworthiness, National Aircraft Certification, Transport Canada, per the following schedule:

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**

1. **For Pre P&WC SB No. A63069 configuration engines installed on aircraft with more than 100 hours of total air time since new:**

Within 25 hours of air time from the effective date of this AD.

2. **For Pre P&WC SB No. A63069 configuration engines installed on aircraft with 100 or less hours of total air time since new:**

Within 150 hours of air time since new.

3. **For Post P&WC SB No. A63069 engines installed on aircraft that has accumulated 75 or less hours of air time since SB incorporation:**

Within 100 hours of air time since SB A63069 incorporation.

4. **For Post P&WC SB No. A63069 engines installed on aircraft that has accumulated more than 75 hours of air time since SB incorporation:**

Within 25 hours of air time from the effective date of this AD.

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@tc.gc.ca or any Transport Canada Centre.