



# AIRWORTHINESS DIRECTIVE

---

*This Airworthiness Directive (AD) is issued pursuant to Canadian Aviation Regulation (CAR) 521.427. No person shall conduct a take-off or permit a take-off to be conducted in an aircraft that is in their legal custody and control, unless the requirements of CAR 605.84 pertaining to ADs are met. Standard 625 - Aircraft Equipment and Maintenance Standards Appendix H provides information concerning alternative means of compliance (AMOC) to ADs.*

**Number:**

CF-2019-05

**Effective Date:**

19 February 2019

**ATA:**

73

**Type Certificate:**

E-20

**Subject:**

Engine Control - Fuel Control Unit (FCU) Galvanic Corrosion Contamination

**Applicability:**

Pratt & Whitney Canada (P&WC) model PT6B-37A engines, serial number PCE-PU0289 and earlier engines.

**Compliance:**

As indicated below, unless already accomplished.

**Background:**

There has been one reported incident on a PT6B-37A engine, where the contamination from galvanic corrosion between the FCU aluminum body and the steel union fitting has caused the loss of engine control, resulting in an engine over-speed condition and subsequently leading to an engine inflight shutdown (IFSD).

This condition, if not corrected, could lead to additional cases of IFSDs, which on a single engine helicopter may result in an emergency autorotation landing. To address the subject galvanic corrosion problem in the FCU, P&WC has issued Service Bulletin (SB) 39107 to replace the affected FCUs with a modified FCU that is not susceptible to the subject galvanic corrosion problem.

This AD mandates compliance with P&WC SB 39107, requiring the replacement of the affected FCUs to mitigate the potential unsafe condition.

**Corrective Actions:**

- A. For pre SB PT6B-72-39107R1 configuration FCUs that have accumulated 1500 hours of air time, or 6 or more years, since new or last overhaul:

Within 6 months from the effective date of this AD, replace the FCU on the affected engine in accordance with P&WC SB PT6B-72-39107R1 instructions, issued on 13 December 2017, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

- B. For pre SB PT6B-72-39107R1 configuration FCUs that have accumulated less than 1500 hours of air time or 6 years, since new or last overhaul:

Prior to the FCU on affected engine accumulating 1500 hours air time or 6 years in service since new or overhauled, whichever occurs first, replace the FCU in accordance with P&WC SB PT6B-72-39107R1 instructions, issued on 13 December 2017 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

The replacement of the FCU in accordance with P&WC SB PT6B-72-39107, Original Issue prior to the effective date of this AD, also meets the requirement of this AD.

**Authorization:**

For the Minister of Transport,

*ORIGINAL SIGNED BY*

Rémy Knoerr  
Chief, Continuing Airworthiness  
Issued on 5 February 2019

**Contact:**

A.K. Durrani, Continuing Airworthiness, Ottawa, telephone 888-663-3639, facsimile 613-996-9178 or e-mail [AD-CN@tc.gc.ca](mailto:AD-CN@tc.gc.ca) or any Transport Canada Centre.