



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) with ADs.

Number:

CF-2021-20

Effective Date:

1 June 2021

ATA:

75

Type Certificate:

E-21

Subject:

Engine Bleed Air – Bleed-Off Valve (BOV) Failure to Close

Applicability:

Pratt & Whitney Canada (P&WC) model PT6E-67XP engines, serial number HP0138 and earlier engines.

Compliance:

As indicated below, unless already accomplished.

Background:

Multiple incidents of engines failing to achieve the required power (torque) during high power applications, have been reported. An investigation by P&WC revealed that the Bleed-off Valves (BOVs) on the incident engines failed to fully close at high power settings, due to internal leaks caused by contaminants. The primary source of contaminants was determined to be the glass beads that were used in the shot peening process during the Gas Generator Casing (GGC) production.

The failure of an engine to achieve the required power during a Go-Around maneuver of the aeroplane is considered hazardous and potentially an unsafe condition that needs mitigation. To address the BOV contamination issue, P&WC has issued an Alert Service Bulletin (SB A75018) for the affected engines, requiring inspection and cleaning of the BOVs.

To address this potentially unsafe condition, this AD mandates compliance with P&WC SB A75018R2.

Further AD action may follow depending on the in-service findings and investigation results.

Corrective Actions:

- A. Within 50 hours air time from the effective date of this AD, inspect the BOVs on the affected engines, in accordance with the Accomplishment Instructions of P&WC SB A75018R2, dated 6 May 2021, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Inspection in accordance with earlier versions of P&WC SB A75018R2, also meets the intent of this paragraph.

- B. If particulate contamination or any other discrepancy is found during the inspection required by Paragraph A above, repeat the Paragraph A inspection requirements every 40 to 60 hours air time from the previous inspection, until no particulate contamination or any other discrepancy is found.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Daniel Gosselin
Acting Chief, Continuing Airworthiness
Issued on 18 May 2021

Contact:

A K Durrani, Continuing Airworthiness, Ottawa, telephone 888-663-3639, facsimile 613-996-9178 or e-mail TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca or any Transport Canada Centre.