



# 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-2019-32

**Effective Date:**

26 September 2019

**ATA:**

72

**Type Certificate:**

E-19

**Subject:**

Engine – High Pressure Turbine (HPT) Rear Cover Life Limitation Reduction

**Applicability:**

Pratt & Whitney Canada (P&WC) model PW127G engines.

**Compliance:**

As indicated below, unless already accomplished.

**Background:**

During the PW127G engine's updated mission analysis, P&WC identified a shortfall between the recalculated and published low cycle fatigue life values of the HPT rear cover, Part Numbers (P/Ns) 3039639 and 3078516-01. The parts have a shorter life than previously published in the Airworthiness Limitations (AWL) section of the Engine Maintenance Manual (EMM), Manual P/N 3044822.

To address the subject shortfall in the part life limitation, Temporary Revision (TR) AL-5 was published on 27 March 2019 to revise the AWL, providing new Flight Count Factors for these components, and the EMM Revision 38.3 was subsequently released on 23 April 2019 to incorporate the TR. In addition, P&WC issued Service Bulletin (SB) 21942, Initial Issue, dated 23 May 2019 to recommend a one-time review of engine records to determine the component life usage based on the new component life limitation.

The actions mandated by this AD will ensure that the HPT Rear Cover operates within the approved component life limitation in order to prevent engine damage and potential aeroplane damage resulting from the failure of the HPT rear cover.

**Corrective Actions:**

- A. Within 30 days from the effective date of this AD, perform a one-time review of engine records to verify the accumulated total cycle of the HPT rear cover, and rectify as required, in accordance with P&WC SB PW100-72-21942, dated 23 May 2019, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada (TC).
- B. Replace the engine HPT rear cover before it reaches the latest total cycle limits in accordance with the AWL section of the EMM, Manual P/N 3044822, Revision 38.3, dated 23 April 2019.

The use of superseding EMM Airworthiness TRs or later revisions of the AWL section of the EMM, approved by TC, is acceptable for compliance with the requirements of paragraph B.

**Authorization:**

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr  
Chief, Continuing Airworthiness  
Issued on 12 September 2019

**Contact:**

Mr. Zhiwei Wang, 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.