
AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/PW300/1 and issues the following AD under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Pratt and Whitney Canada Turbine Engines - PW300 Series

AD/PW300/1 **Engine High Pressure Compressor Drum** **4/2008**
Amdt 1

Applicability: All post-Service Bulletin (SB) 24287, Pratt and Whitney Canada PW305A and PW305B Engines without SB PW300-72-24376 incorporated.

Requirement: On all PW305A and PW305B engines with post SB PW300-72-24462 HPC drum rotor assemblies P/Ns 30B2478 and 30B2542, accomplish the following:

1.a. Gain access to inside of affected HPC rotor assembly and inspect (boroscope) its interior for cracks in accordance with the PW305 MM 05-20-00 "Periodic Inspections, Boroscope" requirements.

1.b. If a crack is found, remove the engine for HPC drum rotor replacement.

Inspection of affected HPC drum rotor assembly per SB PW300-72-24462 and/or PW305 MM 05-20-00 requirements prior to the effective date of this directive satisfy the actions detailed in Requirement 1 of this AD.

2. Repeat the boroscope inspection per Requirement 1.a of this AD.

2.b. If a crack is found, remove the engine for HPC rotor drum replacement.

Replacement of the affected HPC rotor assembly P/N 30B2478 or 30B2542 with Post-SB PW300-72-24376 assembly P/N 31B6325-01 or later superseding P/N, will constitute terminating action for the inspection requirements of this AD.

Note: Transport Canada AD CF-2007-25R1 dated 13 February 2008 refers.

Compliance: 1.a. Remains unchanged as: Within 500 flight hours after 17 January 2008 (the effective date of the original issue of this AD).

1.b. Before further flight.

2.a. At intervals not to exceed 1350 flight cycles per PW305 MM 05-20-00.

2.b. Before further flight.

This Amendment becomes effective on 10 April 2008.

Pratt and Whitney Canada Turbine Engines - PW300 Series

AD/PW300/1 Amdt 1 (continued)

Background: P&WC has determined that the Post-Service Bulletin (SB) PW300-72-24287 High Pressure Compressor (HPC) drum rotor assemblies P/N 30B2478 and 30B2542 on PW 305A and PW305B engines with single stage coated labyrinth seals are susceptible to developing significant cracks in the region of the labyrinth seal.

P&WC issued SB PW300-72-24462 for initial inspection of affected HPC drum rotor assemblies for cracks. In addition, the PW305 Maintenance Manual (MM) 05-20-00 was revised (Revision No.26) accordingly, to add a requirement for repeat inspection intervals. A new P/N 31B6325-01, HPC drum rotor assembly, which is not susceptible to the subject cracking, is made available through SB PW300-72-24376, as a terminating action for the required repeat inspection.

Recent data (Ref: Service Information Letter: PW300-093) indicates that a number of high-time Pre-SB-PW300-72-24376 HPC drum rotor assemblies (P/Ns 30B2478 and 30B2542), with potential for a hazardous disk failure in consequence of non-compliance with the inspection requirements, are still in-service. This AD is issued to mandate the inspection of the affected P/N 30B2478 and 30B2542 HPC drum rotor assemblies in accordance with PW305-MM-05-20-00 requirements.

This amendment corrects a typographical error in the P/N of HPC drum assemblies listed in Requirement 2 of this AD.

The original issue of this AD became effective on 17 January 2008.



David Punshon
Delegate of the Civil Aviation Safety Authority

26 February 2008