



No.	CF-2007-25R1	1/2
Issue Date	13 February 2008	

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) 593**. 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), Aircraft Certification Branch, Transport Canada, Ottawa, telephone 613 952-4357.

- Number:** CF-2007-25R1
- Subject:** PW305A and PW305B Engine High Pressure Compressor (HPC) Drum Rotor Cracks
- Effective:** 29 October 2007
- Revision** Supersedes Airworthiness Directive (AD) 2007-25 dated 29 October 2007 and is issued to correct a typographic error in paragraph "3." of the "Corrective Action".
- Applicability:** All post SB 24287, PW 305A and PW 305B Engines without SBPW300-72-24376 incorporation
- Compliance:** As indicated in the "Corrective Action" per this directive, unless already accomplished
- 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 305B 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 requirement for repeat inspection interval. A new P/N 31B6325-01, HPC drum rotor assembly, which is not susceptible to subject cracking, is made available through SB PW300-72-24376, as terminating action for the required repeat inspection.

Recent data (Ref: SIL: PW300-093) indicate 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.

Corrective Actions: On all PW305A and PW305B engines with post SB PW300-72-B24462 HPC drum rotor assemblies P/Ns 30B2478 and 30B2542, accomplish the following:

1. Within 500 hours airtime after effective date of this directive, 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. If a crack is found, remove the engine before next flight for HPC drum rotor replacement.

Note: Inspection of affected HPC drum rotor assembly per SB PW300-72-B24462 and/or PW305 MM 05-20-00 requirements prior to the effective date of this directive satisfies the requirements of paragraph 1 of this directive.

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



2. Repeat boroscope inspection per paragraph 1., at interval not exceeding 1350 flight cycles per PW305 MM 05-20-00. If a crack is found, remove the engine before next flight for HPC rotor drum replacement.
3. 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 the above paragraphs 1 and 2 of the corrective action requirements of this directive.

Authorization: For Minister of Transport, Infrastructure and Communities



Derek Ferguson
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Contact: Mr. A K Durrani, Continuing Airworthiness, Ottawa, telephone (613) 952-5385, facsimile (613) 996-9178 or e-mail durrana@tc.gc.ca or any Transport Canada Centre