No. 1/2 CF-2012-23 Issue Date 26 July 2012

# 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) 521 Division X. 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), National Aircraft Certification Branch, Transport Canada, Ottawa, telephone 613 952-4357.

Number: CF-2012-23

**Power Turbine Disks Service Life Reduction** Subject:

Effective: 9 August 2012

Applicability: Pratt & Whitney Canada (P&WC) Engine Models:

PW206B (Serial Number (S/N) PCE-BB0126 and earlier),

PW206B2 (S/N PCE-BJ1120 and earlier), PW206C (S/N PCE-BC0906 and earlier), PW207C (S/N PCE-BH0611 and earlier), PW207D (S/N PCE-BF0206 and earlier), PW207D1 (S/N PCE-BL0203 and earlier), PW207D2 (S/N PCE-BN0019 and earlier), PW207E (S/N PCE-BG0165 and earlier) and PW207K (S/N PCE-BK0085 and earlier)

Equipped with power turbine disks part number 3044188-01.

Compliance: As indicated below, unless already accomplished.

**Background:** Certain power turbine (PT) disks, part number (P/N) 3044188-01, made to specific heat

codes may not achieve the established maximum in-service life when installed in Turbomachinery Assembly P/N 3058588. The PT disk in-service life for engines using this specific PT disk and compressor turbine (CT) vane combination is reduced when

operated in a particular temperature and speed environment.

P&WC has revised the in-service life limit for the affected PT disks P/N 3044188-01 and issued Service Bulletin (SB) A28311, to inspect and re-identify those PT disks with serial numbers as listed in the SB to a new part number that has a reduced in-service life limit allocated for all turbo-machinery assembly applications.

This AD is issued to mandate compliance with P&WC SB A28311 for the inspection and re-identification of the affected PT disks and update the Airworthiness Limitation (AWL) section of the applicable engine maintenance manuals (EMM) for the revised in-service life limit for affected PT disks.

Corrective Actions:

Part I - Inspection of PT disk P/N 3044188-01

A. Within 6 months from the effective date of this AD, inspect all affected engines for PT disk P/N 3044188-01 with a serial number listed in Table 1 of SB A28311 Rev 2, in accordance with SB A28311 Rev 2 dated 24 July 2012, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.



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- B. For engines that have PT disk P/N 3044188-01 with a serial number listed in Table 1 of SB A28311 Rev 2 installed, comply with Part II or Part III as applicable and Part IV of this AD.
- C. For engines that do not have PT disk P/N 3044188-01 with a serial number listed in Table 1 of SB A28311 Rev 2 installed, proceed to Part IV for compliance of this AD.
  - D. For spare PT disks P/N 3044188-01 received prior to 1 March 2012, check for a PT disk serial number listed in Table 1 of SB A28311 Rev 2 and re-identify the PT disk prior to installing it in a serviceable engine, in accordance with SB A28311 Rev 2 dated 24 July 2012, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Incorporation of a previous version of SB A28311 Rev. 2 also meets the requirements of this AD.

#### Part II - Re-identification of a PT disk installed with Turbomachinery Assembly P/N 3058588 installation

For engines with a Turbomachinery Assembly P/N 3058588 installations:

A. Within 10 000 cycles of operation since new, re-identify or replace, as applicable, the PT disk P/N 3044188-01 with a serial number listed in Table 1 of SB A28311 Rev 2. in accordance with SB A28311 Rev 2 dated 24 July 2012, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

## Part III - Re-identification of a PT disk installed with other than Turbomachinery Assembly P/N 3058588 installation

For engines with other than P/N 3058588 Turbomachinery Assembly installations:

A. The first time from the effective date of this AD that the engine or module is at a maintenance base that can do the procedure, regardless of the scheduled maintenance action or reason, re-identify or replace, as applicable, the PT disk P/N 3044188-01 with a serial number listed in Table 1 of SB A28311 Rev 2, in accordance with SB A28311 Rev 2 dated 24 July 2012, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

## Part IV - Updating of the Airworthiness Limitation (AWL) section of the Engine **Maintenance Manual (EMM)**

Within 30 days from the effective date of this AD, update the AWL section of your affected EMM P/Ns 3071602, 3053372, 3043612, 3043322, 3039732 and/or 3038324, to incorporate the applicable Temporary Revisions (TR) No: TR AL-3, -4, -9, -10, -12, -13, -16, -18, -19 and/or -20, dated June 05, 2012 for compliance with the revised in-service limits for the affected PT Disks.

#### Authorization: For the Minister of Transport, Infrastructure and Communities,

ORIGINAL SIGNED BY

Philip Tang

Acting Chief, Continuing Airworthiness

Contact: A K Durrani, Continuing Airworthiness, Ottawa, telephone 613-952-4357 facsimile, 613-996-9178 or e-mail ADs@tc.gc.ca or any Transport Canada Centre.