

Airworthiness Directive Schedule

Engine

Pratt and Whitney PW206 and PW207 Series

30 August 2012

- Notes**
1. This AD schedule is applicable to Pratt and Whitney Canada Corp. PW206A, PW206B, PW206B2, PW206C, PW206E, PW207C, PW207D, PW207D1, PW207D2, PW207E and PW207K turbine engines manufactured under Transport Canada Type Certificate Number E-23.
 2. The date above indicates the amendment date of this schedule.
 3. New or amended ADs are shown with an asterisk*

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DCA/PWC/1 **Cancelled – DCA/PW200/1 refers****Effective Date:** 31 January 2008**DCA/PW200/1** **Low Cycle Fatigue Count****Applicability:** All Pratt & Whitney Canada PW206B engines that have incorporated Service Bulletin (SB) 28119 or its later revisions and all PW206C engines that have incorporated SB 28151 or SB 28165 or their later revisions and, all PW206E, all PW207D and all PW207E engines.**Note 1:** This AD supersedes DCA/PWC/1 which is renumbered as DCA/PW200/1 with no additional requirement. No further action is required for engines in compliance with DCA/PWC/1.**Requirement:** To prevent the inadvertent exceedance of engine component life limits, due to de-powering the Engine Electronic Control unit prematurely during engine shutdown, accomplish the following:**Part A:** To prevent DCU corruption and errors, maintain electrical power to the EEC, at engine shutdown until Ng (N1) speed reaches zero, per the Accomplishment Instructions of P&WC ASB A28252, Revision 2. Hand amend the Flight Manual normal procedures accordingly.**Part B:** 1. To confirm that the data stored in the DCU is correct and that data recorded in the engine log books is correct, perform a) Comparison Check a) and b) Consistency Check.

a) Comparison Check: Perform a comparison check of the data stored by the DCU as per the Accomplishment Instructions in ASB A28252, Revision 2, paragraph 3.C. Interpret the results of the comparison check as per ASB A28252, Revision 2, paragraphs 3.C.9.a and 3.C.9b. If necessary, restore the baseline LCF life of components using manual counting as indicated in ASB A28252, Revision 2, paragraph 3.E.

b) Consistency Check: Perform a consistency check by reviewing the engine log books to confirm the Impeller, CT, and PT disks LCF counts are correct in accordance with ASB A28252, Revision 2, Accomplishment Instructions, paragraph 3.D. Interpret the results as per paragraphs 3.D.5 and 3.D.6. If necessary, restore the baseline LCF life of components using manual counting as indicated in ASB A28252, Revision 2, paragraph 3.E.

2. If any LCF critical component is exceeding its published life, this component must be removed before next flight.

3. For engines not installed in helicopters, before the engines are installed perform the checks identified in ASB A28252, Revision 2, paragraph 3.B, as well as the instructions contained in SB 28253, dated 12 February 2004,

Note 2: Compliance with previous revisions of P&WC ASB A28252 prior to the effective date of this directive satisfies the requirements of ASB A28252, Revision 2, mandated by Part A and Part B of this directive.

Part C:Revision of the Airworthiness Limitations Section:

Incorporate the following P&WC Temporary Revisions (TR) into the Airworthiness Limitation Section of the applicable engine Maintenance Manuals:

TR No.	TR date	Engine Model	Maintenance Manual P/N
AL-10, AL-11	11 Mar. 2004	PW206B	3039732
AL-8, AL -9	11 Mar. 2004	PW206C	3043322
AL-15, AL-16	11 Mar. 2004	PW206E	3038324
AL-5	11 Mar. 2004	PW207D	3043612
AL-15, AL-16	11 Mar. 2004	PW207E	3038324

(Canadian AD CF-2004-06 refers)

Compliance:

Part A: By 29 February 2008, unless already accomplished.

Part B: Within the following compliance requirements:

(a) For engines with Impeller and/or Compressor Turbine (CT) Disks and/or Power Turbine (PT) Disks, having less than 2,000 cycles life limit remaining; within the next 50 engine flight hours or 2 months, whichever occurs first and;

(b) For engines with Impeller and/or CT Disks and/or PT Disks having from 2,000 to 5,000 cycles life limit remaining; within the next 200 engine hours TIS or 3 months, whichever occurs first., and;

(c) For engines with Impeller and/or CT Disks and/or PT Disks having more than 5,000 cycles life limit remaining; within the next 500 engine hours TIS or 4 months, whichever occurs first.

Part C: By 29 February 2008, unless already accomplished.

Effective Date: 31 January 2008

DCA/PW200/2**Compressor Turbine Disk – Inspection and Nut Replacement****Applicability:**

Model PW206A engines, S/N all through PCE-BA0031
 Model PW206B engines, S/N all through PCE-BB00126
 Model PW206B2 engines, S/N all through PCE-BJ0369
 Model PW206C engines, S/N all through PCE-BC0605
 Model PW206E engines, S/N all through PCE-BE0048
 Model PW207C engines, S/N all through PCE-BH0054
 Model PW207D engines, S/N all through PCE-BF0135
 Model PW207E engines, S/N all through PCE-BG0106
 Model PW207K engines, S/N all through PCE-BK0032

Requirement:

To prevent Compressor Turbine (CT) disk fracture due to the possibility that the disk bore areas may have experienced impact damage resulting from bending or fracture of the CT disk retaining nut which can reduce the LCF capabilities of the disk, accomplish the following:

Inspect the CT disk bore area for damage per P&WC SB No. PW200-72-A28280 revision 4. If any damage is detected, replace the CT disk before further flight.

If no damage is detected, replace the existing CT disk retaining nut and associated hardware per SB No. PW200-72-A28280 revision 4, before further flight.

Note:

Compliance with earlier versions of SB No. PW200-72-A28280 prior to the effective date of this AD satisfies the requirements of this AD.

(Transport Canada AD CF-2007-24R1 refers)

Compliance: For engines that have never had a shop visit and have accumulated 4000 cycles or more since new on the compressor turbine, and for engines that have accumulated 2700 cycles or more on the compressor turbine since last shop visit, or last CT disk inspection, or accomplishment of SB No. PW200-72-28287:

Within 1150 hours TIS on the engine since 28 April 2006 (original issue date of SB No. PW200-72-A28280) or by 29 February 2008, whichever occurs sooner.

For engines that have never had a shop visit and have accumulated less than 4000 cycles since new on the compressor turbine:

Within 4000 cycles on the compressor turbine or by 29 February 2008, whichever occurs later.

For engines that have accumulated less than 2700 cycles on the compressor turbine since the last shop visit, or last CT disk inspection, or accomplishment of SB No. PW200-72-28287:

Within 2700 cycles on the compressor turbine or by 29 February 2008, whichever occurs later.

Effective Date: 31 January 2008

DCA/PW200/3 HP Turbine and CT Turbine Blades – Inspection and Replacement

Applicability: Model PW206A and PW206E engines fitted on MD Helicopters Inc. MD900 helicopters.

Requirement: To prevent an in flight engine fire and possible loss of engine power accomplish the following:

1. Inspect the Compressor Turbine (CT) and Power Turbine (PT) blade shift per the instructions in P&WC SB No. 28242, dated 1 October 2002, or later Transport Canada approved revisions.
2. Replace the CT blade retaining rivets with the solid rivets and collar, and replace the No. 3 and No. 4 bearing air seal rotors per the instructions in P&WC SB 28069 revision 4, dated 27 December 2000, or later Transport Canada approved revisions.
3. Replace the PT blade retaining rivets with the solid rivet and collar per the instructions in P&WC SB 28239 dated 5 September 2002, or later Transport Canada revisions.

Note 1: Compliance with requirement 2 of this AD is a terminating action for the repetitive CT blade inspection requirements of this AD. Compliance with previous revisions of P&WC SB 28069 prior to the effective date of this directive satisfies requirement 2.

Note 2: Compliance with requirement 3 of this AD is a terminating action for the repetitive PT blade inspection requirements of this AD.

(Transport Canada AD CF-2003-06 refers)

Compliance:

1. Within the next 25 hours TIS or by 31 December 2010, whichever occurs sooner and thereafter at intervals not to exceed 50 hours TIS until 200 hours TIS, then thereafter repeat the inspections at intervals not to exceed 300 hours TIS.
2. At the next engine shop visit when access is available to the necessary sub-assembly (i.e. modules, accessories, components, or build group), or the next engine overhaul, or by 31 December 2010 whichever occurs sooner..
3. At the next engine shop visit when access is available to the necessary sub-assembly (i.e. modules, accessories, components, or build group), or the next engine overhaul, or by 31 December 2010 whichever occurs sooner.

Effective Date: 25 November 2010

* **DCA/PW200/4** **Power Turbine Disks – Life Limit**

Applicability: Model PW206B engines, S/N all through PCE-BB0126,
Model PW206B2 engines, S/N all through PCE-BJ1120,
Model PW206C engines, S/N all through PCE-BC0906,
Model PW207C engines, S/N all through PCE-BH0611,
Model PW207D engines, S/N all through PCE-BF0206,
Model PW207D1 engines, S/N all through PCE-BL0203,
Model PW207D2 engines, S/N all through PCE-BN0019,
Model PW207E engines, S/N all through PCE-BG0165,
Model PW207K engines, S/N all through PCE-BK0085, and
Fitted with power turbine disks P/N 3044188-01.

Requirement: To prevent failure of the power turbine disks, accomplish the requirements in Transport Canada AD CF-2012-23.

Note 1: A copy of Transport Canada AD CF-2012-23 can be obtained from the Transport Canada AD website at <http://wwwapps3.tc.gc.ca/Saf-Sec-Sur/2/cawis-swimn/awd-iv-cs1401.asp?rand>

Note 2: Pratt & Whitney Canada (P&WC) SB A28311 revision 2, dated 24 July 2012 or later Transport Canada approved revisions pertain to the subject of this AD.
(Transport Canada AD CF-2012-23 refers)

Compliance: At the compliance times specified in Transport Canada AD CF-2012-23.

Effective Date: 30 August 2012