



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-2012-24

Subject:

Second Stage Power Turbine Disk Damage

Effective Date:

16 August 2012

Applicability:

Pratt and Whitney Canada Model PT6C-67C Engines with Pre-Service Bulletin 41056 configuration

Compliance:

As indicated below, unless already accomplished.

Background:

There have been 5 reported incidents of second stage Power Turbine (PT) disk damage caused by the PT baffle moving and contacting the downstream side of the second stage PT disk. In two of these incidents, the PT section of the engine failed to rotate (on ground) as a result of baffle interference.

An investigation has determined that the root cause for the PT baffle displacement and the resultant PT disk damage was due to the failure of the retaining ring that holds the PT baffle in its intended position. This discrepancy if not corrected, may result in failure of the PT disk, a potentially unsafe condition.

P&WC, through Service Bulletin (SB) 41056, has introduced an alternate PT baffle installation configuration that effectively addresses the problem of subject PT baffle dislodgement. In addition, as an interim mitigating action, P&WC has issued alert SB A41060 to periodically inspect the pre-SB 41056 configured PT baffle and its retaining ring for proper installation.

This AD is issued to mandate compliance with P&WC alert SB A41060 for the periodic inspection of the PT baffle installation and as terminating action, incorporation of the new baffle configuration in accordance with SB 41056.

Corrective Actions:**Part I – For engines with more than 2000 PT cycles:**

Within 100 hours air time or 150 PT cycles, whichever occurs first, from the effective date of this AD, perform an initial inspection of the PT baffle installation in accordance with P&WC alert SB A41060 Rev. 2 dated 10 February 2012 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Engines that had Special Instructions 45-2011 accomplished or were inspected in accordance with a previous version of alert SB A41060, also meet the requirements of Part I of this AD.

Part II – For engines with 1000 to 2000 PT cycles:

Within 250 hours air time or 350 PT cycles, whichever occurs first, from the effective date of this AD, perform an initial inspection of the PT baffle installation in accordance with P&WC alert SB A41060 Rev. 2 dated 10 February 2012 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Engines that had Special Instructions 45-2011 accomplished or were inspected in accordance with a previous version of alert SB A41060, also meet the requirements of Part II of this AD.

Part III – For engines with less than 1000 PT cycles:

Within 500 hours air time or 750 PT cycles, whichever occurs first, from the effective date of this AD, perform an initial inspection of the PT baffle installation in accordance with P&WC alert SB A41060 Rev. 2 dated 10 February 2012 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Engines that had Special Instructions 45-2011 accomplished or were inspected in accordance with a previous version of alert SB A41060, also meet the requirements of Part III of this AD.

Part IV – For all affected engines:

Repeat the inspection of the PT baffle installation every 600 hours air time or 900 PTcycles, whichever occurs first, from the compliance date of Part I, Part II or Part III of this AD, in accordance with P&WC alert SB A41060 Rev. 2 dated 10 February 2012 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Part V – Terminating Action:

At the next scheduled engine overhaul from the effective date of this AD, modify the affected engine in accordance with P&WC SB 41056 Rev. 4 dated 1 April 2012 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Compliance with earlier versions of SB 41056 meets the intent of this AD and also constitutes as the terminating action for this AD.

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 AD-CN@tc.gc.ca or any Transport Canada Centre.

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

24-0022 (01-2005)