

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. 2003-NE-25-AD; Amendment 39-13263; AD 2003-16-10]

RIN 2120-AA64

**Airworthiness Directives; Pratt & Whitney Canada PW206A and PW206E Turboshift Engines**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for Pratt & Whitney Canada (PWC) PW206A and PW206E turboshift engines. This AD requires initial and repetitive borescope inspections of compressor turbine and power turbine blades for blade axial shift, and replacement of blade retaining rivets and certain rotor air seals as terminating action for the repetitive borescope inspections.

This AD is prompted by reports of engine shutdowns and emergency landings due to severe vibration and drops in engine torque, and an increase in internal engine temperature, triggering in-flight engine fire warnings. We are issuing this AD to prevent turbine blade axial shift, which could cause high levels of vibration, loss of engine torque, in-flight engine shutdown, and possible uncontained engine failure.

**DATES:** Effective August 29, 2003. The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of August 29, 2003.

We must receive any comments on this AD by October 14, 2003.

**ADDRESSES:** Use one of the following addresses to submit comments on this AD:

- By mail: The Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 2003-NE-25-AD, 12 New England Executive Park, Burlington, MA 01803-5299.
- By fax: (781) 238-7055.
- By e-mail: 9-ane-adcomment@faa.gov.

You may get the service information referenced in this AD from Pratt & Whitney Canada, 1000 Marie-Victorin, Longueuil, Quebec, Canada J4G1A1. You may examine the service information at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park,

Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

You may examine the AD docket at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA.

**FOR FURTHER INFORMATION CONTACT:** Ian Dargin, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7178; fax (781) 238-7199.

**SUPPLEMENTARY INFORMATION:** Transport Canada, which is the airworthiness authority for Canada, recently notified the FAA that an unsafe condition may exist on PWC PW206A and PW206E turboshift engines. Transport Canada advises that there have been several reports of PW206-powered helicopters where axial shifting of compressor turbine blades and power turbine blades resulted in heavy blade rubs, causing an increase in internal engine temperature, triggering in-flight engine fire warnings and subsequent emergency landings.

**Relevant Service Information**

We have reviewed and approved the technical contents of the following Pratt & Whitney Canada service documents:

- Alert Service Bulletin (ASB) No. PW200-72-A28242, Revision 1, dated October 2, 2002, that describes procedures for borescope inspecting of compressor turbine blades and power turbine blades for axial shift within the disks.
- Service Bulletin (SB) No. PW200-72-28069, Revision 5, dated February 10, 2003, that describes procedures for replacing compressor turbine blade retaining rivets, the No. 3 bearing rotor air seal, and the No. 4 bearing front rotor air seal.
- SB No. PW200-72-28239, Revision 2, dated February 10, 2003, that describes procedures for replacing power turbine blade retaining rivets.

Transport Canada classified these service bulletins as mandatory and issued AD CF-2003-06, dated February 4, 2003, in order to assure the airworthiness of these PWC PW206A and PW206E turboshift engines in Canada.

**Bilateral Airworthiness Agreement**

This engine model is manufactured in Canada and is type certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. Under this bilateral airworthiness agreement,

Transport Canada has kept the FAA informed of the situation described above. We have examined the findings of Transport Canada, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

**FAA's Determination and Requirements of This AD**

The unsafe condition described previously is likely to exist or develop on other PWC PW206A and PW206E turboshift engines of the same type design. We are issuing this AD to prevent turbine blade axial shift, leading to high levels of vibration, loss of engine torque, in-flight engine shutdown, and possible uncontained engine failure. This AD requires:

- Initial and repetitive borescope inspections of compressor turbine blades and power turbine blades for blade axial shift within the turbine disks, and
- Replacement of blade retaining rivets, the No. 3 bearing rotor air seal, and the No. 4 bearing front rotor air seal as mandatory terminating action for the repetitive borescope inspections.

You must use the service information described previously to perform the actions required by this AD.

**FAA's Determination of the Effective Date**

Since an unsafe condition exists that requires the immediate adoption of this AD, we have found that notice and opportunity for public comment before issuing this AD are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

**Changes to 14 CFR Part 39—Effect on the AD**

On July 10, 2002, we issued a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs our AD system. This regulation now includes material that relates to special flight permits, alternative methods of compliance, and altered products. This material previously was included in each individual AD. Since this material is included in 14 CFR part 39, we will not include it in future AD actions.

**Comments Invited**

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to submit any written relevant data, views, or arguments regarding this AD. Send your comments to an address listed under

**ADDRESSES.** Include "AD Docket No. 2003-NE-25-AD" in the subject line of your comments. If you want us to acknowledge receipt of your mailed comments, send us a self-addressed, stamped postcard with the docket number written on it; we will date-stamp your postcard and mail it back to you. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify it. If a person contacts us verbally, and that contact relates to a substantive part of this AD, we will summarize the contact and place the summary in the docket. We will consider all comments received by the closing date and may amend the AD in light of those comments.

We are reviewing the writing style we currently use in regulatory documents. We are interested in your comments on whether the style of this document is clear, and your suggestions to improve the clarity of our communications with you. You may get more information about plain language at <http://www.faa.gov/language> and <http://www.plainlanguage.gov>.

### Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a summary of the costs to comply with this AD and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under **ADDRESSES**. Include "AD Docket No. 2003-NE-25-AD" in your request.

### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### Adoption of the Amendment

- Accordingly, under the authority delegated to me by the Administrator,

the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

### PART 39—AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701.

#### § 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive:

**2003-16-10 Pratt & Whitney Canada:**  
Amendment 39-13263. Docket No. 2003-NE-25-AD.

#### Effective Date

- (a) This airworthiness directive (AD) becomes effective August 29, 2003.

#### Affected ADs

- (b) None.

#### Applicability

- (c) This AD is applicable to Pratt & Whitney Canada (PWC) PW206A and PW206E turboshaft engines. These engines are installed on, but not limited to MD Helicopters Inc. Model MD-900 helicopters.

#### Unsafe Condition

- (d) This AD is prompted by reports of engine shutdowns and emergency landings due to severe vibration and drops in engine torque, and an increase in internal engine temperature, triggering in-flight engine fire warnings. We are issuing this AD to prevent turbine blade axial shift, leading to high levels of vibration, loss of engine torque, in-flight engine shutdown, and possible uncontained engine failure.

#### Compliance

- (e) You are responsible for having the actions required by this AD performed within the compliance times specified unless the actions have already been done.

#### Initial Sequence of Borescope Inspections

- (f) Perform an initial sequence of borescope inspections of compressor turbine blades and power turbine blades for blade axial shift within the turbine disks. Use paragraph 3. of Accomplishment Instructions of PWC Alert Service Bulletin (ASB) No. PW200-72-A28242, Revision 1, dated October 2, 2002, for the borescope inspection. Do the inspections at the following times:

- (1) Within 25 flight hours accumulated or 30 days after the effective date of this AD, whichever occurs earlier.

- (2) After 30 flight hours, but before 50 flight hours accumulated since inspection of paragraph (f)(1) of this AD.

- (3) After 80 flight hours, but before 100 flight hours accumulated since inspection of paragraph (f)(1) of this AD.

- (4) After 180 flight hours, but before 200 flight hours accumulated since inspection of paragraph (f)(1) of this AD.

### Repetitive Borescope Inspections

- (g) Thereafter, perform repetitive borescope inspections at intervals of not less than 280 nor more than 300 flight hours since-last-inspection. Use paragraph 3. of Accomplishment Instructions of PWC ASB No. PW200-72-A28242, Revision 1, dated October 2, 2002, for the borescope inspections.

### Disposition

- (h) If any blade shift is found, remove engine from service before further flight and perform rivet and rotor air seal replacements, as specified in paragraphs (j)(1) and (j)(2) of this AD, to return the engine to service.

- (i) If blade shift is suspected, confirm the blade shift with the appropriate engine manufacturer service representative before further flight. Remove engine from service if shift is confirmed, and perform rivet and rotor air seal replacements, as specified in paragraphs (j)(1) and (j)(2) of this AD, to return the engine to service.

### Terminating Action

- (j) At the next engine shop visit for any reason, or at the next engine overhaul, whichever occurs first, but before December 31, 2009, do the following:

- (1) Replace the compressor turbine blade retaining rivets, the No. 3 bearing rotor air seal, and the No. 4 bearing front rotor air seal. Use paragraph 3. Accomplishment Instructions of Service Bulletin (SB) No. PW200-72-28069, Revision 5, dated February 10, 2003.

- (2) Replace the power turbine blade retaining rivets. Use paragraph 3. Accomplishment Instructions of SB No. PW200-72-28239, Revision 2, dated February 10, 2003.

### Previous Credit

- (k) Previous credit is allowed for terminating action in paragraph (j)(1) and (j)(2) of this AD that was done in accordance with Accomplishment Instructions of SB No. PW200-72-28069, Revision 4, dated December 27, 2000, and Accomplishment Instructions of SB No. PW200-72-28239, dated September 5, 2002, or Revision 1, dated December 5, 2002, before the effective date of this AD.

- (l) Completing the actions in paragraphs (j)(1) and (j)(2) of this AD terminates all inspection requirements of this AD.

### Alternative Methods of Compliance (AMOCs)

- (m) You must request AMOCs as specified in 14 CFR part 39.19. All AMOCs must be approved by the Manager, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299.

### Material Incorporated by Reference

- (n) You must use the following Pratt & Whitney Canada Service Bulletins and Alert Service Bulletin to perform the inspections and replacement actions required by this AD. The Director of the Federal Register approved the incorporation by reference of the documents listed in Table 1 of this AD in accordance with 5 U.S.C. 552(a) and 1 CFR

part 51. You may get a copy from Pratt & Whitney Canada, 1000 Marie-Victorin, Longueuil, Quebec, Canada J4G1A1. You may review copies at Federal Aviation

Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 2003-NE-25-AD, 12 New England Executive Park, Burlington, MA

01803-5299; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC. Table 1 follows:

TABLE 1.—INCORPORATION BY REFERENCE

Service bulletin	Page No.(s)	Revision	Date
PW200-72-A28242 Total Pages—7	All	1	October 2, 2002.
PW200-72-28069 Total Pages—17	All	5	February 10, 2003.
PW200-72-28239 Total Pages—20	All	2	February 10, 2003.

**Related Information**

(o) Transport Canada issued airworthiness directive CF-2003-06, dated February 4, 2003, which pertains to the subject of this AD, in order to assure the airworthiness of these PWC PW206A and PW206E turboshaft engines in Canada.

Issued in Burlington, Massachusetts, on August 4, 2003.

**Francis A. Favara,**

*Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.*

[FR Doc. 03-20484 Filed 8-13-03; 8:45 am]

**BILLING CODE 4910-13-P**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

[Docket No. 2001-NM-341-AD; Amendment 39-13247; AD 94-01-10 R1]

**RIN 2120-AA64**

**Airworthiness Directives; Boeing Model 757-200 and -200PF Series Airplanes Equipped With Pratt and Whitney PW2000 Series Engines**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

**SUMMARY:** This amendment revises an existing airworthiness directive (AD), applicable to certain Boeing Model 757-200 and -200PF series airplanes, that currently requires inspections, adjustments, and functional checks of the engine thrust reverser system; and modification of the engine thrust reverser directional control valve. The existing AD also requires installation of an additional thrust reverser locking feature and periodic functional tests of the locking feature following installation. That AD was prompted by results of a safety review of the thrust reverser system on these airplanes. The actions specified by that AD are intended to prevent deployment of a thrust reverser in flight and subsequent

reduced controllability of the airplane. This action reduces the applicability of the existing AD.

**DATES:** Effective September 18, 2003.

The incorporation by reference of certain publications, as listed in the regulations, was approved by the Director of the Federal Register as of March 3, 1994 (59 FR 4558, February 1, 1994).

The incorporation by reference of certain other publications, as listed in the regulations, was approved previously by the Director of the Federal Register as of September 16, 1991 (56 FR 46725, September 16, 1991). (The document numbers of these certain publications were cited erroneously in the September 16, 1991, issue of the **Federal Register**, as listed in the regulations.)

**ADDRESSES:** The service information referenced in this AD may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Thomas Thorson, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 917-6508; fax (425) 917-6590.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by revising AD 94-01-10, amendment 39-8792 (59 FR 4558, February 1, 1994), which is applicable to certain Boeing Model 757 series airplanes, was published in the **Federal Register** on October 8, 2002 (67 FR 62654). The action proposed to continue to require inspections, adjustments, and functional checks of the engine thrust reverser

system; modification of the engine thrust reverser directional control valve; and installation and periodic functional tests of an additional thrust reverser locking feature. The action also proposed to reduce the applicability of the existing AD.

**Comments**

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

**Support for the AD**

Two commenters support the AD, as proposed.

**Request To Issue AD as a Correction**

Two commenters request that the proposed AD be issued to correct rather than revise AD 94-01-01. The commenters suggest that a correction in this case would be more appropriate and would minimize record keeping by the operators. One of the commenters states that, “[I]f a new AD number or a revision to the existing AD is issued, [the operator] will be required to revise all of [the operator’s] AD implementation and record keeping documentation at a significant cost to [the] airline. If a correction to the original AD is issued, no document changes will be necessary.”

The FAA disagrees with the commenters’ characterization of the AD revision process. First, a correction to an AD is used primarily for nonsubstantive changes including clarification of ambiguous language in the existing AD. A correction to an AD does not receive a new AD number. A revision to an AD is used to make changes such as reducing the applicability for this AD. A revision of an AD is usually less complicated for operators to track because the compliance documentation need include only the AD number regardless of the revision number. This final rule will be issued as a revision to the existing AD, as proposed.