§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):


(a) Applicability

This AD applies to BHTC Model 407 helicopters, serial numbers 53000 through 53990, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as an incorrect torque value of the tailboom attachment bolt (bolt) specified in the BHTC Model 407 Maintenance Manual and applied during manufacturing, which exceeds the torque range recommended for the bolts. This condition could result in an over-torque of the bolt, bolt failure, loss of the tailboom, and subsequent loss of control of the helicopter.

(c) Effective Date

This AD becomes effective October 22, 2012.

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless accomplished previously.

(e) Required Actions

(1) For helicopters with 7000 hours or less time-in-service (TIS), at the next 600 hours scheduled inspection, or 90 days, whichever comes first; and for helicopters with more than 7000 hours TIS, within 150 hours TIS or 90 days, whichever comes first, replace the tailboom-attachment hardware (attachment hardware) as follows:

(i) Remove the left upper bolt, washers, and nut.

(ii) Install a new bolt, part number (P/N) NAS627–30; washer, P/N 140–007–29S25E6; washer(s), P/N NAS1149G0732P; and new nut, P/N 42FLW–720 in accordance with paragraphs 2.a) through paragraph 5.e) of the “Accomplishment Instructions: Replacement of tailboom attachment bolts and nuts” section and Figure 2 in the BHTC Alert Service Bulletin No. 407–10–93, Revision A, dated August 30, 2010 (ASB).

(iii) Remove the opposite right upper bolt, washers, and nut, and accomplish the requirements in paragraph (e)(1)(ii) of this AD.

(iv) Remove the left lower bolt, washers, and nut.

(v) Install a new bolt, (P/N) NAS626–26; washer, P/N 140–007–25S226E; washer(s), P/N NAS1149G0663P; and new nut, P/N 42FLW–624 in accordance with paragraphs 6.a) through 7.e) of the “Accomplishment Instructions: Replacement of tailboom attachment bolts and nuts” section and Figure 2 in the ASB.

(vi) Remove the right lower bolt, washers, and nut, and accomplish the requirements in paragraph (e)(1)(v) of this AD.

(2) After installation of the new attachment hardware, at intervals of not less than 1 hour TIS but not exceeding 5 hours TIS, determine the torque of each nut until the torque stabilizes at each attachment location, referring to Figure 2 of the ASB. Apply the minimum specified torque of the range, plus the minimum acceptable torque of 14 inch/lbs (1.58 Nm) for the upper nuts, and 9.5 inch/lbs (1.07 Nm) for the lower nuts.

(3) At intervals not to exceed 300 hours TIS, determine the torque of each of the four attachment nuts, referring to Figure 2 of the ASB. Apply the minimum specified torque of the range plus the minimum acceptable torque of 14 inch/lbs (1.58 Nm) for the upper nuts, and 9.5 inch/lbs (1.07 Nm) for the lower nuts. If the proper torque has not been retained since the last torque determination, remove and inspect the tailboom assembly for damage, corrosion, improper assembly, and condition. If the tailboom assembly is airworthy, replace the attachment hardware in accordance with the requirements in paragraphs (e)(1)(i) through (e)(1)(vi) and determine that the torque has stabilized in accordance with paragraph (e)(2) of this AD. Replace any unairworthy tailboom assembly with an airworthy tailboom assembly.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Sharon Miles, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone: (817) 222–5122; fax: 817–222–5061; email: sharon.y.miles@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

(g) Additional Information

The subject of this AD is addressed in the Transport Canada Civil Aviation (TCCA) AD CP–2010–33, dated September 30, 2010.

(h) Subject

Joint Aircraft Service Component (JASC) Code: Rotorcraft tailboom.

(i) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.


(ii) Reserved.

(3) For service information identified in this AD, contact Bell Helicopter Textron Canada Limited, 12.800 Rue de l’Avenir, Mirabel, Quebec J7I 1R4, telephone (450) 437–2862 or (800) 363–8023, fax (450) 433–0272, or at http://www.bellcustomer.com/.

(4) You may review a copy of this service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222–5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741–6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Fort Worth, Texas, on August 30, 2012.

Kim Smith,
Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 2012–22038 Filed 9–14–12; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; Pratt & Whitney Division Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding an existing airworthiness directive (AD) for all Pratt & Whitney Division (Pratt & Whitney) PW4052, PW4056, PW4060, PW4062, PW4062A, PW4074, PW4077, PW4077D, PW4084D, PW4090, PW4090–3, PW4152, PW4156A, PW4158, PW4164, PW4168, PW4168A, PW4460, and PW4462 turbofan engines. That AD currently requires initial and repetitive fluorescent penetrant inspections (FPI) for cracks in the blade loading and locking slots of the high-pressure compressor (HPC) drum rotor disk assembly rear drum. This new AD requires the same actions, requires replacement of the 13th, 14th, and 15th stage HPC seals with redesigned HPC seals as an additional action, and adds an optional terminating action to the repetitive inspection requirements by allowing replacement of the entire HPC drum rotor disk assembly with a redesigned HPC drum rotor disk assembly. This AD was prompted by Pratt & Whitney developing a redesigned HPC drum rotor disk assembly for certain affected engine models. We are issuing this AD to prevent failure of the HPC drum rotor disk assembly, which could lead to an
uncontained engine failure, and damage to the airplane.

DATES: This AD is effective October 22, 2012.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of October 22, 2012.

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of October 18, 2010 (75 FR 55459, September 13, 2010).

ADDRESS: For service information identified in this AD, contact Pratt & Whitney, 400 Main St., East Hartford, CT 06108; phone: 860–565–7700; fax: 860–565–1605. You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781–238–7125.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800–472–5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT:


SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2010–18–13, Amendment 39–16427 (75 FR 55459, September 13, 2010). That AD applies to the specified products. The NPRM published in the Federal Register on May 24, 2012 (77 FR 30926). That NPRM proposed to retain all of the requirements of AD 2010–18–13. That NPRM also proposed to require replacement of the 13th, 14th, and 15th stage HPC seals with redesigned seals and add an optional terminating action to the repetitive inspection requirement by allowing replacement of the HPC drum rotor disk assembly with a redesigned HPC drum rotor disk assembly.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal and the FAA’s response to each comment.

In Agreement With the Proposed AD

The Boeing Company and FedEx Express are in agreement with the proposed AD.

Request To Allow for Previous Credit

FedEx Express requested that we allow credit for prior compliance with the AD actions.

We do not agree. The proposed AD already allows credit for prior compliance in paragraph (e), which states to comply within the compliance times specified unless already done. We did not change the AD.

Request To Reference the Latest Revisions of Two Service Bulletins (SBs)

United Airlines, Korean Air, and Atlas Air, requested that we reference the latest revisions of two SBs which were revised since the proposed AD was issued.

We agree. We now reference Pratt & Whitney SB No. PW4ENG 72–816, Revision 1, dated June 12, 2012, and Pratt & Whitney SB No. PW4G–100–72–240, Revision 1, dated June 12, 2012, in the AD.

Request To Revise Paragraph (g)

United Airlines requested that we change paragraph (g) of the proposed AD to only require use of paragraphs 1.A. through 1.C. of the Accomplishment Instructions of SB No. PW4ENG 72–816 since additional paragraphs of the SB are not needed to comply with the AD.

We agree. We changed paragraphs (g)(1) and (g)(2) to only require use of paragraphs 1.A through 1.C. of that SB to comply with the AD.

Request To Add Previously Approved Alternate Methods of Compliance (AMOCs)

Japan Airlines and Korean Air requested that we add the previously approved AMOCs to the AD. The commenters referenced two previously approved AMOCs related to taking credit for the inspections required by AD 2005–25–09 (70 FR 73358, December 12, 2005), and use of the disk replacement repair included in the PW4000 Engine Cleaning Inspection and Repair (CIR) Manual to return non-cracked stages of the drum rotor disk assembly to service.

We do not agree. We did not list the previously approved AMOCs in the proposed AD because paragraph (j) of the proposed AD already allows use of previously approved AMOCs to paragraph (f) of the existing AD. Paragraph (f) was specified because the content of this paragraph did not change in the proposed AD supersedure. We did not change the AD.

Request To Revise Paragraph (f)(2)

Atlas Air requested that we revise paragraph (f)(2) of the proposed AD to remove only the cracked disk in the HPC drum rotor disk assembly from service. The commenter stated that currently paragraph (f)(2) requires the entire drum rotor disk assembly to be removed from service if a crack is found. The commenter believes it would be acceptable to remove from service only the cracked disk in the drum rotor disk assembly and use the repair in the PW4000 Engine CIR manual to replace it with a serviceable disk.

We partially agree. We agree that an acceptable level of safety would be maintained by returning the other stages of the drum rotor disk assembly to service if they were not cracked, if the cracked stages of the HPC drum rotor disk assembly were replaced by new disks per the disk replacement repairs in the PW4000 Engine CIR manual. We do not agree with revising the proposed AD because this is already an approved global AMOC covered under paragraph (j) of the proposed AD. We did not change the AD.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously.

Costs of Compliance

We estimate that this AD will affect 911 engines installed on airplanes of U.S. registry. We also estimate that it will take about 1 work-hour per engine to perform an inspection using an average labor rate of $85 per work-hour. We estimate that there are 770 PW4000–94” and PW4000–100” engines that will require replacement of 13th, 14th, and 15th stage HPC seals, at a parts cost of $3,000 per engine. No additional labor is assumed when the replacement is done at piece-part exposure of the HPC drum rotor disk assembly. The replacement parts cost of the redesigned HPC drum rotor disk assembly is $630,000. Based on these figures, we
For engine model PW4000–94 ........................................ 50H936; 50H936–002; 53H923–01; 53H923–001; 53H973–01; 53H973–001; 54H803–01; 54H803–001; 54H803–002; 56H013–01; 56H013–001; 54H836–01
PW4000–100 ........................................ 53H973–01; 53H973–001; 54H803–01; 54H803–002; 54H803–002; 56H013–01; 56H013–001; 54H836–01
PW4000–112 ........................................ 55H722–01; 55H910–01; 57H910–01; 57H910–01; 57H910–01

(d) Unsafe Condition

This AD was prompted by Pratt & Whitney developing a redesigned HPC drum rotor disk assembly for certain affected engine models. We are issuing this AD to prevent failure of the HPC drum rotor disk assembly, which could lead to an uncontained engine failure, and damage to the airplane.

(e) Compliance

Comply with this AD within the compliance times specified, unless already done.

(f) Local Fluorescent Penetrant Inspection

(1) Perform a local fluorescent penetrant inspection for cracks in the HPC drum rotor disk assembly rear drum blade loading and locking slots of the specific stages of the HPC drum rotor disk assemblies from which any of the blades are removed as specified in Table 2 to paragraph (f) of this AD.
(2) Remove from service any HPC drum rotor disk assembly rear drum found with a crack in any of the blade loading and locking slots.

(g) Replacement of 13th, 14th, and 15th HPC Seals

At the next piece-part exposure of the HPC drum rotor disk assembly after the effective date of this AD:

(1) Replace the 13th, 14th, and 15th stage HPC seals with redesigned HPC seals of engines listed in paragraph (c)(1) of this AD in accordance with paragraphs 1.A through 1.C of the Accomplishment Instructions of Pratt & Whitney Service Bulletin (SB) No. PW4ENG 72–816, Revision 1, dated June 12, 2012.

(2) Replace the 13th, 14th, and 15th stage HPC seals with redesigned HPC seals of engines listed in paragraph (c)(2) of this AD in accordance with paragraphs 1.A through 1.C of the Accomplishment Instructions of Pratt & Whitney SB No. PW4G–100–72–240, Revision 1, dated June 12, 2012.

(h) Optional Terminating Action

As optional terminating action to the repetitive inspection requirements of this AD:

(1) Replace the HPC drum rotor disk assembly of engines listed in paragraph (c)(1) of this AD with a redesigned HPC drum rotor disk assembly in accordance with the Accomplishment Instructions of Pratt & Whitney SB No. PW4ENG 72–817, dated December 7, 2011.

(2) Replace the HPC drum rotor disk assembly of engines listed in paragraph (c)(2) of this AD with a redesigned HPC drum rotor disk assembly in accordance with the Accomplishment Instructions of Pratt & Whitney SB No. PW4G–100–72–241, dated November 15, 2011.

(i) Definition

For the purpose of this AD, piece-part exposure means that the HPC drum rotor disk assembly is removed from the engine and completely disassembled.

(j) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. AMOCs approved previously in accordance with AD 2010–19–13, Amendment 39–16427 (75 FR 55459, September 13, 2010) are approved as AMOCs for the corresponding requirements in paragraph (f) of this AD.

(k) Related Information

For more information about this AD, contact James Gray, Aerospace Engineer, Engine & Propeller Directorate, FAA, 12 New England Executive Park, Burlington, MA 01803; phone: 781–238–7742; fax: 781–238–7199; email: james.e.gray@faa.gov.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(3) The following service information was approved for IBR on October 22, 2012.


(4) The following service information was approved for IBR on October 18, 2010 (75 FR 55459, September 13, 2010).


For Pratt & Whitney service information identified in this AD, contact Pratt & Whitney, 400 Main St., East Hartford, CT 06108; phone: 860–565–7700; fax: 860–565–1605.

(6) You may view this service information at FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781–238–7125.

(7) You may view this service information at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6036, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Burlington, Massachusetts, on September 4, 2012.

Colleen M. D’Alessandro,
Assistant Manager, Engine & Propeller Directorate, Aircraft Certification Service.

[FR Doc. 2012–22534 Filed 9–14–12; 8:45 am]