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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0072; Directorate Identifier 2013-NE-04-AD; Amendment 39-18017; AD 2014-23-01]

RIN 2120-AA64

Airworthiness Directives; Pratt & Whitney Division Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; correction.

SUMMARY: The FAA is correcting an airworthiness directive (AD) that published in the Federal Register. That AD applies to all Pratt & Whitney Division (PW) PW4074, PW4074D, PW4077, PW4077D, PW4084D, PW4090, and PW4090-3 turbofan engine models with certain second-stage high-pressure turbine (HPT) air seals installed. The time required to perform the initial eddy current inspection (ECI) in the Compliance section is incorrect. This document corrects that error. In all other respects, the original document remains the same.

DATES: This final rule is effective on December 26, 2014. The effective date of AD 2014-23-01, Amendment 39-18017 (79 FR 69369, November 21, 2014) remains December 26, 2014.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of September 17, 2013 (78 FR 49111, August 13, 2013).

ADDRESSES: 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: 800-647-5527) 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: Jo-Ann Theriault, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7105; fax: 781-238-7199; email: jo-ann.theriault@faa.gov.

SUPPLEMENTARY INFORMATION: AD 2014-23-01, Amendment 39-18017 (79 FR 69369, November 21, 2014), requires initial and repetitive inspections for cracks in second-stage HPT air

seals, the removal of the mating hardware if the second-stage HPT air seal is found with a through-crack, and a mandatory terminating action for all PW PW4074, PW4074D, PW4077, PW4077D, PW4084D, PW4090, and PW4090-3 turbofan engine models with certain second-stage HPT air seals installed.

As published, the time required to perform the initial ECI in the Compliance section is incorrect. AD 2014-23-01, paragraph (e)(2)(i), requires an initial ECI for cracks within 1,000 cycles-in-service after September 17, 2013, or before further flight, whichever occurs later. That compliance time is more restrictive than intended and will likely ground airplanes. The intent was to require an initial ECI for cracks before reaching 2,200 cycles since new, or within 1,000 cycles-in-service after September 17, 2013, or before further flight, whichever occurs later.

No other part of the preamble or regulatory information has been changed.

The effective date of AD 2014-23-01 remains December 26, 2014.

Correction of Regulatory Text

§ 39.13 [Corrected]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2013-15-09, Amendment 39-17525 (78 FR 49111, August 13, 2013), and adding the following new AD:



CORRECTION: Federal Register Volume 79, Number 247 (Wednesday, December 24, 2014); Pages 77384-77385.

2014-23-01 Pratt & Whitney Division: Amendment 39-18017; Docket No. FAA-2013-0072; Directorate Identifier 2013-NE-04-AD.

(a) Effective Date

This AD is effective December 26, 2014.

(b) Affected ADs

This AD supersedes AD 2013-15-09, Amendment 39-17525 (78 FR 49111, August 13, 2013).

(c) Applicability

This AD applies to all Pratt & Whitney Division (PW) PW4074, PW4074D, PW4077, PW4077D, PW4084D, PW4090, and PW4090-3 turbofan engine models with second-stage high-pressure turbine (HPT) air seal, part number (P/N) 54L041, 50L960, or 50L976, installed.

(d) Unsafe Condition

This AD was prompted by additional reports of cracking in the second-stage HPT air seal. We are issuing this AD to prevent failure of the second-stage HPT air seal, which could lead to uncontained engine failure and damage to the airplane.

(e) Compliance

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

(1) At the next piece-part exposure after the effective date of this AD, do the following:

(i) Remove from service second-stage HPT air seals, P/Ns 50L960, 50L976, and 54L041.

(ii) Perform a fluorescent-penetrant inspection (FPI) of the second-stage HPT air seal, P/N 54L041, for a through-crack in the front forward fillet radius.

(iii) If a through-crack in the front forward fillet radius is found, remove the first-stage HPT hub, second-stage HPT hub, and second-stage HPT blade retaining plate from service. Do not reinstall the first-stage HPT hub, second-stage HPT hub, or second-stage HPT blade retaining plate into any engine.

(2) For engines with second-stage HPT air seals, P/N 54L041, installed, perform initial and repetitive inspections for cracks on-wing until the part is removed from the engine as follows:

(i) Perform an initial eddy current inspection (ECI) for cracks before reaching 2,200 cycles since new, within 1,000 cycles-in-service after September 17, 2013, or before further flight, whichever occurs later.

(ii) Thereafter, repeat the ECI every 1,200 cycles since last inspection, or fewer, depending on the results of the inspection.

(iii) Use section 4.0 of the appendix of PW Alert Service Bulletin (ASB) No. PW4G-112-A72-330, Revision 2, dated July 11, 2013, to perform the inspection and use paragraph 8 of the Accomplishment Instructions of PW ASB No. PW4G-112-A72-330, Revision 2, dated July 11, 2013, to disposition the results of the inspection.

(f) Installation Prohibition

(1) After the effective date of this AD, do not install any second-stage HPT air seal, P/N 54L041, P/N 50L960, or P/N 50L976, into any engine.

(2) After the effective date of this AD, do not install any spare first-stage HPT hub, second-stage HPT hub, or second-stage HPT blade retaining plate that was previously mated in service to a second-stage HPT air seal, P/N 54L041, that was found to have a through-crack in the front forward fillet radius, into any engine.

(g) Definitions

For the purpose of this AD:

(1) Piece-part exposure is when the second-stage HPT air seal is removed from the engine and fully disassembled.

(2) A through-crack is a crack that has propagated through the thickness of the part and can be seen on both the inner diameter and outer diameter of the front forward fillet radius.

(h) Credit for Previous Actions

(1) If you performed an ECI of the second-stage HPT air seal before the effective date of this AD, using PW ASB No. PW4G-112-A72-330, Revision 1, dated February 14, 2013, or an earlier version, you have met the requirements of paragraph (e)(2)(i) of this AD.

(2) If you performed an in-shop FPI of the second-stage HPT air seal before the effective date of this AD, you have met the requirements of paragraph (e)(2)(i) of this AD.

(i) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

(j) Related Information

(1) For more information about this AD, contact Jo-Ann Theriault, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7105; fax: 781-238-7199; email: jo-ann.theriault@faa.gov.

(2) PW Service Bulletin (SB) No. PW4G-112-72-332, Revision 3, dated June 25, 2014, which is not incorporated by reference in this AD, can be obtained from PW, using the contact information in paragraph (k)(3) of this AD. This SB provides guidance on how to replace the second-stage HPT air seal with an air seal that is more resistant to low cycle fatigue cracks.

(k) 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 September 17, 2013 (78 FR 49111, August 13, 2013).

(i) Pratt & Whitney (PW) Alert Service Bulletin No. PW4G-112-A72-330, Revision 2, dated July 11, 2013.

(ii) Reserved.

(4) For PW service information identified in this AD, contact Pratt & Whitney Division, 400 Main St., East Hartford, CT 06108; phone: 860-565-8770; fax: 860-565-4503.

(5) 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.

(6) 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 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on December 22, 2014.
Colleen M. D'Alessandro,
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Aircraft Certification Service.