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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2001-NE-27-AD; Amendment 39-12753; AD 2002-10-07]

RIN 2120-AA64

Airworthiness Directives; Pratt & Whitney JT9D-59A, -70A, -7Q, and -7Q3 Turbofan Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), that is applicable to Pratt & Whitney (PW) JT9D-59A, -70A, -7Q, and -7Q3 turbofan engines. This amendment requires fluorescent penetrant inspection of the high pressure turbine (HPT) second stage airseal knife edges for cracks, each time the airseal is accessible. This amendment is prompted by reports of cracks found in the knife edges of HPT second stage airseals during HPT disassembly. The actions specified by this AD are intended to prevent failure of HPT second stage airseals due to cracks in the knife edges, which if not detected could result in uncontained engine failure and damage to the airplane.

DATES: Effective June 27, 2002. The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of June 27, 2002.

ADDRESSES: The service information referenced in this AD may be obtained from Pratt & Whitney, 400 Main St., East Hartford, CT 06108; telephone (860) 565-8770; fax (860) 565-4503. This information may be examined, by appointment, at the Federal Aviation Administration (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.

FOR FURTHER INFORMATION CONTACT: Tara Goodman, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7130, fax (781) 238-7199.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that is applicable to PW JT9D-59A, -70A, -7Q, and -7Q3 turbofan engines was published in the Federal Register on November 23, 2001 (66 FR 58691). That action proposed to require fluorescent penetrant inspection of the HPT second stage airseal knife edges for cracks, in accordance with PW service bulletin (SB) JT9D 6409, dated July 27, 2001, each time the airseal is accessible.

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.

Make Removal Wording More Specific

One commenter suggests changing proposed paragraph (a) to be consistent with SB JT9D 6409, dated July 27, 2001. Paragraph (a) proposed that airseals found cracked must be removed from service. The commenter suggests that paragraph (a) should state that airseals that are found cracked must be removed only if the crack is beyond the limit defined in the engine manual inspection section. Another commenter points out that SB JT9D 6409, dated July 27, 2001, refers to the engine manual (EM), but the proposal does not. The EM allows blend repair of cracks that are not located in the pedestal area of the airseal, but the proposal requires removal from service of airseals with any cracks.

The FAA agrees that the wording describing the circumstances that airseals are to be removed from service needs to be more specific. Therefore, the FAA has changed paragraph (a) to reference the return to service criteria as well as the procedures for performing the inspection contained in the Accomplishment Instructions of PW SB JT9D 6409, dated July 27, 2001.

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes described previously. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Economic Analysis

There are approximately 564 engines of the affected design PW JT9D-59A, -70A, -7Q, and -7Q3 turbofan engines in the worldwide fleet. The FAA estimates that 176 engines installed on airplanes of U.S. registry would be affected by this AD. The FAA also estimates that it would take approximately 1 work hour per engine to perform the fluorescent penetrant inspection, and that the average labor rate is \$60 per work hour. Based on these figures, the total labor cost annually of the AD on U.S. operators is estimated to be \$10,560.

Regulatory Analysis

This final rule does not have federalism implications, as defined in Executive Order 13132, because it would 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. Accordingly, the FAA has not consulted with state authorities prior to publication of this final rule.

For the reasons discussed above, I certify that this action (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. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

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

Adoption of the Amendment

Accordingly, pursuant to 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. Section 39.13 is amended by adding a new airworthiness directive to read as follows:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.airweb.faa.gov/rgl"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2002-10-07 Pratt & Whitney: Amendment 39-12753. Docket No. 2001-NE-27-AD.

Applicability: This airworthiness directive (AD) is applicable to Pratt & Whitney (PW) JT9D-59A, -70A, -7Q, and -7Q3 turbofan engines. These engines are installed on, but not limited to, Airbus Industrie A300 series, Boeing 747 series, and McDonnell Douglas DC-10 series airplanes.

Note 1: This AD applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Compliance with this AD is required as indicated, unless already done.

To prevent failure of high pressure turbine (HPT) second stage airseals due to cracks in the knife edges, which if not detected could result in uncontained engine failure and damage to the airplane, do the following:

Inspections

(a) Perform a fluorescent penetrant inspection of the HPT second stage airseal knife edges for cracks in accordance with procedures and return to service criteria contained in Accomplishment Instructions, Paragraphs 1 through 3, of PW Service Bulletin (SB) JT9D 6409, dated July 27, 2001, each time the HPT stage 1 and stage 2 rotors are separated. Remove from service those airseals that are determined to be unserviceable.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office (ECO). Operators must submit their request through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, ECO.

Note 2: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the ECO.

Special Flight Permits

(c) Special flight permits may be issued in accordance with § § 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be done.

Documents That Have Been Incorporated By Reference

(d) The inspection must be done in accordance with Pratt & Whitney Service Bulletin JT9D 6409, dated July 27, 2001. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Pratt & Whitney, 400 Main St., East Hartford, CT 06108; telephone (860) 565-8770; fax (860) 565-4503. Copies may be inspected, by appointment, 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.

Effective Date

(e) This amendment becomes effective on June 27, 2002.

Issued in Burlington, Massachusetts, on May 10, 2002.
Francis A. Favara,
Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.
[FR Doc. 02-12630 Filed 5-22-02; 8:45 am]
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