

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. 2003-NE-34-AD; Amendment 39-13631; AD 2004-10-01]**

**RIN 2120-AA64**

### **Airworthiness Directives; Pratt & Whitney JT9D-3A, -7, -7A, -7AH, -7H, -7F, -7J, -20, and -20J Turbofan Engines**

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

**ACTION:** Final rule.

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**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for Pratt & Whitney (PW) JT9D-3A, -7, -7A, -7AH, -7H, -7F, -7J, -20, and -20J turbofan engines. This AD clarifies a life limit for certain part numbers of 6th stage low pressure turbine (LPT) air seals, and requires their removal from service before accumulating 15,000 cycles-since-new (CSN). This AD results from reports of certain 6th stage LPT air seals possibly not being life tracked due to confusion from updates to the engine manuals. We are issuing this AD to prevent failure of the 6th stage LPT air seal, which could cause LPT damage resulting in an uncontained engine failure.

**DATES:** This AD becomes effective June 15, 2004. The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of June 15, 2004.

**ADDRESSES:** You can get the service information identified in this AD from Pratt & Whitney, 400 Main St., East Hartford, CT 06108; telephone (860) 565-8770; fax (860) 565-4503.

You may examine the AD docket at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA. 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 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/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html)

**FOR FURTHER INFORMATION CONTACT:** Kevin Donovan, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7743; fax (781) 238-7199.

**SUPPLEMENTARY INFORMATION:** The FAA proposed to amend 14 CFR Part 39 with a proposed AD. The proposed AD applies to PW JT9D-3A, -7, -7A, -7AH, -7H, -7F, -7J, -20, and -20J turbofan engines. We published the proposed AD in the Federal Register on September 5, 2003 (68 FR 52720). That action proposed to clarify a life limit for certain part numbers of 6th stage LPT air seals, and require their removal from service before accumulating 15,000 CSN.

## **Comments**

We provided the public the opportunity to participate in the development of this AD. We received no comments on the proposal or on the determination of the cost to the public.

## **Conclusion**

We have carefully reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed.

## **Costs of Compliance**

There are about 1,024 engines of the affected design in the worldwide fleet. We estimate that 367 engines installed on airplanes of U.S. registry will be affected by this AD. We also estimate that it will take approximately 0.5 work hour per engine to calculate the 6th stage LPT air seal part life, and that the average labor rate is \$65 per work hour. Based on these figures, we estimate the total cost of the AD to U.S. operators to be \$11,928.

## **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 this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866;
- (2) Is not a "significant rule" under 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-34-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 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 (AD):

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

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

*We post ADs on the internet at "www.faa.gov"*

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).

**2004-10-01 Pratt & Whitney:** Amendment 39-13631. Docket No. 2003-NE-34-AD.

## Effective Date

- (a) This AD becomes effective June 15, 2004.

## Affected ADs

- (b) None.

## Applicability

(c) This AD applies to Pratt & Whitney (PW) JT9D-3A, -7, -7A, -7AH, -7H, -7F, -7J, -20, and -20J turbofan engines. These engines are installed on, but not limited to, Boeing 747-100, 747-200, 747SR, 747SP, and DC10-40 series airplanes.

## Unsafe Condition

(d) This AD results from reports of certain 6th stage low pressure turbine (LPT) air seals possibly not being life tracked due to confusion from updates to the engine manuals. Chapter 5 of Engine Manuals, part numbers (P/Ns) 646028, 770407, and 770408 will be revised to show a life limit of 15,000 cycles-since-new (CSN) for 6th stage LPT air seals P/Ns 808846, 809171, 811260 and 811261. We are issuing this AD to prevent failure of the 6th stage LPT air seal which could cause LPT damage, resulting in an 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.

## Determine Service Life

(f) For 6th stage LPT air seals, P/Ns 808846, 809171, 811260, and 811261, with an unknown number of cycles since installed, calculate the service life within 60 days after the effective date of this AD.

(1) Use Method 1 of the Accomplishment Instructions of PW Service Bulletin (SB) No. JT9D 6448, dated June 10, 2003, for when all service records are available for the specific air seal, to calculate the service life.

(2) Use Method 2 of the Accomplishment Instructions of PW SB No. JT9D 6448, dated June 10, 2003, for when any or all service records are not available for a specific air seal, to calculate the

service life. If the worst-case daily utilization rate is unknown, use the fleet worst-case daily utilization rate of 2.9 cycles/day.

## Removal From Service

(g) Remove 6th stage LPT air seals, P/Ns 808846, 809171, 811260, and 811261, from service at or before accumulating the CSN in the following Table 1.

**TABLE 1.—PART NUMBER AND ENGINE APPLICABILITY**

| Part number  | Engine applicability                             | Life limit CSN |
|--------------|--|----------------|
| 808846 (old) | JT9D-3A, -7, -7A, -7AH, -7H, -7F, -7J, -20, -20J | 15,000         |
| 811260 (new) | JT9D-3A, -7, -7A, -7AH, -7H, -7F, -7J, -20, -20J | 15,000         |
| 809171 (old) | JT9D-3A, -7, -7A, -7AH, -7H, -7F, -20            | 15,000         |
| 811261 (new) | JT9D-3A, -7, -7A, -7AH, -7H, -7F, -20            | 15,000         |

(h) If the service life cannot be determined as specified in paragraph (f) of this AD, remove the 6th stage LPT air seal before accumulating 2,500 cycles-in-service after the effective date of this AD.

(i) After the effective date of this AD, do not install any 6th stage LPT air seal, P/N 808846, 809171, 811260, or 811261, that exceeds 15,000 CSN, or that was removed to comply with paragraph (h) of this AD because its service life could not be determined.

## Alternative Methods of Compliance

(j) The Manager, Engine Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

## Material Incorporated by Reference

(k) You must use Pratt & Whitney Service Bulletin No. JT9D 6448, dated June 10, 2003, to perform the service life calculations required by this AD. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You can get a copy from Pratt & Whitney, 400 Main St., East Hartford, CT 06108; telephone (860) 565-8770; fax (860) 565-4503. You can review copies at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or 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/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html)

## Related Information

(l) None.

Issued in Burlington, Massachusetts, on April 30, 2004.

**Jay J. Pardee,**

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 04-10428 Filed 5-10-04; 8:45 am]

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