

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

[Docket No. 97-ANE-05-AD; Amendment 39-13192; AD 2003-12-07]

RIN 2120-AA64

Airworthiness Directives; Pratt & Whitney JT8D Series Turbofan Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), that is applicable to Pratt & Whitney JT8D-1, -1A, -1B, -7, -7A, -7B, -9, -9A, -11, -15, -15A, -17, -17A, -17R, and -17AR turbofan engines. That AD currently requires a determination of the utilization rate and protective coating type of the 7th, 8th, 9th, 10th, 11th, and 12th stage high pressure compressor (HPC) disks, and removal, inspection for corrosion, and recoating of those HPC disks based on utilization rate. This amendment requires removal and replacement of protective coating of 7th, 8th, 9th, 10th, 11th, and 12th stage HPC disks, initial and repetitive inspections for corrosion pits and cracks, and removal from service as required. This amendment is prompted by operator reports of cracks found on several JT8D steel HPC disks since the existing AD was published. The actions specified by this AD are intended to prevent fracture of the HPC disks, which can result in uncontained release of engine fragments, inflight engine shutdown, and airframe damage.

DATES: Effective July 18, 2003. The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of July 18, 2003.

ADDRESSES: The service information referenced in this AD may be obtained from Pratt & Whitney, 400 Main St., East Hartford, CT 06108; telephone (860) 565-6600; 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: Christopher Spinney, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park,

Burlington, MA 01803-5299; telephone (781) 238-7175; fax (781) 238-7199.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by superseding AD 98-12-07, Amendment 39-10563 (63 FR 31340, June 9, 1998), which is applicable to Pratt & Whitney JT8D-1, -1A, -1B, -7, -7A, -7B, -9, -9A, -11, -15, -15A, -17, -17A, -17R, and -17AR turbofan engines was published in the **Federal Register** on January 24, 2003 (68 FR 3475). That action proposed to require removal and replacement of protective coating of 7th, 8th, 9th, 10th, 11th, and 12th stage HPC disks, initial and repetitive inspections for corrosion pits and cracks, and removal from service as required in accordance with Pratt & Whitney (PW) Alert Service Bulletin (ASB) No. JT8D A6431, dated November 27, 2002. Since the publication of the proposed rule, PW ASB No. JT8D A6431 was reissued as Revision 1 on March 7, 2003.

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.

Effective Dates Should Coincide

One commenter states that the effective date of the AD should coincide with the revision of the Standard Practices Manual to incorporate the disk preservation and storage instructions.

The FAA does not agree. The Standard Practice Manual will be updated to incorporate the disk preservation steps specified in PW ASB No. JT8D A6431, Revision 1, dated March 7, 2003; however until that time, the steps specified in the accomplishment instructions, Paragraphs 8.A. through 8.H. of the ASB, are sufficient to properly perform the preservation technique. Therefore, no changes will be made to the AD.

Underestimated Operational Impact

One commenter states that the operational impact on the operators of the proposed requirements is underestimated. The commenter believes that the more stringent inspection requirements on certain 9th stage HPC disks will increase the demand on other 9th stage HPC disks creating industry shortages.

The FAA agrees. The FAA and the original equipment manufacturer (OEM) are aware that the demand for new 9th stage HPC disks will increase because of the more stringent re-inspection requirements imposed on older 9th

stage disks. As a result, steps have been initiated at the OEM to meet the increased demand. The FAA expects that the steps the OEM has taken will prevent industry shortages significant enough not to change the economic impact of this AD. Therefore, no changes will be made to the AD.

Underestimated Costs of Replacement Disks

One commenter states that the costs associated with a new HPC disk are underestimated. The commenter notes that the \$7,000 cost of a replacement disk specified in the proposed rule is too low, and that new disk prices range from \$11,920 to \$23,190.

The FAA does not agree. The FAA believes that it is not necessary to include the full cost of the disk in the economic analysis because the disks must be replaced before reaching their certified life, which would be part of the normal costs of operation. The \$7,000 figure is the prorated replacement cost of the disk. This figure is the estimated average residual value of disks lost due to removal before reaching the full certified life of the disk. Therefore, no changes will be made to the AD.

Allowance for Preservation Status

One commenter requests that the AD include a provision to allow spare engines and disks not to accumulate time if placed in a preservation status in accordance with the JT8D Maintenance Manual. The commenter believes that once the engine is installed, then time will accumulate from the installation date, and this will allow the operators to maintain spare equipment and comply with the AD.

The FAA agrees. As the proposed rule is currently worded, an engine or disk does not accumulate time while in storage if preserved in accordance with procedures described in the compliance section of PW ASB No. JT8D A6431, Revision 1, dated March 7, 2003. Paragraphs 1.C. and 1.D of the compliance section of the ASB explain the storage requirements for the full engine and disk piece-parts respectively, and the associated time credits allowed for each storage method. Therefore, no changes will be made to the AD.

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 as proposed.

Regulatory Analysis

This final rule does not have federalism implications, as defined in Executive Order 13132, because it