

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 from 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 USC 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. Section 39.13 is amended by adding the following new airworthiness directive:

97-02-12 Rolls-Royce plc: Amendment 39-9897. Docket 96-ANE-09.

Applicability: Rolls-Royce plc. (R-R) Models RB211-535E4 and -535E4-B turbofan engines installed on Boeing 757-200 series aircraft.

Note 1: This airworthiness directive (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 (c) 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:** Required as indicated, unless accomplished previously.

To prevent compressor stall and subsequent engine rundown on one or both engines, accomplish the following:

(a) No later than 9 calendar months after the effective date of this AD, install a fuel flow governor (FFG) that incorporates a revised minimum compressor discharge P4 stop setting, in accordance with R-R Mandatory Service Bulletin (SB) No. RB.211-73-B869, Revision 1, dated May 24, 1996.

(b) Installation of improved FFGs on both engines for each Boeing 757 aircraft in accordance with paragraph (a) of this AD constitutes terminating action to the requirements of AD 96-04-11.

(c) 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. The request should be forwarded through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Engine Certification Office.

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

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.

(e) The actions required by this AD shall be done in accordance with the following R-R Mandatory SB:

Document No.	Pages	Revision	Date
RB.211-73-B869.	1-4	1	May 24, 1996.
	5-9	Original	February 12, 1996.
Supplement ...	1	Original	February 12, 1996.

Total Pages: 10.

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 Rolls-Royce plc, P.O. Box 31, Moor Lane, Derby, DE248BJ, United Kingdom; telephone 1332-249428, fax 1332-249423. Copies may be inspected at the FAA, New England Region, Office of the Assistant Chief 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.

(f) This amendment becomes effective on April 4, 1997.

Issued in Burlington, Massachusetts, on January 13, 1997.

Jay J. Pardee,  
Manager, Engine and Propeller Directorate,  
Aircraft Certification Service.

[FR Doc. 97-1701 Filed 1-31-97; 8:45 am]

**BILLING CODE 4910-13-U**

**14 CFR Part 39**

[Docket No. 94-ANE-49; Amendment 39-9898; AD 97-02-13]

RIN 2120-AA64

**Airworthiness Directives; Pratt & Whitney JFTD12A Series and T73 Series Turboshaft Engines**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to Pratt & Whitney JFTD12A series and T73 series turboshaft engines, that requires initial and repetitive fluorescent penetrant inspections (FPI) of compressor hubs, disks, spacers, and bolted on (rotating) airseals for cracks, and replacement, if necessary, with serviceable parts. This amendment is prompted by reports of extensive compressor rotor part cracking. The actions specified by this AD are intended to prevent disk rupture, an uncontained engine failure, and possible damage to the aircraft.

**DATES:** Effective April 4, 1997.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of April 4, 1997.

**ADDRESSES:** The service information referenced in this AD may be obtained from Pratt & Whitney, Publications Department, Supervisor Technical Publications Distribution, M/S 132-30, 400 Main St., East Hartford, CT 06108; telephone (860) 565-7700, fax (860) 565-4503. This information may be examined at the Federal Aviation Administration (FAA), New England Region, Office of the Assistant Chief 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:** Barbara Caufield, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (617) 238-7146, fax (617) 238-7199.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to Pratt & Whitney (PW) JFTD12A series and T73 series turboshaft engines was published in the Federal Register on October 20, 1995 (60 FR 54203). That action proposed to require initial and repetitive fluorescent penetrant inspections (FPI) of compressor hubs, disks, spacers, and bolted on (rotating) airseals for cracks, and replacement, if necessary, with serviceable parts, in accordance with PW Alert Service Bulletin (ASB) No. 5856, Revision 1, dated December 13, 1991.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

One commenter states specific part numbers (P/N's) for all parts affected by the AD should be added to the compliance section, in order to eliminate the need to revise the AD if future part modifications occur that negate the necessity for inspection. The FAA does not concur. As written, the AD applies to all JFTD12A-4A, -5A, T73-P-1, and -P-700 engines regardless of the hardware installed. The note following the applicability paragraph clarifies that if a future part modification occurs, the operator must request an alternative method of compliance in order to comply with the AD. The operator cannot make the determination to not comply with the AD independently. There may not be a need to revise or supersede the AD since an alternative method of compliance may be available.

The commenter also states that a specific inspection of the third stage disk tiebolt holes utilizing eddy current techniques in accordance with a Pratt & Whitney approved procedure must be accomplished in addition to FPI. Cracks have only occurred in the third stage disk tiebolt holes and the second stage disk blade pin holes. The commenter takes specific exception to the use of FPI to detect these cracks as they have significant experience that the utilization of the highest sensitivity penetrant required by Pratt & Whitney does not consistently identify cracked disks. The FAA does not concur. The risk analysis used to determine the AD compliance interval takes into account the reliability of the FPI, including the probability that an FPI inspection will not identify all cracks. The FAA has determined that FPI is adequate for detecting cracks in the third stage disk tiebolt holes and second stage disk blade pin holes.

The commenter also states that the AD should only address second and third stage disks and allow all the other parts to remain at the overhaul inspection interval of 3,000 hours time in service (TIS). Cracks have been found only in the third stage disk tiebolt holes and the second stage disk blade pin holes. There has never been a crack found in first stage or fourth through ninth stage disks. Therefore, continued inspection of all other parts at 1,500 hour TIS intervals is unnecessary and an economic burden, especially due to the complexity of deblading all nine stages of compressor disks. The FAA concurs in part. The FAA agrees that the inspection of the first stage disk and fourth through ninth stage disks may be accomplished at a 3,000 hour TIS overhaul interval; this final rule has been revised accordingly. However,

inspection of all other parts, including second and third stage disks, hubs, spacers and bolted on (rotating) airseals, must still be accomplished at 1,500 hour TIS intervals. The FAA has revised the AD accordingly.

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest 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.

There are approximately 120 engines of the affected design in the worldwide fleet. The FAA estimates that 47 engines installed on aircraft of U.S. registry will be affected by this AD, that it will take approximately 140 work hours per engine to accomplish the required actions, and that the average labor rate is \$60 per work hour. Required parts will cost approximately \$40,670 per engine. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be \$2,306,290.

The regulations adopted herein will not have substantial direct effects 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. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

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 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 from 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 the following new airworthiness directive:

97-02-13 Pratt & Whitney: Amendment 39-9898. Docket 94-ANE-49.

*Applicability:* Pratt & Whitney Models JFTD12A-4A and -5A, and T73-P-1 and -P-700 turboshaft engines, installed on but not limited to Sikorsky S-64 series and CH-54 series aircraft.

Note 1: This airworthiness directive (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 (e) 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:* Required as indicated, unless accomplished previously.

To prevent disk rupture, an uncontained engine failure, and possible damage to the aircraft, accomplish the following:

(a) Perform a fluorescent penetrant inspection (FPI) of compressor hubs, second stage and third stage disks, spacers, and bolted on (rotating) airseals for cracks in accordance with PW Alert Service Bulletin (ASB) No. 5856, Revision 1, dated December 13, 1991, as follows:

(1) Prior to further flight, for engines that equal or exceed 2,200 hours time in service (TIS) since last FPI of affected parts on the effective date of this airworthiness directive (AD).

(2) At or before 2,200 hours TIS since last FPI of affected parts on the effective date of this AD, for engines that equal or exceed 1,500 hours TIS but have less than 2,200 hours TIS since last FPI of affected parts on the effective date of this AD.

(3) At or before 1,500 hours TIS since last FPI of affected parts on the effective date of this AD, for engines that have less than 1,500 hours TIS since last FPI of affected parts on the effective date of this AD.

(4) Prior to further flight, remove cracked compressor hubs, second and third stage disks, spacers, and bolted on (rotating) airseals, and replace with serviceable parts.

(b) Thereafter, except for engines described in paragraphs (c) and (d) of this AD, perform repetitive FPI of affected parts for cracks at

intervals not to exceed 1,500 hours TIS since last FPI in accordance with PW ASB No. 5856, Revision 1, dated December 13, 1991.

(c) Perform FPI of compressor first stage and fourth through ninth stage disks for cracks, in accordance with PW ASB No. 5856, Revision 1, dated December 13, 1991, as follows:

(1) At or before 3,000 hours TIS since last FPI of affected parts on the effective date of this AD.

(2) Thereafter, perform repetitive FPI of affected parts for cracks at intervals not to exceed 3,000 hours TIS since last FPI, in accordance with PW ASB No. 5856, Revision 1, dated December 13, 1991.

(3) Prior to further flight, remove cracked compressor first stage and fourth through ninth stage disks, and replace with serviceable parts.

(d) For all engines inspected in accordance with paragraphs (a) or (b) of this AD that have zero time second and third stage compressor disks installed after the effective date of this AD, perform the next FPI of affected parts at or before 3,000 hours TIS since the last FPI performed in accordance with paragraph (a) or (b) of this AD, and thereafter perform repetitive FPI of affected parts for cracks at intervals not to exceed 1,500 hours TIS since the last FPI, in accordance with PW ASB No. 5856, Revision 1, dated December 13, 1991. Prior to further flight, remove cracked compressor disks, and replace with serviceable parts.

(e) 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. The request should be forwarded through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Engine Certification Office.

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

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.

(g) The actions required by this AD shall be done in accordance with the following PW ASB:

Document No.	Pages	Revision	Date
No. 5856 .....	1-3	1 .....	December 13, 1991.
	4	Original.	June 16, 1989.
	5-7	1 .....	December 13, 1991.

Total pages: 7.

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, Publications Department, Supervisor Technical

Publications Distribution, M/S 132-30, 400 Main St., East Hartford, CT 06108; telephone (860) 565-7700. Copies may be inspected at the FAA, New England Region, Office of the Assistant Chief 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.

(h) This amendment becomes effective on April 4, 1997.

Issued in Burlington, Massachusetts, on January 13, 1997.

Jay J. Pardee,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 97-1700 Filed 1-31-97; 8:45 am]

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### 14 CFR Part 39

[Docket No. 96-ANE-33; Amendment 39-9896; AD 97-02-11]

RIN 2120-AA64

### Airworthiness Directives; Pratt & Whitney JT8D-200 Series Turbofan Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to Pratt & Whitney (PW) JT8D-200 series turbofan engines, that requires, for front compressor front hubs (fan hubs), cleaning; initial and repetitive eddy current (ECI) and fluorescent penetrant inspections (FPI) of tierod and counterweight holes for cracks; removal of bushings; the cleaning and ECI and FPI of bushed holes for cracks; and, if necessary, replacement with serviceable parts. In addition, this AD requires reporting the findings of cracked fan hubs. This amendment is prompted by a report of an uncontained failure of a fan hub. The actions specified by this AD are intended to prevent fan hub failure due to tierod, counterweight, or bushed hole cracking, which could result in an uncontained engine failure and damage to the aircraft.

**DATES:** Effective March 5, 1997.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of March 5, 1997.

**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 at the Federal Aviation Administration (FAA),

New England Region, Office of the Assistant Chief 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:**

Diane Cook, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (617) 238-7134, fax (617) 238-7199.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to Pratt & Whitney (PW) JT8D-200 series turbofan engines was published in the Federal Register on October 4, 1996 (61 FR 51847). That action proposed to require cleaning, initial and repetitive eddy current inspections (ECI) and fluorescent penetrant inspections (FPI) for cracks of tierod and counterweight holes; removing bushings; initial and repetitive ECI and FPI of bushed holes for cracks; and, if necessary, replacing with serviceable parts. The compliance requirements allow selection of inspection schedules depending on fan hub S/Ns listed in PW Alert Service Bulletin (ASB) No. A6272, dated September 24, 1996, and includes an inspection schedule for those fan hubs whose S/Ns are not listed in the ASB. In addition, the proposed AD requires reporting the number of initial inspections and the findings of cracked fan hubs.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

One commenter states that the Notice of Proposed Rulemaking (NPRM) as written was confusing and subject to interpretation, and offered a number of editorial suggestions. The FAA reviewed the suggestions and concurs in part with the changes.

The commenter states that the applicability should be expressed to the lowest practical level by including the phrase "front compressor front hub (fan hub)" and its corresponding part number in the applicability statement. The FAA concurs. The applicability section in this final has been revised to read "\* \* \* engines with front compressor front hub (fan hub) Part Number 5000501-01 installed".

The commenter states that a stronger statement regarding the initial inspections for fan hubs with less than 4,000 cycles since new (CSN) was