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October 22, 2007

Sent via E-Mail

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RE: Compliance with Airworthiness Directives versus § 43.13 Compliance
Withdrawal of Unapproved Parts Notification 2006-00178
“Approval” by Manufacturers under § 43.13

Dear Ms. MacPherson:

The Aeronautical Repair Station Association (ARSA):

- (1) Seeks clarification from the Federal Aviation Administration (FAA) on compliance with Airworthiness Directive (AD) 2003-12-07.
- (2) Requests the withdrawal of Unapproved Parts Notification (UPN) 2006-00178.
- (3) Requests confirmation that approval by a manufacturer is not required to establish compliance with 14 CFR¹ § 43.13.

Our questions arise from members that received the referenced UPN which accuses a repair station of improperly contracting maintenance to a source that was not “approved” by the manufacturer. The certificate holders that used this repair station requested an inspection to comply with AD 2003-12-07. The owners of the disks that are the subject of the UPN are constantly questioned as to whether the work performed can be used to establish compliance with the AD.

After a review of the AD and other pertinent regulations, ARSA contends that not only did the repair station that was the subject of the UPN comply with the AD when it inspected the disks, but the re-plating process was also performed as required by the regulation even though the source was not approved by the manufacturer.

AD 2003-12-07 Requirements

AD 2003-12-07 was issued June 13, 2003 (see 68 Fed. Reg. 35286) to address pits and cracks found in Pratt & Whitney (P&W) JT8D-1 turbofan engine seventh through twelve stage high pressure compressor disks (hereafter “disks”).

¹ Unless otherwise noted all regulatory references are to Title 14 CFR.

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Compliance with the AD requires initial and repetitive inspections of the disks for corrosion pits and cracks after stripping the protective coating in accordance with the procedures specified in P&W Alert Service Bulletin (ASB) number JT8D A6431, revision 1, dated March 7, 2003 (ASB A6431 or “service bulletin”).

Any disks found with corrosion pits or cracks beyond serviceable limits, as defined in ASB A6431, must be replaced. ASB A6431 is the only service document that is approved for incorporation by reference into the AD (see 5 U.S.C. § 552(a), 1 C.F.R. part 51).

P&W ASB A6431 Flow Down

ASB A6431 requires the removal and inspection of the disks in accordance with P&W engine manuals 72-36-41 through -46. To inspect the disks the engine manuals require the removal of the disks’ protective coating.

After inspection, a determination of whether the disks can continue in service can be made; any disks with pitting or cracks beyond a serviceable limit must be replaced. At this point, the compliance requirements of AD 2003-12-07 are met.

The service bulletin, however, continues beyond the scope of the AD to recommend re-plating/recoating methods for disks with no (or acceptable) pitting or cracking. In other words, it sets forth methods, techniques and practices that may be used to accomplish maintenance that is not mandated by the AD.

- After proper inspection the service bulletin calls for recoating/re-plating the disks per P&W ASB 6426 (a document that is not incorporated by reference in the AD).
- ASB 6426 calls for nickel-cadmium plating of the disks per P&W engine manuals 72-36-41 through -46 for each stage disk.
- These engine manuals call for the plating to be done in accordance with Standard Practices Manual, 70-44-01, SPOP 25 (another document that is not incorporated by reference in the AD).
- SPOP 25 has two parts for nickel-cadmium plating. Part A states that the plating of certain parts be accomplished by a P&W approved source, while part B does not recommend any P&W approved source for other parts.
- SPOP 25 lists the 13 companies P&W considered “approved” for such work.

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AD Compliance

Section 39.11 states that “[a]irworthiness directives specify inspections you must carry out, conditions and limitations you must comply with, and any actions you must take to resolve an unsafe condition.” Compliance with AD 2003-12-07 requires performing initial and repetitive inspections of the disks after stripping the protective coating and replacement of any disks with corrosion pits or crack beyond serviceable limits. It further requires that **these tasks** be done in accordance with ASB A6431 (emphasis added).

ARSA contends that the regulatory requirements of § 39.11 (i.e., AD 2003-12-07) are met when a repair station strips and inspects each disk in accordance with ASB A6431. The service bulletin is the only document approved for incorporation by reference into the AD and it lays out the tasks for performing the required inspection of the disks. If no (or acceptable) pitting and cracking conditions are found, no further action is required under the AD. In other words, the AD does not require or cover any maintenance for those disks that can be continued in service after passing the inspection.

Maintenance after AD Compliance

After the inspection establishes that there are no (or acceptable) pitting or corrosion, subsequent maintenance tasks on the disk, including plating, must be done using methods, techniques and practices that return it to at least the original (or properly altered) condition as set forth in § 43.13.

Unless specified in an AD, the regulations do not require that the manufacturer approve sources of maintenance activities. Indeed, even if the manufacturer “approved” certain facilities to perform maintenance tasks, the work must still be accomplished in accordance with part 43 (and in this case also part 145). Persons authorized to perform maintenance in part 43 do not include those merely “approved” by a manufacturer; the source must either be certificated by the FAA or be working under the authority of a certificated entity (see §§ 43.3 and 145.217).

There is no indication in the UPN that the work was performed improperly; it merely states that the repair station used another certificated entity (repair station) that was not “approved” by P&W. That statement does not indicate nor evidence any violation of any regulation. Indeed, the repair station referenced in the UPN informed ARSA that it submitted evidence to the FAA that its contractor (another properly certificated repair station) performed the nickel-cadmium plating to a specification that is more stringent than the one “approved” by P&W.

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Immediate Withdrawal of UPN 2006-00178

ARSA requests that the FAA immediately withdraw UPN 2006-00178. Disks that were re-plated/recoated by an appropriately rated repair station using a method, technique or practice that returned them to their original or properly altered condition are eligible for approval for return to service in respect to that work whether or not the entity performing the maintenance task was “approved” by P&W.

Clarification of AD Compliance versus § 43.13 Compliance

ARSA recognizes that the issue of what constitutes compliance with an AD goes beyond AD 2003-12-07 and UPN 2006-00178. Enforcement issues arise when the FAA is unclear as to what constitutes compliance with an AD when the document incorporated by reference contains additional information.

However, ARSA requests confirmation that after establishing compliance with an AD, the regulations clearly allow a properly certificated person to perform additional or other maintenance tasks using methods, techniques and practices that are acceptable to the Administrator as set forth in § 43.13.

Clarification of Need for Manufacturer Approval under § 43.13

We also request that the FAA confirm that in all cases, approval by a manufacturer is not required under § 43.13(a) even if the maintenance manual or ICA “requires” such approval provided the method, technique or practice used returns the article to at least its original or properly altered condition as required by § 43.13(b).

Respectfully submitted,



Sarah MacLeod
Executive Director

Attachments: Airworthiness Directive (AD) 2003-12-07
Unapproved Parts Notification (UPN) 2006-00178

cc: Chris Poreda, Vincent Bennett,
Regional Counsel Assistant Counsel
chris.poreda@faa.gov vincent.bennet@faa.gov

[Federal Register: June 13, 2003 (Volume 68, Number 114)]
[Rules and Regulations]
[Page 35286-35287]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
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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 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 removing Amendment 39-10563 (63 FR 31340, June 9, 1998) and by adding a new airworthiness directive, Amendment 39-13192, 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.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).

2003-12-07 Pratt & Whitney: Amendment 39-13192. Docket No. 97-ANE-05-AD. Supersedes AD 98-12-07, Amendment 39-10563.

Applicability: This airworthiness directive (AD) is applicable to Pratt & Whitney (PW) JT8D-1, -1A, -1B, -7, -7A, -7B, -9, -9A, -11, -15, -15A, -17, -17A, -17R, and -17AR turbofan engines. These engines are installed on, but not limited to Boeing 737 and 727 series, and McDonnell Douglas DC-9 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 (d) 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 fracture of the 7th, 8th, 9th, 10th, 11th, and 12th stage high pressure compressor (HPC) disks, which can result in uncontained release of engine fragments, inflight engine shutdown, and airframe damage, do the following:

(a) Perform initial and repetitive inspections of HPC disks for corrosion pits and cracks after stripping the protective coating in accordance with the intervals specified in the compliance section and procedures specified in the accomplishment instructions of PW Alert Service Bulletin (ASB) No. JT8D A6431, Revision 1, dated March 7, 2003.

(b) Before further flight, replace HPC disks found with corrosion pits or cracks beyond serviceable limits as defined by PW ASB No. JT8D A6431, Revision 1, dated March 7, 2003.

(c) For the purposes of this AD, use the effective date of this AD for computing compliance intervals whenever PW ASB No. JT8D A6431, Revision 1, dated March 7, 2003, refers to the release date of the ASB.

Alternative Methods of Compliance

(d) 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

(e) 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 airplanes to a location where the requirements of this AD can be done.

Documents That Have Been Incorporated by Reference

(f) The actions must be done in accordance with Pratt & Whitney Alert Service Bulletin No. JT8D A6431, Revision 1, dated March 7, 2003. 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) 565-6600; fax (860) 565-4503. Copies may be inspected 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

(g) This amendment becomes effective on July 18, 2003.

Issued in Burlington, Massachusetts, on June 5, 2003.

Peter A. White,

Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 03-14844 Filed 6-12-03; 8:45 am]

BILLING CODE 4910-13-P



UNAPPROVED PARTS NOTIFICATION

SUSPECTED UNAPPROVED PARTS PROGRAM OFFICE, AVS-20
13873 PARK CENTER ROAD, SUITE 165
HERNDON, VA 20171

U.S. Department of Transportation

Federal Aviation Administration

No. 2006-00178
December 22, 2006

<http://www.faa.gov/aircraft/safety/programs/sups/upn/>

AFFECTED PARTS

Pratt & Whitney JT8D engine series – rotating group components.

PURPOSE

The purpose of this notification is to advise all aircraft owners, operators, manufacturers, maintenance organizations, and parts suppliers and distributors regarding improper maintenance performed on Pratt & Whitney JT8D aircraft engine components.

BACKGROUND

Information received during a Federal Aviation Administration (FAA) suspected unapproved parts investigation revealed that beginning in January 2004, Aircraft Power & Service, Inc. (APS, Inc.), located at 2415 W. Arkansas, Durant, OK 74701, subcontracted nickel-cadmium plating on JT8D engine rotating group components to a repair station that was not approved by Pratt & Whitney, the engine manufacturer. The Pratt & Whitney overhaul manual requires that nickel-cadmium plating be performed by an approved vendor. APS, Inc., holds FAA Air Agency Certificate No. AP6R434N with limited accessory, powerplant, and non-destructive testing ratings.

RECOMMENDATIONS

Regulations require that type-certificated products conform to their type design and be properly maintained using current data, required equipment, and appropriately trained personnel. Aircraft owners, operators, manufacturers, maintenance organizations, and parts suppliers and distributors should inspect their aircraft and/or parts inventory for Pratt & Whitney JT8D rotating components approved for return to service by APS, Inc. Appropriate action should be taken if any of these components have been installed on an aircraft engine. If any existing inventory includes these components, the FAA recommends that you quarantine the component to prevent installation on an aircraft until a determination can be made regarding each component's eligibility for installation.

Below is a *partial* list of components that were approved for return to service by APS, Inc.

PARTIAL LIST OF PARTS

Work Order Number	Return-to-Service Approval Date	Accessory Name	Manufacturer	Assembly Part Number	Assembly Serial Number
19471-1	04/15/05	9 th -stage compressor disk	Pratt & Whitney	701509-001	NENCAH2543
19471-1	05/19/05	9 th -stage compressor disk	Pratt & Whitney	701509-001	

21107	05/26/05	11 th -stage compressor disk	Pratt & Whitney	772511-001	BENCAL9591
21109	05/26/05	7 th -stage compressor disk	Pratt & Whitney	5006007-022	BENCAL5125
21480	06/08/05	10 th -stage compressor disk	Pratt & Whitney	815610-002	BENCAS5755
21464	06/23/05	rear compressor hub	Pratt & Whitney	3013111	
21576	06/28/05	11 th -stage compressor disk	Pratt & Whitney	815611	BENCAM7996
21575	06/28/05	12 th -stage compressor disk	Pratt & Whitney	815612	BENCAP7357
21577	06/28/05	9 th -stage compressor disk	Pratt & Whitney	815609	BENCAP8095
21588	06/29/05	10 th -stage compressor disk	Pratt & Whitney	865610	BENCAP7681
21578	06/29/05	8 th -stage compressor disk	Pratt & Whitney	815708	BENCAM8485
21582	06/29/05	C-7 disk	Pratt & Whitney	815607	BENCAP4904
21606	07/07/05	rear compressor hub	Pratt & Whitney	3013821	2549
21605	07/07/05	rear compressor hub	Pratt & Whitney	3013821	9E014
21607	07/08/05	rear compressor hub	Pratt & Whitney	3013821	9T261
21629	07/12/05	C-9 disk	Pratt & Whitney	701509	NENCAH3046
21630	07/12/05	10 th -stage compressor disk	Pratt & Whitney	772510	BENCAP1017
21250	07/15/05	rear compressor rotor tube	Pratt & Whitney	719837	2266
21600	07/29/05	8 th -stage compressor disk	Pratt & Whitney	792038	BENCA37969
21600	07/29/05	8 th -stage compressor disk	Pratt & Whitney	792038	BENCAJ7969
21672	08/04/05	C-7 disk	Pratt & Whitney	5006007-02	BENCAN7485
21628	08/05/05	8 th -stage compressor disk	Pratt & Whitney	787208	BENCAN9552
21656	08/05/05	C-12 disk	Pratt & Whitney	798512	BENCAN6291
21626	08/05/05	8 th -stage compressor disk	Pratt & Whitney	748608	BENCAL8444
21627	08/05/05	C-7 disk	Pratt & Whitney	5006007-02	BENCAP3267
21650	08/12/05	8 th -stage compressor disk	Pratt & Whitney	748608	B208AA0075
	08/18/05	C-4 disk	Pratt & Whitney	799504	BBDUAT0459
21743	08/22/05	7 th -stage compressor disk	Pratt & Whitney	774407-001	BENCAK1692
21675	08/23/05	10 th -stage compressor disk	Pratt & Whitney	772510	BENCAH2700

21628	08/24/05	8 th -stage compressor disk	Pratt & Whitney	787208	BENCAN9552
21856	08/30/05	11 th -stage compressor disk	Pratt & Whitney	772511-011	BENCAK7580
21674	08/31/05	8 th -stage compressor disk	Pratt & Whitney	792038	BENCAN5414
21673	08/31/05	9 th -stage compressor disk	Pratt & Whitney	701509-001	NENCAH3164
22004	09/01/05	rear compressor hub	Pratt & Whitney	3013821	94080
21818	09/08/05	10 th -stage compressor disk	Pratt & Whitney	772510	B210AA0855
21745	09/08/05	C-9 disk	Pratt & Whitney	701509	NENCAH0520
21747	09/08/05	C-11 disk	Pratt & Whitney	772511	B211AA0878
21748	09/08/05	C-12 disk	Pratt & Whitney	798512	BENCAK0450
21746	09/08/05	10 th -stage compressor disk	Pratt & Whitney	772510	BENCAJ9903
21740	09/13/05	front compressor	Pratt & Whitney	593211	
21783	09/13/05	8 th -stage compressor disk	Pratt & Whitney	787208	
21922	09/13/05	C-7 disk	Pratt & Whitney	815607	BENCAP8054
21821	09/13/05	C-7 disk	Pratt & Whitney	774407	BENCAK6038
21816	09/13/05	C-12 disk	Pratt & Whitney	798512	BENCAK6860
21817	09/13/05	C-11 disk	Pratt & Whitney	772511	BENCAN0199
21730	09/13/05	10 th -stage compressor disk	Pratt & Whitney	772510	B21AA1083
22123	09/14/05	rear compressor hub	Pratt & Whitney	3013821	8K583
21982	09/15/05	9 th -stage compressor disk	Pratt & Whitney	701509-001	P97638
21819	09/15/05	9 th -stage compressor disk	Pratt & Whitney	701509-001	R17637
21731	09/15/05	11 th -stage compressor disk	Pratt & Whitney	772511-001	B21AA0421
21729	09/16/05	12 th -stage compressor disk	Pratt & Whitney	798512-12-001	B212AA0776
21858	09/28/05	C-12 disk	Pratt & Whitney	798512	
21967	09/28/05	7 th -stage compressor disk	Pratt & Whitney	774407-001	R02921
	09/30/05	C-9 disk	Pratt & Whitney	701509	K85342
22268	10/07/05	C-7 disk	Pratt & Whitney	5006007-02	BENCAN5767
22253	10/07/05	C-8 disk	Pratt & Whitney	5005808-01	B228A0208

22073	10/07/05	9 th -stage compressor disk	Pratt & Whitney	798509	BENCAM3476
22053	10/07/05	C-12 disk	Pratt & Whitney	772512	P97717
21820	10/07/05	8 th -stage compressor disk	Pratt & Whitney	787208	BENCAN7016
22099	10/12/05	C-12 disk	Pratt & Whitney	772512	M10192
22075	10/12/05	C-12 disk	Pratt & Whitney	798512	BENCAM4153
22036	10/12/05	C-11 disk	Pratt & Whitney	772511	L31955
21975	10/12/05	8 th -stage compressor disk	Pratt & Whitney	787208	P45361
21744	10/14/05	8 th -stage compressor disk	Pratt & Whitney	792038-002	BENCAH2133
22206	10/17/05	C-7 disk	Pratt & Whitney	5006007-02	
22163	10/17/05	front compressor tie	Pratt & Whitney	593211	
22162	10/17/05	front compressor tie	Pratt & Whitney	593211	
22078	10/18/05	C-11 disk	Pratt & Whitney	772511	BENCAM2098
22231	10/18/05	C-12 disk	Pratt & Whitney	798512	BENCAM5378
22317	10/18/05	C-7 disk	Pratt & Whitney	875707	BENCAS6211
22058	10/19/05	C-7 disk	Pratt & Whitney	774407	P81351
22318	10/19/05	C-11 disk	Pratt & Whitney	772511	T23024
22038	10/19/05	C-8 disk	Pratt & Whitney	787208	P44691
22076	10/19/05	C-7 disk	Pratt & Whitney	5006007-01	BENCAM5042
22074	10/19/05	C-10 disk	Pratt & Whitney	772510	BENCAM4051
22080	10/26/05	8 th -stage compressor disk	Pratt & Whitney	787208	BENCAM2718
22061	10/26/05	11 th -stage compressor disk	Pratt & Whitney	772511-001	P97308
22243	10/27/05	tie rods	Pratt & Whitney	780605	
21578A	10/27/05	C-8 disk	Pratt & Whitney	815708-002	BENCAM8485
22111	10/27/05	C-7 disk	Pratt & Whitney	774407	L72198
22033	10/28/05	C-12 disk	Pratt & Whitney	798512	BENCAH2185
21669	10/28/05	C-12 disk	Pratt & Whitney	798512	BENCAH8144
22032	10/28/05	10 th -stage compressor disk	Pratt & Whitney	772510	B210AA1147

22069	10/28/05	C-9 disk	Pratt & Whitney	701509	R19003
22054	11/02/05	C-10 disk	Pratt & Whitney	772510	P77081
	11/07/05	C-11 disk	Pratt & Whitney	772511	
22110	11/08/05	C-8 disk	Pratt & Whitney	787008	L61404
22423	11/10/05	C-11 disk	Pratt & Whitney	772511	B211AA0987
22459	11/16/05	C-11 disk	Pratt & Whitney	815611	BENCAR8928
22457	11/16/05	C-12 disk	Pratt & Whitney	772512	J00798
22294	11/16/05	C-7 disk	Pratt & Whitney	774407	BENCAK5139
2237	11/17/05	8 th stage compressor disk	Pratt & Whitney	787208	R92219
22492	11/17/05	C-7 disk	Pratt & Whitney	815607	BENCAP2528
22100	11/18/05	C-11 disk	Pratt & Whitney	772511	M61385
22504	11/21/05	C-7 disk	Pratt & Whitney	774407	K20123
22503	11/22/05	8 th stage compressor disk	Pratt & Whitney	748608	578088
22458	11/28/05	C-10 disk	Pratt & Whitney	815610	BENCAR6821
22542	12/01/05	C-11 disk housing	Pratt & Whitney	772511	R30959
21674A	12/01/05	C-8 disk	Pratt & Whitney	792038-002	BENCAN5414
22509	12/06/05	C-12 disk	Pratt & Whitney	798512	BENCAM4412
22543	12/06/05	C-9 disk	Pratt & Whitney	701509	877530
22512	12/07/05	C-9 disk	Pratt & Whitney	798509	BENCAM3717
22069	12/07/05	C-9 disk	Pratt & Whitney	701509	R19003
22562	12/07/05	C-11 disk	Pratt & Whitney	772511	BENCAM0142
22563	12/07/05	C-10 disk	Pratt & Whitney	772510	R45254
22561	12/07/05	C-12 disk	Pratt & Whitney	798512	BENCAM4172
22482	12/08/05	C-11 disk	Pratt & Whitney	772511-001	BENCAK7120
22481	12/08/05	C-10 disk	Pratt & Whitney	772510-001	BENCAJ9864
22511	12/08/05	C-10 disk	Pratt & Whitney	772510	BENCAM3811
22483	12/09/05	C-12 disk	Pratt & Whitney	798512-001	BENCAK2341

22479	12/09/05	C-8 disk	Pratt & Whitney	787208-001	BENCAH1580
22510	12/09/05	C-11 disk	Pratt & Whitney	772511-001	BENCAN3078
22508	12/12/05	C-8 disk	Pratt & Whitney	787208	BENCAN4302
22553	12/12/05	C-12 disk	Pratt & Whitney	798512	B212AA1145
22101	12/12/05	C-10 disk	Pratt & Whitney	772510	L31358
22513	12/12/05	C-7 disk	Pratt & Whitney	5006007-02	BENCAM5116
22478	12/14/05	C-7 disk	Pratt & Whitney	774407	B207AA0497
22480	12/14/05	C-9 disk	Pratt & Whitney	701509	N209AA0167
22571	12/19/05	C-8 disk	Pratt & Whitney	797938	R23316
22473	12/20/05	C-2 disk	Pratt & Whitney	745902	BBDUUAU1510
22589	12/21/05	C-7 disk	Pratt & Whitney	815607	BENCAR3287
22594	01/02/06	C-12 disk	Pratt & Whitney	815612	BENCAR7088
22735	01/05/06	C-7 disk	Pratt & Whitney	774407	S36638
22736	01/06/06	C-11 disk	Pratt & Whitney	772511	S03956
22737	01/06/06	C-11 disk	Pratt & Whitney	772511	S04026
22669	01/09/06	C-8 disk	Pratt & Whitney	787008	L61516
22708	01/10/06	C-12 disk	Pratt & Whitney	772512	S01780
22766	01/10/06	C-10 disk	Pratt & Whitney	772510	S70218
22765	01/10/06	C-10 disk	Pratt & Whitney	772510	S19503
22746	01/13/06	C-8 disk	Pratt & Whitney	787208	BENCAM9565
22670	01/13/06	C-9 disk	Pratt & Whitney	701509	M86335
22711	01/17/06	C-9 disk	Pratt & Whitney	701509	NENCAH1472
22708	01/17/06	C-7 disk	Pratt & Whitney	5006007-02	BENCAL5846
22707	01/18/06	C-7 disk	Pratt & Whitney	815607	C-7 disk
22742	01/18/06	C-7 disk	Pratt & Whitney	5006007-02	BENCAP0720
22819	01/19/06	8 th -stage compressor disk	Pratt & Whitney	815708	BENCAR5664
22828	01/20/06	11 th -stage compressor disk	Pratt & Whitney	815611	BENCAR8820

22829	01/20/06	C-10 disk	Pratt & Whitney	815610	BENCAR3181
22827	01/20/06	9 th stage compressor disk	Pratt & Whitney	815609	BENCAR5966
22830	01/20/06	C-12 disk	Pratt & Whitney	798512	BENCAK4464
22747	01/20/06	10 th -stage compressor disk	Pratt & Whitney	772510	P10994
22821	01/24/06	C-9 disk	Pratt & Whitney	798509	S94336
22709	01/24/06	C-12 disk	Pratt & Whitney	798512-001	BENCAM3884
22780	01/24/06	C-9 disk	Pratt & Whitney	798509-001	BENCAM5828
22743	01/30/06	C-12 disk	Pratt & Whitney	798512	BENCAM3742
22754	01/30/06	C-11 disk	Pratt & Whitney	772511	N98625
22744	01/30/06	C-10 disk	Pratt & Whitney	772510	BENCAM2870
22773	01/30/06	C-10 disk	Pratt & Whitney	772510	BENCAM6634
22745	01/30/06	C-11 disk	Pratt & Whitney	772511	BENCAM2045
22779	01/30/06	C-8 disk	Pratt & Whitney	787208	S39426
22708	01/30/06	C-7 disk	Pratt & Whitney	5006007-02	BENCAL5846
22826	01/30/06	C-7 disk	Pratt & Whitney	5006007-02	BENCAR9939
22707	01/30/06	C-7 disk	Pratt & Whitney	815607	BENCAR2635
22775	01/30/06	C-11 disk	Pratt & Whitney	772511	BENCAL9589
22763	02/02/06	C-12 disk	Pratt & Whitney	772512	L86214
22785	02/02/06	C-12 disk	Pratt & Whitney	798512	T28620
22752	02/02/06	C-9 disk	Pratt & Whitney	701509	NENCAH2977
22751	02/02/06	C-7 disk	Pratt & Whitney	774407	BENCAJ8474
22883	02/02/06	C-7 disk	Pratt & Whitney	5006007-02	BENCAN7466
22859	02/02/06	C-7 disk	Pratt & Whitney	5006007-02	BENCAM6338
22753	02/02/06	C-12 disk	Pratt & Whitney	772512	RY5830
22929	02/02/06	C-12 disk	Pratt & Whitney	798512	BENCAP0407
22764	02/06/06	C-11 disk	Pratt & Whitney	772511	L86058
22762	02/06/06	C-10 disk	Pratt & Whitney	772510	L85299

22781	02/06/06	C-12 disk	Pratt & Whitney	5006007-02	BENCAM5750
22895	02/06/06	C-12 disk	Pratt & Whitney	815612	BENCAR0331
22922	02/06/06	C-9 disk	Pratt & Whitney	798509	BENCAM2513
22923	02/08/06	C-8 disk	Pratt & Whitney	797938-004	BENCAM4214
23023	02/13/06	C-11 disk	Pratt & Whitney	815611-002	BENCAN5013
22779	02/15/06	C-8 disk	Pratt & Whitney	787208	S39426
23020	02/20/06	C-12 disk	Pratt & Whitney	798512	BENCAN1645
23048	02/20/06	C-12 disk	Pratt & Whitney	772512	S19646
23032	02/20/06	C-10 disk	Pratt & Whitney	815610-002	BENCCAP6822
23025	02/20/06	C-10 disk	Pratt & Whitney	772510-001	BENCAH3998
23031	02/20/06	C-9 disk	Pratt & Whitney	815609	BENCAP8513
23029	02/20/06	C-8 disk	Pratt & Whitney	748608	R73092
23022	02/20/06	C-9 disk	Pratt & Whitney	701509	NENCAH2456
23033	02/21/06	C-7 disk	Pratt & Whitney	5006007-02	BENCAN1293
23060	02/22/06	C-11 disk	Pratt & Whitney	772511	BENCAK7360
23030	02/22/06	C-7 disk	Pratt & Whitney	774407	S36711
23028	02/23/06	C-11 disk	Pratt & Whitney	815611	BENCAP1443
23050	02/23/06	C-10 disk	Pratt & Whitney	772510	T28057
23017	02/23/06	C-12 disk	Pratt & Whitney	815612-002	BENCAR7164
23094	02/24/06	C-7 disk	Pratt & Whitney	5006007-02	BENCAM4594
23061	02/27/06	C-9 disk	Pratt & Whitney	815609-001	BENCAR6331
23024	02/27/06	C-12 disk	Pratt & Whitney	798512-001	BENCAM8540
23026	02/28/06	C-10 disk	Pratt & Whitney	772510	BENCAM7082
23049	02/28/06	C-11 disk	Pratt & Whitney	772511-001	T22542
23026	02/28/06	C-10 disk	Pratt & Whitney	77251-001	BENCAM7082
23060	02/28/06	C-11 disk	Pratt & Whitney	772511-001	BENCAK7360
23189	03/01/06	C-7 disk	Pratt & Whitney	815607-001	BECNAP2644

23218	03/03/06	C-11 disk	Pratt & Whitney	772511-001	R30657
23027	03/03/06	C-12 disk	Pratt & Whitney	815612	BENCAP6068
23192	03/03/06	C-12 disk	Pratt & Whitney	815612-002	BENCAR7389
23220	03/03/06	C-10 disk	Pratt & Whitney	815610-002	BENCAT2458
23208	03/03/06	C-10 disk	Pratt & Whitney	815610-002	BENCAS5761
23191	03/03/06	C-11 disk	Pratt & Whitney	815611-002	BENCAS7146
23219	03/07/06	C-12 disk	Pratt & Whitney	815612-002	BENCAS7908
23013	03/07/06	C-8 disk	Pratt & Whitney	815608	BENCAS0744
23012	03/07/06	C-7 disk	Pratt & Whitney	774407	S37395
23235	03/07/06	C-7 disk	Pratt & Whitney	5006007-02	BENCAK9809
23130	03/07/06	C-12 disk	Pratt & Whitney	815612-002	BENCAR2030
23209	03/08/06	C-8 disk	Pratt & Whitney	792038-002	BENCAN5414
23174	03/10/06	C-9 disk	Pratt & Whitney	701509	N29AA0353
23081	03/10/06	C-9 disk	Pratt & Whitney	748608	BENCAM3680
23131	03/10/06	C-11 disk	Pratt & Whitney	772511-001	T22285
23185	03/10/06	C-12 disk	Pratt & Whitney	798512	BENCAM3545
23132	03/15/06	C-12 disk	Pratt & Whitney	815612-002	BENCAR0849
23183	03/15/06	C-10 disk	Pratt & Whitney	772510	BENCAM3946
23096	03/17/06	C-9 disk	Pratt & Whitney	701509	NENCAH2056
22929	03/17/06	C-12 disk	Pratt & Whitney	798512-001	BENCAP0407
23082	03/22/06	C-9 disk	Pratt & Whitney	701509	NENCAH2713
23021	03/22/06	C-9 disk	Pratt & Whitney	701509	NENCAH2427
23078	03/22/06	C-3 disk	Pratt & Whitney	772510	J48531
23083	03/22/06	10 th stage compressor disk	Pratt & Whitney	772510	BENCAM3920
23199	03/24/06	C-7 disk	Pratt & Whitney	815607	BENCAR3301
22513A	03/24/06	C-7 disk NiCad	Pratt & Whitney	5006007-02	BENCAM5116
23194	03/24/06	C-11 disk	Pratt & Whitney	772511	BENCAM0277

815611	03/24/06	11 th -stage compressor disk	Pratt & Whitney	815611	BENCAL9980
22479-1	03/27/06	8 th -stage compressor disk	Pratt & Whitney	787208	BENCAH1580
23204	03/27/06	C-12 disk	Pratt & Whitney	798512	BENCAM1702
23205	03/27/06	C-9 disk	Pratt & Whitney	701509	NENCAH1923
23014	03/27/06	C-9 disk	Pratt & Whitney	701509	NENCAH2827
23197	03/27/06	C-7 disk	Pratt & Whitney	5006007-002	BENCAK9944
	03/27/06	C-10 disk	Pratt & Whitney	772510	BENCAM2785
23184	03/28//06	C-11 disk	Pratt & Whitney	772511	T23001
23132	03/28/06	C-12 disk	Pratt & Whitney	798512	T43176
23202	03/28/06	C-8 disk	Pratt & Whitney	787208	BENCAM4205
23193	03/30/06	C-12 disk	Pratt & Whitney	815612-002	BENCAR3343
23200	03/30/06	C-8 disk	Pratt & Whitney	787208	BENCAM9580
23182	03/31/06	C-10 disk	Pratt & Whitney	772510	BENCAM4698
23196	03/31/06	C-10 disk	Pratt & Whitney	815610	BENCAR3411
23337	04/03/06	C-2 disk	Pratt & Whitney	797938-002	BENCAN8274
23195	04/03/06	C-9 disk	Pratt & Whitney	701509	NENCAH0803
23328	04/03/06	C-9 disk	Pratt & Whitney	815710	BENCAS8458
22748	04/04/06	C-8 disk	Pratt & Whitney	787208-001	R23235
23329	04/06/06	C-10 disk	Pratt & Whitney	815610	BENCAR6631
23129	04/11/06	C-8 disk	Pratt & Whitney	787208-001	R24905
23097	04/17/06	C-10 disk	Pratt & Whitney	772510	BENCAM1260
23330	04/18/06	C-12 disk	Pratt & Whitney	815612	BENCAR7340
23337	04/19/06	C-8 disk	Pratt & Whitney	797938-002	BENCCAN8274
23439	04/24/06	rear compressor hub	Pratt & Whitney	3013111	A4143
23412	04/26/06	rear compressor hub	Pratt & Whitney	3013111	4A658
23438	04/27/06	rear compressor hub	Pratt & Whitney	3013111	5Y033

23446	04/28/06	C-11 disk	Pratt & Whitney	772511	R30612
23395	04/28/06	C-11 disk	Pratt & Whitney	815611	BENCAR8744
23431	05/08/06	C 11 disk	Pratt & Whitney	772511	503882
23445	05/08/06	C-12 disk NiCad plate per spop	Pratt & Whitney	798512-001	BENCAK5794
23447	05/09/06	C-10 disk NiCad plate per spop	Pratt & Whitney	772510	BENCAK5321
23432	05/09/06	C-9 disk NiCad plate per spop	Pratt & Whitney	701509	N209AA0228
23434	05/09/06	C-8 disk NiCad plate per spop	Pratt & Whitney	787208	B228AA0457
23501	05/15/06	12 th -stage compressor disk	Pratt & Whitney	798512-001	BENCAL9042
23448	05/15/06	C-7 disk	Pratt & Whitney	774407	BENCAK5438
23452	05/15/06	C-12 disk	Pratt & Whitney	798512	BENCAL6837
23497	05/15/06	C-10 disk	Pratt & Whitney	815610	BENCAS4793
23291	05/15/06	C-7 disk	Pratt & Whitney	5006007-02	BENCAL3630
23404	05/15/06	C-7 disk	Pratt & Whitney	5006007-002	BENCAN1309
23449	05/15/06	8 th -stage compressor disk	Pratt & Whitney	787208	BENCAN0166
23391	05/16/06	C-7 disk	Pratt & Whitney	774407	N27862
23392	05/19/06	C-8 disk	Pratt & Whitney	787008	N90138
234665	05/19/06	C-8 disk	Pratt & Whitney	787208-001	BENCAN3002
23511	05/24/06	C-9 disk	Pratt & Whitney	798509-001	BENCAM3447
23433	05/24/06	C-12 disk	Pratt & Whitney	798512	BENCAN929
23513	05/25/06	10 th -stage compressor disk	Pratt & Whitney	772510-001	BENCAM3332
22513A	05/25/06	7 th -stage compressor disk	Pratt & Whitney	6006007-022	BENCAM5116
23396	05/25/06	C-12 disk	Pratt & Whitney	798512	BENCAN3313
23359	05/26/06	C-10 disk	Pratt & Whitney	815610	BENCAP8894
23353	05/26/06	C-12 disk	Pratt & Whitney	798512	BENCAN9594
23354	05/30/06	C-11 disk	Pratt & Whitney	772511	BENCAM0336
23500	05/30/06	C 11 disk	Pratt & Whitney	772511	B211AA0117
23627	05/30/06	C-11 disk	Pratt & Whitney	815611	BENCAT3314

23031A	06/01/06	C-9 disk	Pratt & Whitney	815609-001	BENCAP8513
23512	06/01/06	11 th -stage compressor disk	Pratt & Whitney	772511-001	BENCAM0143
23029a	06/01/06	8 th -stage compressor disk	Pratt & Whitney	748608	R73092
23397	06/02/06	11 th -stage compressor disk	Pratt & Whitney	772511-001	BENCAL7153

FURTHER INFORMATION

Further information concerning this investigation, and guidance regarding the above-referenced components, can be obtained from the FAA Flight Standards District Offices (FSDO) given below. The FAA would appreciate any information concerning the discovery of the above-referenced components from any source, the means used to identify the source, and the actions taken to remove the components from aircraft and/or stock.

This notice originated from the Oklahoma City Flight Standards District Office, 1300 S. Meridian, Suite 601, Oklahoma City, OK 73108, telephone (405) 951-4200, fax (405) 951-4282; and was published through the FAA SUP Program Office, AVS-20, telephone (703) 668-3720, fax (703) 481-3002.