

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2005-23072; Directorate Identifier 2005-NE-38-AD; Amendment 39-15186; AD 2007-18-06]

RIN 2120-AA64

Airworthiness Directives; Pratt & Whitney JT9D-7R4 Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is superseding an existing airworthiness directive (AD) for Pratt & Whitney (PW) JT9D-7R4 turbofan engines. That AD currently requires inspection of the blade root thickness of 1st stage fan blades identified by part number (P/N) and serial number (SN) in the AD. This AD requires the same actions but corrects 12 P/Ns, adds 10 part SNs, and adds the definition of next fan blade exposure to the compliance section. This AD results from the discovery of inaccurate part quantity, part numbers, and serial numbers used in AD 2005-26-09. We are issuing this AD to prevent 1st stage fan blade fracture and uncontained engine failure, resulting in possible damage to the airplane.

DATES: This AD becomes effective October 5, 2007.

ADDRESSES: The Docket Operations office is located at U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Kevin Donovan, Aerospace Engineer, Engine Certification Office, FAA, Engine and 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 by superseding AD 2005-26-09, Amendment 39-14430 (70 FR 76381, December 27, 2005), with a proposed AD. The proposed AD applies to (PW) JT9D-7R4 turbofan engines. We published the proposed AD in the Federal Register on March 1, 2007 (72 FR 9276). That action proposed to require inspection of the blade root thickness of 1st stage fan blades identified by P/N and SN.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://dms.dot.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is provided in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the comment received.

Duplicate Serial Number

One commenter asks us to remove a duplicate serial number from Table 1. The commenter states that we listed two fan blades, P/N 831021, serial number NS8559 in Table 1. We agree. We deleted one of the duplicate SNs.

Corrections to the NPRM

We found one typographical error in a blade SN. We changed ND6924 to ND8924. Blade SN ND6924 is not included in the population of suspect blades. We also found the population is not 531, it is 538. We corrected these errors in the NPRM.

Conclusion

We have carefully reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously. We have determined that these changes will cause only a minimal increase to the economic burden on any operator and will not increase the scope of the AD.

Costs of Compliance

We estimate that this AD will affect 538 1st stage fan blades installed on JT9D-7R4 turbofan engines installed on airplanes of U.S. registry. We also estimate that it will take about 0.5 work-hour per 1st stage fan blade to perform the proposed actions, and that the average labor rate is \$80 per work-hour. Based on these figures, we estimate the total cost of this AD to U.S. operators to be \$21,520.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This

regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

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 at the address listed under ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, 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 removing Amendment 39-14430 70 FR 76381, December 27, 2005, and by adding a new airworthiness directive, Amendment 39-15196, to read as follows:



2007-18-06 Pratt & Whitney: Amendment 39-15196. Docket No. FAA-2005-23072; Directorate Identifier 2005-NE-38-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective October 5, 2007.

Affected ADs

(b) This AD supersedes AD 2005-26-09.

Applicability

(c) This AD applies to Pratt & Whitney (PW) JT9D-7R4 turbofan engines. These engines are installed on, but not limited to, Airbus A300 and A310, and Boeing 747 and 767 airplanes.

Unsafe Condition

(d) This AD results from the discovery of inaccurate part quantity, part numbers (P/Ns), and serial numbers (SNs) used in AD 2005-26-09. We are issuing this AD to prevent 1st stage fan blade fracture and uncontained engine failure, resulting in possible damage to the airplane.

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.

(f) For 1st stage fan blades that are listed by P/N and SN in Table 1 of this AD, do the following:

Table 1 - Affected 1st Stage Fan Blades

P/Ns	SNs				
5001341-022	JW2804	5001341-022	ND8635	5001341-022	NE0308
5001341-022	JW0354	5001341-022	JW4624	5001341-022	NE0200
5001341-022	ND5746	5001341-022	NE0394	5001341-022	MG6797
5001341-022	ND5770	5001341-022	NE0153	5001341-022	JW0230
5001341-022	JW3992	5001341-022	NN8054	5001341-022	ND5652
5001341-022	ND8615	5001341-022	JW4693	5001341-022	ND5775
5001341-022	JW0442	5001341-022	ND7304	5001341-022	JW0251
5001341-022	JW2317	5001341-022	MG6108	5001341-022	ND5719
5001341-022	ND8631	5001341-022	MG5862	5001341-022	JW0248
		5001341-022	MG5619	5001341-022	ND5785

5001341-022	ND5676
5001341-022	ND5661
5001341-022	JW0265
5001341-022	ND5699
5001341-022	ND5767
5001341-022	JW0259
5001341-022	ND5680
5001341-022	ND5749
5001341-022	JW0235
5001341-022	ND5776
5001341-022	ND8580
5001341-022	MG6039
5001341-022	ND9127
5001341-022	JW4287
5001341-022	JW0262
5001341-022	JW0445
5001341-022	JW4665
5001341-022	MG5901
5001341-022	NE0303
5001341-022	ND8703
5001341-022	JW4574
5001341-022	JW4286
5001341-022	JW4491
5001341-022	JW4630
5001341-022	JW4391
5001341-022	MG6550
5001341-022	MG6776
5001341-022	JW4586
5001341-022	JW0352
5001341-022	JW4261
5001341-022	MG6135
5001341-022	JW4685
5001341-022	MG6772
5001341-022	MG6793
5001341-022	MG7111

5001341-022	ND8618
5001341-022	JW0644
5001341-022	JW4631
5001341-022	JW4651
5001341-022	JW0234
5001341-022	JW4646
804121	NN9016
804121	VJ3393
804121	PX3694
804121	RK9168
804121	PX5023
804121	VJ3324
804121	VJ3504
804121	NN9115
804121	NN8936
804121	PX3816
804121	VJ3412
804121	RK9163
804121	VJ3447
804121	RK9230
804121	RK9109
804121	PX4627
804121	RK8990
804121	SP9459
804121	RK8656
804121	NN8933
804121	VJ3444
804121	ND5864
804121	NN9020
804121	RK8905
804121	SR1733
804121	NN9047
804121	PX3692
804121	PX3786
804121	NN9025

804121	NN9007
804121	RK9100
804121	VJ3399
804121	PX4970
804121	PX5013
804121	RK8904
804121	NN8986
804121	NN8829
804121	VJ3459
804121	RK9143
804121	VJ3414
804121	NN9028
804121	SP1557
804121	PX5003
804121	PX5042
804121	VJ3475
804121	ND7330
804121	PX3714
831021-003	NS8913
831021-003	ND6512
831021-003	ND6941
831021-003	ND9576
831021-003	NS7555
831021-003	NS8286
831021-003	NS7447
831021-003	ND6488
831021-003	ND8296
831021-003	ND6956
831021-003	ND7879
831021-003	ND6509
831021-003	ND9814
831021-003	NN7331
831021-003	ND6991
831021-003	ND6894
831021-003	NS6413

831021-003	ND7344
831021-003	ND6947
831021-003	NN8732
831021-003	ND8536
831021-003	ND6946
831021-003	ND6723
831021-003	ND9294
831021-003	ND9290
831021-003	ND6013
831021-003	ND8937
831021-003	NS7160
831021-003	NS6435
831021-003	NS6591
831021-003	ND9558
831021-003	NS8479
831021-003	NS9382
831021-003	ND8965
831021-003	ND9837
831021-003	ND5959
831021-003	NS6491
831021-003	NS9072
831021-003	ND9625
831021-003	ND6714
831021-003	ND6820
831021-003	ND8972
831021-003	NE0286
831021-003	NE0347
831021-003	ND8010
831021-003	ND8956
831021-003	ND9535
831021-003	ND9831
831021-003	NE0227
831021-003	ND8283
831021-003	ND9730
831021-003	NN7656

831021-003	NS7775
831021-003	ND9815
831021-003	ND6135
831021-003	NS8491
831021-003	NS6395
831021-003	NS8584
831021-003	NN7272
831021-003	MG7159
831021-003	NS6592
831021-003	ND7862
831021-003	ND6684
831021-003	NN7744
831021-003	ND7480
831021-003	ND7873
831021-003	ND6827
831021-003	ND6576
831021-003	ND9261
831021-003	NS8686
831021-003	ND9052
831021-003	ND6897
831021-003	ND6565
831021-003	NN8966
831021-003	PX3707
831021-003	NS7031
831021-003	ND6584
831021-003	ND9883
831021-003	NS6535
831021-003	ND7852
831021-003	ND9662
831021-003	ND7871
831021-003	JW0106
831021-003	ND8305
831021-003	NS6409
831021-003	NE0442
831021-003	ND9095

831021-003	ND9302
831021-003	ND9023
831021-003	ND8009
831021-003	ND8477
831021-003	ND7492
831021-003	ND8776
831021-003	ND6524
831021-003	ND6704
831021-003	ND8911
831021-003	ND8789
831021-003	ND8798
831021-003	ND6407
831021-003	ND7668
831021-003	ND9179
831021-003	NE0421
831021-003	ND6513
831021-003	ND6744
831021-003	ND7654
831021-003	ND7870
831021-003	ND9759
831021-003	ND6561
831021-003	ND5826
831021-003	ND6031
831021-003	ND8714
831021-003	ND8872
831021-003	ND6678
831021-003	ND6629
831021-003	ND8995
831021-003	NE0302
831021-003	ND6405
831021-003	NS8300
831021-003	NS8769
831021-003	NS7147
831021-003	ND6649
831021-003	ND7766

831021-003	NS7864
831021-003	NS8734
831021-003	ND6677
831021-003	NS7911
831021-003	ND8205
831021-003	ND8804
831021-003	ND6639
831021-003	ND8994
831021-003	ND7275
831021-003	ND9195
831021-003	ND6178
831021-003	ND8639
831021-003	ND9760
831021-003	ND9108X
831021-003	ND6427
831021-003	ND6590
831021-003	NS6551
831021-003	JW1158
831021-003	ND6412
831021-003	ND7922
831021-003	NS8678
831021-003	ND8930
831021-003	ND6596
831021-003	ND9570
831021-003	NN9027
831021-003	ND6446
831021-003	NE0275
831021-003	ND9917
831021-003	NS7919
831021-003	NS7907
831021-003	ND6583
831021-003	NN7420
831021-003	ND7746
831021-003	ND8187
831021-003	NN8999

831021-003	ND6043
831021-003	ND7880
831021-003	NN7175
831021-003	ND9816
831021-003	ND8174
831021-003	ND6045
831021-003	NS7562
831021-003	JW0075
831021-003	ND6848
831021-003	ND8531
831021-003	ND6311
831021-003	ND8144
831021-003	ND5798
831021-003	ND8113
831021-003	ND9642
831021-003	ND7436
831021-003	ND9054
831021-003	ND9683
831021-003	ND5991
831021-003	ND6026
831021-003	ND6616
831021-003	ND6530
831021-003	NE0374
831021-003	ND6364
831021-003	ND7718
831021-003	ND6473
831021-003	ND6436
831021-003	ND6887
831021-003	ND6518
831021-003	ND6479
831021-003	NS6330
831021-003	ND7264
831021-003	ND8151
831021-003	ND6562
831021-003	NS8776

831021-003	ND6519
831021-003	ND7659
831021-003	NS9049
831021-003	NS6861
831021-003	ND9571
831021-003	ND9346
831021-003	ND6501
831021-003	NS8505
831021-003	ND9338
831021-003	ND9775
831021-003	ND6485
831021-003	ND7165
831021-003	ND9371
831021-003	ND9537
831021-003	NS7889
831021-003	ND7877
831021-003	ND8670
831021-003	ND9032
831021-003	ND8781
831021-003	ND8604
831021-003	ND9329
831021-003	ND9110
831021-003	ND5997
831021-003	ND6027
831021-003	ND9589
831021-003	ND6575
831021-003	ND6592
831021-003	ND6463
831021-003	NS8583
831021-003	NS8590
831021-003	NS8567
831021-003	NS6795
831021-003	NS7110
831021-003	NS6587
831021-003	NS6404

831021-003	ND6486
5001341-022	JW0942
5001341-022	ND9231
5001341-022	JW4812
5001341-022	ND6555
5001341-022	M1375
5001341-022	MG6627
5001341-022	MG6794
5001341-022	ND9399
5001341-022	NE0084
5001341-022	MG6252
5001341-022	ND7422
5001341-022	ND7043
5001341-022	MG5722
5001341-022	MG5918
5001341-022	ND6984
5001341-022	M0839
5001341-022	M0922
5001341-022	M0938
5001341-022	M1117
5001341-022	M0307
5001341-022	JW3871
5001341-022	M1125
5001341-022	M1149
5001341-022	JW2681
5001341-022	M0270
5001341-022	M1120
5001341-022	M0205
5001341-022	AE9352
5001341-022	JW3492
5001341-022	ND6148
5001341-022	ND8907
5001341-022	M1235
5001341-022	MG5585
5001341-022	ND8436

5001341-022	MG5696
5001341-022	ND8704
5001341-022	JW2284
5001341-022	JW2313
5001341-022	JW2498
5001341-022	JW2541
5001341-022	JW2560
5001341-022	JW2589
5001341-022	JW2639
5001341-022	JW2760
5001341-022	JW2792
5001341-022	M0579
5001341-022	MG2825
5001341-022	MG5477
5001341-022	ND5917
5001341-022	JW1976
5001341-022	JW2653
5001341-022	JW2608
5001341-022	JW2727
5001341-022	JW2764
5001341-022	JW2265
5001341-022	JW2474
5001341-022	JW2396
5001341-022	JW3554
5001341-022	JW2667
5001341-022	MG2302
5001341-022	MG3972
5001341-022	JW3930
5001341-022	ND6749
5001341-022	M1172
5001341-022	JW2104
5001341-022	JW2519
5001341-022	JW2640
5001341-022	JW2517
5001341-022	JW2663

5001341-022	JW2823
5001341-022	M0536
5001341-022	JW2725
5001341-022	MG5917
5001341-022	JW0681
5001341-022	JW0711
5001341-022	JW0740
5001341-022	JW0807
5001341-022	JW1089
5001341-022	JW1362
5001341-022	JW2065
5001341-022	MG2434
5001341-022	MG2846
5001341-022	JW0806
804121	NN9854
804121	NN9024
804121	NN9032
804121	PX5029
804121	NN9050
804121	NS8242
804121	NS8260
804121	PX4273
804121	PX4378
804121	RL0857
804121	RX8763
804121	NS8331
804121	NN9824
804121	MG6979
804121	MG7023
804121	MG7055
804121	RK8914
804121	RL0023
804121	PX4328
804121	RK9008
804121	TG1506

804121	KK8226	831021-003	ND9671	831021-003	NN9557
804121	MG2604	831021-003	ND9684	831021-003	NN9710
804121	NS6691	831021-003	NE0277	831021-003	NS8374
804121	RK8968	831021-003	NE0384	831021-003	NS8770
804121	NN9917	831021-003	NE0396	831021-003	NS9022
804121	RK7824	831021-003	ND6421	831021-003	NS8416
804121	M1343	831021-003	ND6599	831021-003	NS6474
804121	NS6559	831021-003	ND6614	831021-003	ND8912
804121	NS7767	831021-003	ND7847	831021-003	NT0108
804121	NE0363	831021-003	ND8346	831021-003	NS8836
804121	PX3771	831021-003	ND8853	831021-003	NN8310
804121	NN9972	831021-003	ND8915	831021-003	NS8559
804121	RL0460	831021-003	NS8719	5001341-022	JW2313
804121	RK8310	831021-003	NS8838	5001341-022	JW2498
804121	SR2115	831021-003	NT0169	5001341-022	JW2541
804121	TG2826	831021-003	NS9584	5001341-022	JW2560
804121	PX5018	831021-003	ND6445	5001341-022	JW2589
804121	PX5002	831021-003	ND6834	5001341-022	JW2639
831021-003	ND7627	831021-003	ND7467	5001341-022	JW2760
831021-003	ND6890	831021-003	ND8887	5001341-022	JW2792
831021-003	ND7461	831021-003	ND6520	5001341-022	JW4713
831021-003	ND9616	831021-003	NS8611	5001341-022	MG6743
831021-003	NE0413	831021-003	NS7640	5001341-022	ND8924
831021-003	NS8825	831021-003	NN7037	831021-003	ND9177
831021-003	NS6350	831021-003	NN7590	831021-003	ND9496
831021-003	NS7168	831021-003	NN8120	831021-003	NS7894
831021-003	NS7705	831021-003	NN8573	831021-003	NS9072
831021-003	NS7848	831021-003	NN9719	804121	PX3805
831021-003	ND9128	831021-003	NS8784	804121	PX4266
831021-003	ND9541	831021-003	TB6B367		

For Engines Installed on an Airplane

(1) For engines installed on an airplane with affected 1st stage fan blades installed, perform the actions in paragraphs (f)(3) through (f)(6)(ii) of this AD at the next 1st stage fan blade exposure.

For Engines Not Installed on an Airplane, or, for Affected 1st Stage Fan Blades Not Installed in an Engine

(2) For engines not installed on an airplane with affected 1st stage fan blades installed, or, for affected 1st stage fan blades not installed in an engine, paragraph (h) of this AD applies.

1st Stage Fan Blade Check

(3) Check the 1st stage fan blade for a circled, letter I, on the approved marking area of the outboard side of the blade platform. If the blade has this marking, no further action is required.

(4) Remove 1st stage fan blades without a circled, letter I, on the approved marking area of the outboard side of the blade platform, if installed.

(5) Inspect the 1st stage fan blade root thickness. You can find information on inspecting the blade root thickness in PW Engine Manual Section 72-31-02, Inspect-01, and Repair-23.

(6) For 1st stage fan blades that pass the inspection referenced in paragraph (f)(5) of this AD:

(i) Vibropeen the letter I and a circle around that letter, on the approved marking area of the outboard side of the blade platform. You can find information on approved blade marking in the JT9D-7R4 Engine Manual, Section 72-31-02, Typical Repair-13, Mark Repair Codes.

(ii) Return the 1st stage fan blades to service.

Definition

(g) For the purposes of paragraph (f)(1) of this AD, next 1st stage fan blade exposure is:

(1) When any 1st stage fan blade is removed from the engine; or

(2) When the 1st stage fan hub is removed from the engine.

Prohibited Installation

(h) After the effective date of this AD, do not install any 1st stage fan blades listed in Table 1 of this AD on any airplane, unless the actions of this AD have been done to the 1st stage fan blades.

Alternative Methods of Compliance

(i) 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.

Related Information

(j) None.

Issued in Burlington, Massachusetts, on August 24, 2007.

Mark A. Rumizen,

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

[FR Doc. E7-17210 Filed 8-30-07; 8:45 am]