Proposed Rules

Federal Register
Vol. 69, No. 188
Wednesday, September 29, 2004

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 96–ANE–35–AD]

RIN 2120–AA64

Airworthiness Directives; Pratt & Whitney JT8D–200 Series Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede an existing airworthiness directive (AD) for Pratt & Whitney (PW) JT8D–200 series turbofan engines. That AD currently requires installing and periodically inspecting individual or sets of certain part number (P/N) temperature indicators on the No. 4 and 5 bearing compartment scavenge oil tube and performance of any necessary corrective action. This proposed AD would require installing and periodically inspecting two P/N 810486 temperature indicators on all PW JT8D–200 series turbofan engines, including those incorporating high pressure turbine (HPT) containment hardware. This proposed AD results from five uncontained HPT shaft failures out of thirteen HPT shaft fractures. The HPT shafts fractured through the No. 4½ oil return holes due to oil fires within the No. 4 and 5 bearing compartment. We are proposing this AD to prevent oil fires and the resulting fracture of the HPT shaft, which can result in uncontained release of engine fragments; engine fire; in-flight engine shutdown; and possible airplane damage.

DATES: We must receive any comments on this proposed AD by November 29, 2004.

ADDRESSES: Use one of the following addresses to submit comments on this proposed AD:

- By mail: Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 96–ANE–35–AD, 12 New England Executive Park, Burlington, MA 01803–5299.
- By fax: (781) 238–7055.
- By e-mail: *9-ane-adcomment@faa.gov*

You can get the service information identified in this proposed AD from Pratt & Whitney, 400 Main St., East Hartford, CT 06108; telephone (860) 565–7700, fax (860) 565–1605.

You may examine the AD docket 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.*

FOR FURTHER INFORMATION CONTACT: Keith Lardie, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803–5299; telephone (781) 238–7189, fax (781) 238–7199.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to submit any written relevant data, views, or arguments regarding this proposal. Send your comments to an address listed under **ADDRESSES.** Include ''AD Docket No. 96–ANE–35–AD'' in the subject line of your comments. If you want us to acknowledge receipt of your mailed comments, send us a self-addressed, stamped postcard with the docket number written on it; we will date-stamp your postcard and mail it back to you. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the proposed AD. If a person contacts us verbally, and that contact relates to a substantive part of this proposed AD, we will summarize the contact and place the summary in the docket. We will consider all comments received by the closing date and may amend the proposed AD in light of those comments.

We are reviewing the writing style we currently use in regulatory documents. We are interested in your comments on whether the style of this document is clear, and your suggestions to improve the clarity of our communications that affect you. You may get more information about plain language at *http://www.faa.gov/language* and *http://www.plainlanguage.gov.*

Examining the AD Docket

You may examine the AD Docket (including any comments and service information), by appointment, between 8 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays. See **ADDRESSES** for the location.

Discussion

On September 10, 1997, the FAA issued AD 97–19–13, Amendment 39–10134 (62 FR 49135, September 19, 1997). That AD requires installing and periodically inspecting temperature indicators on the No. 4 and 5 bearing compartment scavenge oil tube and performance of any necessary corrective action. That AD resulted from a report of an uncontained turbine failure due to an HPT shaft fracture on an engine that had the containment hardware installed. The HPT shaft fractures were caused by oil fires within the No. 4 and 5 bearing compartment, due to thirteenth stage pressure cooling pressure (PCP) air leaking into the bearing compartment. The PCP air leakage was due to:

- Inner heat shield cracking; or
- No. 5 compartment carbon seal support burn-through.

That condition, if not corrected, could result in uncontained release of engine fragments, engine fire, in-flight engine shutdown, and possible airplane damage.

Actions Since AD 97–19–13 Was Issued

Since that AD 97–19–13 was issued, PW found a new source of thirteenth stage PCP air leakage into the No. 4 and 5 bearing compartments that might lead to compartment oil fires. The source of air leaks into the No. 4 and 5 bearing compartments is from the thirteenth stage PCP air, due to:

- Inner heat shield cracking; or
- No. 5 compartment carbon seal support burn-through; or
- No. 5 carbon seal sticking in the open position.

This air leakage resulted in oil fires, fracturing the HPT shaft through the No. 4½ oil return holes, leading to an uncontained turbine failure. We are

proposing this AD to prevent oil fires and the resulting fracture of the HPT shaft, which can result in uncontained release of engine fragments; engine fire; in-flight engine shutdown; and possible airplane damage.

Relevant Service Information

We have reviewed and approved the technical contents of PW Alert Service Bulletin (ASB) No. 5944, Revision 4, dated April 8, 2004. The ASB describes procedures for installing and inspecting temperature indicator devices on the No. 4 and 5 bearing compartment scavenge tubes on PW JT8D–200 series turbofan engines.

FAA's Determination and Requirements of the Proposed AD

We have evaluated all pertinent information and identified an unsafe condition that is likely to exist or develop on other products of this same type design. We are proposing this AD, which would require installation and inspection of temperature indicator devices on the No. 4 and 5 bearing compartment scavenge tube. The proposed AD would require that you do these actions using the service information described previously.

Costs of Compliance

There are about 2,345 PW JT8D–200 series turbofan engines of the affected design in the worldwide fleet. We estimate that 1,143 engines installed on airplanes of U.S. registry would be affected by this proposed AD. We also estimate that it would take about 1 work hour per engine to perform the proposed actions, and that the average labor rate is $65 per work hour. Required parts would cost about $37 per engine. Based on these figures, we estimate the total cost of the proposed AD to U.S. operators to be $116,586.

Regulatory Findings

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD 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.

For the reasons discussed above, I certify that the proposed regulation:

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. Would 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 proposal 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. 96–ANE–35–AD'' in your request.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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 Federal Aviation Administration (FAA) amends § 39.13 by removing Amendment 39–10134 (62 FR 49135, September 19, 1997) and by adding a new airworthiness directive (AD) to read as follows:

Pratt & Whitney: Docket No. 96–ANE–35–AD. Supersedes AD 97–19–13, Amendment 39–10134.

Comments Due Date

(a) The FAA must receive comments on this AD action by November 29, 2004.

Affected ADs

(b) This AD supersedes AD 97–19–13, Amendment 39–10134.

Applicability

(c) This AD applies to Pratt & Whitney (PW) JT8D–200 series turbofan engines. These engines are installed on, but not limited to, McDonnell Douglas MD–80 series and Boeing 727 series airplanes.

Unsafe Condition

(d) This AD results from five uncontained high pressure turbine (HPT) shaft failures out of thirteen HPT shaft fractures due to oil fires in the No. 4 and 5 bearing compartments. We are proposing this AD to prevent oil fires; fracture of the HPT shaft, which can result in uncontained release of engine fragments; engine fire; in-flight engine shutdown; and possible airplane damage.

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.

Installation of the Dual-Window Temperature Indicators

(f) Install two dual-window temperature indicators on the No. 4 and 5 bearing compartment scavenge oil tubes of PW JT8D–200 series turbofan engines within 90 days after the effective date of this AD. Use paragraph 1.A. of Accomplishment Instructions of PW Alert Service Bulletin (ASB) No. 5944, Revision 4, dated April 8, 2004, to install the temperature indicators.

Initial Visual Inspection of the Dual-Window Temperature Indicators

(g) Perform initial visual inspection of the dual-window temperature indicators installed in paragraph (f) of this AD within 65 hours time-in-service (TIS) since installation.

(1) If the color of any temperature indicator window has turned black, perform troubleshooting, diagnostic testing, and corrective action as required, using paragraph 1.B. of the Accomplishment Instructions of PW ASB No. 5944, Revision 4, dated April 8, 2004.

(2) If one temperature indicator is missing, inspect the remaining temperature indicator. If the remaining temperature indicator has turned black, perform troubleshooting, diagnostic testing, and corrective action as required, using paragraph 1.B. of the Accomplishment Instructions of PW ASB No. 5944, Revision 4, dated April 8, 2004. If the remaining temperature indicator has not turned black, replace the missing temperature indicator as specified in paragraph (f) of this AD, and inspect as specified in paragraph (g) of this AD, prior to returning the engine to service.

(3) If both temperature indicators are missing, remove the engine from service.

(4) Prior to returning the engine to service, replace any temperature indicator that has turned black as specified in paragraph (f) of this AD and inspect as specified in paragraph (g) of this AD.

Repetitive Visual Inspection of the Dual-Window Temperature Indicators

(h) Perform repetitive visual inspections of the dual-window temperature indicators installed in paragraph (f) of this AD within 65 hours TIS since last inspection. Use paragraph (g) of this AD to inspect the temperature indicators.

Material Incorporated by Reference

(i) None.

Related Information

(j) None.

Issued in Burlington, Massachusetts, on September 22, 2004.

Francis A. Favara,

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

[FR Doc. 04–21812 Filed 9–28–04; 8:45 am]

BILLING CODE 4910–13–P