Airworthiness Directives; Boeing Model 747 Series Airplanes Equipped With Pratt & Whitney (PW) JT9D–7Q and JT9D–7Q3 Turbofan Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to certain Boeing Model 747 series airplanes. This proposal would require a detailed visual inspection to detect evidence of wear or contact between the precooler support fitting and link assembly; and rework and reidentification of the fitting. This proposal is prompted by a report of a diffuser case fracture on a PW JT9D–7Q engine due to cracking in the outer pressure wall in the rear skirt area. The actions specified by the proposed AD are intended to prevent contact between the precooler support link and the precooler support fitting, which could contribute to an uncontained failure of the diffuser case and damage to the airplane.

DATES: Comments must be received by June 19, 2000.

ADRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–114, Attention: Rules Docket No. 2000–NM–98–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124–2207. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055–4056.


SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: “Comments to Docket Number 2000–NM–98–AD.” The postcard will be date stamped and returned to the commenter.

Availability of NPRMs


Discussion

In January 1997, the diffuser case on a Pratt & Whitney (PW) JT9D–7Q engine ruptured when the engine was at takeoff power at the beginning of a takeoff roll. The engine was installed on a Boeing Model 747–251 airplane. Both engine side cowls, a precooler, and other hardware were ejected from the engine as a result of the rupture of the diffuser case. The escaping gas and engine debris blew out the engine pylon access panels and created holes, cracks, and other damage to the leading edge, aileron, and flaps of the wing.

The diffuser case fracture was due to a crack that most likely developed in a toolmark that was left by a blending operation adjacent to the dog-bone-shaped embossment at the 11 o’clock circumferential location of the outer pressure wall of the case in the area of the rear skirt. Although extensive investigation of the incident could not determine the source of the vibration that caused the crack to progress in a high-cycle fatigue mode, the investigation did reveal evidence of contact between the precooler support link and the precooler support fitting.

Contact between the precooler support link and the precooler support fitting may result in additional vibration through the mount boss to the case. The additional vibration caused by contact of the support link and the support fitting may have contributed to the propagation of the crack. Such contact between the precooler support link and precooler support fitting, if not corrected, could contribute to an uncontained failure of the diffuser case and damage to the airplane.

Explanation of Relevant Service Information

Boeing has issued Service Letter 747–SL–36–089, dated August 10, 1998, which describes procedures for reworking certain precooler support fittings. Accomplishment of the action specified in the service letter is intended to adequately address the identified unsafe condition.

Explanation of Requirements of Proposed Rule

Since an unsafe condition has been identified that is likely to exist or develop on other products of this same type design, the proposed AD would require a detailed visual inspection to detect evidence of wear or contact between the precooler support fitting and link assembly; and rework and reidentification of the fitting. The rework would be required to be accomplished in accordance with the service letter described previously.

Cost Impact

There are approximately 79 airplanes of the affected design in the worldwide fleet. The FAA estimates that 27 airplanes of U.S. registry would be affected by this proposed AD. It would take approximately 2 work hours per airplane to accomplish the proposed inspection, and that the average labor rate is $60 per work hour. Based on these figures, the cost impact of the proposed inspection on U.S. operators is estimated to be $3,240, or $120 per airplane.

It would take approximately 16 work hours per airplane to accomplish the proposed rework, and that the average labor rate is $80 per work hour. No parts are required to accomplish the rework. Based on these figures, the cost impact of the proposed rework on U.S. operators is estimated to be $7,040, or $28 per airplane.
operators is estimated to be $25,920, or $960 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the proposed requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

Regulatory Impact

The regulations proposed herein 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. Therefore, it is determined that this proposal would not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this 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) if promulgated, 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 copy of the draft regulatory evaluation prepared for this action 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, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend 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:


Applicability: Model 747 airplanes, certificated in any category; equipped with Pratt & Whitney JT9D–7Q and JT9D–7Q3 turbofan engines.

Note 1: This AD applies to each airplane 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 airplanes that have been modified, altered, or repaired so that the perform 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 contact between the precooler support link and the precooler support fitting, which could contribute to an uncontained failure of the diffuser case and damage to the airplane, accomplish the following:

(a) For any precooler support fitting having P/N 65B90924±1 or P/N 65B90924±600 that has not been reworked to the dimensions specified in Boeing Service Letter 747–SL–36–089, dated August 10, 1998: Within 6,000 hours time-in-service after the effective date of this AD, or within 18 months after the effective date of this AD, whichever occurs first, perform a detailed visual inspection to detect evidence of contact wear or contact damage to the airplane, accomplish the following:

1. If no evidence of contact wear or contact between the precooler support fitting and link assembly is found: At the next engine removal, rework the precooler support fitting to the dimensions specified in the service letter, in accordance with the service letter; and permanently and legibly reidentify the support fitting as P/N 65B90924±601.

2. If any evidence of contact wear or contact between the precooler support fitting and link assembly is found: Prior to further flight, rework the precooler support fitting to the dimensions specified in the service letter, in accordance with the service letter; and permanently and legibly reidentify the support fitting as P/N 65B90924±601.

Note 2: For purposes of this AD, a detailed visual inspection is defined as: “An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required.”

(b) For any precooler support fitting having P/N 65B90924±1 or P/N 65B90924±600 that has been reworked to the dimensions specified in Boeing Service Letter 747–SL–36–089, dated August 10, 1998, but has not been permanently and legibly reidentified: Within 6,000 hours time-in-service or 18 months after the effective date of this AD, whichever occurs first, permanently and legibly reidentify the reworked fitting as P/N 65B90924±601.

Alternative Methods of Compliance

(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, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permit

(d) 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 airplane to a location where the requirements of this AD can be accomplished.

Issued in Renton, Washington, on April 27, 2000.

Donald L. Riggin,
Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 00–11064 Filed 5–2–00; 8:45 am]
BILLING CODE 4910–13–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 73
[DA 00–849, MM Docket No. 00–66, RM–9842]

Radio Broadcasting Services; Des Moines, NM

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: The Commission requests comments on a petition filed by Sierra Grande Broadcasting seeking the allotment of Channel 287C to Des Moines, NM, as the community’s first local aural service. Petitioner is requested to provide demographic information showing that Des Moines qualifies as a “community” for allotment purposes. Channel 287C can be allotted to Des Moines in compliance with the Commission’s minimum distance separation requirements without the imposition of a site restriction, at coordinates 36–45–48 NL; 103–50–12 WL.

DATES: Comments must be filed on or before June 5, 2000, and reply comments on or before June 20, 2000.

ADDRESSES: Federal Communications Commission, 445 12th Street, S.W., Room TW–A325, Washington, DC 20554. In addition to filing comments with the FCC, interested parties should provide demographic information showing that Des Moines qualifies as a “community” for allotment purposes.