

[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [64 FR 66370 11/26/99]

[Docket No. 99-NM-125-AD; Amendment 39-11431; AD 99-24-07]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 757 Series Airplanes Equipped with Rolls Royce Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain Boeing Model 757 series airplanes equipped with Rolls Royce RB211 engines, that requires modification of the nacelle strut and wing structure. This amendment is prompted by reports indicating that the actual operational loads applied to the nacelle are higher than the analytical loads that were used during the initial design. Such an increase in loading can lead to fatigue cracking in primary strut structure prior to an airplane's reaching its design service objective. The actions specified by this AD are intended to prevent fatigue cracking in primary strut structure and consequent reduced structural integrity of the strut.

DATES: Effective January 3, 2000.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of January 3, 2000.

ADDRESSES: The service information referenced in this AD may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Rick Kawaguchi, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1153; fax (425) 227-1181.

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 certain Boeing 757 series airplanes was published in the **Federal Register** on August 20, 1999 (64 FR 45483). That action proposed to require modification of the nacelle

strut and wing structure of certain Boeing Model 757 series airplanes equipped with Rolls Royce RB211 engines.

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.

One commenter indicates that it is not affected by the proposed rule.

One commenter states that it plans to accomplish the requirements of the proposed rule.

Conclusion

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.

Cost Impact

There are approximately 394 airplanes of the affected design in the worldwide fleet. The FAA estimates that 176 airplanes of U.S. registry will be affected by this AD, that it will take approximately 1,049 work hours per airplane to accomplish the required modification, and that the average labor rate is \$60 per work hour. This work hour figure includes the time it will take to remove and reinstall the struts from the airplane as well as the time to gain and close access to the adjacent wing structure. Based on these figures, the cost impact of the modification required by this AD on U.S. operators is estimated to be \$11,077,440, or \$62,940 per airplane.

This cost impact figure does not reflect the cost of the terminating actions described in the service bulletins listed in paragraph I.C., Table I, "Strut Improvement Bulletins," on page 6 of Boeing Service Bulletin 757-54-0035, that are required to be accomplished prior to, or concurrently with, the modification of the nacelle strut and wing structure. Since some operators may have accomplished certain modifications on some or all of the airplanes in its fleet, while other operators may not have accomplished any of the modifications on any of the airplanes in its fleet, the FAA is unable to provide a reasonable estimate of the cost of accomplishing the terminating actions described in the service bulletins listed in Table I of the service bulletin.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. However, the FAA has been advised that manufacturer warranty remedies are available for part costs associated with accomplishing the actions required by this proposed AD. Therefore, the future economic cost impact of this rule on U.S. operators may be less than the cost impact figure indicated above.

Regulatory Impact

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:

AIRWORTHINESS DIRECTIVE

Aircraft Certification Service
Washington, DC



U.S. Department
of Transportation
**Federal Aviation
Administration**

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).

99-24-07 BOEING: Amendment 39-11431. Docket 99-NM-125-AD. Issued November 17, 1999.

Applicability: Model 757 series airplanes equipped with Rolls Royce engines, line numbers 1 through 735 inclusive; certificated in any category.

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 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 (b) 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 fatigue cracking in primary strut structure and consequent reduced structural integrity of the strut, accomplish the following:

(a) Modify the nacelle strut and wing structure in accordance with Boeing Service Bulletin 757-54-0035, dated July 17, 1997, at the later of the times specified in paragraph (a)(1) or (a)(2). All of the terminating actions described in the service bulletins listed in paragraph I.C., Table I, "Strut Improvement Bulletins," on page 6 of Boeing Service Bulletin 757-54-0035, must be accomplished in accordance with those service bulletins prior to, or concurrently with, the accomplishment of the modification of the nacelle strut and wing structure required by this paragraph.

(1) Prior to the accumulation of 37,500 total flight cycles, or prior to 20 years since the date of manufacture of the airplane, whichever occurs first.

- (2) Within 3,000 flight cycles after the effective date of this AD.

Alternative Methods of Compliance

(b) 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 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

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

Incorporation by Reference

(d) The modification shall be done in accordance with Boeing Service Bulletin 757-54-0035, dated July 17, 1997. 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 Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

- (e) This amendment becomes effective on January 3, 2000.

FOR FURTHER INFORMATION CONTACT:

Rick Kawaguchi, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1153; fax (425) 227-1181.