[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [65 FR 59703 10/6/2000]

[Docket No. 99-NM-308-AD; Amendment 39-11920; AD 2000-20-09]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 757 Series Airplanes Powered by Pratt & Whitney 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, 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 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 November 13, 2000.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of November 13, 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: Dennis Stremick, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2776; 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 Model 757 series airplanes was published in the **Federal Register** on June 7, 2000 (65 FR 36095). That action proposed to require modification of the nacelle strut and wing structure.

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 supports the proposed rule.

One commenter states that it does not operate Boeing Model 757 series airplanes powered by Pratt & Whitney engines and is not affected by the proposed rule.

Contact Manufacturer for Approval of Repairs

One commenter states that the instructions specified in paragraph (c) of the proposal do not clearly identify who should be contacted if any damage to the airplane structure is found during accomplishment of the modification referenced in the proposal. The commenter states that, based on instructions in Boeing Service Bulletin 757-54-0034, and the fact that the manufacturer is more knowledgeable about the modifications necessary; paragraph (c) should be revised to include contacting the manufacturer for repair of any damage.

The FAA concurs with the commenter's request, however, although Boeing Service Bulletin 757-54-0034 specifies that the manufacturer may be contacted for disposition of certain damage conditions, this AD requires the repair of those conditions to be accomplished in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, or data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative (DER) who has been authorized by the FAA to make such findings. Paragraph (c) of this final rule has been revised to add Boeing DER approval for repairs.

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 with the change previously described. The FAA has determined that this change will neither increase the economic burden on any operator nor increase the scope of the AD.

Cost Impact

There are approximately 317 airplanes of the affected design in the worldwide fleet. The FAA estimates that 278 airplanes of U.S. registry will be affected by this AD.

It will take approximately 800 work hours per airplane to accomplish the required modification of the nacelle strut and wing structure described in Boeing Service Bulletin 757-54-0034, at an average labor rate of $60 per work hour. Required parts will be provided at no cost by the airplane manufacturer. Based on these figures, the cost impact of this required modification on U.S. operators is estimated to be $13,344,000, or $48,000 per airplane.

It will take approximately 26 work hours per airplane to accomplish the actions described in Boeing Service Bulletin 757-54-0027, Revision 1, at an average labor rate of $60 per work hour. Required parts will be provided at no cost by the airplane manufacturer. Based on these figures, the cost impact of these required actions on U.S. operators is estimated to be $433,680, or $1,560 per airplane.

It will take approximately 90 work hours per airplane to accomplish the actions described in Boeing Service Bulletin 757-54-0036, at an average labor rate of $60 per work hour. Required parts will be provided at no cost by the airplane manufacturer. Based on these figures, the cost impact of these required actions on U.S. operators is estimated to be $1,501,200, or $5,400 per airplane.

The cost impact figures discussed above are 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. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

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

We post ADs on the internet at "av-info.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).

2000-20-09 BOEING: Amendment 39-11920. Docket 99-NM-308-AD.

Applicability: Model 757 series airplanes powered by Pratt & Whitney 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 (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: 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:

Modifications

(a) Modify the nacelle strut and wing structure on both the left and right sides of the airplane, in accordance with Boeing Service Bulletin 757-54-0034, dated May 14, 1998, at the later of the times specified in paragraph (a)(1) or (a)(2) of this AD.

(1) Prior to the accumulation of 37,500 total flight cycles, or within 20 years since the date of manufacture, whichever occurs first. Use of the optional threshold formula described in paragraph I.D. of the service bulletin is an acceptable alternative to the 20-year threshold.

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

(b) Prior to or concurrently with the accomplishment of the modification of the nacelle strut and wing structure required by paragraph (a) of this AD; as specified in paragraph I.D., Table I, “Strut Improvement Bulletins,” on page 5 of Boeing Service Bulletin 757-54-0034, dated May 14, 1998; accomplish the actions specified in Boeing Service Bulletin 757-54-0027, Revision 1, dated October 27, 1994, and Boeing Service Bulletin 757-54-0036, dated May 14, 1998, as applicable, in accordance with those service bulletins.

Repair

(c) If any damage to airplane structure is found during the accomplishment of the modification required by paragraph (a) of this AD; and the service bulletin specifies to contact Boeing for appropriate action: Prior to further flight, repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering

Representative (DER) who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the approval letter must specifically reference this AD.

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, Seattle ACO. 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

(e) 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

(f) Except as provided by paragraph (c) of this AD, the actions shall be done in accordance with Boeing Service Bulletin 757-54-0034, dated May 14, 1998; Boeing Service Bulletin 757-54-0027, Revision 1, dated October 27, 1994; and Boeing Service Bulletin 757-54-0036, dated May 14, 1998; as applicable. 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.

Effective Date

(g) This amendment becomes effective on November 13, 2000.

FOR FURTHER INFORMATION CONTACT: Dennis Stremick, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2776; fax (425) 227-1181.

Issued in Renton, Washington, on September 28, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.