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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2000-NM-376-AD; Amendment 39-13666; AD 2004-12-07]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 757 Series Airplanes Equipped With Rolls Royce RB211 Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to certain Boeing Model 757 series airplanes equipped with Rolls Royce RB211 engines, that currently requires modification of the nacelle strut and wing structure. This amendment requires, for certain airplanes, repetitive detailed inspections of certain aft bulkhead fasteners for loose or missing fasteners, and corrective action if necessary. For certain other airplanes, this amendment requires a one-time detailed inspection of the middle gusset of the inboard side load fitting for proper alignment and realignment if necessary; a one-time eddy current inspection of certain fastener holes for cracking, and repair if necessary; and a detailed inspection of certain fasteners for loose or missing fasteners; and replacement with new fasteners if necessary. The actions specified by this AD are intended to prevent fatigue cracking in primary strut structure and consequent reduced structural integrity of the strut. These actions are intended to address the identified unsafe condition.

DATES: Effective July 21, 2004.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of July 21, 2004.

ADDRESSES: The service information referenced in this AD may be obtained from Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124-2207. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; 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: Dennis Stremick, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 917-6450; fax (425) 917-6590.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by superseding AD 99-24-07, amendment 39-11431 (64 FR 66370, November 26, 1999), which is applicable to certain Boeing Model 757 series airplanes equipped with Rolls Royce RB211 engines, was published as a supplemental Notice of Proposed Rulemaking in the Federal Register on April 15, 2003 (68 FR 18170). The action proposed to continue to require modification of the nacelle strut and wing structure. The action proposed to require, for certain airplanes, repetitive detailed inspections of certain aft bulkhead fasteners for loose or missing fasteners, and corrective action if necessary. For certain other airplanes, the action proposed to require a one-time detailed inspection of the middle gusset of the inboard side load fitting for proper alignment and realignment if necessary; a one-time eddy current inspection of certain fasteners holes for cracking; and repair if necessary; and a detailed inspection of certain fasteners for loose or missing fasteners; and replacement with new fasteners if necessary. Additionally, the action proposed to require that certain actions specified in Boeing Service Bulletin 757-54-0035, Revision 2, dated June 13, 2002 (specified in the supplemental NPRM as one of the appropriate sources of service information), be done using Boeing-supplied tools.

Request for 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.

Comments Received That Resulted in Changes to the AD

Requests To Extend Repetitive Inspection Interval

Several commenters request that the repetitive inspection interval of every six months proposed by paragraph (b) of the supplemental NPRM be extended. Two commenters state that repetitive inspection intervals of every 3,000 flight cycles would be less of a burden for the operators. Another commenter advises that the airplane manufacturer's intent was to require repetitive inspections every 12,000 flight cycles or 72 months, whichever occurs first.

The FAA concurs that the repetitive inspection interval may be extended somewhat. We understand that the manufacturer has recommended an interval of every 12,000 flight cycles or 72 months. However, we have recently received reports of field experience that show the fasteners can loosen in less than 72 months. Therefore, we have revised paragraph (b) of the AD to specify a repetitive inspection interval not to exceed 6,000 flight cycles or 36 months, whichever occurs first.

Requests To Clarify Paragraph (f) of the Supplemental NPRM

One commenter states that the way the supplemental NPRM is written, it would require the actions specified in paragraph (f) of the supplemental NPRM to be accomplished after each repetitive inspection required by paragraph (b) of the supplemental NPRM. Two commenters request that the supplemental NPRM be revised to clearly specify that accomplishment of the requirements of paragraph (f) of the supplemental NPRM is terminating action.

We agree with the need to clarify paragraph (f) of the supplemental NPRM. The requirements of paragraph (f) of the AD (to increase the diameter of the fastener holes and to install new fasteners) apply to those airplanes on which the actions specified in paragraph (d) of the AD have been accomplished. We have revised paragraph (f) of the AD to reflect that clarification. Additionally, we

agree that the actions specified in paragraph (f) of this AD terminates the repetitive inspection requirements of this AD. We have revised the AD accordingly.

Comments Received That Resulted in No Change to the Supplemental NPRM

Requests To Withdraw Rulemaking Until New Service Information Is Issued

Several commenters request that the supplemental NPRM be withdrawn and that, instead, new rulemaking be proposed to specify that the initial inspection specified in paragraph (b) of the supplemental NPRM be accomplished within 90 days after the release of a new Boeing service bulletin (Boeing Alert Service Bulletin 757-54A0047). The commenters state that using the new service information would simplify and clarify the actions proposed in the supplemental NPRM.

We do not agree that this AD should be withdrawn. We have not reviewed or approved new service information specified by the commenters. In this case, we find that to withdraw this AD and initiate new proposed rulemaking (providing for public opportunity to comment) would significantly delay the rulemaking process and would be inappropriate in light of the identified unsafe condition. Therefore, no change is necessary to the AD in this regard. In the future, if the manufacturer elects to provide new service information, the service information can be evaluated and approved in accordance with paragraph (h) of this AD.

Request To Extend Compliance Time of Paragraph (b) of the Supplemental NPRM

One commenter requests that, for airplanes that have completed the modification specified in Boeing Service Bulletin 757-54-0035, the compliance time specified in paragraph (b) of the supplemental NPRM be extended. The commenter states that the compliance time should be extended because the previous modification was done on those airplanes in a shop environment.

We do not agree that extending the compliance time specified in paragraph (b) of this AD is necessary. The requirements of paragraph (b) of this AD apply only to airplanes that have not been modified per Boeing Service Bulletin 757-54-0035. Therefore, no change is necessary in this regard to the AD.

Requests To Revise Inspection Method for Loose or Missing Fasteners

Two commenters request that a method of inspecting for loose or missing fasteners without the engine in place be specified. The commenters state that the inspection method specified in the supplemental NPRM is burdensome to accomplish with the engine in place.

We do not agree with the commenters' request. Since the manufacturer has not provided us with service information describing such a method of inspection, we have not reviewed and approved such an inspection method. However, under the provisions of paragraph (h) of the AD, we may approve requests for an alternative inspection method if data are submitted to substantiate that such an alternative inspection method would provide an acceptable level of safety.

Request for an Alternative Inspection Method

One commenter, the manufacturer, requests that a simple gap check be performed with a feeler or wire gage in lieu of the inspection in paragraph (c) of the supplemental NPRM. The commenter explains that this can be done with the strut still installed, which is described in Boeing Service Bulletin 757-54-0035, Revision 2. The commenter further recommends that a minimum gap of 0.030 inch be maintained between the middle gusset on the inboard side load fitting and the strut clevis lug.

We do not agree with permitting such an alternative method of inspection at this time, since the gap check has not been sufficiently defined for us to review and approve. However, under the

provisions of paragraph (h) of the AD, we may approve requests for an alternative inspection method if data are submitted to substantiate that such an alternative method would provide an acceptable level of safety.

Request To Use Alternative Method of Oversizing Holes

One commenter requests approval for using procedures to oversize holes specified in the Structural Repair Manual (SRM) in lieu of using Boeing-supplied tools specified in paragraph (g) of the supplemental NPRM. The commenter notes that there is a limited supply of those tools.

We do not agree with the commenter's request. In certain cases, operator supplied tools have contributed to unsafe conditions. However, under the provisions of paragraph (h) of the AD, we may approve requests for an alternative method of oversizing holes if data are submitted to substantiate that such a method to oversize holes would provide an acceptable level of safety.

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

Change to the Code of Federal Regulations

On July 10, 2002, the FAA issued a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs the FAA's airworthiness directives system. The regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance. Because we have now included this material in part 39, only the office authorized to approve AMOCs is identified in each individual AD. However, for clarity and consistency in this AD, we have retained the language of the supplemental NPRM regarding that material.

Change to Labor Rate Estimate

We have reviewed the figures we have used over the past several years to calculate AD costs to operators. To account for various inflationary costs in the airline industry, we find it necessary to increase the labor rate used in these calculations from $60 per work hour to $65 per work hour. The cost impact information, below, reflects this increase in the specified hourly labor rate.

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.

The modification that is currently required by AD 99-24-07 takes approximately 1,049 work hours per airplane to accomplish, at an average labor rate of $65 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 required to gain and close access to the adjacent wing structure. Based on these figures, the cost impact of the currently required modification on U.S. operators is estimated to be $12,000,560, or $68,185, 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 7 of Revision 2 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 the fleet, while other operators may not have accomplished any of the modifications on any of the airplanes in the 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.

It will take approximately 1 work hour per airplane to accomplish the new detailed inspection of the middle gusset, at an average labor rate of $65 per work hour. Based on these figures, the cost impact of the inspection required by this AD is estimated to be $11,440, or $65 per airplane.

It will take approximately 8 work hours per airplane to accomplish the new fastener removal and eddy current inspection, at an average labor rate of $65 per work hour. Based on these figures, the cost impact of the removal and inspection required by this AD is estimated to be $91,520, or $520 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 removing amendment 39-11431 (64 FR 66370, November 26, 1999), and by adding a new airworthiness directive (AD), amendment 39-13666, to read as follows:

AIRWORTHINESS DIRECTIVE

Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
Federal Aviation
Administration

We post ADs on the internet at "www.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).

2004-12-07 Boeing: Amendment 39-13666. Docket 2000-NM-376-AD. Supersedes AD 99-24-07, Amendment 39-11431.

Applicability: Model 757 series airplanes equipped with Rolls Royce RB211 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 (AMOC) in accordance with paragraph (h)(1) 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:

Restatement of Requirements of AD 99-24-07

Modification

(a) Modify the nacelle strut and wing structure according to Boeing Service Bulletin 757-54-0035, dated July 17, 1997; Revision 1, dated April 15, 1999; or Revision 2, dated June 13, 2002, at the later of the times specified in paragraph (a)(1) or (a)(2) of this AD. All of the terminating actions described in the service bulletins and listed in paragraph I.C., Table I, "Strut Improvement Bulletins," on page 6 of Boeing Service Bulletin 757-54-0035, on page 7 of Revision 1 of the service bulletin, and on Page 7 of Revision 2 of the service bulletin, as applicable, must be accomplished according to those service bulletins prior to, or concurrently with, the accomplishment of the modification of the nacelle strut and wing structure required by this paragraph. After the effective date of this AD, use only Revision 2 of the service bulletin.

(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 January 3, 2000 (the effective date of AD 99-24-07, amendment 39-11431).

New Requirements of This AD

Inspections/Corrective Actions

(b) For airplanes on which the modification required by paragraph (a) of this AD has not been done according to Boeing Service Bulletin 757-54-0035, dated July 17, 1997: Before the accumulation of 15,000 total flight cycles, or within 6 months after the effective date of this AD, whichever is later, do a detailed inspection of the 20 aft bulkhead fasteners of the lower spar fitting for loose or missing fasteners, according to a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA. Before further flight, replace any loose or missing fasteners with new fasteners according to Boeing Service Bulletin 757-54-0035, Revision 1, dated April 15, 1999; or Revision 2, dated June 13, 2002, excluding Evaluation Form. Repeat the inspection thereafter at intervals not to exceed 6,000 flight cycles or 36 months, whichever occurs first. Accomplishment of the actions required by paragraph (a) of this AD constitutes terminating action for the requirements of this paragraph.

Note 2: The 20 aft bulkhead fasteners are located in Panel 7 at Locations 36, 37, and 41. The number of fasteners at Location 37 has increased from 2 to 8 fasteners. Figure 30 of Boeing Service Bulletin 757-54-0035, Revision 2, dated June 13, 2002, illustrates the location of the fasteners.

Note 3: For the purposes of this AD, a detailed 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."

(c) For airplanes on which the modification required by paragraph (a) of this AD has been done according to Boeing Service Bulletin 757-54-0035, dated July 17, 1997: Within 15,000 flight cycles after doing the modification required by paragraph (a) of this AD, or within 3 years after the effective date of this AD, whichever is later; do a one-time detailed inspection of the middle gusset of the inboard side load fitting for proper alignment, according to Part II of the Accomplishment Instructions of Boeing Service Bulletin 757-54-0035, Revision 1, dated April 15, 1999; or Revision 2, dated June 13, 2002, excluding Evaluation Form. If the gusset is not aligned properly, before further flight, machine the gusset to the specified angle according to the service bulletin.

(d) Before further flight after doing paragraph (c) of this AD, do the actions required by paragraphs (d)(1) and (d)(2) of this AD.

(1) Remove the aft bulkhead fasteners of the lower spar fitting and do a one-time eddy current inspection of those fastener holes for cracking, according to Part V of the Accomplishment Instructions of Boeing Service Bulletin 757-54-0035, Revision 1, dated April 15, 1999; or Revision 2, dated June 13, 2002, excluding Evaluation Form.

(2) Do a detailed inspection of the 8 fasteners of the lower spar fitting for loose or missing fasteners, according to a method approved by the Manager, Seattle ACO. Before further flight, replace any loose or missing fasteners with new fasteners according to Boeing Service Bulletin 757-54-0035, Revision 1, dated April 15, 1999; or Revision 2, dated June 13, 2002, excluding Evaluation Form.

Note 4: The 8 fasteners are located in Panel 7 at Location 37. The number of fasteners at Location 37 has increased from 2 to 8 fasteners. Figure 30 of Boeing Service Bulletin 757-54-0035, Revision 2, dated June 13, 2002, excluding Evaluation Form, illustrates the location of the fasteners.

(e) If any cracking is found during any inspection required by this AD: Before further flight, repair according to a method approved by the Manager, Seattle ACO; or according to data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative 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 Manager's approval letter must specifically reference this AD.

(f) If no cracking is found during the inspection required by paragraph (d) of this AD, before further flight, increase the diameter of the fastener holes and install new fasteners according to Boeing Service Bulletin 757-54-0035, Revision 2, dated June 13, 2002, excluding Evaluation Form.

(g) Except as identified in Figures 3 and 5 of the Accomplishment Instructions of Boeing Service Bulletin 757-54-0035, Revision 2, dated June 13, 2002, excluding Evaluation Form, the actions must be done using Boeing-supplied tools.

Alternative Methods of Compliance

(h)(1) An AMOC 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.

(2) AMOCs, approved previously in accordance with AD 99-24-07, amendment 39-11431, are approved as AMOCs with paragraph (a) of this AD.

Note 5: Information concerning the existence of approved AMOCs with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permit

(i) 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

(j) Unless otherwise specified, the actions shall be done in accordance with Boeing Service Bulletin 757-54-0035, Revision 1, dated April 15, 1999; or Boeing Service Bulletin 757-54-0035, Revision 2, dated June 13, 2002. 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 Airplanes, 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 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*.

Effective Date

(k) This amendment becomes effective on July 21, 2004.

Issued in Renton, Washington, on May 25, 2004.
Kalene C. Yanamura,
Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.
[FR Doc. 04-13144 Filed 6-15-04; 8:45 am]
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