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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2004-19753; Directorate Identifier 2002-NM-264-AD; Amendment 39-14104; AD 2005-11-02]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 767-200, -300, and -300F Series Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is superseding an existing airworthiness directive (AD), which applies to certain Boeing Model 767-200, -300, and -300F series airplanes. That AD currently requires inspections for fatigue cracking of the horizontal stabilizer pivot bulkhead, and repetitive inspections or other follow-on actions. That action also provides a permanent repair, which is optional for airplanes with no cracks, and, if accomplished, ends the repetitive inspections. For airplanes on which the permanent repair is not installed, this new AD requires repetitive inspections of the same and additional inspection locations at new inspection intervals; a one-time torque test; and related investigative and corrective actions. For airplanes on which the permanent repair is installed, this new AD would require repetitive inspections of the repaired area and, if necessary, corrective action. This AD is prompted by reports of loose tension bolts and crack indications in the fuselage skin. We are issuing this AD to find and fix fatigue cracking of the horizontal stabilizer pivot bulkhead and adjacent structure, which could result in loss of the horizontal stabilizer.

DATES: This AD becomes effective July 1, 2005.

The incorporation by reference of Boeing Alert Service Bulletin 767-53A0078, Revision 3, dated November 15, 2001; and Boeing Alert Service Bulletin 767-53A0078, Revision 4, dated September 26, 2002, as listed in the AD is approved by the Director of the Federal Register as of July 1, 2005.

On May 24, 2001 (66 FR 23538, May 9, 2001), the Director of the Federal Register approved the incorporation by reference of Boeing Service Bulletin 767-53-0078, Revision 2, dated April 19, 2001.

ADDRESSES: For service information identified in this AD, contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124-2207.

Docket: The AD docket contains the proposed AD, comments, and any final disposition. You can examine the AD docket on the Internet at <http://dms.dot.gov>, or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal

holidays. The Docket Management Facility office (telephone (800) 647-5227) is located on the plaza level of the Nassif Building at the U.S. Department of Transportation, 400 Seventh Street SW., room PL-401, Washington, DC. This docket number is FAA-2004-19753; the directorate identifier for this docket is 2002-NM-264-AD.

FOR FURTHER INFORMATION CONTACT: Suzanne Masterson, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 917-6441; fax (425) 917-6590.

SUPPLEMENTARY INFORMATION: The FAA proposed to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) with an AD to supersede AD 2001-09-13, amendment 39-12220 (66 FR 23538, May 9, 2001). The existing AD applies to certain Boeing Model 767-200, -300, and -300F series airplanes. The proposed AD was published in the Federal Register on December 1, 2004 (69 FR 69838). That action proposed to require, for airplanes on which the permanent repair is not installed, repetitive inspections of the same and additional inspection locations at new inspection intervals; a one-time torque test; and related investigative and corrective actions. For airplanes on which the permanent repair is installed, that action proposed to require repetitive inspections of the repaired area and, if necessary, corrective action.

Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the comments that have been submitted on the proposed AD.

Request To Revise Compliance Time

Two commenters request that we revise the compliance language in paragraph (n) of the proposed AD to specify that the earlier-occurring threshold determines the compliance time.

We agree that we inadvertently omitted the phrase "whichever occurs first" in paragraph (n)(1). We have revised the final rule accordingly.

Request To Include Grace Period

One commenter, an operator, requests that we revise paragraph (n) of the proposed AD to add a grace period to the inspection threshold. The commenter reports that some of its airplanes could exceed the proposed thresholds and would consequently be grounded as of the effective date of the AD. The commenter recommends a grace period of 18 months.

We agree with the request. A substantial portion of the Model 767 fleet has accumulated more than 25,000 total flight cycles, and the cited service bulletin (767-53A0078) for this AD was originally issued October 15, 1998—more than 72 months ago. Therefore, some airplanes indeed could have already exceeded the thresholds in proposed paragraph (n). We find that an 18-month grace period will provide an acceptable level of safety. We have revised the final rule accordingly by adding the grace period in new paragraph (n)(3).

Request To Clarify Certain Requirements

One commenter, an operator, has no objections to the proposed AD but notes a potential discrepancy in certain requirements. The commenter states that paragraphs (l)(1)(ii) and (o) of the proposed AD would require inspection of airplanes that meet certain criteria in the service bulletin but does not specify any requirement for airplanes that do not meet those criteria. The commenter requests that we clarify the proposed AD to address this case.

We agree that clarification might be necessary. Paragraph (l)(1)(i) of this AD is required for all airplanes; paragraph (l)(1)(ii) is an additional action for certain airplanes. Cracking cannot be reliably detected—using the inspections in paragraph (l)—at critical fastener locations hidden by external doublers, rub strips, or wear plates; therefore, the open-hole high frequency eddy current (HFEC) inspections are required only for those airplanes that meet those criteria. For those airplanes, the open-hole HFEC inspections are required in addition to the surface inspections (HFEC, low frequency eddy current, and detailed visual inspections) required by paragraph (l) of this AD. We have revised paragraphs (l)(1)(ii) and (o) of this final rule to include this information for clarification.

Request To Add Authorized Representative

One commenter requests a revision to the section titled "Difference Between the Proposed AD and the Service Bulletin" in the preamble of the proposed AD. The commenter requests that we include a reference to the Boeing Airworthiness Representative (AR) in addition to the Designated Engineering Representative (DER).

We partially agree with the request. All active Boeing Company DERs on the Model 767 fleet have been converted to ARs. Although the referenced section of the preamble is not restated in a final rule, we have replaced the DER reference in paragraph (p)(3) of this final rule.

Request for Reformatting

One commenter requests that we revise certain formatting for the paragraph designations in the proposed AD. Specifically, in the proposed requirement to "[d]o all the actions in paragraph (l)(1)," the commenter notes the potential confusion between the lower case letter "L" and the numeral "1," and suggests that using italics could help the reader differentiate between the two forms.

We agree that certain paragraph designations might be difficult to distinguish. However, the Federal Register, which is the medium for notifying the public of official agency actions (including ADs), establishes the formatting requirements for regulations. The proposed AD followed those formatting requirements. We have not changed the final rule regarding this issue.

Explanation of Additional Changes to Proposed AD

We have identified the inspections in paragraph (l)(1) in this final rule as "detailed" and "special detailed" inspections. New Note 3 in this final rule defines a special detailed inspection.

Boeing has received a Delegation Option Authorization (DOA). We have revised this final rule to delegate the authority to approve an alternative method of compliance for any repair required by this AD to the Authorized Representative for the Boeing DOA Organization rather than the Designated Engineering Representative (DER).

Conclusion

We have carefully reviewed the available data, including the comments that have been submitted, and determined that air safety and the public interest require adopting the AD with the changes described previously. We have determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Costs of Compliance

This AD will affect about 699 airplanes worldwide. The following table provides the estimated costs for U.S. operators to comply with this AD.

ESTIMATED COSTS

| Action | Work hours | Average labor rate per hour | Parts | Cost per airplane | Number of U.S.-registered air-planes |
|--|------------|-----------------------------|-------|------------------------------|---|
| Inspection (required by AD 2001-09-13). | 1 | \$65 | None | \$65 (per inspection cycle) | 287. |
| Inspection and torque check (new action). | 4 | 65 | None | \$260 (per inspection cycle) | 287. |
| Post-modification inspection (new action). | 6 | 65 | None | \$390 | Unknown (for those with permanent repair per this AD or AD 2001-09-13). |

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

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

For the reasons discussed above, I certify that this AD:

- (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.

We prepared a regulatory evaluation of the estimated costs to comply with this AD. See the ADDRESSES section for a location to examine the regulatory evaluation.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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 FAA amends § 39.13 by removing amendment 39-12220 (66 FR 23538, May 9, 2001), and by adding the following new airworthiness directive (AD):

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).

2005-11-02 Boeing: Amendment 39-14104. Docket No. FAA-2004-19753; Directorate Identifier 2002-NM-264-AD.

Effective Date

- (a) This AD becomes effective July 1, 2005.

Affected ADs

- (b) This AD supersedes AD 2001-09-13, amendment 39-12220.

Applicability

(c) This AD applies to Boeing Model 767-200, -300, and -300F series airplanes, as listed in Boeing Alert Service Bulletin 767-53A0078, Revision 4, dated September 26, 2002; certificated in any category.

Unsafe Condition

(d) This AD was prompted by reports of loose tension bolts and crack indications in the fuselage skin. We are issuing this AD to find and fix fatigue cracking of the horizontal stabilizer pivot bulkhead and adjacent structure, which could result in loss of the horizontal stabilizer.

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.

Requirements of AD 2001-09-13, Restated

Initial Inspections

(f) Prior to the accumulation of 8,000 total flight cycles, or within 90 days after May 24, 2001 (the effective date of AD 2001-09-13), whichever occurs later, perform detailed, surface high frequency eddy current (HFEC), and low frequency eddy current (LFEC) inspections, as applicable, for cracking of the forward and aft outer chord, aft mid chord, and upper and lower intercostals of the Station 1809.5 bulkhead. Do the inspections per Boeing Service Bulletin 767-53-0078, Revision 2, dated April 19, 2001; or Boeing Alert Service Bulletin 767-53A0078, Revision 3, dated November 15, 2001.

Note 1: For the purposes of this AD, a detailed inspection is: "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."

Repetitive Inspections

(g) For areas where no cracking is found during the inspection per paragraph (f) of this AD: Repeat the inspections in paragraph (f) thereafter at the intervals specified in paragraphs (g)(1) and (g)(2) of this AD, per Boeing Service Bulletin 767-53-0078, Revision 2, dated April 19, 2001; or Boeing Alert Service Bulletin 767-53A0078, Revision 3, dated November 15, 2001; until paragraph (i), (l)(1), or (m) of this AD has been done.

(1) Repeat the detailed inspection every 3,000 flight cycles, or 18 months, whichever comes first.

(2) Repeat the surface HFEC and LFEC inspections every 6,000 flight cycles or 36 months, whichever comes first.

Repair and Follow-On Actions

(h) If any cracking is found during any inspection required by paragraph (f) or (g) of this AD, before further flight, repair per paragraph (h)(1) or (h)(2) of this AD, as applicable.

(1) For cracking of the aft outer chord, aft mid chord, or any intercostal: Repair per a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA. 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.

(2) For cracking of the forward outer chord: Repair per Boeing Service Bulletin 767-53-0078, Revision 2, dated April 19, 2001; Boeing Alert Service Bulletin 767-53A0078, Revision 3, dated November 15, 2001; or Revision 4, dated September 26, 2002; except as provided by paragraph (j) of this AD. Procedures for repair include open-hole HFEC inspections for cracking of certain fastener holes of the chord and longeron fitting, detailed inspections for cracking of adjacent structure, and installation of new chords, splices, fairings, and brackets. If the time-limited repair is done per the service bulletin, do a detailed inspection of the repaired area within 1,500 flight cycles or 9 months after installation of the temporary repair, whichever comes first, and do paragraph (h)(2)(i) or (h)(2)(ii) of this AD, per the service bulletin. As of the effective date of this AD, inspect only in accordance with Boeing Alert Service Bulletin 767-53A0078, Revision 4, dated September 26, 2002.

(i) If no cracking is found during the inspection of the repaired area: Within 3,000 flight cycles or 18 months after installation of the time-limited repair, whichever comes first, do paragraph (i), "Permanent Repair," of this AD.

(ii) If any cracking is found during the inspection of the repaired area: Before further flight, do paragraph (i), "Permanent Repair," of this AD.

Permanent Repair

(i) Except as provided by paragraph (j) of this AD, installation of the permanent repair of the forward outer chord, including accomplishment of all actions specified in Part 4 of the Accomplishment Instructions of Boeing Service Bulletin 767-53-0078, Revision 2, dated April 19, 2001; Boeing Alert Service Bulletin 767-53A0078, Revision 3, dated November 15, 2001; or Boeing Alert Service Bulletin 767-53A0078, Revision 4, dated September 26, 2002; terminates the repetitive inspections required by paragraph (g) of this AD. As of the effective date of this AD, install the permanent repair only in accordance with Boeing Alert Service Bulletin 767-53A0078, Revision 4, dated September 26, 2002.

Note 2: Installation of the permanent repair before the effective date of this AD in accordance with Boeing Service Bulletin 767-53-0078, dated October 15, 1998; Revision 1, dated September 9, 1999; is acceptable for compliance with paragraph (i) of this AD.

Exception To Repair Instructions

(j) For repairs of the forward outer chord: Where the service bulletin specifies to ask Boeing for repair data, repair per a method approved by the Manager, Seattle ACO, or per 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 repair must meet the certification basis of the airplane, and the Manager's approval letter must specifically reference this AD.

New Requirements of This AD

Initial and Repetitive Inspections, and Torque Test for Airplanes Without the Permanent Repair

(k) For airplanes that have not had the permanent repair installed in accordance with paragraph (i) of this AD, at the later of the times in paragraphs (k)(1) and (k)(2) of this AD, do all the actions in paragraph (l) of this AD.

(1) Within 3,000 flight cycles or 18 months after the effective date of this AD, whichever occurs first.

(2) Prior to the accumulation of 8,000 total flight cycles.

(l) Do all the actions in paragraphs (l)(1) and (l)(2) of this AD in accordance with "Part 1– Inspection" of the Accomplishment Instructions of Boeing Alert Service Bulletin 767-53A0078, Revision 4, dated September 26, 2002.

(1) Do a detailed inspection and applicable special detailed inspections (i.e., using LFEC and HFEC methods) for cracking of the forward and aft outer chord, splice fitting, aft mid chord, aft intercostal, tension fitting, and fuselage skin, and repeat the applicable inspections at the applicable time in paragraph (l)(1)(i) and (l)(1)(ii) of this AD. This inspection terminates the repetitive inspections required by paragraphs (f) and (g) of this AD.

Note 3: For the purposes of this AD, a special detailed inspection is: "An intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. The examination is likely to make extensive use of specialized inspection techniques and/or equipment. Intricate cleaning and substantial access or disassembly procedure may be required."

(i) Repeat the inspections, except for the open-hole inspections, at intervals not to exceed 3,000 flight cycles until the permanent repair in paragraph (m)(2) of this AD has been done.

(ii) For airplanes that meet the criteria in flag note 1 of Figure 1 of Boeing Alert Service Bulletin 767-53A0078, Revision 4, dated September 26, 2002 (close ream fasteners, external doubler, rub strip, or wear plate installed): Repeat the open-hole HFEC inspections for cracking of the forward outer chord, splice fitting, tension fitting, and fuselage skin in Step 7, Figure 2, of the service bulletin at intervals not to exceed 9,000 flight cycles until the permanent repair in paragraph (m)(2) of this AD has been done. The open-hole HFEC inspections are required in addition to the surface inspections (HFEC, LFEC, and detailed visual inspections) required by paragraph (l)(1)(i) of this AD.

(2) Do a one-time torque test and related investigative and corrective actions of the tension bolt at lower stringer 12A. If any corrosion or damage is found in the bolt hole, and the service bulletin specifies to contact Boeing for appropriate action: Before further flight, repair per a method approved

by the Manager, Seattle Aircraft Certification Office (ACO), FAA; or per data meeting the type certification basis of the airplane approved by an Authorized Representative for the Boeing Delegation Option Authorization Organization who has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

Corrective Actions

(m) If any cracking is found during any inspection required by paragraph (l), (n) and (o) of this AD, before further flight, repair in accordance with paragraph (m)(1) or (m)(2) of this AD, as applicable.

(1) For cracks found during the inspection required by paragraph (n) or (o) of this AD, or for cracks found in the aft outer chord, tension fitting, splice fitting, aft mid chord, or any intercostal: Before further flight, repair per a method approved by the Manager, Seattle ACO; or per data meeting the type certification basis of the airplane approved by an Authorized Representative for the Boeing Delegation Option Authorization Organization who has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(2) For cracks in the forward outer chord: Prior to further flight, do the time limited repair in paragraph (h)(2) of this AD, or do the permanent repair in paragraph (i) of this AD. If the time limited repair is done, do the other applicable actions in paragraph (h)(2) of this AD at the times specified in that paragraph. As of the effective date of this AD, only repairs done per Boeing Alert Service Bulletin 767-53A0078, Revision 4, dated September 26, 2002, are acceptable for compliance with the requirements of this paragraph.

Repetitive Inspection of Repaired Area

(n) For any airplane on which the permanent repair in paragraph (i) or (m)(2) of this AD is installed, at the latest of the times in paragraphs (n)(1), (n)(2), and (n)(3) of this AD: Do detailed, LFEC, and applicable HFEC inspections of the forward and aft outer chords, tension fitting, splice fitting, and splice angle for cracks; and a detailed inspection of the aft mid chord and aft upper and lower intercostals for cracks. Do the inspections in accordance with "Part 6—After Modification or After-Repair Inspection Program" of the Accomplishment Instructions of Boeing Alert Service Bulletin 767-53A0078, Revision 4, dated September 26, 2002. Repeat each inspection, except as provided by paragraph (o) of this AD, thereafter at intervals not to exceed 6,000 flight cycles, or 36 months, whichever occurs first.

(1) Within 12,000 flight cycles or 72 months, whichever occurs first, after the repair accomplished in accordance with paragraph (i) or (m)(2) of this AD.

(2) Prior to the accumulation of 25,000 total flight cycles.

(3) Within 18 months after the effective date of this AD.

(o) For any airplane on which the permanent repair in paragraph (i) or (m)(2) of this AD is installed, and that meets the criteria (close ream fasteners, external doubler, rub strip or wear plate installed) in flag note 1 of Figure 9 of Boeing Alert Service Bulletin 767-53A0078, Revision 4, dated September 26, 2002: After the initial inspection in paragraph (n) of this AD, repeat the open-hole HFEC inspection in Step 7 of Figure 10 of the service bulletin, at intervals not to exceed 12,000 flight cycles, or 72 months, whichever occurs first. The open-hole HFEC inspections are required in addition to the surface inspections (HFEC, LFEC, and detailed visual inspections) required by paragraph (n) of this AD.

Alternative Methods of Compliance

(p)(1) In accordance with 14 CFR 39.19, the Manager, Seattle ACO, is authorized to approve alternative methods of compliance (AMOCs) for the corresponding provisions of this AD.

(2) AMOCs approved previously per AD 2001-09-13, amendment 39-12220, are approved as AMOCs with the corresponding provisions of this AD.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD, if it is approved by an Authorized Representative for the Boeing Delegation Option Authorization Organization who has been authorized by the Manager, Seattle ACO, to make such findings.

Material Incorporated by Reference

(q) Unless otherwise specified in this AD, the actions must be done in accordance with Boeing Service Bulletin 767-53-0078, Revision 2, dated April 19, 2001; Boeing Alert Service Bulletin 767-53A0078, Revision 3, dated November 15, 2001; and Boeing Alert Service Bulletin 767-53A0078, Revision 4, dated September 26, 2002; as applicable.

(1) The incorporation by reference of Boeing Alert Service Bulletin 767-53A0078, Revision 3, dated November 15, 2001; and Boeing Alert Service Bulletin 767-53A0078, Revision 4, dated September 26, 2002; is approved by the Director of the Federal Register, in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of Boeing Service Bulletin 767-53-0078, Revision 2, dated April 19, 2001, was approved previously by the Director of the Federal Register as of May 24, 2001 (66 FR 23538, May 9, 2001).

(3) To get copies of the service information, contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124-2207. You may view the AD docket at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., room PL-401, Nassif Building, Washington, DC. To review copies of the service information, go to 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.

Issued in Renton, Washington, on May 16, 2005.

Michael J. Kaszycki,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

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