

[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 FR 23538 5/9/2001]

[Docket No. 2001-NM-51-AD; Amendment 39-12220; AD 2001-09-13]

RIN 2120-AA64

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

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that is applicable to certain Boeing Model 767-200, -300, and -300F series airplanes. This action requires inspections for fatigue cracking of the horizontal stabilizer pivot bulkhead, and repetitive inspections or other follow-on actions. This action also provides a permanent repair, which is optional for airplanes with no cracks, and, if accomplished, ends the repetitive inspections. This action is necessary to find and fix fatigue cracking of the horizontal stabilizer pivot bulkhead and adjacent structure, which could result in loss of the horizontal stabilizer. This action is intended to address the identified unsafe condition.

DATES: Effective May 24, 2001.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of May 24, 2001.

Comments for inclusion in the Rules Docket must be received on or before July 9, 2001.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2001-NM-51-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. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address: 9-anm-iarcomment@faa.gov. Comments sent via fax or the Internet must contain "Docket No. 2001-NM-51-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

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 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.

FOR FURTHER INFORMATION CONTACT: John Craycraft, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2782; fax (425) 227-1181.

SUPPLEMENTARY INFORMATION: The FAA has received reports that fatigue cracking of the horizontal stabilizer pivot bulkhead has been found on several Boeing Model 767-200, -300, and -300F series airplanes. The cracks occurred in the forward and aft outer chords and the outer chord splice fitting of the Station 1809.5 bulkhead, just above the horizontal stabilizer fitting. Cracking also occurred in the intercostals that support the Station 1809.5 bulkhead. Analysis indicates that these fatigue cracks occur because the flight loads on the horizontal stabilizer in the upper corner of

the Station 1809.5 bulkhead are higher than expected. Fatigue cracking in this area, if not found and fixed, could result in loss of the horizontal stabilizer.

Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Service Bulletin 767-53-0078, Revision 2, dated April 19, 2001, which describes procedures for repetitive inspections for fatigue cracking of the horizontal stabilizer pivot bulkhead, and follow-on actions, if necessary. The inspections include detailed visual, surface high frequency eddy current (HFEC), and low frequency eddy current (LFEC) inspections, as applicable, of the forward and aft outer chord, aft mid chord, and upper and lower intercostals of the Station 1809.5 bulkhead above the horizontal stabilizer fitting. If cracking is found in the forward outer chord, the service bulletin describes procedures for both a permanent repair and a time-limited repair, which allows accomplishment of the permanent repair to be deferred, provided that a one-time detailed visual inspection for cracks of the chord repair straps is done. The permanent repair includes open-hole HFEC inspections for cracking of certain fastener holes of the chord and longeron fitting, detailed visual inspections for cracking of adjacent structure, and installation of new chords, splices, fairings, and brackets. Doing the permanent repair eliminates the need for the repetitive inspections described in the service bulletin. The permanent repair is provided as an optional preventative modification for airplanes on which no cracking is found. Throughout the procedures in the service bulletin, the service bulletin specifies to contact Boeing for repair instructions if cracking is found in areas other than the forward outer chord.

Explanation of the Requirements of the Rule

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design, this AD is being issued to find and fix fatigue cracking of the horizontal stabilizer pivot bulkhead and adjacent structure, which could result in loss of the horizontal stabilizer. This AD requires accomplishment of the actions specified in the service bulletin described previously, except as discussed below.

Interim Action

This is considered to be interim action. The FAA is currently considering requiring installation of the permanent repair described in the service bulletin, which would constitute terminating action for the repetitive inspections required by this AD action. However, the planned compliance time for the installation of the modification is sufficiently long so that notice and opportunity for prior public comment will be practicable.

Differences Between This AD and the Service Bulletin

The compliance time for the initial inspection required by this AD differs from the compliance time for that action in the service bulletin. The service bulletin recommends that the initial inspection be done before the accumulation of 10,000 total flight cycles, or, if the total number of total flight cycles is close to or more than 10,000, at the earlier of 3,000 flight cycles or 18 months after receipt of the service bulletin. In developing an appropriate compliance time for this AD, the FAA considered not only the manufacturer's recommendation, but the degree of urgency associated with addressing the subject unsafe condition and the average utilization of the affected fleet. In light of all of these factors, the FAA finds a compliance time of 8,000 total flight cycles, or 90 days after the effective date of this AD, whichever comes later, for completing the required actions to be warranted, in that it represents an appropriate interval of time allowable for affected airplanes to continue to operate without compromising safety.

This AD also differs from the service bulletin with regard to disposition of certain repair conditions of the forward outer chord. While the service bulletin specifies that the manufacturer may be contacted for disposition of certain repair conditions, this AD requires repair of those conditions per a method approved by the FAA, 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.

This AD also differs from the service bulletin in cases where cracking is found in the aft outer chord, aft mid chord, or intercostals. The logic diagram in Figure 1 of the service bulletin specifies to repair cracking in these areas per data from the airplane manufacturer, and repeat the detailed visual

inspection at the earlier of 3,000 flight cycles or 18 months and the HFEC/LFEC inspections at the earlier of 6,000 flight cycles or 36 months. For airplanes on which cracking is found in the aft outer chord, aft mid chord, or intercostals, this AD does not require these repetitive inspections at these intervals. The FAA finds that, because the service bulletin does not include instructions for repair of cracking in areas other than the forward outer chord, repairs of the aft outer chord, aft mid chord, or intercostals must be accomplished per a method approved by the FAA, as required by paragraph (c)(1) of this AD. The FAA will approve any repetitive inspection requirements along with the repair method.

Determination of Rule's Effective Date

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this 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 under the caption "ADDRESSES." All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Submit comments using the following format:

- Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- For each issue, state what specific change to the AD is being requested.
- Include justification (e.g., reasons or data) for each request.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the 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 that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2001-NM-51-AD." The postcard will be date-stamped and returned to the commenter.

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.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, 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:

SUPERSEDED

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).

2001-09-13 BOEING: Amendment 39-12220. Docket 2001-NM-51-AD.

Applicability: Model 767-200, -300, and -300F series airplanes; as listed in Boeing Service Bulletin 767-53-0078, Revision 2, dated April 19, 2001; 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 (f) 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 find and fix fatigue cracking of the horizontal stabilizer pivot bulkhead and adjacent structure, which could result in loss of the horizontal stabilizer, accomplish the following:

Initial Inspections

(a) Prior to the accumulation of 8,000 total flight cycles, or within 90 days after the effective date of this AD, whichever occurs later, perform detailed visual, 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.

Note 2: For the 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."

Repetitive Inspections

(b) For areas where no cracking is found during the inspection per paragraph (a) of this AD: Repeat the inspections in paragraph (a) thereafter at the intervals specified in paragraphs (b)(1) and (b)(2) of this AD, per Boeing Service Bulletin 767-53-0078, Revision 2, dated April 19, 2001, until paragraph (d) of this AD has been done.

(1) Repeat the detailed visual 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

(c) If any cracking is found during any inspection required by paragraph (a) or (b) of this AD, before further flight, repair per paragraph (c)(1) or (c)(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, except as provided by paragraph (e) of this AD. Procedures for repair include open-hole HFEC inspections for cracking of certain fastener holes of the chord and longeron fitting, detailed visual 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 visual 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 (c)(2)(i) or (c)(2)(ii) of this AD, per the service bulletin.

(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 (d) of this AD.

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

Permanent Repair

(d) Except as provided by paragraph (e) 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, terminates the repetitive inspections required by this AD.

Note 3: Installation of the permanent repair per Boeing Service Bulletin 767-53-0078, dated October 15, 1998, or Revision 1, dated September 9, 1999, is acceptable for compliance with paragraph (d) of this AD.

Exception to Repair Instructions

(e) 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 Manager's approval letter must specifically reference this AD.

Alternative Methods of Compliance

(f) 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 4: 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

(g) 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

(h) Except as provided by paragraphs (c)(1) and (e) of this AD, the actions shall be done in accordance with Boeing Service Bulletin 767-53-0078, Revision 2, dated April 19, 2001. 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

(i) This amendment becomes effective on May 24, 2001.

FOR FURTHER INFORMATION CONTACT: John Craycraft, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2782; fax (425) 227-1181.

Issued in Renton, Washington, on April 27, 2001.

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