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Airworthiness Directives

X-ref AD w/Correction



Airworthiness Directive

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Federal Register Information

[Federal Register: March 5, 2004 (Volume 69, Number 44)]

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Header Information

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

FAA-2004-19446-4

[Docket No. 2004-NM-17-AD; Amendment 39-13505; AD 2004-05-10]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 767 Series Airplanes
PDF Copy (If Available):



040510.pdf

Preamble Information

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to certain Boeing Model 767 series airplanes, that currently requires repetitive detailed visual inspections of the aft pressure bulkhead for damage and cracking, and repair if necessary. That AD also requires additional eddy current inspections prior to the airplane accumulating 25,000 flight cycles. This amendment requires a reduction of the interval for the detailed and repetitive eddy current inspections. The actions specified in this AD are intended to prevent fatigue cracking of the aft pressure bulkhead, which could result in rapid depressurization of the airplane and possible damage or interference with the airplane control systems that penetrate the bulkhead, and consequent loss of controllability of the airplane. This action is intended to address the identified unsafe condition.

DATES: Effective March 22, 2004.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of March 22, 2004.

Comments for inclusion in the Rules Docket must be received on or before May 4, 2004.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2004-NM-17-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9 a.m. and 3 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. 2004-NM-17-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 or 2000 or ASCII text.

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 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: 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: On February 27, 1990, the FAA issued AD 88- 19-03 R1, amendment 39-6532 (55 FR 8118, March 7, 1990), applicable to certain Boeing Model 767 series airplanes, to require repetitive detailed visual inspections of the aft pressure bulkhead for damage and cracking, and repair if necessary. That AD also requires additional eddy current inspections prior to the airplane accumulating 25,000 flight cycles. That action was prompted by reports of cracking detected during fatigue testing of the aft pressure bulkhead. The actions required by that AD are intended to prevent failure of the aft pressure bulkhead and depressurization of the airplane.

Actions Since Issuance of Previous Rule

Since the issuance of that AD, we have received a report of multiple-site fatigue cracking in two lap splices on the aft pressure bulkhead of one airplane. The airplane had accumulated approximately 32,000 total flight cycles. The repetitive inspection intervals required by AD 88-19-03 R1 are based on the damage tolerance capability of the structure with a single crack rather than multiple-site crack pattern. Such fatigue cracking of the aft pressure bulkhead could result in rapid depressurization of the airplane and possible damage or interference with the airplane control systems that penetrate the bulkhead, and consequent loss of controllability of the airplane.

New Service Information

We have approved Boeing Alert Service Bulletin (ASB) 767-53A0026, Revision 5, dated January 29, 2004. (The original and Revision 1 of this ASB were the appropriate service information referenced in AD 88- 19-03 R1.) Revision 5 of the ASB describes procedures for repetitive detailed inspections for damage (e.g., nicks, tears, scratches, dents, and corrosion) of the aft pressure bulkhead, and repair if necessary. The ASB also describes procedures for repetitive high frequency and low frequency eddy current inspections for cracking of body station (BS) 1582 bulkhead, web lap splices, and tearstrap splices, and repair if necessary. Revision 5 of the ASB also recommends a reduction of the repetitive intervals for those inspections from 6,000 flight cycles to 1,800 flight cycles. Additionally, the ASB describes procedures for a one-time detailed inspection and a high frequency eddy current inspection of the web to determine if any "oil cans" are present, and repair if necessary.

Explanation of Requirements of Rule

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of this same type design, this AD supersedes AD 88-19-03 R1 to require the actions specified in the ASB described previously, except as described below.

Differences Between the ASB and the AD

Although Boeing ASB 767-53A0026, Revision 5, dated January 29, 2004, contains procedures for a one-time detailed inspection and a high frequency eddy current inspection of the web to determine if any "oil cans" are present, and repair if necessary, this AD does not require those actions. We have determined that those actions do not represent the urgency of the other procedures specified in the ASB. Therefore, we are considering separate rulemaking to propose those actions.

The Boeing ASB also provides the following information in Note 6 of the Accomplishment Instructions: "For the purposes of this service bulletin, do not count flight-cycles with a cabin pressure differential of 2.0 [pounds per square inch (psi)] or less. However, any flight-cycle with momentary spikes in cabin pressure differential above 2.0 psi must be included as a full-pressure flight-cycle. Cabin pressure records must be maintained for each airplane. Fleet averaging of cabin pressure is not allowed." This AD, however, does not permit such allowances for the new requirements of this AD. We consider that numerous factors, such as total number of low pressure cycles, amount of thrust, number of gross weight flight cycles, etc., affect the calculation of flight cycles. We find that these mitigating factors can be best evaluated through requests for alternative methods of compliance, as provided for in paragraph (g)(1) of this AD. Operators should note that, although AD 88-19-03 R1 provides for such allowance, we have removed such provision in this AD for the reasons stated previously.

Additionally, the Accomplishment Instructions of the ASB specify that operators may contact the manufacturer for disposition of certain repair instructions. This AD requires that, if repair requirements exceed allowable repair criteria, operators must repair 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 FAA to make such findings.

Editorial Changes to the AD

Paragraphs referenced in the "Restatement of the Requirements of AD 88-19-03 R1" section of this AD have been renumbered to conform to the current AD formatting style.

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

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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 2004-NM-17-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 removing amendment 39-6532 (55 FR 8118, March 7, 1990), and by adding a new airworthiness directive (AD), amendment 39-13505, to read as follows:

Regulatory Information

2004-05-10 Boeing: Amendment 39-13505. Docket 2004-NM-17-AD. Supersedes AD 88-19-03 R1, Amendment 39-6532.

Applicability: Model 767 series airplanes, line number 001 through 175 inclusive; certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent fatigue cracking of the aft pressure bulkhead, which could result in rapid depressurization of the airplane and possible damage or interference with the airplane control systems that penetrate the bulkhead, and consequent loss of controllability of the airplane; accomplish the

following:

Restatement of AD 88-19-03 R1

(a) Prior to the accumulation of 6,000 flight cycles or within the next 1,000 flight cycles after September 26, 1988 (effective date of AD 88-19-03 R1, amendment 39-6001), whichever occurs later, unless accomplished within the last 5,000 flight cycles, and thereafter at intervals not to exceed 6,000 flight cycles, perform a detailed inspection of the aft side of the entire body station 1582 pressure bulkhead for damage (as defined in the Structural Repair Manual) and cracking, in accordance with Boeing Service Bulletin 767-53-0026, dated November 19, 1987; or Revision 1, dated March 16, 1989.

(b) Prior to the accumulation of 25,000 flight cycles, and thereafter at intervals not to exceed 6,000 flight cycles, perform an eddy current inspection of the body station 1582 pressure bulkhead, in accordance with paragraph C. of the Accomplishment Instructions of Boeing Service Bulletin 767-53-0026, Revision 1, dated March 16, 1989.

(c) For the purpose of complying with the requirements of paragraphs (a) and (b) of this AD, the number of flight cycles may be determined to equal the number of pressurization cycles where the cabin pressure differential was equal to or greater than 2.0 PSI. The pressurization allowance does not apply to the requirements of paragraph (e) of this AD.

(d) Repair all damage and cracking detected during the inspections specified in paragraphs (a) and (b) of this AD, prior to further flight in accordance with Note 4 in the Accomplishment Instructions of Boeing Service Bulletin 767-53-0026, Revision 1, dated March 16, 1989. After the effective date of this AD, repair must be accomplished per Boeing Alert Service Bulletin (ASB) 767- 53A0026, Revision 5, dated January 29, 2004.

New Requirements of this AD

Detailed Inspection

Note 1: 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."

Detailed Inspections and Eddy Current Inspections

(e) Perform a detailed inspection for damage and cracking of the aft side of the aft pressure bulkhead and perform high frequency and low frequency eddy current inspections for cracking of the aft pressure bulkhead, per the Accomplishment Instructions of Boeing ASB 767-53A0026, Revision 5, dated January 29, 2004, at the later of the times specified in paragraph (e)(1) or (e)(2) of this AD. Thereafter, repeat these inspections at intervals not to exceed 1,800 flight cycles. Accomplishment of the initial inspections required by this paragraph, terminate the inspection requirements of paragraphs (a) and (b) of this AD.

(1) Prior to the accumulation of 25,000 total flight cycles, or within 1,800 flight cycles after the most recent inspection done per AD 88-19-03 R1, whichever occurs later; or

(2) Within 90 days after the effective date of this AD.

Repair Requirements

(f) If any damage or cracking is detected during any inspections required by paragraph (e) of this AD: Before further flight accomplish the requirements of paragraph (f)(1) or (f)(2) of this AD, as applicable:

(1) For repairs within the limits of the Accomplishment Instructions of Boeing ASB 767-53A0026,

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Revision 5, dated January 29, 2004, repair per the ASB.

(2) For any repairs outside the limits, 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 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, as required by this paragraph, the approval must specifically reference this AD.

Alternative Methods of Compliance (AMOC)

(g)(1) In accordance with 14 CFR 39.19, the Manager, Seattle ACO, FAA, is authorized to approve AMOCs for this AD.

(2) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD, if it is approved by a Boeing Company DER who has been authorized by the Manager, Seattle ACO, to make such findings.

(3) AMOCs approved previously for paragraph (c) of AD 88-19-03 R1, amendment 39-6532, are approved as AMOCs with paragraph (f) of this AD.

Incorporation by Reference

(h) Unless otherwise specified in this AD, the actions shall be done in accordance with Boeing Service Bulletin 767-53-0026, dated November 19, 1987; Boeing Service Bulletin 767-53-0026, Revision 1, dated March 16, 1989; and Boeing Alert Service Bulletin 767-53A0026, Revision 5, dated January 29, 2004; as applicable. This incorporation by reference is 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 Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(i) This amendment becomes effective on March 22, 2004.

Footer Information

Issued in Renton, Washington, on February 24, 2004.
Kalene C. Yanamura,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.
[FR Doc. 04-4660 Filed 3-4-04; 8:45 am]
BILLING CODE 4910-13-P

Service Bulletin Information

Service Bulletin for the Lotus Notes Client:

Comments

CORRECTION: [Federal Register: May 5, 2004 (Volume 69, Number 87); Page 24938; www.access.gpo.gov/su_docs/aces/aces140.html] Go to the attached "pdf" for full correction text. This copy reflects the correction.