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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2003-NM-109-AD; Amendment 39-13728; AD 2004-14-19]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 767 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to all Boeing Model 767 series airplanes, that requires repetitive detailed inspections of the aft pressure bulkhead for indications of "oil cans" and previous "oil can" repairs, and corrective actions, if necessary. An "oil can" is an area on a pressure dome web that moves when pushed from the forward side. This action is necessary to detect and correct the propagation of fatigue cracks in the vicinity of "oil cans" on the web of the aft pressure bulkhead, which could result in rapid decompression of the passenger cabin, possible damage or interference with the airplane control systems that pass through the bulkhead, and consequent loss of control of the airplane. This action is intended to address the identified unsafe condition.

DATES: Effective August 20, 2004.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of August 20, 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, Rules Docket, 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: 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: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to all Boeing Model 767 series airplanes was published in the Federal Register on February 6, 2004 (69 FR 5771). That action proposed to require repetitive detailed inspections of the aft pressure bulkhead for indications of "oil cans" and previous "oil can" repairs, and corrective actions, if necessary. An "oil can" is an area on a pressure dome web that moves when pushed from the forward side.

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.

Support for Proposed Rule

One commenter states that it supports the proposed rule.

Request for Clarification When Cause of Previous Repair Is Unknown

One commenter requests clarification on what to do when the cause of the damage for a previous repair of the aft pressure bulkhead is unknown. The commenter notes that the cause of the damage might not be possible to determine. The commenter questions if operators should assume the cause of the damage was due to an "oil canning" condition when the cause of the damage for a previous repair is unknown.

The FAA agrees that clarification is needed when the cause of the damage for a previous repair of the aft pressure bulkhead is unknown. Paragraph (c) of the final rule requires a detailed inspection if any previous "oil can" repair is found during the inspection of the aft pressure bulkhead required by paragraph (b) of the final rule. If the cause of the damage for a previous repair is unknown, operators should assume the repairs are "oil can" repairs. We have added the following text to paragraph (b) of the final rule: "In the absence of information proving otherwise, assume a previous repair of the aft pressure bulkhead is an `oil can' repair."

Request To Clarify Reference

One commenter states that both service bulletins refer to Boeing 767 Airplane Maintenance Manual (AMM) 38-11-01/401 for the removal and installation of the potable water tanks. The commenter believes the correct reference is AMM 38-11-01/201. We infer that the commenter requests that the reference be clarified.

We agree that the reference for the removal and installation of the potable water tanks should be clarified and have confirmed that AMM 38-11-01/201 is the correct reference. We have added the following text to paragraph (a) of the final rule: "Where Figure 5 of the service bulletin specifies to refer to Boeing 767 Airplane Maintenance Manual (AMM) 38-11-01/401 for the removal and installation of the potable water tanks, refer to AMM 38-11-01/201."

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.

Interim Action

This is considered to be interim action. The FAA may consider further rulemaking to reduce thresholds if cracks are reported earlier than the predicted fatigue life.

Cost Impact

There are approximately 890 airplanes of the affected design in the worldwide fleet. The FAA estimates that 398 airplanes of U.S. registry will be affected by this AD, that it will take approximately 14 work hours per airplane to accomplish the required actions, and that the average labor rate is \$65 per work hour. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be \$362,180, or \$910 per airplane, per inspection cycle.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

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

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39-AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service Washington, DC

U.S. Department of Transportation Federal Aviation Administration

We post ADs on the internet at "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).

2004-14-19 Boeing: Amendment 39-13728. Docket 2003-NM-109-AD.

Applicability: All Model 767 series airplanes, certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct the propagation of fatigue cracks in the vicinity of "oil cans" on the web of the aft pressure bulkhead, which could result in rapid decompression of the passenger cabin, possible damage or interference with the airplane control systems that pass through the bulkhead, and consequent loss of control of the airplane, accomplish the following:

Service Bulletin References

- (a) The term "service bulletin," as used in this AD, means the Accomplishment Instructions of the service bulletin specified in paragraph (a)(1) or (a)(2) of this AD, as applicable. Where Figure 5 of the service bulletin specifies to refer to Boeing 767 Airplane Maintenance Manual (AMM) 38-11-01/401 for the removal and installation of the potable water tanks, refer to AMM 38-11-01/201.
- (1) For Model 767-200, -300, and -300F series airplanes: Boeing Alert Service Bulletin 767-53A0105, dated April 10, 2003.
- (2) For Model 767-400ER series airplanes: Boeing Alert Service Bulletin 767-53A0106, dated April 10, 2003.

Initial and Repetitive Inspections

- (b) Perform a detailed inspection of the aft pressure bulkhead for indications of "oil cans" and previous "oil can" repairs, in accordance with the service bulletin, at the applicable time specified in paragraph (b)(1) or (b)(2) of this AD. In the absence of information proving otherwise, assume a previous repair of the aft pressure bulkhead is an "oil can" repair. Repeat the detailed inspection thereafter at intervals not to exceed 6,000 flight cycles.
- **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."
- (1) For Model 767-200 and -300 series airplanes: Prior to the accumulation of 50,000 total flight cycles, or within 1,000 flight cycles after the effective date of this AD, whichever is later.
- (2) For Model 767-300F and -400ER series airplanes: Prior to the accumulation of 40,000 total flight cycles, or within 1,000 flight cycles after the effective date of this AD, whichever is later.

Indication of Previous "Oil Can" Repairs

- (c) If any previous "oil can" repair is found during any detailed inspection required by paragraph (b) of this AD: Before further flight, do a detailed inspection of the web around any "oil can" repair for cracks or smaller "oil cans," in accordance with the service bulletin.
- (1) If any crack is found, before further flight, repair in accordance with the service bulletin. Where the service bulletin specifies to contact Boeing for repair, 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 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, the approval must specifically reference this AD.
- (2) If any "oil can" is found, before further flight, perform the surface high frequency eddy current (HFEC) inspection specified in paragraph (d) of this AD.

Indication of "Oil Can"

- (d) If any indication of an "oil can" is found during any detailed inspection specified in paragraph (b) or (c) of this AD: Before further flight, perform a surface HFEC inspection of the web around the periphery and in the center of the "oil can" indication for cracks, at all "oil cans," and perform a detailed inspection of the web for cracks, in accordance with the service bulletin. Alternative inspection specified in the service bulletin is acceptable for this AD.
- (1) If no crack is found and the "oil can" meets the allowable limits specified in the service bulletin, do the action in either paragraph (d)(1)(i) or (d)(1)(ii) of this AD.
- (i) Repeat the surface HFEC inspection specified in paragraph (d) of this AD thereafter at intervals not to exceed 3,000 flight cycles.
- (ii) Before further flight, repair the "oil can" in accordance with the service bulletin. Repair of all "oil cans" is considered a terminating action for the repetitive HFEC inspections required by paragraph (d)(1)(i) of this AD. However, continue to repeat the detailed inspection required by paragraph (b) of this AD.
- (2) If no crack is found and the "oil can" does not meet the specified allowable limits specified in the service bulletin: Before further flight, repair the "oil can" in accordance with the service bulletin. If, following the repair, any "oil can" remains that meets the allowable limits specified in the service bulletin, do the action required by either paragraph (d)(1)(i) or (d)(1)(ii) of this AD.
- (3) If any crack is found, before further flight, repair in accordance with the service bulletin. Where the service bulletin specifies to contact Boeing for appropriate action, 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 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, the approval must specifically reference this AD.

Alternative Methods of Compliance

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

Incorporation by Reference

(f) Unless otherwise specified in this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin 767-53A0105, dated April 10, 2003; or Boeing Alert Service Bulletin 767-53A0106, dated April 10, 2003; as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may

be obtained from Boeing Commercial 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

(g) This amendment becomes effective on August 20, 2004.

Issued in Renton, Washington, on July 1, 2004. Kalene C. Yanamura, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service. [FR Doc. 04-15759 Filed 7-15-04; 8:45 am] BILLING CODE 4910-13-P