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[Page 38824-38826]  
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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. 2003-NM-126-AD; Amendment 39-13697; AD 2004-13-15]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Boeing Model 747-400 and -400D Series Airplanes**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

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**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to certain Boeing Model 747-400 and -400D series airplanes, that requires an inspection to detect missing fasteners in the section 42 skin and internal doubler at the cutout for the ground exhaust valve of the electrical equipment; modification and rework of the doubler; repetitive inspections of the skin for cracks; and corrective actions if necessary; as applicable. This action is necessary to detect and correct fatigue cracks in the section 42 skin at the cutout for the ground exhaust valve of the electrical equipment, which could result in rapid decompression of the airplane. This action is intended to address the identified unsafe condition.

**DATES:** Effective August 3, 2004.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of August 3, 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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html)*.

**FOR FURTHER INFORMATION CONTACT:** Candice Gerretsen, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 917-6428; 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 certain Boeing Model 747-400 and -400D series airplanes was published in the Federal Register on April 1, 2004 (69 FR 17073). That action proposed to require an inspection to detect missing fasteners in the section 42 skin and internal doubler at the cutout for the ground exhaust valve of the electrical equipment; modification and rework of the doubler; repetitive inspections of the skin for cracks; and corrective actions if necessary; as applicable.

## **Comments**

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were submitted in response to the proposal or the FAA's determination of the cost to the public.

## **Conclusion**

The FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

## **Cost Impact**

There are approximately 142 airplanes of the affected design in the worldwide fleet. The FAA estimates that 22 airplanes of U.S. registry will be affected by this AD.

For Group 1 airplanes listed in Boeing Alert Service Bulletin 747-53A2340, it will take approximately 1 work hour per airplane to accomplish the required inspection (part 1), at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of this inspection required by this AD on U.S. operators is estimated to be \$65 per airplane.

For Groups 1 and 2 airplanes listed in Boeing Alert Service Bulletin 747-53A2340, it will take approximately 40 work hours per airplane to accomplish the required modification and rework (part 2), at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of this modification and rework required by this AD on U.S. operators is estimated to be \$2,600 per airplane.

For Groups 1 through 4 airplanes listed in Boeing Alert Service Bulletin 747-53A2340, it will take approximately 1 work hours per airplane to accomplish the required inspection (part 3), at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of this inspection required by this AD on U.S. operators is estimated to be \$65 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"*

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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).

**2004-13-15 Boeing:** Amendment 39-13697. Docket 2003-NM-126-AD.

**Applicability:** Model 747-400 and 400D series airplanes, as listed in paragraph 1.A., "Effectivity," of Boeing Alert Service Bulletin 747-53A2340, Revision 2, dated April 24, 2003; certificated in any category.

**Compliance:** Required as indicated, unless accomplished previously.

To detect and correct fatigue cracks in the section 42 skin at the cutout for the ground exhaust valve of the electrical equipment, which could result in rapid decompression of the airplane, accomplish the following:

## **Part 1—Fastener Inspection and Corrective Actions if Necessary**

(a) For Group 1 airplanes listed in Boeing Alert Service Bulletin 747-53A2340, Revision 2, dated April 24, 2003: Within 250 flight cycles or 4 months after the effective date of this AD, whichever occurs later, do a general visual inspection to detect missing fasteners in the section 42 skin and internal doubler at the cutout for the ground exhaust valve of the electrical equipment, per part 1 of the Accomplishment Instructions of the service bulletin.

(1) If all fasteners are installed, do the actions specified in paragraph (b) of this AD at the indicated time.

(2) If any fastener is missing, before further flight, accomplish all applicable corrective actions (i.e., performing an open hole high frequency (HFEC) inspection for cracks and any applicable repair, oversizing and drilling of holes, and installation of fasteners), in accordance with part 1 of the Accomplishment Instructions of the service bulletin, except as required by paragraph (f) of this AD.

## **Part 2—Modification and Rework**

(b) For Group 1 and Group 2 airplanes listed in Boeing Alert Service Bulletin 747-53A2340, Revision 2, dated April 24, 2003: Before the accumulation of 6,000 total flight cycles, or within 1,500 flight cycles or 24 months after the effective date of this AD, whichever occurs later, modify and rework the internal doubler (i.e., performing an open hole HFEC inspection for cracks and any applicable repair, oversizing and drilling of holes, and installation of fasteners) by accomplishing all actions specified in part 2 of the Accomplishment Instructions of the service bulletin. Do the actions per the service bulletin, except as required by paragraph (f) of this AD. Any applicable repair must be accomplished before further flight.

### **Part 3—Repetitive Inspections and Repair if Necessary**

(c) At the applicable time specified in paragraph (c)(1) or (c)(2) of this AD, do an external HFEC inspection of the skin for cracks per part 3 of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2340, Revision 2, dated April 24, 2003.

(1) For Group 1 and Group 2 airplanes listed in the service bulletin: Within 10,000 flight cycles after accomplishing the actions required by paragraph (b) of this AD, or within 1,500 flight cycles or 24 months after the effective date of this AD, whichever occurs later.

(2) For Group 3 and Group 4 airplanes listed in the service bulletin: Before the accumulation of 15,000 total flight cycles, or within 1,500 flight cycles or 24 months after the effective date of this AD, whichever occurs later.

(d) If no crack is detected during the external HFEC inspection required by paragraph (c) of this AD, repeat the external HFEC inspection thereafter at intervals not to exceed 5,000 flight cycles.

(e) If any crack is detected during the external HFEC inspection required by paragraph (c) of this AD, before further flight, repair per part 3 of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2340, Revision 2, dated April 24, 2003, except as required by paragraph (f) of this AD. Repeat the external HFEC inspection in the unrepaired areas thereafter at intervals not to exceed 5,000 flight cycles.

#### **Exception to Service Bulletin Actions**

(f) If any discrepancy is found during any inspection required by this AD, and the bulletin specifies to contact Boeing for an alternate 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.

#### **Credit for Previous Revisions of Service Bulletins**

(g) Actions accomplished before the effective date of this AD per Boeing Alert Service Bulletin 747-53A2340, original issue, dated August 1, 1991; or Revision 1, dated October 31, 1991, are acceptable for compliance with the requirements of this AD.

#### **Alternative Methods of Compliance**

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

(2) An AMOC that provides an acceptable level of safety may be used for any inspection or repair required by this AD, if it is approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings. For an inspection or repair method to be approved, the approval must specifically reference this AD.

#### **Incorporation by Reference**

(i) Unless otherwise specified in this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin 747-53A2340, Revision 2, dated April 24, 2003. 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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

**Effective Date**

(j) This amendment becomes effective on August 3, 2004.

Issued in Renton, Washington, on June 17, 2004.

Ali Bahrami,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 04-14568 Filed 6-28-04; 8:45 am]

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