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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2005-21701; Directorate Identifier 2005-NM-086-AD; Amendment 39-15231; AD 2007-21-13]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 747 and 767 Airplanes

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

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Boeing Model 747 and 767 airplanes. This AD requires reworking the electrical bonding between the airplane structure and the pump housing of the outboard boost pumps in the main fuel tank of certain Boeing Model 747 airplanes, and between the airplane structure and the pump housing of the override/jettison pumps in the left and right wing center auxiliary fuel tanks of certain Boeing Model 767 airplanes. This AD also requires related investigative actions and corrective actions if necessary. This AD results from fuel system reviews conducted by the manufacturer. We are issuing this AD to prevent insufficient electrical bonding, which could result in a potential of ignition sources inside the fuel tanks, and which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

DATES: This AD becomes effective November 20, 2007.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of November 20, 2007.

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

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (telephone 800-647-5527) is the Document

Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Philip Sheridan, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6441; fax (425) 917-6590.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA issued a supplemental notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to certain Boeing Model 747 and 767 airplanes. That supplemental NPRM was published in the Federal Register on March 30, 2007 (72 FR 15069). That supplemental NPRM proposed to require reworking the electrical bonding between the airplane structure and the pump housing of the outboard boost pumps in the main fuel tank of certain Boeing Model 747 airplanes, and between the airplane structure and the pump housing of the override/jettison pumps in the left and right wing center auxiliary fuel tanks of certain Boeing Model 767 airplanes. That supplemental NPRM also proposed to require related investigative actions and corrective actions if necessary. That supplemental NPRM proposed to revise the original NPRM to add an inspection requirement for certain Model 747 airplanes, and to specify cold-working the fastener holes for certain other Model 747 airplanes.

Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the comments received to the supplemental NPRM.

Requests To Refer to New Revisions of Service Information

Boeing, All Nippon Airways, and Air Transport Association on behalf of its member United Airlines, all request that we refer to various new revisions of relevant service information as follows: Boeing Special Attention Service Bulletins 747-28-2259, Revision 2, dated July 5, 2007; 767-57-0092, Revision 1, dated February 15, 2007; and 767-57-0093, Revision 1, dated February 15, 2007. (We referred to earlier revisions of these service bulletins as the appropriate sources of service information for accomplishing the actions proposed in the supplemental NPRM.)

We agree with the commenters' requests. We have reviewed the new service information and revised Table 1 and paragraph (f) of the AD to refer to the new revisions of the service information. We have also revised paragraph (g) of the AD to give credit for prior accomplishment of earlier revisions by adding a new Table 2. The new revisions specify that no more work is necessary for airplanes on which the actions were accomplished in accordance with the earlier revisions. The new revisions of the service information, among other things, correct certain typographical errors, change references to certain documents, add information about certain edge margins, and revise the grouping of airplanes in the effectivity.

Operators should note that on September 25, 2007, Boeing issued Information Notice 747-28-2259 IN 01. The information notice alerts operators of a typographical error in step 9 of figures 1 through 6 of Boeing Special Attention Service Bulletin 747-28-2259, Revision 2, dated July 5, 2007. The information notice states that the note given in step 9 should read "if the maximum resistance value of 0.0005 ohm can not be met, repeat steps 1 through 7" and not "steps 1 through 8."

Explanation of Additional Change Made to This AD

We have simplified paragraph (f)(1) of this AD by referring to the "Alternative Methods of Compliance (AMOCs)" paragraph of this AD for repair methods.

Conclusion

We have carefully reviewed the available data, including the comments received, 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

There are about 3,401 airplanes of the affected design in the worldwide fleet. 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	Cost per airplane	Number of U.S.-registered airplanes	Fleet cost
Rework electrical bonding for Boeing Model 747 airplanes	10	\$80	\$800	1,115	\$892,000
Rework electrical bonding for Boeing Model 767 airplanes	9	\$80	\$720	921	\$663,120

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 and placed it in the AD docket. 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 Federal Aviation Administration (FAA) amends § 39.13 by adding the following new airworthiness directive (AD):



2007-21-13 Boeing: Amendment 39-15231. Docket No. FAA-2005-21701; Directorate Identifier 2005-NM-086-AD.

Effective Date

(a) This AD becomes effective November 20, 2007.

Affected ADs

(b) None.

Applicability

(c) This AD applies to the Boeing airplane models identified in Table 1 of this AD, certificated in any category.

Table 1 – Airplanes Affected by this AD

Model –	As Identified in Boeing Special Attention Service Bulletin –
747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP series airplanes	747-28-2259, Revision 2, dated July 5, 2007
767-200, -300, and -300F series airplanes	767-57-0092, Revision 1, dated February 15, 2007
767-400ER series airplanes	767-57-0093, Revision 1, dated February 15, 2007

Unsafe Condition

(d) This AD results from fuel system reviews conducted by the manufacturer. We are issuing this AD to prevent insufficient electrical bonding, which could result in a potential of ignition sources inside the fuel tanks, and which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

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.

Rework Electrical Bonding

(f) Within 60 months after the effective date of this AD: Do the actions specified in paragraph (f)(1) or (f)(2) of this AD, as applicable, by accomplishing all the actions specified in the Accomplishment Instructions of the applicable service bulletin specified in Table 1 of this AD. Do any related investigative and corrective actions before further flight.

(1) For Boeing Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP series airplanes: Rework the electrical bonding between the airplane structure and the pump housing of the outboard boost pumps in the main fuel tank, and do related investigative and applicable corrective actions. If any crack, corrosion, or damage is found during the open-hole high-frequency eddy current (HFEC) inspection specified in Boeing Special Attention Service Bulletin 747-28-2259, Revision 2, dated July 5, 2007, and the special attention service bulletin specifies contacting Boeing for repair instructions: Before further flight, repair using a method approved in accordance with the procedures specified in paragraph (h) of this AD.

(2) For Boeing Model 767-200, -300, -300F, and -400ER series airplanes: Rework the electrical bonding between the airplane structure and the pump housing of the override/jettison pumps in the left and right wing center auxiliary fuel tanks, and do the related investigative and applicable corrective actions.

Credit for Actions Accomplished Previously

(g) Actions done before the effective date of this AD in accordance with the applicable special attention service bulletins listed in Table 2 of this AD are acceptable for compliance with the corresponding requirements of paragraph (f) of this AD.

Table 2 – Service Bulletins Acceptable for Actions Accomplished Previously

Boeing Special Attention Service Bulletin	Revision Level	Date
747-28-2259	Original	November 4, 2004
747-28-2259	1	October 5, 2006
767-57-0092	Original	November 4, 2004
767-57-0093	Original	November 4, 2004

Alternative Methods of Compliance (AMOCs)

(h)(1) The Manager, Seattle ACO, FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

Material Incorporated by Reference

(i) You must use the applicable special attention service bulletin listed in Table 3 of this AD to perform the actions that are required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference of these documents in accordance with

5 U.S.C. 552(a) and 1 CFR part 51. Contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124-2207, for a copy of this service information. You may review copies at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; 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/cfr/ibr-locations.html>.

Table 3 – Material Incorporated by Reference

Boeing Special Attention Service Bulletin	Revision Level	Date
747-28-2259	2	July 5, 2007
767-57-0092	1	February 15, 2007
767-57-0093	1	February 15, 2007

Issued in Renton, Washington, on October 5, 2007.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7-20223 Filed 10-15-07; 8:45 am]