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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2010-0698; Directorate Identifier 2009-NM-264-AD; Amendment 39-16613; AD 2011-05-04]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Model 757 Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding an existing airworthiness directive (AD) for the products listed above. That AD currently requires sealing the fasteners on the front and rear spars inside the left and right main fuel tanks and on the rear spar and lower panel of the center fuel tank. That AD also requires inspections of the wire bundle support installations to verify if certain clamps are installed and if Teflon sleeving covers the wire bundles inside the left and right equipment cooling system bays, on the left and right rear spars, and on the left and right front spars; and corrective actions if necessary. This new AD also requires sealing the additional fasteners on the rear spar inside the left and right main fuel tanks. This AD was prompted by a fuel system review conducted by the manufacturer. We have received reports from the manufacturer that additional fasteners in the main fuel tanks must be sealed for lightning strike protection. We are issuing this AD to detect and correct improper wire bundle support installation and sleeving and to prevent improperly sealed fasteners in the main and center fuel tanks from becoming an ignition source, in the event of a fault current or lightning strike, which could result in a fuel tank explosion and consequent loss of the airplane.

DATES: This AD is effective March 31, 2011.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of March 31, 2011.

ADDRESSES: For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; e-mail me.boecom@boeing.com; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

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 (phone: 800-647-5527) is 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: Tak Kobayashi, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6499; fax (425) 917-6590.; e-mail: Takahisa.Kobayashi@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede airworthiness directive (AD) 2008-23-19, Amendment 39-15740 (73 FR 71534, November 25, 2008). That AD applies to the specified products. The NPRM published in the Federal Register on July 23, 2010 (75 FR 43097). That NPRM proposed to continue to require sealing the fasteners on the front and rear spars inside the left and right main fuel tanks and on the rear spar and lower panel of the center fuel tank. That NPRM also proposed to require inspections of the wire bundle support installations to verify if certain clamps are installed and if Teflon sleeving covers the wire bundles inside the left and right equipment cooling system bays, on the left and right rear spars, and on the left and right front spars; corrective actions if necessary; and sealing of additional fasteners on the rear spar inside the left and right main fuel tanks.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal and the FAA's response to each comment.

Concurrence With the NPRM

Boeing concurs with the contents of the proposed rule.

Request To Revise the Compliance Time

FedEx, US Airways, Delta, European Air Transport Leipzig GmbH (European Air)/DHL Air requested a change in the compliance time. FedEx, Delta, and US Airways requested that we change the compliance time from "60 months after December 30, 2008," to "60 months after the effective date of the final rule" in paragraph (h) of the NPRM. European Air/DHL Air requested an extension of the compliance time from 60 months to a minimum of 72 months for airplanes that have already been modified in accordance with Boeing Alert Service Bulletin 757-57A0064, dated July 16, 2007. FedEx and Delta stated that fuel tank access occurs at 72-month intervals. European Air/DHL Air stated that they purge the fuel tanks during a 4C-check corresponding to 72 months, 12,000 flight cycles, or 24,000 flight hours, whichever occurs first. European Air/DHL Air stated that the proposed compliance time does not allow a suitable maintenance opportunity to accomplish the additional work without disturbing the scheduled maintenance activities. Delta stated that the proposed compliance time allows approximately 3 years from the effective date of the final rule. Delta

considered this requirement an undue burden that is not justified. Delta stated that the SFAR88 initiative and the Aging Aircraft initiatives generally have a timeline of 60 months to upgrade the airplanes based on the FAA harmonization policy of the aging airplane programs per "Fuel Tank Safety Compliance Extension (Final Rule) and Aging Airplane Program Update (Request for Comments)" (69 FR 45936, July 30, 2004).

We agree that the compliance time in paragraph (h) of this AD should be changed to "within 60 months after the effective date of this AD" to avoid causing an undue burden on operators who have already accomplished the modification in accordance with Boeing Alert Service Bulletin 757-57A0064, dated July 16, 2007. In addition, we consider the following condition may warrant this change in the compliance time. The additional work specified in Boeing Alert Service Bulletin 757-57A0064, Revision 1, dated October 5, 2009, is intended to provide an additional layer of protection to the main fuel tanks to prevent ignition sources from occurring inside those tanks under a lightning strike event. The existing fastener installation is able to tolerate lightning current without introducing ignition sources inside the main fuel tanks if no failure conditions exist. The additional work of sealing the affected fasteners will add a fail-safe design feature to the existing fastener installation so that no ignition sources are introduced under the presence of single failures. Because of this, we consider that an acceptable level of safety would still be provided with this change in the compliance time. We have also limited the airplanes affected by paragraph (h) of this AD to airplanes on which Boeing Alert Service Bulletin 757-57A0064, dated July 16, 2007, was done before the effective date of this AD.

We have also revised paragraph (g) of this AD to add the following sentence: "As of the effective date of this AD, only Boeing Alert Service Bulletin 757-57A0064, Revision 1, dated October 5, 2009, may be used."

We do not agree with extending the compliance time to 72 months. In developing an appropriate compliance time, we considered the safety implications, parts availability, and normal maintenance schedules for timely replacement of the fasteners. In consideration of all of these factors, we determined that the 60-month compliance time represents an acceptable interval in which the fasteners can be sealed in a timely manner, while still maintaining an acceptable level of safety. According to the provisions of paragraph (j) of this AD, operators may request an alternative method of compliance (AMOC) to request a longer compliance time, if the request is submitted with substantiating data that proves that the longer compliance time will provide an acceptable level of safety. We have not changed the AD further in this regard.

Request To Allow Modification in Accordance With Original Issue of Service Bulletin

European Air/DHL Air requested that we allow the modification, in accordance with Boeing Alert Service Bulletin 757-57A0064, dated July 16, 2007, and Boeing Multi Operator Message (MOM) 1-1046487761, dated November 6, 2008, as an accepted means of compliance. European Air stated that they started incorporating the modifications specified in Boeing Alert Service Bulletin 757-57A0064, dated July 16, 2007, and Boeing MOM 1-1046487761, dated November 6, 2008, before AD 2008-23-19 was issued.

We infer that European Air/DHL Air are requesting that we allow the modification done in accordance with Boeing Alert Service Bulletin 757-57A0064, dated July 16, 2007, and Boeing MOM 1-1046487761, dated November 6, 2008, as a means of compliance with paragraphs (g) and (h) of this AD. We do not agree. Boeing Alert Service Bulletin 757-57A0064, dated July 16, 2007, is not sufficient to address the unsafe condition, and Boeing MOM 1-1046487761, dated November 6, 2008, merely informs operators of a forthcoming revision to Boeing Alert Service Bulletin 757-57A0064, dated July 16, 2007, which will include additional work of sealing 40 fasteners that are not identified in Boeing Alert Service Bulletin 757-57A0064, dated July 16, 2007. Boeing MOM 1-1046487761, dated November 6, 2008, refers to two sketches that provide the locations of additional fasteners that must be sealed. Those sketches can help operators to accomplish the additional work, but they only provide figures that are applicable to certain airplane groups identified in Boeing Alert

Service Bulletin 757-57A0064, dated July 16, 2007. In addition, those sketches are not a published document and cannot be incorporated by reference in the AD. We have determined that it is inappropriate to include Boeing MOM 1-1046487761, dated November 6, 2008, as an accepted means to comply with the actions required by this AD. However, operators who have used those data can still request approval of an AMOC, in accordance with paragraph (j) of this AD. No change has been made to the AD in this regard.

Request To Clarify Instructions for Continued Airworthiness (ICA)

Continental stated that proper ICA must be provided in order to prevent inadvertent reversal of implemented changes that can lead to violation of requirements of the SFAR88 program as well as the final rule. Continental Airlines requested that we coordinate with Boeing to ensure proper instructions are provided.

We acknowledge the commenter's concern. Operators and owners are responsible for ensuring that the configuration mandated by this AD is maintained in accordance with section 39.7 of the Federal Aviation Regulations (14 CFR 39.7). If any new airworthiness limitations (AWLs) related to any of the design features mandated by this AD are developed, we may consider additional rulemaking to mandate incorporation of those AWLs into operators' maintenance programs. The FAA is working with industry to evaluate potential changes to the AD process that are intended to more clearly identify how to maintain configurations that are required for AD compliance. We have not changed the AD regarding this issue.

Request To Allow Alternative Color of Lacing Tape

Continental raised a question regarding the color of lacing tape specified in Boeing Alert Service Bulletins 757-57A0064, dated July 16, 2007; and Revision 1, dated October 5, 2009. Continental stated that those service bulletins require use of a lacing tape identified as BMS 13-54, Type III, Class 1, Finish C, Black. Continental stated that a specific color of the lacing tape should not be mandated. Continental stated that Boeing Standard Wiring Process Manual 20-10-11 makes no distinction regarding the color of the lacing tape for sleeve installation.

We infer that Continental is requesting that we allow any color as long as the lacing tape is BMS 13-54, Type III, Class 1, Finish C. We agree to allow the use of white lacing tape because white is a neutral color that is not associated with any specific color code requirement. However, we disagree with allowing the use of lacing tape with colors other than black or white because use of colors other than black or white may be inconsistent with color-coding used by the manufacturer or operator, and could create confusion in wiring identification. We have granted a global AMOC to allow the use of lacing tape BMS 13-54, Type III, Class 1, Finish C, with white color in place of black color when accomplishing the actions specified in Boeing Alert Service Bulletin 757-57A0064, dated July 16, 2007, as required by paragraph (f) of AD 2008-23-19, Amendment 39-15740. Paragraph (i) has been added to this AD to reflect these changes.

Conclusion

We reviewed the relevant data, considered 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:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

Costs of Compliance

We estimate that this AD affects 667 airplanes of U.S. registry.
We estimate the following costs to comply with this AD:

Estimated Costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Fastener Sealing and Inspections (required by AD 2008-23-19)	Up to 545 work-hours X \$85 per hour = Up to \$46,325 per airplane depending on configuration	\$325	Up to \$46,650	Up to \$31,115,550
Main Tank Fastener Sealing (new proposed action)	Up to 30 work-hours X \$85 per hour = Up to \$2,550	\$0	Up to \$2,550	Up to \$1,700,850

We estimate the following costs to do any necessary replacements that would be required based on the results of the proposed inspection. We have no way of determining the number of aircraft that might need these replacements:

On-Condition Costs

Action	Labor cost	Parts cost	Cost per product
Clamp Replacement	Up to 6 work-hours X \$85 per hour = \$510	\$0	Up to \$510

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

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),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) 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.

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 FAA amends § 39.13 by removing airworthiness directive (AD) 2008-23-19, Amendment 39-15740 (73 FR 71534, November 25, 2008), and adding the following new AD:



2011-05-04 The Boeing Company: Amendment 39-16613; Docket No. FAA-2010-0698; Directorate Identifier 2009-NM-264-AD.

Effective Date

(a) This airworthiness directive (AD) is effective March 31, 2011.

Affected ADs

(b) This AD supersedes AD 2008-23-19, Amendment 39-15740.

Applicability

(c) This AD applies to all The Boeing Company Model 757-200, -200CB, -200PF, and -300 series airplanes, certificated in any category.

Subject

(d) Air Transport Association (ATA) of America Code 57: Wings.

Unsafe Condition

(e) This AD results from a fuel system review conducted by the manufacturer. We have received reports from the manufacturer that additional fasteners in the main fuel tanks must be sealed for lightning strike protection. The Federal Aviation Administration is issuing this AD to detect and correct improper wire bundle support installation and sleeving and to prevent improperly sealed fasteners in the main and center fuel tanks from becoming an ignition source, in the event of a fault current or lightning strike, which could result in a fuel tank explosion and consequent loss of the airplane.

Compliance

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Restatement of Requirements of AD 2008-23-19, With Revised Service Information

Fastener Sealing and Inspections

(g) Within 60 months after December 30, 2008 (the effective date of AD 2008-23-19), seal the applicable fasteners and do the general visual inspections of the wire bundle support installations, and do all the applicable corrective actions before further flight, by accomplishing all of the applicable actions specified in the Accomplishment Instructions of Boeing Alert Service Bulletin 757-57A0064, dated July 16, 2007; or Part 1 through Part 10 of the Work Instructions of Boeing Alert Service

Bulletin 757-57A0064, Revision 1, dated October 5, 2009. As of the effective date of this AD, only Boeing Alert Service Bulletin 757-57A0064, Revision 1, dated October 5, 2009, may be used.

New Requirements of This AD

Fastener Sealing on the Rear Spar

(h) For airplanes on which the actions in Boeing Alert Service Bulletin 757-57A0064, dated July 16, 2007, were accomplished before the effective date of this AD: Within 60 months after the effective date of this AD, seal the fasteners on the rear spar inside the left and right main fuel tanks, in accordance with Part 11 of the Work Instructions of Boeing Alert Service Bulletin 757-57A0064, Revision 1, dated October 5, 2009.

Acceptable Lacing Tape for Repair Actions

(i) Where Boeing Alert Service Bulletin 757-57A0064, Revision 1, dated October 5, 2009, describes the use of lacing tape BMS 13-54, Type III, Class 1, Finish C, Black, this AD also allows the use of lacing tape BMS 13-54, Type III, Class 1, Finish C, White, as an alternative.

Alternative Methods of Compliance (AMOCs)

(j)(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Tak Kobayashi, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6499; fax (425) 917-6590. Information may be e-mailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(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, notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(3) AMOCs approved previously in accordance with AD 2008-23-19, Amendment 39-15740, are approved as AMOCs for the corresponding provisions of paragraph (g) of this AD.

Related Information

(k) For more information about this AD, contact Tak Kobayashi, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6499; fax (425) 917-6590; e-mail: Takahisa.Kobayashi@faa.gov.

Material Incorporated by Reference

(l) You must use Boeing Alert Service Bulletin 757-57A0064, Revision 1, dated October 5, 2009, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; e-mail me.boecom@boeing.com; Internet <https://www.myboeingfleet.com>.

(3) You may review copies of the service information at the FAA, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, call 202-741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on February 14, 2011.

Kalene C. Yanamura,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.