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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2006-26710; Directorate Identifier 2006-NM-147-AD; Amendment 39-15517; AD 2008-10-11]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 757 Airplanes

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

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Boeing Model 757 airplanes. This AD requires revising the Airworthiness Limitations (AWLs) section of the Instructions for Continued Airworthiness by incorporating new limitations for fuel tank systems to satisfy Special Federal Aviation Regulation No. 88 requirements. This AD also requires the initial inspection of certain repetitive AWL inspections to phase-in those inspections, and repair if necessary. This AD results from a design review of the fuel tank systems. We are issuing this AD to prevent the potential for ignition sources inside fuel tanks caused by latent failures, alterations, repairs, or maintenance actions, which, in combination with flammable fuel vapors, could result in a fuel tank explosion and consequent loss of the airplane.

DATES: This AD becomes effective June 12, 2008.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of June 12, 2008.

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: Judy Coyle, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6497; 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 all Boeing Model 757 airplanes. That supplemental NPRM was published in the Federal Register on August 1, 2007 (72 FR 41963). That supplemental NPRM proposed to require revising the Airworthiness Limitations (AWLs) section of the Instructions for Continued Airworthiness (ICA) by incorporating new limitations for fuel tank systems to satisfy Special Federal Aviation Regulation No. 88 requirements. That supplemental NPRM also proposed to require the initial inspection of certain repetitive inspections specified in the AWLs to phase-in those inspections, and repair if necessary. That supplemental NPRM also proposed to revise the original NPRM by aligning the compliance time for revising the AWLs section with the compliance date of the special maintenance program requirements, updating the listing of applicable airplane maintenance manuals in Appendix 1, and clarifying certain actions.

Actions Since Supplemental NPRM Was Issued

Since we issued the supplemental NPRM, Boeing has issued Temporary Revision (TR) 09-008, dated March 2008. Boeing TR 09-008 is published as Section 9 of the Boeing 757 Maintenance Planning Document (MPD) Document, D622N001-9, Revision March 2008 (hereafter referred to as "Revision March 2008 of the MPD"). The supplemental NPRM referred to Revision March 2006 of the MPD as the appropriate source of service information for accomplishing the proposed actions. Revision March 2008 of the MPD, among other actions, includes the following changes:

- Removes the repetitive task interval of 36,000 flight cycles from AWLs No. 28-AWL-01, No. 28-AWL-03, and No. 28-AWL-14.
- Revises the task description for AWL No. 28-AWL-01 to harmonize it with AWL No. 28-AWL-02 by removing references to certain station numbers.
- Revises AWL No. 28-AWL-03 to reflect the new maximum loop resistance values associated with the lightning protection of the unpressurized fuel quantity indicating system (FQIS) wire bundle installations.

Accordingly, we have revised paragraphs (f), (g), and (h) of this AD to refer to Revision March 2008 of the MPD. We also have added a new paragraph (j) to this AD specifying that actions done before the effective date of this AD in accordance with Revisions March 2006 through November 2007 of the MPD are acceptable for compliance with the corresponding requirements of paragraphs (g) and (h) of this AD.

We also have removed reference to 36,000 total flight cycles from Table 1 of this AD and revised the initial threshold for accomplishing AWLs No. 28-AWL-01, No. 28-AWL-03, and No. 28-AWL-14 to within 120 months since the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness.

Operators should note that we have revised paragraph (g) of this AD to require incorporating only AWLs No. 28-AWL-01 through No. 28-AWL-24 inclusive. AWL No. 28-AWL-25 was added in Revision October 2006 of the MPD, and AWL No. 28-AWL-26 was added in Revision January 2007 of the MPD. However, as an optional action, operators may incorporate those AWLs as specified in paragraph (g) of this AD.

We have issued a separate NPRM (Docket No. FAA-2007-28598) that, in part, proposes to incorporate AWLs No. 28-AWL-20 and No. 28-AWL-26 into the AWLs section of the ICA. That NPRM was published in the Federal Register on July 9, 2007 (72 FR 37132). We have also issued

AD 2008-06-03, amendment 39-15415 (73 FR 13081, March 12, 2008) that, in part, requires revising the AWLs section of the ICA to incorporate AWLs No. 28-AWL-23, No. 28-AWL-24, and No. 28-AWL-25. Therefore, we have added a new paragraph (k) to this AD specifying that incorporating AWLs No. 28-AWL-23, No. 28-AWL-24, and No. 28-AWL-25 in accordance with paragraph (g) of this AD terminates the action required by paragraph (h)(2) of AD 2008-06-03.

Other Changes Made to This AD

We have revised paragraph (h) of this AD to clarify that the actions identified in Table 1 of this AD must be done at the compliance time specified in that table. Also, for standardization purposes, we have revised this AD in the following ways:

- We have added a new paragraph (i) to this AD to specify that no alternative inspections, inspection intervals, or critical design configuration control limitations (CDCCLs) may be used unless they are part of a later approved revision of Revision March 2008 of the MPD, or unless they are approved as an alternative method of compliance (AMOC). Inclusion of this paragraph in the AD is intended to ensure that the AD-mandated airworthiness limitations changes are treated the same as the airworthiness limitations issued with the original type certificate.
- We have revised Note 1 of this AD to clarify that an operator must request approval for an AMOC if the operator cannot accomplish the proposed inspections because an airplane has been previously modified, altered, or repaired in the areas addressed by the proposed inspections.
- We have revised paragraph (h) of this AD to specify that accomplishing the applicable AWLs in Table 1 of this AD as part of an FAA-approved maintenance program before the applicable compliance time constitutes compliance with the applicable requirements of that paragraph.
- We have deleted Appendix 1 from this AD, since Revision March 2008 of the MPD already contains most of the updated information that is listed in Appendix 1 of the NPRM.

Comments

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

Request To Extend the Task Intervals for Certain AWL Inspections

KLM Royal Dutch Airlines, on behalf of several operators, requests that we review a 45-page proposal to align certain airworthiness limitation item (ALI) intervals with the applicable maintenance significant item (MSI) and enhanced zonal analysis procedure (EZAP) intervals for Model 737, 747, 757, 767, and 777 airplanes. The recommendations in that proposal ensure that the ALI intervals align with the maintenance schedules of the operators. Among other changes, the proposal recommends extending certain AWL inspection intervals from 10 years/36,000 flight cycles to 12 years for Model 757 airplanes.

We disagree with KLM's request to extend certain AWL inspection intervals to 12 years. However, as stated previously, we have deleted the 36,000-total-flight-cycle parameter from Table 1 of this AD to correspond with the task intervals specified in Revision March 2008 of the MPD. In developing an appropriate compliance time for this action, we considered the urgency associated with the subject unsafe condition and the practical aspect of accomplishing the required actions within a period of time that corresponds to the normal scheduled maintenance for most affected operators. However, according to the provisions of paragraph (l) of this AD, we might approve requests to adjust the compliance time if the request includes data that prove that the new compliance time would provide an acceptable level of safety.

Request To Revise the Loop Resistance Values for AWL No. 28-AWL-03

Boeing states that the loop resistance values for AWL No. 28-AWL-03 specified in Revision March 2006 of the MPD are going to be revised, since those values are relevant for production airplanes. Boeing also states that the revised values will be more representative of the expected values for in-service airplanes. Boeing points out that, according to paragraph (h) of the supplemental NPRM, the revised values should be able to be used in accordance with a later revision of the MPD if the revision is approved by the Seattle Aircraft Certification Office (ACO), FAA.

We agree that operators may use the revised loop resistance values for AWL No. 28-AWL-03 in accordance with Revision March 2008 of the MPD. As stated previously, we have revised this AD accordingly.

Request To Revise Note 1

Boeing requests that we revise Note 1 of the supplemental NPRM to clarify the need for an AMOC. Boeing states that the current wording is difficult to follow, and that the note is meant to inform operators that an AMOC to the required MPD AWLs might be required if an operator has previously modified, altered, or repaired the areas addressed by the limitations. Boeing requests that we revise Note 1 as follows:

- Add the words "according to paragraph (g)" at the end of the first sentence.
- Replace the words "revision to" with "deviation from" in the last sentence.
- Delete the words "(g) or" and "as applicable" from the last sentence.

As stated previously, we have simplified the language in Note 1 of this AD for standardization with other similar ADs. The language the commenter requests that we change does not appear in the revised note. Therefore, no additional change to this AD is necessary in this regard.

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 990 airplanes of the affected design in the worldwide fleet. The following table provides the estimated costs, at an average labor rate of \$80 per work hour, for U.S. operators to comply with this AD.

Estimated Costs				
Action	Work hours	Cost per airplane	Number of U.S.-registered airplanes	Fleet cost
AWLs revision	8	\$640	639	\$408,960
Inspections	8	\$640	639	\$408,960

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):



2008-10-11 Boeing: Amendment 39-15517. Docket No. FAA-2006-26710; Directorate Identifier 2006-NM-147-AD.

Effective Date

(a) This AD becomes effective June 12, 2008.

Affected ADs

(b) None.

Applicability

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

Note 1: This AD requires revisions to certain operator maintenance documents to include new inspections. Compliance with these inspections is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by these inspections, the operator may not be able to accomplish the inspections described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance (AMOC) according to paragraph (l) of this AD. The request should include a description of changes to the required inspections that will ensure the continued operational safety of the airplane.

Unsafe Condition

(d) This AD results from a design review of the fuel tank systems. We are issuing this AD to prevent the potential for ignition sources inside fuel tanks caused by latent failures, alterations, repairs, or maintenance actions, which, in combination with flammable fuel vapors, could result in a fuel tank explosion 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.

Service Information

(f) The term "Revision March 2008 of the MPD" as used in this AD, means Boeing Temporary Revision (TR) 09-008, dated March 2008. Boeing TR 09-008 is published as Section 9 of the Boeing 757 Maintenance Planning Document (MPD) Document, D622N001-9, Revision March 2008.

Revision of Airworthiness Limitations (AWLs) Section

(g) Before December 16, 2008, revise the AWLs section of the Instructions for Continued Airworthiness (ICA) by incorporating the information in the subsections specified in paragraphs (g)(1) through (g)(3) of this AD into the MPD; except that the initial inspections specified in Table 1 of this AD must be done at the compliance times specified in Table 1. Accomplishing the revision in accordance with a later revision of the MPD is an acceptable method of compliance if the revision is approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA.

(1) Subsection E, "AIRWORTHINESS LIMITATIONS–FUEL SYSTEMS," of Revision March 2008 of the MPD.

(2) Subsection F, "PAGE FORMAT: SYSTEMS AIRWORTHINESS LIMITATIONS," of Revision March 2008 of the MPD.

(3) Subsection G, "AIRWORTHINESS LIMITATIONS–FUEL SYSTEM AWLs," AWLs No. 28-AWL-01 through No. 28-AWL-24 inclusive, of Revision March 2008 of the MPD. As an optional action, AWLs No. 28-AWL-25 and No. 28-AWL-26, as identified in Subsection G of Revision March 2008 of the MPD, also may be incorporated into the AWLs section of the ICA.

Initial Inspections and Repair

(h) Do the inspections specified in Table 1 of this AD at the compliance time specified in Table 1 of this AD, and repair any discrepancy, in accordance with Section G of Revision March 2008 of the MPD. The repair must be done before further flight. Accomplishing the actions in accordance with a later revision of the MPD is an acceptable method of compliance if the revision is approved by the Manager, Seattle ACO. Accomplishing the inspections identified in Table 1 of this AD as part of an FAA-approved maintenance program before the applicable compliance time specified in Table 1 of this AD constitutes compliance with the requirements of this paragraph.

Table 1 – Initial Inspections

AWL No.	Description	Compliance Time (whichever occurs later)	
		Threshold	Grace Period
(1) 28-AWL-01	A detailed inspection of external wires over the center fuel tank for damaged clamps, wire chafing, and wire bundles in contact with the surface of the center fuel tank	Within 120 months since the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness	Within 72 months after the effective date of this AD.
(2) 28-AWL-03	A special detailed inspection of the lightning shield to ground termination on the out-of-tank fuel quantity indicating system to verify functional integrity	Within 120 months since the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness	Within 24 months after the effective date of this AD.

(3) 28-AWL-14	A special detailed inspection of the fault current bond of the fueling shutoff valve actuator of the center wing tank to verify electrical bond	Within 120 months since the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness	Within 60 months after the effective date of this AD.
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Note 2: For the purposes of this AD, a detailed inspection is: "An intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirror, magnifying lenses, etc., may be necessary. Surface cleaning and elaborate procedures may be required."

Note 3: For the purposes of this AD, a special detailed inspection is: "An intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. The examination is likely to make extensive use of specialized inspection techniques and/or equipment. Intricate cleaning and substantial access or disassembly procedure may be required."

No Alternative Inspections, Inspection Intervals, or Critical Design Configuration Control Limitations (CDCCLs)

(i) After accomplishing the actions specified in paragraphs (g) and (h) of this AD, no alternative inspections, inspection intervals, or CDCCLs may be used unless the inspections, intervals, or CDCCLs are part of a later revision of "Revision March 2008 of the MPD" that is approved by the Manager, Seattle ACO; or unless the inspections, intervals, or CDCCLs are approved as an AMOC in accordance with the procedures specified in paragraph (l) of this AD.

Credit for Actions Done According to Previous Revisions of the MPD

(j) Actions done before the effective date of this AD in accordance with Section 9 of the Boeing 757 MPD Document, D622N001-9, Revision March 2006; Revision October 2006; Revision January 2007; or Revision November 2007; are acceptable for compliance with the corresponding requirements of paragraphs (g) and (h) of this AD.

Terminating Action for AD 2008-06-03, Amendment 39-15415

(k) Incorporating AWLs No. 28-AWL-23, No. 28-AWL-24, and No. 28-AWL-25 into the AWLs section of the ICA in accordance with paragraph (g) of this AD terminates the action required by paragraph (h)(2) of AD 2008-06-03.

Alternative Methods of Compliance (AMOCs)

(l)(1) The Manager, Seattle ACO, 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

(m) You must use Boeing Temporary Revision (TR) 09-008, dated March 2008, to the Boeing 757 Maintenance Planning Document (MPD) Document, D622N001-9, to perform the actions that are required by this AD, unless the AD specifies otherwise. Boeing TR 09-008 is published as Section 9 of the Boeing 757 Maintenance Planning Document (MPD) Document, D622N001-9, Revision March 2008.

(1) The Director of the Federal Register approved the incorporation by reference of this document in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) Contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124-2207, for a copy of this service information.

(3) You may review copies 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/cfr/ibr-locations.html>.

Issued in Renton, Washington, on April 29, 2008.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E8-9917 Filed 5-7-08; 8:45 am]