

[Federal Register: November 25, 2008 (Volume 73, Number 228)]  
[Rules and Regulations]  
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From the Federal Register Online via GPO Access [wais.access.gpo.gov]  
[DOCID:fr25no08-7]

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## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2007-0289; Directorate Identifier 2007-NM-208-AD; Amendment 39-15740;  
AD 2008-23-19]

RIN 2120-AA64

#### Airworthiness Directives; Boeing Model 757 Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT

**ACTION:** Final rule.

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**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Boeing Model 757 airplanes. This AD 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. This 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 AD results from a fuel system review conducted by the manufacturer. 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, which could result in a fuel tank explosion and consequent loss of the airplane.

**DATE:** This AD becomes effective December 30, 2008.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of December 30, 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**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an airworthiness directive (AD) that would apply to certain Boeing Model 757 series airplanes. That NPRM was published in the Federal Register on December 6, 2007 (72 FR 68064). The NPRM proposed to require sealing the fasteners on the front and rear spars inside the left and right main fuel tanks and on the 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 trays, on the left and right rear spars, and on the left and right front spars; and corrective actions if necessary.

### **Comments**

We gave the public the opportunity to participate in developing this AD. We considered the comments received from the four commenters.

### **Request for Justification of the NPRM**

Northwest Airlines (NWA) has no objection to the intent of the NPRM, but it states it is not clear that we have shown that the probability of a fuel tank explosion due to unsealed fuel tank fasteners reaches the threshold for justifying the proposed modification. NWA requests that we provide more detail regarding the risk and benefit of the NPRM.

We agree to provide clarification. The unsafe condition encompassed the scenario of single failures (for example, a wire bundle clamp failure that could result in wire bundle contact with the fuel tank causing an ignition source internal to the tank) that place an airplane at risk of a fuel tank explosion. The in-tank sealant is designed to provide a second level of protection against fuel tank ignition by encapsulating and containing the potential source of ignition. Further, the risk level associated with this single failure scenario was determined to warrant the actions required by this AD. No change to the AD is necessary in this regard.

### **Request To Clarify the Unsafe Condition**

Boeing requests that we revise paragraph (d) of the NPRM to cover the requirement to do the general visual inspection for wire bundle support installation and sleeving. Boeing states that failures of the wire bundles and shorting to clamps are the prime candidates for the fault current source, and that they should be identified as the unsafe condition.

We agree because accomplishing the general visual inspections for wire bundle supports and sleeving is one of the requirements of this AD. We have revised the Summary and paragraph (d) of this AD accordingly.

## Request To Clarify Requirements

Boeing requests that we revise the Summary of the NPRM to include the requirement to seal the fasteners on the rear spar of the center fuel tank. Boeing states that this action is called out on page 149 in view B of Figure 7 of Boeing Alert Service Bulletin 757-57A0064, dated July 16, 2007.

We agree and have revised the Summary of this AD accordingly. Although the specific location of the "rear spar of the center tank" was inadvertently omitted from the Summary of the NPRM, it was covered by paragraph (f) of the NPRM, which specified accomplishing all of the applicable actions specified in the Accomplishment Instructions of Boeing Alert Service Bulletin 757-57A0064, dated July 16, 2007.

## Request To Delay Issuance To Provide Instructions for Maintaining the Design Change

Continental Airlines (CAL) is concerned that not enough attention has been given to ensure that the changes detailed in Boeing Alert Service Bulletin 757-57A0064, dated July 16, 2007, are preserved for the long-term operation of its Model 757 fleet. CAL states that, other than this service bulletin and some generic information found in the Boeing 757 Maintenance Planning Data (MPD) document, there are no other published "maintenance" documents currently available to show each specific requirement as detailed in the service bulletin. CAL further states that information detailed by the service bulletin must be available in manuals that are routinely used by maintenance personnel. CAL asserts that making this information available will prevent the inadvertent reversal of the implemented changes, which could lead to violation of the NPRM, in addition to compromising the higher level of safety intended for the Model 757 fleet.

CAL believes the current program, as provided by the service bulletin and proposed by the NPRM, is not ready to be implemented. CAL states that, if the NPRM is mandated as proposed, CAL would not be able to incorporate the modification on its Model 757-200 series airplanes, and a high risk of future de-modification would exist for those airplanes that could be modified. CAL recommends that we coordinate with Boeing regarding its requested changes.

We infer that CAL requests that we delay issuance of the AD until Boeing has revised the applicable maintenance documents to provide detailed information for maintenance personnel to maintain the required design change. We agree with CAL's concern about ensuring that the requirements of this AD are maintained throughout the life of the airplane. We are considering additional rulemaking in this regard. However, we disagree with delaying issuance of the final rule until Boeing has worked through its process to revise the applicable maintenance documents. To delay this action would be inappropriate, since we have determined that an unsafe condition exists and that the actions required by this AD must be mandated to ensure continued safety. However, as a result of this comment, we have initiated discussions with Boeing about including more detail in the Instructions for Continued Airworthiness (ICA) to ensure that the integrity of this AD is maintained throughout the life of an airplane. Those discussions are ongoing at this time. We have not changed the AD in this regard.

## Request To Delay Issuance of the AD To Provide Instructions for Modified Airplanes

CAL states that all of its 41 Model 757-200 series airplanes were modified in the past with a Aviation Partners Boeing (APB) winglet design that incorporated significant changes to the forward and rear spars. CAL states that Boeing has acknowledged that Boeing Alert Service Bulletin 757-57A0064, dated July 16, 2007, does not include instructions for the configuration of CAL's modified airplanes. CAL also states that Boeing is currently assessing the configuration of CAL's airplanes and that Boeing will respond with an action plan.

We infer that CAL requests that we delay issuance of the AD until Boeing has revised the service bulletin to provide instructions for accomplishing the modification on airplanes equipped with APB winglets installed in accordance with Supplemental Type Certificate (STC) ST01518SE. We

disagree with delaying issuance of the final rule because we have determined that an unsafe condition exists and that the actions required by this AD must be mandated to ensure continued safety. Further, we have discussed CAL's concern about the service bulletin instructions with both the airplane and winglet manufacturers. They both indicated that the procedures in the service bulletin, as published, can be accomplished on airplanes equipped with APB winglets installed in accordance with STC ST01518SE. We have not changed the AD in this regard.

### **Request To Extend Compliance Time**

European Air Transport, on behalf of DHL Air, and NWA request that we extend the compliance time from 60 months to 72 months. European Air Transport states that, due to the high number of work hours needed to accomplish the proposed actions, it plans to do the work during a 4C-check (corresponding to 72 months, 24,000 flight hours, or 12,000 flight cycles, whichever occurs first). European Air Transport also states that a 60-month compliance time would require it to do the proposed actions on some of its airplanes outside the 4C-check, but that a 72-month compliance time will allow it to do the proposed actions on the entire fleet during base maintenance.

NWA states that, due to access requirements, it considers the proposed modification to be consistent with a D-check level of work. NWA also states that it does not understand the substantiation for the 60-month compliance time and believes that doing the work during scheduled fuel tank access will ensure more consistent quality of the modification, as well as reduced costs to industry. NWA also states that it is unaware of any accident or incident that has been attributed to unsealed fuel tank fasteners, or that the risk is such that compliance should be required within 60 months instead of 72 months. NWA believes that a 1-year extension of the compliance time would not have an appreciable impact on safety. NWA further states its request is consistent with the FAA harmonization policy of the aging airplane programs in accordance with "Fuel Tank Safety Compliance Extension (Final Rule) and Aging Airplane Program Update (Request for Comments)" (69 FR 45936, July 30, 2004).

We do not agree with the request to extend the compliance time. In developing an appropriate compliance time for this action, we considered the urgency associated with the subject unsafe condition and the practical aspects of accomplishing the required modification within a period of time that corresponds to the normal scheduled maintenance for most affected operators. We recognize that operators have different maintenance schedules for accomplishing heavy maintenance on Model 757 airplanes, but at the same time we understand that a 60-month compliance time will accommodate most operators' schedules for that type of work. However, according to the provisions of paragraph (g) of this AD, we may 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. We have not changed the AD in this regard.

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

### **Costs of Compliance**

There are about 1,049 airplanes of the affected design in the worldwide fleet. This AD affects about 539 airplanes of U.S. registry. The required actions take up to 545 work hours per airplane depending on the airplane configuration, at an average labor rate of \$80 per work hour. Required parts cost about \$325 per airplane. Based on these figures, the estimated cost of the AD for U.S. operators is up to \$23,675,575, or up to \$43,925 per airplane.

## 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

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.

You can find our regulatory evaluation and the estimated costs of compliance in the AD Docket.

## 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—AIRWORKSHOP 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 adding the following new AD:



**2008-23-19 Boeing:** Amendment 39-15740. Docket No. FAA-2007-0289; Directorate Identifier 2007-NM-208-AD.

**Effective Date**

(a) This airworthiness directive (AD) is effective December 30, 2008.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to Boeing Model 757-200, -200CB, -200CF, and -300 series airplanes, certificated in any category; as identified in Boeing Alert Service Bulletin 757-57A0064, dated July 16, 2007.

**Unsafe Condition**

(d) This AD results from a fuel system review conducted by the manufacturer. 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, which 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.

**Fastener Sealing and Inspections**

(f) Within 6 months after the effective date of this AD, 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.

**Alternative Methods of Compliance (AMOCs)**

(g)(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, ATTN: Judy Coyle, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle ACO, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 917-6497; fax (425) 917-6590; has the authority to approve AMOCs for this AD, if requested, using 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**

(h) You must use Boeing Alert Service Bulletin 757-57A0064, dated July 16, 2007, 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, P.O. Box 3707, Seattle, Washington 98124-2207; telephone 206-544-9990; fax 206-766-5682; mail DDCS@boeing.com; Internet <https://www.myboeingfleet.com>.

(3) You may review copies of the service information incorporated by reference 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).

Issued in Renton, Washington, on October 24, 2008.

Ali Bahrami,  
Manager, Transport Airplane Directorate,  
Aircraft Certification Service.

**SUPERSEDED**