

# 2010-01-08

## THE BOEING COMPANY

Amendment 39-16166

Docket No. FAA-2008-0669; Directorate Identifier 2007-NM-350-AD

### PREAMBLE

#### Effective Date

(a) This airworthiness directive (AD) is effective February 16, 2010.

#### Affected ADs

(b) None.

#### Applicability

(c) This AD applies to The Boeing Company Model 737-600, -700, and -800 series airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 737-57A1294, dated April 23, 2007.

#### Subject

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

#### Unsafe Condition

(e) This AD results from drill starts being found on the free flange of the lower stringers of the wing center section during a quality assurance inspection at the final assembly plant. We are issuing this AD to prevent cracks from propagating from drill starts in the free flange, vertical web, and radius between the free flange and vertical web of the lower stringers of the wing center section lower stringers, which could cause a loss of structural integrity of the wing center section and may result in a fuel leak.

#### Compliance

(f) Comply with this AD within the compliance times specified, unless already done.

#### Inspection and Related Investigative and Corrective Actions

(g) Before the accumulation of 18,000 total flight cycles, or within 90 days after the effective date of this AD, whichever occurs later, do a detailed inspection of the free flange, vertical web, and radius between the free flange and vertical web of the lower stringers of the wing center section for any drill start, and do all applicable related investigative and corrective actions, by accomplishing all the applicable actions specified in paragraphs 3.B.2 and 3.B.4 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-57A1294, dated April 23, 2007; except as provided in paragraph

(h) of this AD. The applicable related investigative and corrective actions must be done before further flight.

(h) If any crack is found during any inspection required by paragraph (g) of this AD, and Boeing Alert Service Bulletin 737-57A1294, dated April 23, 2007, specifies to contact Boeing for appropriate action: Before further flight, repair the crack using a method approved in accordance with the procedures specified in paragraph (i) of this AD.

### **Alternative Methods of Compliance (AMOCs)**

(i)(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: Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6440; fax (425) 917-6590. Or, e-mail information 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 on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD, if it is approved by an Authorized Representative for the Boeing Commercial Airplanes Delegation Option Authorization Organization who has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

### **Material Incorporated by Reference**

(j) You must use Boeing Alert Service Bulletin 737-57A1294, dated April 23, 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, 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, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221 or 425-227-1152.

(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 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:** Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356, telephone (425) 917-6440; fax (425) 917-6590.

Issued in Renton, Washington, on December 23, 2009.

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

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[Rules and Regulations]  
[Page 1536-1538]  
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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

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

**[Docket No. FAA-2008-0669; Directorate Identifier 2007-NM-350-AD; Amendment 39-16166; AD 2010-01-08]**

**RIN 2120-AA64**

**Airworthiness Directives; The Boeing Company Model 737-600, -700, and -800 Series 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 Model 737-600, -700, and -800 series airplanes. This AD requires an inspection of the free flange, vertical web, and radius between the free flange and vertical web of the lower stringers of the wing center section for drill starts, and applicable related investigative and corrective actions. This AD results from drill starts being found on the free flange of the lower stringers of the wing center section during a quality assurance inspection at the final assembly plant. We are issuing this AD to prevent cracks from propagating from drill starts in the free flange, vertical web, and radius between the free flange and vertical web of the lower stringers of the wing center section lower stringers, which could cause a loss of structural integrity of the wing center section and may result in a fuel leak.

**DATES:** This AD is effective February 16, 2010.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of February 16, 2010.

**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>.

#### **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:** Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356, telephone (425) 917-6440; fax (425) 917-6590.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

We issued a supplemental notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an airworthiness directive (AD) that would apply to certain Model 737-600, -700, and -800 series airplanes. That supplemental NPRM was published in the Federal Register on March 6, 2009 (74 FR 9776). That supplemental NPRM proposed to require an inspection of the free flange, vertical web, and radius between the free flange and vertical web of the lower stringers of the wing center section for drill starts, and applicable related investigative and corrective actions.

### **Comments**

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

### **Support for the Supplemental NPRM**

Air Transport Association (ATA), on behalf of its member, Continental Airlines (CAL), expresses support for the compliance time.

### **Request To Align NPRMs Affecting Areas Under Enhanced Airworthiness Program for Airplane Systems (EAPAS) Regulations or Maintenance Planning Documents**

ATA, on behalf of its member CAL, notes that Boeing Alert Service Bulletin 73-57A1294, dated April 23, 2007, was issued before airworthiness limitations (AWLs) 28-AWL-11 and 28-AWL-12 were published. CAL points out that the service bulletin states to contact Boeing for repair instructions for crack findings to comply with the requirements of the supplemental NPRM. However, CAL states the supplemental NPRM and the service bulletin do not address how to comply with AWLs 28-AWL-11 and 28-AWL-12 of Section 9 of the Boeing 737-600/700/800/900 MPD Document D626A001-CMR if the repair instructions require installing fasteners into the fuel tank. CAL notes that FAA approval of the MPD AWLs can only be granted by the Manager, Seattle Aircraft Certification Office (ACO), FAA.

We infer that CAL is asking that we revise the supplemental NPRM to clarify whether the corrective actions are compliant with EAPAS regulations or MPD AWLs. We partially agree with CAL's request. We agree that operators benefit from notification that certain repairs covered by this AD are also potentially subject to compliance with the requirements of AD 2008-10-10, Amendment 39-15516 (73 FR 25986, May 8, 2008). AD 2008-10-10 mandates AWLs 28-AWL-11 and 28-AWL-12 and requires that any new penetration into the fuel tank be approved for lightning considerations by the FAA, Seattle ACO.

We disagree that a change to the supplemental NPRM is necessary. On April 15, 2009, Boeing issued MultiOperator Message (MOM) MOM-09-0178-01B, applicable to the following ADs:

- AD 2008-04-11, Amendment 39-15383 (73 FR 9666, February 22, 2008)
- AD 2008-04-10, Amendment 39-15382 (73 FR 9668, February 22, 2008)
- AD 2008-10-09, Amendment 39-15515 (73 FR 25970, May 8, 2008)

- AD 2008-10-10, Amendment 39-15516 (73 FR 25986, May 8, 2008)
- AD 2008-10-07, Amendment 39-15513 (73 FR 25977, May 8, 2008)
- AD 2008-10-06, Amendment 39-15512 (73 FR 25990, May 8, 2008)
- AD 2008-10-11, Amendment 39-15517 (73 FR 25974, May 8, 2008)
- AD 2008-11-01, Amendment 39-15523 (73 FR 29414, May 21, 2008)
- AD 2008-11-13, Amendment 39-15536 (73 FR 30737, May 29, 2008)

This MOM notifies operators that the FAA issued an alternative method of compliance (AMOC) to the same ADs. This AMOC states:

Any alteration, design change, or repair involving new penetrations of the fuel tanks (such as a repair with fasteners, adding a bracket, bulkhead fitting or equipment) or change to the design features of the existing equipment penetrations (such as fuel measuring sticks, sump drain valves, fueling manifold, fuel temperature sensor, and motor operated fuel shutoff valve adapter plate) requires approval by the FAA Seattle ACO or an Authorized Representative (AR) of the Boeing Commercial Airplanes Delegated Compliance Organization (BDCO).

However, any alteration, design change or repair involving new penetrations of the fuel tanks, accomplished in accordance with an FAA-approved Boeing Structural Repair Manual (SRM) or Boeing Service Bulletin is not subject to this requirement for additional approval.

We consider that this AMOC and the subsequent MOM supplied by Boeing is sufficient notification and clarification because the MOM states that certain Boeing service bulletins do not require additional approval in accordance with AD 2008-10-10. We have not changed the AD in regard to this issue.

### **Request To Allow ARs To Approve Repairs**

ATA, on behalf of its member CAL, requests that we revise the supplemental NPRM to grant delegated authority to Boeing to approve repairs mandated by this AD and AWLs 28-AWL-11 and 28-AWL-12 of Section 9 of the Boeing 737-600/700/800/900 MPD Document D626A001-CMR provided that only the fuel tank structure is affected, while the structural repair does not disrupt the fuel tank system. CAL states that it is concerned with complying with the MPD since Boeing Alert Service Bulletin 737-57A1294, dated April 23, 2007, was written before AWLs 28-AWL-11 and 28-AWL-12. CAL notes that the service bulletin states to contact Boeing for repair instruction for crack findings. However, CAL notes that this AD and the service bulletin do not reference the AWLs in the event that Boeing repair instructions require fastener installation into the fuel tank. CAL points out that FAA approval to reference the MPD AWLs can be granted only by the Manager, Seattle ACO.

We disagree with the request. We have approved an AMOC that allows designated ARs of the BDCO to approve fuel tank penetration for lightning considerations for several EAPAS rules. That AMOC is written against the specific AD requiring lightning approvals, which is not part of this AD. We have not changed the final rule in regard to this issue.

### **Explanation of Change Made to This AD**

We have revised this AD to identify the correct legal name of the manufacturer as published in the most recent type certificate data sheet for the affected airplane models.

## **Conclusion**

We 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 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 17 airplanes of U.S. registry. We also estimate that it would take 7 work-hours per product to comply with this AD. The average labor rate is \$80 per work-hour. Based on these figures, we estimate the cost of this AD to the U.S. operators to be \$9,520, or \$560 per product.

## **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–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 adding the following new AD: