

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2007-0186; Directorate Identifier 2007-NM-226-AD; ~~Amendment 39-16156;~~  
AD 2009-26-17]

RIN 2120-AA64

**Airworthiness Directives; McDonnell Douglas Corporation Model DC-10-10, DC-10-10F, DC-10-15, DC-10-30, DC-10-30F (KC-10A and KDC-10), DC-10-40, DC-10-40F, MD-10-10F, and MD-10-30F Airplanes**

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

**ACTION:** Final rule.

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**SUMMARY:** The FAA is superseding an existing airworthiness directive (AD), which applies to certain Model DC-10-10, DC-10-10F, DC-10-15, DC-10-30, DC-10-30F (KC-10A and KDC-10), DC-10-40, and DC-10-40F airplanes. That AD currently requires installing or replacing with improved parts, as applicable, the bonding straps between the metallic frame of the fillet and the wing leading edge ribs, on both the left and right sides of the airplane. This new AD revises the applicability by adding and removing certain airplanes. This new AD requires, for certain airplanes, repositioning or replacing two bonding straps, and doing a bonding-resistance check and an inspection to determine correct installation of certain bonding straps, and applicable corrective actions. This AD results from fuel system reviews conducted by the manufacturer. We are issuing this AD to reduce the potential of ignition sources inside fuel tanks in the event of a severe lightning strike, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

**DATES:** This AD becomes effective February 4, 2010.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of February 4, 2010.

**ADDRESSES:** For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, California 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; e-mail dse.boecom@boeing.com; Internet <https://www.myboeingfleet.comd>.

## 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:** Samuel Lee, Aerospace Engineer, Propulsion Branch, ANM-140L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5262; fax (562) 627-5210.

## SUPPLEMENTARY INFORMATION:

### Discussion

The FAA issued a second supplemental notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that supersedes AD 2006-16-03, Amendment 39-14703 (71 FR 43962, August 3, 2006). The existing AD applies to certain Model DC-10-10, DC-10-10F, DC-10-15, DC-10-30, DC-10-30F (KC-10A and KDC-10), DC-10-40, and DC-10-40F airplanes. The existing AD requires installing or replacing with improved parts, as applicable, the bonding straps between the metallic frame of the fillet and the wing leading edge ribs, on both the left and right sides of the airplane. That second supplemental NPRM was published in the Federal Register on September 1, 2009 (74 FR 45135). That second supplemental NPRM proposed to add a requirement to reposition or replace bonding straps for certain airplanes, and for certain airplanes, a bonding-resistance check and an inspection to determine correct installation of certain bonding straps, and applicable corrective actions. The second supplemental NPRM also proposed to revise the applicability by adding and removing certain airplanes.

### Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the comments from the sole commenter, FedEx, that have been received on the second supplemental NPRM.

### Request for Credit for Actions Previously Accomplished

FedEx requests credit for the actions previously accomplished. FedEx notes that under its alternative method of compliance (AMOC) previously approved by the FAA it has already accomplished resistance checks required by paragraphs (i)(2) and (j)(2) of the second supplemental NPRM on its airplanes. FedEx notes that they performed resistance checks in accordance with the AMOC previously granted by the FAA. FedEx states that it will accomplish a resistance check of any bonding straps replaced.

FedEx also requests credit for correctly installing the braided bonding straps mentioned in paragraph (j)(1) of the second supplemental NPRM, which it accomplished in accordance with the AMOC previously granted.

We agree to provide credit for accomplishing the actions required by paragraphs (i)(2), (j)(1), and (j)(2) of this final rule for the reasons that the commenter provided. Paragraph (l)(3) of the second supplemental NPRM already states that AMOCs approved previously in accordance with AD 2006-16-03 are approved as AMOCs for the corresponding provisions of this AD. Therefore, no change to this final rule is necessary.

## **Request To Change Applicability of Paragraph (h) of the Second Supplemental NPRM**

FedEx requests that we change the identification of airplanes subject to paragraph (h) of the second supplemental NPRM. FedEx notes that paragraph (h) of the second supplemental NPRM specifies "airplanes with fuselage numbers not identified in Table 2 of this AD except for airplanes identified in paragraph (i) or (j) of this AD." FedEx notes that its fuselage 317 does not appear in the effectivity of either Boeing Service Bulletin DC10-53-111, Revision 6, dated March 3, 2009; or Boeing Service Bulletin DC10-53-109, Revision 7, dated March 3, 2009 (the airplane groups identified in those service bulletins are referenced in paragraphs (i) and (j) of this AD). FedEx assumes that paragraph (h) was added to address this airplane and other airplanes that did not appear in either service bulletin. FedEx notes that the effectivity issues as they pertained to its fleet were sorted out in its AMOC request.

We disagree that it is necessary to address fuselage number 317 and the other airplane fuselage numbers in this final rule because the effectivity has been corrected in the effectivity sections of the Boeing service bulletins listed in Table 1 of this AD and/or previously approved AMOCs. We have not changed the AD in regard to this issue.

## **Request To Revise Paragraph (h) of the Second Supplemental NPRM**

FedEx requests that we remove the phrase "and reposition two bonding straps" from paragraph (h) of the second supplemental NPRM. FedEx states that if airplanes have not been modified to comply with the intent of the applicable service bulletin referenced in paragraph (h) of the second supplemental NPRM, then they would not have any bonding straps that require only repositioning.

We agree to remove the phrase "and reposition two bonding straps" from paragraph (h) of the second supplemental NPRM in this final rule for the reason stated by the commenter.

## **Request To Clarify Paragraph (j)(1) of the Second Supplemental NPRM**

FedEx requests that we clarify paragraph (j)(1) of the second supplemental NPRM to help operators determine the correct braided bonding strap. FedEx suggests changing paragraph (j)(1) to state: "Do a general visual inspection to verify correct installation of two braided bonding straps (one LH wing and one RH wing) as shown [in] Boeing Service Bulletin DC-10-53-111, Revision 6, Figure 3, Sheet 7 of 9."

We agree that this change provides additional beneficial information to operators. We have revised paragraph (j)(1) of the final AD accordingly.

## **Request To Clarify Effectivity Sections of the Service Bulletins in Table 2**

FedEx requests that we note that the effectivity sections in the service bulletins identified in Table 2 of the second supplemental NPRM have 25 fuselage numbers that appear in both service bulletins. FedEx states that we may wish to address these fuselage numbers in some manner in the proposed rule.

We agree that clarification may be necessary. Boeing has corrected Table 1 in the effectivity sections of the service bulletins referenced in Table 2 of this AD. We have not changed this AD in this regard.

## **Conclusion**

We have carefully reviewed the available data, including the comments that have been 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 457 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 |                             |               |                   |                                     |                   |
|-----------------|-----------------------------|---------------|-------------------|-------------------------------------|-------------------|
| Work hours      | Average labor rate per hour | Parts         | Cost per airplane | Number of U.S.-registered airplanes | Fleet cost        |
| 2–17            | \$80                        | Up to \$4,169 | Up to \$5,529     | 281                                 | Up to \$1,553,649 |

### 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 removing amendment 39-14703 (71 FR 43962, August 3, 2006) and by adding the following new airworthiness directive (AD):

SUPERSEDED



**2009-26-17 McDonnell Douglas Corporation:** Amendment 39-16156. Docket No. FAA-2007-0186; Directorate Identifier 2007-NM-226-AD.

#### Effective Date

- (a) This AD becomes effective February 4, 2010.

#### Affected ADs

- (b) This AD supersedes AD 2006-16-03, Amendment 39-14703.

#### Applicability

(c) This AD applies to McDonnell Douglas Corporation Model DC-10-10, DC-10-10F, DC-10-15, DC-10-30, DC-10-30F (KC-10A and KDC-10), DC-10-40, and DC-10-40F airplanes, and MD-10-10F and MD-10-30F airplanes that have been converted from Model DC-10 series airplanes; certificated in any category; with manufacturer's fuselage numbers as identified in the applicable service bulletin listed in Table 1 of this AD.

**Table 1—Applicability**

| Boeing Service Bulletin – | Revision – | Dated –       | For airplanes with –                   |
|---------------------------|------------|---------------|--|
| DC10-53-109               | 7          | March 3, 2009 | Extended wing-to-fuselage fillets.     |
| DC10-53-111               | 6          | March 3, 2009 | Conventional wing-to-fuselage fillets. |

#### Subject

- (d) Air Transport Association (ATA) of America Code 53: Fuselage.

#### Unsafe Condition

(e) This AD results from fuel system reviews conducted by the manufacturer. We are issuing this AD to reduce the potential of ignition sources inside fuel tanks in the event of a severe lightning strike, which, in combination with flammable fuel vapors, could result in fuel tank explosions 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 2006-16-03, With New Service Information

### Installation or Replacement

(g) For airplanes with manufacturer's fuselage numbers identified in the applicable service bulletin listed in Table 2 of this AD: Within 7,500 flight hours or 60 months after September 7, 2006 (the effective date of AD 2006-16-03), whichever occurs earlier: Install or replace with improved parts, as applicable, the bonding straps between the metallic frame of the fillet and the wing leading edge ribs, on both the left and right sides of the airplane, in accordance with the Accomplishment Instructions of the applicable service bulletin identified in Table 2 of this AD or Table 1 of this AD. After the effective date of this AD, use the applicable service bulletin identified in Table 1 of this AD.

**Table 2—Fuselage Numbers Affected by AD 2006-16-03**

| McDonnell Douglas<br>DC-10 Service Bulletin – | Revision – | Dated –         | For airplanes with –                  |
|---|------------|-----------------|---------------------------------------|
| 53-109  | 4          | October 7, 1992 | Extended wing-to-fuselage fillets     |
| 53-111  | 3          | August 24, 1992 | Conventional wing-to-fuselage fillets |

### New Requirements of This AD

#### Installation or Replacement

(h) For airplanes with fuselage numbers not identified in Table 2 of this AD except for airplanes identified in paragraph (i) or (j) of this AD: Within 7,500 flight hours or 60 months, whichever occurs first after the effective date of this AD, install or replace with improved parts, as applicable, the bonding straps between the metallic frame of the fillet and the wing leading edge ribs, on both the left and right sides of the airplane. Do the actions in accordance with the Accomplishment Instructions of the applicable service bulletin identified in Table 1 of this AD.

#### Strap Repositioning for Certain Airplanes

(i) For Group 1-4, Configuration 3 airplanes, as identified in Boeing Service Bulletin DC10-53-109, Revision 7, dated March 3, 2009: Within 7,500 flight hours or 60 months after the effective date of this AD, whichever occurs first, do the actions specified in paragraphs (i)(1) and (i)(2) of this AD.

(1) Remove two braided bonding straps and install two longer braided bonding straps between the metallic frame of the fillet and the wing leading edge ribs, in accordance with the Accomplishment Instructions of Boeing Service Bulletin DC10-53-109, Revision 7, dated March 3, 2009.

(2) Measure the resistance of the previously installed bonding straps and, before further flight, do all applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Service Bulletin DC10-53-109, Revision 7, dated March 3, 2009.



## Inspection and Corrective Action for Certain Airplanes

(j) For Group 1-2, Configuration 2 airplanes, as identified in Boeing Service Bulletin DC10-53-111, Revision 6, dated March 3, 2009: Within 7,500 flight hours or 60 months after the effective date of this AD, whichever occurs first, do the actions specified in paragraphs (j)(1) and (j)(2) of this AD.

(1) Do a general visual inspection to verify correct installation of the braided bonding straps (one left-hand wing and one right-hand wing) as shown in Sheet 7 in Figure 3 of Boeing Service Bulletin DC10-53-111, Revision 6, dated March 3, 2009, and, before further flight, do all applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Service Bulletin DC10-53-111, Revision 6, dated March 3, 2009.

(2) Measure the resistance of the previously installed bonding straps and, before further flight, do all applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Service Bulletin DC10-53-111, Revision 6, dated March 3, 2009.

## Credit for Actions Accomplished in Accordance With Previous Service Information

(k) Actions accomplished before the effective date of this AD according to Boeing Service Bulletin DC10-53-111, Revision 5, dated March 19, 2008; and Boeing Service Bulletin DC10-53-109, Revision 6, dated July 10, 2008; are considered acceptable for compliance with the corresponding action specified in this AD.

## Alternative Methods of Compliance (AMOCs)

(1)(1) The Manager, Los Angeles 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: Samuel Lee, Aerospace Engineer, Propulsion Branch, ANM-140L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5262; fax (562) 627-5210.

(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) AMOCs approved previously in accordance with AD 2006-16-03 are approved as AMOCs for the corresponding provisions of this AD.

## Material Incorporated by Reference

(m) You must use Boeing Service Bulletin DC10-53-109, Revision 7, dated March 3, 2009; and Boeing Service Bulletin DC10-53-111, Revision 6, dated March 3, 2009; as applicable; 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, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, California 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; e-mail dse.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).

Issued in Renton, Washington, on December 17, 2009.  
Stephen P. Boyd,  
Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.  
[FR Doc. E9-30698 Filed 12-30-09; 8:45 am]

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