

# Proposed Rules

Federal Register

Vol. 70, No. 183

Thursday, September 22, 2005

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2005-22503; Directorate Identifier 2005-NM-062-AD]

RIN 2120-AA64

#### Airworthiness Directives; McDonnell Douglas 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, MD-10-30F, MD-11, and MD-11F Airplanes

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to adopt a new airworthiness directive (AD) for certain McDonnell Douglas transport category airplanes. This proposed AD would require an initial ultrasonic inspection for cracks of the studbolts of the inboard and outboard hinge fittings of the left and right outboard flaps of the wings. Based on the inspection results, this proposed AD would also require doing repetitive ultrasonic inspections, replacing upper and/or lower studbolts with new or serviceable studbolts, doing a detailed inspection for corrosion of the upper studbolts, doing a magnetic particle inspection for cracks of studbolts, and changing the protection treatment; as applicable. This proposed AD is prompted by reports of corrosion and failures of the upper and lower studbolts of the outboard flaps inboard and outboard hinge fittings. We are proposing this AD to prevent corrosion and subsequent cracking of studbolts, which could result in failure of the flap hinge fittings and their possible separation from the wing rear spar, and consequent reduced controllability of the airplane.

**DATES:** We must receive comments on this proposed AD by November 7, 2005.

**ADDRESSES:** Use one of the following addresses to submit comments on this proposed AD.

- DOT Docket Web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.

- Government-wide rulemaking Web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.

- Mail: Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., Nassif Building, room PL-401, Washington, DC 20590.
- By fax: (202) 493-2251.
- Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street SW., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Data and Service Management, Dept. C1-L5A (D800-0024).

You can examine the contents of this AD docket on the Internet at <http://dms.dot.gov>, or in person at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., room PL-401, on the plaza level of the Nassif Building, Washington, DC. This docket number is FAA-2005-22503; the directorate identifier for this docket is 2005-NM-062-AD.

**FOR FURTHER INFORMATION CONTACT:** Maureen Moreland, Aerospace Engineer, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5238; fax (562) 627-5210.

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

We invite you to submit any relevant written data, views, or arguments regarding this proposed AD. Send your comments to an address listed under **ADDRESSES**. Include "Docket No. FAA-2005-22503; Directorate Identifier 2005-NM-062-AD" in the subject line of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the proposed AD. We will consider all comments

submitted by the closing date and may amend the proposed AD in light of those comments.

We will post all comments we receive, without change, to <http://dms.dot.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD. Using the search function of that Web site, anyone can find and read the comments in any of our dockets, including the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You can review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477-78), or you can visit <http://dms.dot.gov>.

#### Examining the Docket

You can examine the AD docket on the Internet at <http://dms.dot.gov>, or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647-5227) is located on the plaza level of the Nassif Building at the DOT street address stated in the **ADDRESSES** section. Comments will be available in the AD docket shortly after the DMS receives them.

#### Discussion

We have received several reports of corrosion and failures of the upper and lower studbolts of the outboard flaps inboard and outboard hinge fittings on certain McDonnell Douglas 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. We have also received several reports of corrosion of the upper studbolts of the outboard flaps inboard and outboard hinge fittings on certain McDonnell Douglas Model MD-11 and -11F airplanes. (The lower studbolts installed on Model MD-11 and -11F airplanes during production are made of corrosion-resistant material and are not subject to the identified unsafe condition.)

Investigation has shown that the failures are caused by stress corrosion starting at corrosion pits. Corrosion and subsequent cracking of the studbolts, if

not detected and corrected, could result in failure and possible separation of the flap hinge fittings from the wing rear

spar, and consequent reduced controllability of the airplane.

**Relevant Service Information**

We have reviewed the service bulletins in the following table:

**REFERENCED SERVICE BULLETINS**

Model—	Boeing service bulletin—
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.	DC10-57-154, dated February 2, 2005.
MD-11 and MD-11F airplanes .....	MD11-57-076, dated February 2, 2005.

The service bulletins describe procedures for an initial ultrasonic inspection for cracks of the upper and lower studbolts (upper only for MD-11

and -11F airplanes) of the inboard and outboard hinge fittings of the left and right outboard flaps of the wings. Based on the inspection results, the service

bulletins describe the procedures in the following two tables:

**CONDITION 1.—(NO CRACKED STUDBOLTS)**

Option	Description
1 .....	Repetitive ultrasonic inspections (described previously).
2 .....	Replacement of the upper and lower studbolts (as applicable) with new or serviceable studbolts. Replacing studbolts with studbolts that have increased corrosion protection ends the repetitive inspections.
3 .....	Removal of upper and lower studbolts (as applicable), a visual inspection for corrosion of the studbolts, a magnetic particle inspection for cracks of studbolts if necessary, contact Boeing for protection treatment procedures if necessary, and installation of new or serviceable studbolts.

**CONDITION 2.—(CRACKED STUDBOLTS)**

Option	Description
1 .....	Removal of upper and lower studbolts (as applicable), a visual inspection for corrosion of studbolts, a magnetic particle inspection for cracks of studbolts if necessary, installation of new or serviceable studbolts, and repetitive ultrasonic inspections (described previously) if necessary. Replacing studbolts with studbolts that have increased corrosion protection ends the repetitive inspections.
2 .....	Replacement of the upper and lower studbolts (as applicable) with new or serviceable studbolts.
3 .....	Removal of upper and lower studbolts (as applicable), a detailed inspection for corrosion of the studbolts, a magnetic particle inspection for cracks of studbolts if necessary, and installation of new or serviceable studbolts.

Accomplishing the actions specified in the service information is intended to adequately address the unsafe condition.

**FAA’s Determination and Requirements of the Proposed AD**

We have evaluated all pertinent information and identified an unsafe condition that is likely to exist or develop on other airplanes of this same type design. Therefore, we are proposing this AD, which would require accomplishing the actions specified in the service information described previously, except as discussed under

“Differences Between the Proposed AD and Service Bulletins.”

**Differences Between the Proposed AD and Service Bulletins**

Although the service bulletins specify that operators may contact the manufacturer for disposition of certain repair conditions, this proposed AD would require operators to repair those conditions according to a method approved by the FAA.

The service bulletins refer only to a “visual inspection” for corrosion of studbolts. We have determined that the procedures in the service bulletins

should be described as a “detailed inspection.” Note 1 has been included in this proposed AD to define this type of inspection.

**Costs of Compliance**

There are about 594 airplanes of the affected design in the worldwide fleet. This proposed AD would affect about 297 U.S.-registered 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; and 69 Model MD-11 and -11F airplanes.

**ESTIMATED COSTS FOR REQUIRED ACTIONS**

Action	Work hours	Average labor rate per hour	Parts	Cost per airplane	Number of U.S.-registered airplanes	Fleet cost
Initial ultrasonic inspection .....	16	\$65	None	\$1,040	366	\$380,640

**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 proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 the proposed regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the 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 proposed AD. 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, Safety.

**The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator,

the FAA proposes to amend 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 airworthiness directive (AD):

**McDonnell Douglas:** Docket No. FAA-2005-22503; Directorate Identifier 2005-NM-062-AD.

**Comments Due Date**

(a) The Federal Aviation Administration (FAA) must receive comments on this AD action by November 7, 2005.

**Affected ADs**

(b) None.

**Applicability:** (c) This AD applies to McDonnell Douglas airplanes identified in Table 1 of this AD, certificated in any category.

TABLE 1.—APPLICABILITY

Model—	As identified in—
(1) 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.	Boeing Service Bulletin DC10-57-154, dated February 2, 2005
(2) MD-11 and MD-11F airplanes .....	Boeing Service Bulletin MD11-57-076, dated February 2, 2005

**Unsafe Condition**

(d) This AD was prompted by reports of corrosion and failures of the upper and lower studbolts of the outboard flaps inboard and outboard hinge fittings. We are issuing this AD to prevent corrosion and subsequent cracking of studbolts, which could result in failure of the flap hinge fittings and their possible separation from the wing rear spar, and consequent reduced controllability 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 Bulletins**

(f) The term "service bulletin," as used in this AD, means the Accomplishment

Instructions of the applicable service bulletin listed in Table 1 of this AD.

**Ultrasonic Inspection**

(g) Do an ultrasonic inspection for cracks of the upper and lower studbolts (upper studbolts only for Model MD-11 and -11F airplanes) of the inboard and outboard hinge fittings of the left and right outboard flaps of the wings, in accordance with the service bulletin. Inspect within 72 months from the time the studbolts were last replaced, or within 24 months after the effective date of this AD, whichever occurs later.

**Condition 1: No Cracked Studbolts**

(h) If no cracked upper or lower studbolt is detected during any ultrasonic inspection required by paragraph (g) of this AD, do the

actions specified in paragraph (i), (j), or (k) of this AD.

**Condition 1, Option 1: Repetitive Inspections**

(i) Repeat the ultrasonic inspection required by paragraph (g) of this AD thereafter at intervals not to exceed 24 months, until the action in paragraph (j)(1), (j)(2), (k)(1), or (k)(2)(i) of this AD is done.

**Condition 1, Option 2: Replacement**

(j) Within 72 months from the time the studbolts were last replaced, or within 24 months after the effective date of this AD, whichever occurs later, do any one of the replacements in Table 2 of this AD. Thereafter, at the times specified in Table 2, repeat the ultrasonic inspection required by paragraph (g) of this AD (if applicable).

TABLE 2.—REPLACEMENT PARTS

Replace the upper and lower studbolts (as applicable) of the inboard and outboard hinge fitting with—	And repeat the ultrasonic inspection required by paragraph (g) of this AD thereafter—	Accomplishing this replacement terminates—
(1) New studbolts that have increased corrosion protection in accordance with the service bulletin.	None .....	The repetitive inspection requirements of paragraph (i), (j)(3), and (j)(4) of this AD.

TABLE 2.—REPLACEMENT PARTS—Continued

Replace the upper and lower studbolts (as applicable) of the inboard and outboard hinge fitting with—	And repeat the ultrasonic inspection required by paragraph (g) of this AD thereafter—	Accomplishing this replacement terminates—
(2) Studbolts changed with protective treatment in accordance with a method approved by the Manager, Los Angeles Aircraft Certification (ACO), FAA.	None .....	The repetitive inspection requirements of paragraph (i), (j)(3), and (j)(4) of this AD.
(3) Equivalent studbolts in accordance with the service bulletin.	At intervals not to exceed 24 months.	None.
(4) Kept serviceable studbolts wet with sealant .....	At intervals not to exceed 24 months.	None.

### Condition 1, Option 3: Removal, Inspection(s), and Corrective Actions

(k) Within 72 months from the time the studbolts were last replaced, or within 24 months after the effective date of this AD, whichever occurs later, remove the upper and lower studbolts (as applicable) of the inboard and outboard hinge fittings, and do a detailed inspection for corrosion of the upper and lower studbolts (as applicable), in accordance with the service bulletin.

**Note 1:** 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.”

(1) If no corroded studbolt is found, before further flight, change the protective treatment of all upper and lower studbolts (as applicable) to give increased corrosion protection in accordance with a method approved by the Manager, Los Angeles ACO, FAA. Accomplishing this change ends the repetitive inspection requirements of paragraph (i) of this AD.

(2) If any corroded studbolt is found, before further flight, install any studbolt identified in and in accordance with Table 2 of this AD, thereafter do the repetitive inspections (if applicable) in accordance with Table 2 of this AD, and do a magnetic particle inspection for cracks in any remaining studbolt in accordance with the service bulletin.

(i) If no cracked studbolt is found, before further flight, change the protective treatment of all remaining studbolts to give increased corrosion protection in accordance with a method approved by the Manager, Los Angeles ACO, FAA. Accomplishing this change ends the repetitive inspection requirements of paragraph (i) of this AD.

(ii) If any cracked studbolt is found, before further flight, install any studbolt identified in and in accordance with Table 2 of this AD, and thereafter do the repetitive inspections (if applicable) in accordance with Table 2 of this AD.

### Condition 2: Cracked Studbolts

(l) If any cracked studbolt is detected during any ultrasonic inspection required by paragraph (g) of this AD, before further flight,

do the actions specified in paragraph (m), (n), or (o) of this AD.

### Condition 2, Option 1: Removal, Inspection(s), and Corrective Actions

(m) Remove any cracked upper and lower studbolt (as applicable) of the inboard and outboard hinge fittings, install any studbolt identified in and in accordance with Table 2 of this AD, do the repetitive inspections (if applicable) in accordance with Table 2 of this AD, and do a detailed inspection for corrosion of any remaining studbolts in accordance with the service bulletin.

(1) If no corroded studbolt is found, before further flight, do a magnetic particle inspection for cracks in any remaining studbolt in accordance with the service bulletin. If any crack is found, before further flight, install any studbolt identified in and in accordance with Table 2 of this AD and do the repetitive inspections (if applicable) in accordance with Table 2 of this AD.

(2) If any corroded studbolt is found, before further flight, install any studbolt identified in and in accordance with Table 2 of this AD, do the repetitive inspections (if applicable) in accordance with Table 2 of this AD, and do a magnetic particle inspection for cracks in any remaining studbolt in accordance with the service bulletin.

(i) If no cracked studbolt is found, before further flight, install any studbolt identified in and in accordance with Table 2 of this AD, and do the repetitive inspections (if applicable) in accordance with Table 2 of this AD.

(ii) If any cracked studbolt is found, before further flight, install any studbolt identified in and in accordance with Table 2 of this AD, and do the repetitive inspections (if applicable) in accordance with Table 2 of this AD.

### Condition 2, Option 2: Replacement

(n) Replace all studbolts in accordance with paragraph (j) of this AD.

### Condition 2, Option 3: Removal, Inspections, and Installation

(o) Remove any cracked studbolt, install any studbolt identified in and in accordance with Table 2 of this AD, do the repetitive inspections (if applicable) in accordance with Table 2 of this AD, and do a detailed inspection for corrosion of any remaining studbolt in accordance with the service bulletin.

(1) If no corroded studbolt is found, before further flight, do a magnetic particle

inspection for cracks in any remaining studbolt in accordance with the service bulletin, and change the protective treatment of all remaining upper and lower studbolts (as applicable) to give increased corrosion protection in accordance with a method approved by the Manager, Los Angeles ACO, FAA. Accomplishing this change ends the repetitive inspection requirements of paragraph (i) of this AD.

(2) If any corroded studbolt is found, before further flight, install any studbolt identified in and in accordance with Table 2 of this AD, do the repetitive inspections (if applicable) in accordance with Table 2 of this AD, and do a magnetic particle inspection for cracks in any remaining studbolt in accordance with the service bulletin.

(i) If no cracked studbolt is found, before further flight, change the protective treatment of all remaining studbolts to give increased corrosion protection in accordance with a method approved by the Manager, Los Angeles ACO, FAA. Accomplishing this change ends the repetitive inspection requirements of paragraph (i) of this AD.

(ii) If any cracked studbolt is found, before further flight, install any studbolt identified in and in accordance with Table 2 of this AD, and do the repetitive inspections (if applicable) in accordance with Table 2 of this AD.

### Alternative Methods of Compliance (AMOCs)

(p) The Manager, Los Angeles ACO, FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

Issued in Renton, Washington, on September 15, 2005.

**Ali Bahrami,**

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

[FR Doc. 05–18907 Filed 9–21–05; 8:45 am]

**BILLING CODE 4910–13–P**