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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

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

**[Docket No. 2002-NM-164-AD; Amendment 39-13308; AD 2003-19-05]**

**RIN 2120-AA64**

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

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

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**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to certain McDonnell Douglas Model DC-10-10, -10F, -15, -30, -30F (KC-10A and KDC-10), -40, and -40F airplanes; and certain Model MD-10-10F and -30F airplanes, that requires inspections for cracking and corrosion of the bolt assemblies and bushings on the hinge fittings of the inboard and outboard flaps of the left and right wings, and follow-on and corrective actions. This action is necessary to prevent failure of the bolt and bushing that attach the hinge fitting to the flap, which could result in loss of the flap and consequent reduced controllability of the airplane. This action is intended to address the identified unsafe condition.

**DATES:** Effective October 27, 2003.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of October 27, 2003.

**ADDRESSES:** The service information referenced in this AD may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Data and Service Management, Dept. C1-L5A (D800-0024). This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Ron Atmur, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5224; fax (562) 627-5210.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain McDonnell Douglas Model DC-10-10, -10F, -15, -30, -30F (KC-10A and KDC-10), -40, and -40F airplanes; and certain Model MD-10-10F and -30F airplanes, was published in the Federal Register on June 10, 2003 (68 FR 34557). That action proposed to require inspections for cracking and corrosion of the bolt assemblies and bushings on the hinge fittings of the inboard and outboard flaps of the left and right wings, and follow-on and corrective actions.

## **Comments**

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were submitted in response to the proposal or the FAA's determination of the cost to the public.

## **Conclusion**

The FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

## **Changes to 14 CFR Part 39/Effect on the AD**

On July 10, 2002, the FAA issued a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs the FAA's airworthiness directives system. The regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance (AMOCs). Because we have now included this material in part 39, only the office authorized to approve AMOCs is identified in each individual AD.

## **Change to Labor Rate Estimate**

We have reviewed the figures we have used over the past several years to calculate AD costs to operators. To account for various inflationary costs in the airline industry, we find it necessary to increase the labor rate used in these calculations from \$60 per work hour to \$65 per work hour. The cost impact information, below, reflects this increase in the specified hourly labor rate.

## **Cost Impact**

There are approximately 402 airplanes of the affected design in the worldwide fleet. The FAA estimates that 297 airplanes of U.S. registry will be affected by this AD.

It will take approximately 1 work hour per airplane to accomplish the required initial inspections, at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of the required initial inspections on U.S. operators is estimated to be \$19,305, or \$65 per airplane.

It will take approximately 2 work hours per flap to accomplish the required replacement. Each wing has 2 flaps; therefore, it will take approximately 4 work hours per airplane to accomplish the required replacement, at an average labor rate of \$65 per work hour. Required parts will cost approximately \$2,982 for the outboard flap, and \$2,825 for the inboard flap. Based on these figures, the cost impact of the required replacement on U.S. operators is estimated to be \$1,801,899, or \$6,067 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD

rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

### **Regulatory Impact**

The regulations adopted herein 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (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. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by adding the following new airworthiness directive:

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

*We post ADs on the internet at "www.faa.gov"*

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**CORRECTION:** *[A error exists in the Type Certificate Data Sheet (TCDS) Holder and Manufacturer reference of this AD as published in the Federal Register, September 22, 2003, page 54993, 2. Section 39.13. The correct TCDS holder is McDonnell Douglas. The FAA will issue a correction. This copy reflects the correction.]*

**2003-19-05 McDonnell Douglas:** Amendment 39-13308. Docket 2002-NM-164-AD.

**Applicability:** Model DC-10-10, -10F, -15, -30, -30F (KC-10A and KDC-10), -40, and -40F airplanes; and Model MD-10-10F and -30F airplanes; certificated in any category.

**Compliance:** Required as indicated, unless accomplished previously.

To prevent failure of the bolt and bushing that attach the hinge fitting to the flap, which could result in loss of the flap and consequent reduced controllability of the airplane, accomplish the following:

## **Initial General Visual and Magnetic Particle Inspections**

(a) Within 6 months after the effective date of this AD: Do initial general visual and magnetic particle inspections for cracking and corrosion of the pivot bolt assemblies and bushings on the hinge fittings of the inboard and outboard flaps of the left and right wings, per Boeing Alert Service Bulletin DC10-57A148, Revision 01, dated August 13, 2002; and Boeing Alert Service Bulletin DC10-57A117, Revision 01, dated July 23, 2002; as applicable. Before further flight, do the applicable follow-on and corrective actions required by paragraphs (a)(1), (a)(2), and (a)(3) of this AD.

**Note 1:** For the purposes of this AD, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made from within touching distance unless otherwise specified. A mirror may be necessary to enhance visual access to all exposed surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or droplight and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

## Follow-On and Corrective Actions

(1) If no cracking or corrosion is found: Before further flight, do the actions specified in either paragraph (a)(1)(i) or (a)(1)(ii) of this AD per Condition 1 of the Work Instructions of the applicable service bulletin.

(i) Do the actions specified in Option 1 of Condition 1 per the applicable service bulletin. The actions include (for the inboard flaps) reinstalling each existing bushing, replacing each existing pivot bolt assembly with a new assembly made from corrosion-resistant steel, and lubricating the assembly; (for the outboard flaps) replacing each existing pivot bolt assembly with a new assembly made from multi-phase material, and lubricating the assembly.

(ii) Do the actions specified in Option 2 of Condition 1 per the applicable service bulletin. The actions include (for the inboard flaps) reinstalling the existing bushing and pivot bolt assembly, lubricating the assembly, repeating the lubrication at the intervals specified, and doing repetitive ultrasonic inspections of the assembly for cracking at the intervals specified; (for the outboard flaps) reinstalling the pivot bolt assembly, lubricating the assembly, repeating the lubrication at the intervals specified, and doing repetitive ultrasonic inspections of the assembly for cracking at the intervals specified. Accomplishment of paragraph (a)(1)(i) of this AD terminates the requirements of this paragraph.

(2) If corrosion is found: Before further flight, do the actions specified in either paragraph (a)(2)(i) or (a)(2)(ii) of this AD per Condition 2 of the Work Instructions of the applicable service bulletin.

(i) Do the actions specified in Option 1 of Condition 2 per the applicable service bulletin. The actions include (for the inboard flaps) replacing the affected bushing with a new equivalent part, replacing the affected pivot bolt assembly with a new assembly made from corrosion-resistant steel, and lubricating each assembly; (for the outboard flaps) replacing the affected pivot bolt assembly with a new assembly made from multi-phase material, and lubricating each assembly.

(ii) Do the actions specified in Option 2 of Condition 2 per the applicable service bulletin. The actions include (for the inboard flaps) repairing and re-installing the existing bushing and affected pivot bolt assembly, lubricating each assembly, repeating the lubrication at the intervals specified, and doing repetitive ultrasonic inspections of the assembly for cracking at the intervals specified; (for the outboard flaps) repairing and installing the existing pivot bolt assembly, lubricating each assembly, repeating the lubrication at the intervals specified, and doing repetitive ultrasonic inspections of the assembly for cracking, at the intervals specified. Do the inspections until paragraph (a)(2)(i) of this AD has been done.

(3) If cracking is found: Before further flight, do the actions specified in either paragraph (a)(3)(i) or (a)(3)(ii) of this AD per Condition 3 of the Work Instructions of the applicable service bulletin.

(i) Do the actions specified in Option 1 of Condition 3 per the applicable service bulletin. The actions include (for the inboard flaps) replacing the affected bushing with a new equivalent part, replacing the affected pivot bolt assembly with a new assembly made from corrosion-resistant steel, and lubricating each assembly; (for the outboard flaps) replacing the affected pivot bolt assembly with a new assembly made from multi-phase material, and lubricating each assembly.

(ii) Do the actions specified in Option 2 of Condition 3 per the applicable service bulletin. The actions include (for the inboard flaps) replacing the affected bushing and pivot bolt assembly with new equivalent parts, lubricating each assembly, repeating the lubrication at the intervals specified, and doing repetitive ultrasonic inspections of the assembly for cracking at the intervals specified; (for the outboard flaps) replacing the affected pivot bolt assembly with a new equivalent part, lubricating each assembly, repeating the lubrication at the intervals specified, and doing repetitive ultrasonic inspections of the assembly for cracking at the intervals specified. Do the inspections until paragraph (a)(3)(i) of this AD has been done.

## **Credit for Actions Done per Previous Issue of Service Bulletins**

(b) Accomplishment of the specified actions before the effective date of this AD per Boeing Alert Service Bulletin DC10-57A148, dated June 14, 2002; or Boeing Alert Service Bulletin DC10-57A117, dated February 11, 1991; is considered acceptable for compliance with the applicable requirements of paragraph (a) of this AD.

## **Alternative Methods of Compliance**

(c) In accordance with 14 CFR 39.19, the Manager, Los Angeles Aircraft Certification Office, FAA, is authorized to approve alternative methods of compliance (AMOCs) for this AD.

## **Incorporation by Reference**

(d) Unless otherwise specified in this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin DC10-57A148, Revision 01, dated August 13, 2002; and Boeing Alert Service Bulletin DC10-57A117, Revision 01, dated July 23, 2002; as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Data and Service Management, Dept. C1-L5A (D800-0024). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

## **Effective Date**

(e) This amendment becomes effective on October 27, 2003.

Issued in Renton, Washington, on September 11, 2003.

Vi L. Lipski,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 03-23670 Filed 9-18-03; 12:01 pm]

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