

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2001-NM-362-AD; Amendment 39-13515; AD 2004-05-20]

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Model DC-10-10, DC-10-30F, DC-10-15, DC-10-30, DC-10-30F (KC-10A and KDC-10), DC-10-40, DC-10-40F, MD-10-10, MD-10-30F, MD-11, and MD-11F Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain McDonnell Douglas transport category airplanes, that requires modification of the installation wiring for the electric motor operated auxiliary hydraulic pumps in the right wheel well area of the main landing gear, and repetitive inspections of the numbers 1 and 2 electric motors of the auxiliary hydraulic pumps for electrical resistance, continuity, mechanical rotation, and associated airplane wiring resistance/voltage; and corrective actions if necessary. This action is necessary to prevent failure of the electric motors of the hydraulic pump and associated wiring, which could result in fire at the auxiliary hydraulic pump and consequent damage to the adjacent electrical equipment and/or structure. This action is intended to address the identified unsafe condition.

DATES: Effective April 15, 2004.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of April 15, 2004.

ADDRESSES: The service information referenced in this AD may be obtained from Boeing Commercial Airplanes, 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 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: Ken Sujishi, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712; telephone (562) 627-5353; 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, 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, was published in the Federal Register on October 15, 2003 (68 FR 59349). That action proposed to require modification of the installation wiring for the electric motor operated auxiliary hydraulic pumps in the right wheel well area of the main landing gear, and repetitive inspections of the numbers 1 and 2 electric motors of the auxiliary hydraulic pumps for electrical resistance, continuity, mechanical rotation, and associated airplane wiring resistance/voltage; and corrective actions if necessary.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

Requests To Extend Repetitive Inspection Interval

Two commenters state that they support the intent of the proposed rule, but they request that the proposed repetitive inspection interval of 2,500 flight hours be extended to every 18 months or 6,000 flight hours. One commenter states that it has been inspecting the affected pump installations every 18 months or 6,000 flight hours and that none of the affected airplanes or pumps removed from the affected airplanes exhibit signs of arcing, burnt wiring, or other conditions indicative of a fire.

The FAA does not agree that the repetitive interval should be extended. In the "Discussion" section of the preamble of the proposed AD, we advised that investigation revealed that the unsafe condition had occurred on airplanes that had been in service several years and/or had the auxiliary hydraulic pump previously overhauled. In addition, two reports of short circuit failure of the motor electrical connector of the auxiliary hydraulic pump occurred even though the affected airplanes were being inspected at intervals of 18 months or 6,000 flight hours. Therefore, we have determined that an inspection interval of 2,500 flight hours will provide an adequate interval to detect and correct the identified unsafe condition.

Conclusion

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

Cost Impact

There are approximately 409 Model DC-10 airplanes of the affected design in the worldwide fleet. The FAA estimates that 322 airplanes of U.S. registry will be affected by this AD.

It will take approximately 9 work hours per airplane to do the modification specified in Boeing Alert Service Bulletin DC10-29A144, at an average labor rate of \$65 per work hour. Required parts will cost would be between \$4,886 and \$7,920 per airplane. Based on these figures, the cost impact of the modification is estimated to be between \$5,471 and \$8,505 per airplane.

It will take approximately 1 work hour per airplane to do the inspection specified in Boeing Alert Service Bulletin DC10-29A142, at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of the inspection is estimated to be \$65 per airplane, per inspection cycle.

There are approximately 195 Model MD-11 airplanes of the affected design in the worldwide fleet. The FAA estimates that 74 airplanes of U.S. registry will be affected by this AD.

It will take approximately 13 work hours per airplane to do the modification specified in Boeing Alert Service Bulletin MD11-29A059, at an average labor rate of \$65 per work hour. Required parts will cost between \$5,183 and \$9,182 per airplane. Based on these figures, the cost impact of the modification is estimated to be between \$6,028 and \$10,027 per airplane.

It will take approximately 1 work hour per airplane to do the inspection specified in Boeing Alert Service Bulletin MD11-29A057, at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of the inspection is estimated to be \$65 per airplane, per inspection cycle.

The cost impact figure discussed above is 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).

2004-05-20 McDonnell Douglas: Amendment 39-13515. Docket 2001-NM-367 AD.

Applicability: 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; certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent failure of the electric motors of the hydraulic pump and associated wiring, which could result in fire at the auxiliary hydraulic pump and consequent damage to the adjacent electrical equipment and/or structure, accomplish the following:

Modification/Prior or Concurrent Actions

(a) For airplanes listed in Boeing Alert Service Bulletin DC10-29A144, Revision 2, dated August 1, 2003: Within 18 months after the effective date of this AD, do the actions specified in paragraphs (a)(1) and (a)(2) of this AD.

(1) Modify the installation wiring of the electric motor operated auxiliary hydraulic pumps in the right wheel well area of the main landing gear (MLG) (including removing existing clamps, ground wires, if required, and sleeving from the wire assemblies; inspecting for cracks and chafing, installing new support bracket, clips and bracket assemblies, as applicable; installing sleeving; re-routing and attaching wire assemblies using new clamps and attachments; installing an additional routing clip on lower bracket of fuel motor control valve, if applicable; and doing a voltage check and a functional test), per the Accomplishment Instructions of Boeing Alert Service Bulletin DC10-29A144, Revision 2, dated August 1, 2003.

(2) Prior to or concurrent with accomplishment of paragraph (a)(1) of this AD: Do the actions specified in Boeing Alert Service Bulletin DC10-29A142, Revision 02, dated April 17, 2003 (including inspecting the numbers 1 and 2 electric motors of the auxiliary hydraulic pumps for electrical resistance, continuity, mechanical rotation, and associated airplane wiring resistance/voltage; and replacing the auxiliary hydraulic pump with a serviceable pump and repairing the wiring if necessary), per the Accomplishment Instructions of the service bulletin. Repeat the actions after that at intervals not to exceed 2,500 flight hours.

(b) For airplanes listed in Boeing Alert Service Bulletin MD11-29A059, Revision 2, dated August 1, 2003: Within 18 months after the effective date of this AD, do the actions specified in paragraphs (b)(1) and (b)(2) of this AD.

(1) Modify the installation wiring of the electric motor auxiliary hydraulic pumps in the wheel well area of the right MLG (including removing and retaining wire assembly clamps, if applicable; retaining the existing ground wire assemblies; retaining or replacing all other wire assemblies for both connectors; installing spiral wrap and sleeving; wrapping upper ends of individual wires with

tape; installing new support bracket assemblies, if applicable; re-routing and attaching wire assemblies using new clamps and attachments, if applicable; and doing a voltage check and a functional test), per the Accomplishment Instructions of Boeing Alert Service Bulletin MD11-29A059, Revision 2, dated August 1, 2003.

(2) Prior to or concurrent with accomplishment of paragraph (b)(1) of this AD: Do the actions specified in Boeing Alert Service Bulletin MD11-29A057, Revision 02, dated April 17, 2003 (including inspecting the numbers 1 and 2 electric motors of the auxiliary hydraulic pumps for electrical resistance, continuity, mechanical rotation, and associated airplane wiring resistance/voltage; and replacing the auxiliary hydraulic pump with a serviceable pump and repairing the wiring if necessary), per the Accomplishment Instructions of the service bulletin. Repeat the actions after that at intervals not to exceed 2,500 flight hours.

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) The actions shall be done in accordance with the applicable service bulletins listed in the following table:

TABLE 1.—APPLICABLE SERVICE BULLETINS

Service bulletin	Revision level	Date
Boeing Alert Service Bulletin DC10-29A142	Revision 02	April 17, 2003.
Boeing Alert Service Bulletin DC10-29A141	Revision 2	August 1, 2003.
Boeing Alert Service Bulletin MD11-29A057	Revision 02	April 17, 2003.
Boeing Alert Service Bulletin MD11-29A059	Revision 2	August 1, 2003.
Appendix		

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. (a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane, 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, 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.

Effective Date

(e) This amendment becomes effective on April 15, 2004.

Issued in Renton, Washington, on February 26, 2004.

Kalene C. Yanamura,
 Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.
 [FR Doc. 04-4937 Filed 3-10-04; 8:45 am]
 BILLING CODE 4910-13-P