

[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [65 FR 8034 2/17/2000]

[Docket No. 99-NM-168-AD; Amendment 39-11569; AD 2000-03-10]

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Model MD-11 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to all McDonnell Douglas Model MD-11 series airplanes, that currently requires a one-time inspection to detect discrepancies at certain areas around the entry light connector of the sliding ceiling panel above the forward passenger doors, and repair, if necessary. For certain airplanes, this amendment requires the installation or modification of a flapper door ramp deflector on the forward entry drop ceiling structure. For certain other airplanes, this amendment requires inspection of the wire assembly support installation for evidence of chafing, and corrective actions, if necessary. This amendment is prompted by a report indicating that damaged electrical wires were found above the forward passenger doors due to flapper panels moving inboard and chafing the electrical wire assemblies of this area. The actions specified by this AD are intended to prevent such chafing, which could result in an electrical fire in the passenger compartment.

DATES: Effective March 23, 2000.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of March 23, 2000.

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: Technical Publications Business Administration, Dept. C1-L51 (2-60). 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, Transport Airplane Directorate, 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: Brett Portwood, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5350; fax (562) 627-5210.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by superseding AD 98-25-11 R1, amendment 39-10988 (64 FR 1502, January 11, 1999), which is applicable to all McDonnell Douglas Model MD-11 series airplanes, was

published in the **Federal Register** on October 27, 1999 (64 FR 57811). The action proposed to supersede AD 98-25-11 R1 to continue to require a one-time inspection to detect discrepancies at certain areas around the entry light connector of the sliding ceiling panel above the forward passenger doors, and repair, if necessary. For certain airplanes, the action proposed to require the installation or modification of a flapper door ramp deflector on the forward entry drop ceiling structure. For certain other airplanes, the action proposed to require inspection of the wire assembly support installation for evidence of chafing, and corrective actions, if necessary; and modification of the subject area.

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

Support for the Proposal

Two commenters support the proposed rule.

Interim Action

Since the issuance of the proposed rule, the manufacturer has advised the FAA that modifying the wire assembly support installation above the entry door (L1) sliding panel in accordance with McDonnell Douglas Alert Service Bulletin MD11-24A068, Revision 01, dated March 8, 1999, may cause further damage of the wire assembly due to the possibility of the wire assembly chafing on adjacent brackets. Further, the manufacturer advises that it is currently planning to revise the alert service bulletin to alleviate the potential chafing problem.

In light of this new information, the FAA has removed reference to this modification requirement [reference paragraph (c)(4)(ii) of the proposed rule] from this final rule. The final rule has been reformatted to accommodate this change. This AD is now considered to be interim action until final action is identified, at which time the FAA may consider further rulemaking to address the modification of the referenced wire assembly support installation.

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 with the changes previously described. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Cost Impact

There are approximately 152 Model MD-11 series airplanes of the affected design in the worldwide fleet on which the installation or modification of the flapper door ramp deflector on the forward entry drop ceiling structure will be required. The FAA estimates that this installation or modification will be required on 29 airplanes of U.S. registry.

There are approximately 152 airplanes of the affected design in the worldwide fleet on which the inspection and modification of the wire assembly support installation above the entry door (L1) sliding panel will be required. The FAA estimates that this inspection and modification will be required on 41 airplanes of U.S. registry.

The actions that are currently required by AD 98-25-11 R1 take approximately 2 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the currently required actions on U.S. operators is estimated to be \$7,800, or \$120 per airplane.

The new installation or modification of the flapper door ramp deflector on the forward entry drop ceiling structure required by this AD action will be required on three airplane groups.

Group 1 (installation of a ramp deflector) affects approximately 23 airplanes of U.S. registry and will take approximately 8 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts will cost approximately \$480 per airplane. Based on these figures, the cost impact of this requirement of this AD on U.S. operators is estimated to be \$22,080, or \$960 per airplane.

- Group 2 (installation of a ramp deflector) affects approximately 4 airplanes of U.S. registry and will take approximately 8 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts will cost approximately \$890 per airplane. Based on these figures, the cost impact of this requirement of this AD on U.S. operators is estimated to be \$5,480, or \$1,370 per airplane.
- Group 3 (modification of a previously installed ramp deflector) affects approximately 2 airplanes of U.S. registry and will take approximately 2 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. The cost of required parts will be nominal. Based on these figures, the cost impact of this requirement of this AD on U.S. operators is estimated to be \$240, or \$120 per airplane.

The inspection of the wire assembly support installation above entry door (L1) sliding panel affects approximately 41 airplanes and will take approximately 1 work hour per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of this inspection required by this AD on U.S. operators is estimated to be \$2,460, or \$60 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. However, the FAA has been advised that manufacturer warranty remedies are available for some labor associated with accomplishing the required actions. Therefore, the future economic cost impact of this rule on U.S. operators may be less than the cost impact figures indicated above.

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 removing amendment 39-10988 (64 FR 1502, January 11, 1999), and by adding a new airworthiness directive (AD), amendment 39-11569, to read as follows:

SUPPERSSEDED



AIRWORTHINESS DIRECTIVE

REGULATORY SUPPORT DIVISION
P.O. BOX 26460
OKLAHOMA CITY, OKLAHOMA 73125-0460

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

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).

2000-03-10 MCDONNELL DOUGLAS: Amendment 39-11569. Docket 99-NM-168-AD. Supersedes AD 98 25-11 R1, Amendment 39-10988.

Applicability: Model MD-11 series airplanes, as listed in McDonnell Douglas Alert Service Bulletins MD11-25A194, Revision 05, dated June 21, 1999, and MD11-24A068, Revision 01, dated March 8, 1999; certificated in any category. NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent chafing of certain electrical wires above the forward passenger doors, which could result in an electrical fire in the passenger compartment, accomplish the following:

RESTATEMENT OF THE REQUIREMENTS OF AD 98-25-11 R1

Detailed Visual Inspection

(a) Within 10 days after December 28, 1998 (the effective date of AD 98-25-11 R1, amendment 39-10988), perform a detailed visual inspection of the aircraft wiring to detect discrepancies that include but are not limited to frayed, chafed, or nicked wires and wire insulation in the areas specified in paragraphs (a)(1) and (a)(2) of this AD.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(1) At the area of the forward drop ceiling just outboard of mod block S3-735, and forward and inboard of the light ballast for the entry light on the sliding ceiling panel above the forward left passenger door (1L) at station location $x = 24.75$, $y = 435$, and $z = 64.5$.

(2) At the area above the forward right passenger door (1R) at station location $x = -30$, $y = 430$, and $z = 70$ in the ramp deflector assembly part number 4223570-501.

Corrective Action

(b) If any discrepancy is detected during the visual inspection required by paragraph (a) of this AD, prior to further flight, repair in accordance with Chapter 20, Standard Wiring Practices of the MD-11 Wiring Diagram Manual, dated January 1, 1998, or April 1, 1998.

NEW REQUIREMENTS OF THIS AD

Inspection, Installation, and Modification

(c) Within 6 months after the effective date of this AD, accomplish the actions specified in paragraphs (c)(1), (c)(2), (c)(3), and (c)(4) of this AD, as applicable.

(1) For Group 1 airplanes listed in McDonnell Douglas Alert Service Bulletin MD11-25A194, Revision 05, dated June 21, 1999: Install a ramp deflector assembly on the right side forward entry drop ceiling structure in accordance with McDonnell Douglas Alert Service Bulletin MD11-25A194, Revision 05, dated June 21, 1999.

(2) For Group 2 airplanes listed in McDonnell Douglas Alert Service Bulletin MD11-25A194, Revision 05, dated June 21, 1999: Install a ramp deflector assembly on the right side forward entry drop ceiling structure in accordance with McDonnell Douglas Alert Service Bulletin MD11-25A194, Revision 05, dated June 21, 1999.

NOTE 3: Installation of a ramp deflector assembly in accordance with McDonnell Douglas Service Bulletin MD11-25-194, dated March 15, 1996; Revision 01, dated May 1, 1996; Revision 02, dated July 12, 1996; Revision 03, dated December 12, 1996; or Revision 04, dated March 8, 1999, is acceptable for compliance with the requirements of paragraph (c)(2) of this AD.

(3) For Group 3 airplanes listed in McDonnell Douglas Alert Service Bulletin MD11-25A194, Revision 05, dated June 21, 1999: Modify the previously installed ramp deflector assembly bracket in accordance with McDonnell Douglas Alert Service Bulletin MD11-25A194, Revision 05, dated June 21, 1999.

(4) For airplanes listed in McDonnell Douglas Alert Service Bulletin MD11-24A068, Revision 01, dated March 8, 1999: Perform a general visual inspection of the wire assembly support installation for evidence of chafing, in accordance with the service bulletin. If any chafing is detected, prior to further flight, repair or replace any discrepant part with a new part in accordance with the service bulletin.

NOTE 4: 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 under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, 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 check."

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 5: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) Except as provided by paragraphs (a) and (b) of this AD, the actions shall be done in accordance with McDonnell Douglas Alert Service Bulletin MD11-25A194, Revision 05, dated June 21, 1999; or McDonnell Douglas Alert Service Bulletin MD11-24A068, Revision 01, dated March 8, 1999; 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: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, 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.

(g) This amendment becomes effective on March 23, 2000.

FOR FURTHER INFORMATION CONTACT:

Brett Portwood, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5350; fax (562) 627-5210.

Issued in Renton, Washington, on February 10, 2000.

Donald L. Riggins, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.