

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2001-NM-264-AD; Amendment 39-12463; AD 2001-20-15]

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Model DC-9 Series Airplanes and MD-88 Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that is applicable to certain McDonnell Douglas Model DC-9 series airplanes and MD-88 airplanes. This action requires an inspection to determine if a certain AC cross-tie relay is installed; replacement of a certain AC cross-tie relay with a new AC cross-tie relay; and repetitive cleaning, inspection, repair and testing of a certain AC cross-tie relay. This action is necessary to prevent AC cross-tie relay failures, which could result in internal arcing of the relay and smoke and/or fire in the cockpit and cabin. This action is intended to address the identified unsafe condition.

DATES: Effective October 26, 2001.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of October 26, 2001.

Comments for inclusion in the Rules Docket must be received on or before December 10, 2001.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2001-NM-264-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address: 9-anm-iarcomment@faa.gov. Comments sent via fax or the Internet must contain ``Docket No. 2001-NM-264-AD'' in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

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 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.

FOR FURTHER INFORMATION CONTACT: Elvin Wheeler, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5344; fax (562) 627-5210.

SUPPLEMENTARY INFORMATION: The FAA has received reports of a recent incident on a McDonnell Douglas Model DC-9 series airplane involving smoke in the cockpit and cabin. Investigation of the incident revealed that the smoke was caused by an internal phase-to-phase short circuit of the alternating current (AC) cross-tie relay resulting from migration and accumulation of metallic dust from electrical contact wear. Operators have reported other instances of AC cross-tie relay failure, causing arcing in the electrical panel area. Internal phase-to-phase short circuiting of the AC cross-tie relay caused by metallic dust accumulation, if not corrected, could result in internal arcing of the relay and smoke and/or fire in the cockpit and cabin.

Other Relevant Rulemaking

Operators should note that a supplemental notice of proposed rulemaking (NPRM), Rules Docket 99-NM-90-AD, was published in the Federal Register on June 14, 2001 (66 FR 32276), which would require replacement of certain AC power relays with certain new relays, and repetitive overhauls of certain AC power relays. That supplemental NPRM is related to this AD.

Based on comments received in response to the supplemental NPRM and the recent incident described above, the FAA has determined that the AC cross-tie relay, part number (P/N) 914F567-3 and -4, poses a more serious safety condition than previously determined. The FAA finds that a shorter compliance time (i.e., within 90 days after the effective date of this AD) than the compliance time specified in the supplemental NPRM (i.e., within 12 months after the effective date of the AD) is necessary for accomplishing the replacement of AC cross-tie relay, P/N 914567-3. Since a shorter compliance time would alter the actions currently proposed by the supplemental NPRM, another supplemental NPRM would be required. The FAA finds that to delay that action would be inappropriate in light of the identified unsafe condition.

In addition, the FAA has verified with the airplane manufacturer that there is a limited availability of spare parts, Sundstrand (Westinghouse) AC cross-tie relay, P/N 914567-4. Therefore, for any Sundstrand (Westinghouse) AC cross-tie relay, P/N 914567-4, with more than 7,000 flight hours since modification or installation, and for airplanes on which the flight hours since modification or installation of Sundstrand (Westinghouse) AC cross-tie relay, P/N 914567-4 cannot be determined, the FAA has determined that replacement and repetitive maintenance of those relays within 90 days will accommodate the time necessary for affected operators to obtain and replace the affected relay, without adversely affecting safety.

In light of the above findings, certain actions required for the AC cross-tie relays, P/N 914F567-3 and -4, that were specified in the supplemental NPRM have been specified in this AD, and the supplemental NPRM will be revised to reflect these changes.

Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Alert Service Bulletin DC9-24A193, dated July 31, 2001, which describes procedures for a one-time inspection to determine if a certain AC cross-tie relay is installed. The service bulletin also describes procedures for replacement of any AC cross-tie

relay, P/N 914F567-3, with a Sundstrand (Westinghouse) relay, P/N 9008D09 series or 914F567-4; and repetitive cleaning, inspection, repair and testing of any Sundstrand (Westinghouse) AC cross-tie relay, P/N 914F567-4. Accomplishment of the actions specified in the service bulletin is intended to adequately address the identified unsafe condition.

Explanation of the Requirements of the Rule

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design, this AD is being issued to prevent internal arcing of the AC cross-tie relay and smoke and/or fire in the cockpit and cabin. This AD requires accomplishment of the actions specified in the service bulletin described previously, except as discussed below.

Differences Between This Rule and Service Bulletin

Operators should note that, although the procedures described in Boeing Alert Service Bulletin DC9-24A193, dated July 31, 2001, specify maintenance of P/N 9008D09 series when it is beyond service interval limits, this AD does not require repetitive maintenance of AC cross-tie relays with that P/N because the unsafe condition has not been found on AC cross-tie relays with that P/N.

Determination of Rule's Effective Date

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified under the caption ADDRESSES. All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Submit comments using the following format:

- Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- For each issue, state what specific change to the AD is being requested.
- Include justification (e.g., reasons or data) for each request.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2001-NM-264-AD." The postcard will be date stamped and returned to the commenter.

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.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, 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.

Sec. 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 "av-info.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).

2001-20-15 McDonnell Douglas: Amendment 39-12463. Docket 2001-NM-264-AD.

Applicability: Model DC-9 series airplanes and MD-88 airplanes; certificated in any category; as specified in Boeing Alert Service Bulletin DC9-24A193, dated July 31, 2001.

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 (f) 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 internal arcing of the alternating current (AC) relay and smoke and/or fire in the cockpit and cabin, accomplish the following:

Inspection

(a) Within 90 days after the effective date of this AD, perform a one-time inspection to determine if an AC cross-tie relay, part number (P/N) 914F567-3, or Sundstrand (Westinghouse) AC cross-tie relay, P/N 914F567-4, is installed, per Boeing Alert Service Bulletin DC9-24A193, dated July 31, 2001.

Replacement of Any AC cross-tie relay, P/N 914F567-3

(b) If any AC cross-tie relay, P/N 914F567-3, is found installed during the inspection required by paragraph (a) of this AD, within 90 days after the effective date of this AD, replace AC cross-tie relay, P/N 914F567-3, with a Sundstrand (Westinghouse) cross-tie relay, P/N 9008D09 series or 914F567-4, per the Accomplishment Instructions of Boeing Alert Service Bulletin DC9-24A193, dated July 31, 2001.

Maintenance of Sundstrand (Westinghouse) AC cross-tie relay, P/N 914F567-4

(c) If any Sundstrand (Westinghouse) AC cross-tie relay, P/N 914F567-4, is found installed during the inspection required by paragraph (a) of this AD, clean, inspect, repair, and test the relay, per Sundstrand (Westinghouse) Overhaul Manual 24-20-46, Revision 8, dated August 15, 1983, at the later of the times specified in paragraph (c)(1) and (c)(2) of this AD, except as provided by paragraph (d) of this AD.

- (1) Within 90 days after the effective date of this AD.
- (2) Within 7,000 flight hours after installation of the Sundstrand (Westinghouse) AC cross-tie relay, P/N 914F567-4.
- (d) For airplanes on which the flight hours since installation of any Sundstrand (Westinghouse) AC cross-tie relay, P/N 914F567-4, cannot be determined: Clean, inspect, repair, and test within 90 days after the effective date of this AD.

Repetitive Maintenance of Sundstrand (Westinghouse) AC cross-tie relay, P/N 914F567-4

(e) Repeat the cleaning, inspection, repair, and test required by paragraphs (c) and (d) of this AD on all Sundstrand (Westinghouse) AC cross-tie relays, P/N 914F567-4, installed per paragraphs (b) and (c) of this AD at intervals not to exceed 7,000 flight hours.

Alternative Methods of Compliance

(f) 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. 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 2: 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

(g) 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

(h) The actions shall be done in accordance with Boeing Alert Service Bulletin DC9-24A193, dated July 31, 2001; and Sundstrand (Westinghouse) Overhaul Manual 24-20-46, Revision 8, dated August 15, 1983; 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); and Hamilton Sundstrand, 4747 Harrison Avenue, P.O. Box 7002, Rockford, IL 61125-7002; as applicable. 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

- (i) This amendment becomes effective on October 26, 2001.

Issued in Renton, Washington, on October 3, 2001.

Vi L. Lipski,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 01-25394 Filed 10-10-01; 8:45 am]

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