

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2002-NM-53-AD; Amendment 39-12996; AD 2002-26-08]

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Model DC-9-10, DC-9-20, DC-9-30, DC-9-40, and DC-9-50 Series Airplanes; and Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), and MD-88 Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain McDonnell Douglas DC-9-10, DC-9-20, DC-9-30, DC-9-40, and DC-9-50 series airplanes; and Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), and MD-88 airplanes. This amendment requires replacement of the emergency power switch knob on the overhead switch panel in the flight compartment with a new, improved knob made of non-conductive material. The actions specified by this AD are intended to prevent the knob from conducting electricity, which could result in delivery of an electrical shock and consequent injury to flightcrew or maintenance personnel. This action is intended to address the identified unsafe condition.

DATES: Effective February 10, 2003.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of February 10, 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: Elvin K. 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: 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-9-10, DC-9-20, DC-9-30, DC-9-40, and DC-9-50 series airplanes; and Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), and MD-88 airplanes was published in the Federal Register on August 16, 2002 (67 FR 53527). That action proposed to require replacement of the emergency power switch knob on the overhead switch panel in the flight compartment with a new, improved knob made of non-conductive material.

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.

Request To Withdraw Proposed AD or Extend Compliance Time

One commenter asks the FAA to withdraw the proposed AD for the following reasons: The proposed AD states that one mechanic received a shock during maintenance, and the commenter notes that it is not likely that the problem exists or will develop in other switches. The commenter operates 74 Model DC-9 series airplanes, and over the past 21 years in service there have been no reported incidents by pilots or mechanics while operating the emergency power switch. The pilots and mechanics have operated the emergency power switches over half a million times.

- Receiving a shock from the power switch does not pose a substantial hazard to the continued airworthiness of the aircraft. The reason for this is that 99 percent of power switch operations are performed while the airplane is parked at the gate, when the pilot performs a pre-flight check, or when a mechanic performs a maintenance service check. If the pilot or mechanic did receive a shock from the power switch, a discrepancy form would be filled out and the switch would be replaced.

The same commenter asks that, as an alternative to withdrawing the proposed AD, the compliance time for replacement of the switch be extended from 6 months to 24 months, using the lead-time of the parts and scheduled maintenance interval criteria, as follows:

- In the proposed AD the FAA estimates that 1,079 airplanes of U.S.-registry are affected. At the time the proposed AD was issued, the manufacturer had no knobs in stock, and 374 on order, with a due date near the end of 2002. There is a 160-day lead time on orders for the power switch knob; therefore, the fleet cannot be outfitted until the knobs are received.
- Because the commenter's C-check is performed at 20-month intervals, it would have less impact on operations if the knobs could be changed during a C-check. This would eliminate special routing of airplanes or special distribution of the knobs. In addition, as stated in Boeing Alert Service Bulletin DC9-24A189 (referenced in the proposed AD as the appropriate source of service information for accomplishment of the actions), the opening of the forward overhead switch panel would not be required, "based on knowledge of mechanic performing replacement of knob assembly on emergency power switch." This would allow one set of mechanics to replace the knobs and would eliminate unnecessary steps.

We partially agree with the commenter, as follows:

- We do not agree to withdraw the proposed AD. As specified in the Discussion section of the proposed AD, "Investigation revealed that terminals within the switch had shorted to the switch shaft. Due to the design of the emergency power system, this switch is not grounded. The capacity of the

- emergency power switch knob to conduct electricity, if not corrected, could result in delivery of an electrical shock and consequent injury to flightcrew or maintenance personnel." Further, the existing power switch must be replaced with a non-conductive material in order to preclude the possibility of an electrical shock to personnel, which could happen either in flight or before takeoff. The final rule will be issued accordingly.
- We do agree to extend the compliance time somewhat for the replacement of the switch. We have reviewed and approved Boeing Alert Service Bulletin DC9-24A189, Revision 01, dated August 5, 2002, excluding Evaluation Form; and Revision 02, dated October 8, 2002, excluding Evaluation Form; as additional sources of service information for accomplishment of the actions. Revision 02 extends the compliance time recommended in the original issue of the service bulletin from 6 to 12 months, as parts will be available within that timeframe. The changes in Revisions 01 and 02 are not substantive, meaning that airplanes modified per those service bulletins are not subject to any additional work. However, we have changed paragraph (a) of this final rule to refer to Revision 02 of the service bulletin as the appropriate source of service information for the actions in that paragraph. In addition, we have added a new paragraph (b) to the final rule (and reordered subsequent paragraphs accordingly) to give credit for replacements done before the effective date of this AD according to the original issue and Revision 01 of the service bulletin. To follow the compliance time specified in Revision 02 of the service bulletin, we have extended the compliance time for the replacement to within 12 months after the effective date of this AD. Paragraph (a) of this final rule has been changed accordingly.

Request To Extend Compliance Time

Two commenters ask that the compliance time specified in the proposed AD be extended from 6 to 12 months. A third commenter states that, although there are concerns about parts availability, if Boeing can provide an adequate supply of parts to meet the overnight inspection schedule, a compliance time of 6 months can be met. The two commenters note that although Revision 01 of the referenced service bulletin was released on August 5, 2002, to reset the start date of the original issue of the service bulletin, only 300 parts were available at that time. One commenter adds that the FAA is currently reviewing Revision 02 of the service bulletin which extends the compliance time to 12 months to accommodate availability of parts. Both commenters state that the proposed AD should be changed to reflect the latest revision of the service bulletin with the extended compliance time, which allows time for Boeing to produce an adequate number of parts.

As described previously, we have reviewed and approved Revision 02 of the service bulletin and agree to extend the compliance time for the replacement required by this final rule to within 12 months after the effective date of this AD.

Explanation of Editorial Change

We have changed the service bulletin citation throughout this final rule to exclude the Evaluation Form. (The form is intended to be completed by operators and submitted to the manufacturer to provide input on the quality of the service bulletin; however, this AD does not include such a requirement.)

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 1,904 airplanes of the affected design in the worldwide fleet. The FAA estimates that 1,079 airplanes of U.S. registry will be affected by this AD, that it will take approximately 1 work hour per airplane to accomplish the required replacement, and that the average labor rate is \$60 per work hour. Required parts will cost approximately \$250 per airplane. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be \$334,490, or \$310 per airplane.

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).

2002-26-08 McDonnell Douglas: Amendment 39-12996. Docket 2002-NM-53-AD.

Applicability: Model DC-9-11, DC-9-12, DC-9-13, DC-9-14, DC-9-15, DC-9-15F, DC-9-21, DC-9-31, DC-9-32, DC-9-32 (VC-9C), DC-9-32F, DC-9-33F, DC-9-34, DC-9-34F, DC-9-32F (C-9A, C-9B), DC-9-41, DC-9-51, DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), and MD-88 airplanes; as listed in Boeing Alert Service Bulletin DC9-24A189, dated December 12, 2001; 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 the emergency power switch knob from conducting electricity, which could result in delivery of an electrical shock and consequent injury to flightcrew or maintenance personnel, accomplish the following:

Replacement

(a) Within 12 months after the effective date of this AD, replace the emergency power switch knob on the overhead switch panel in the flight compartment with a new, improved knob, having part number 4957249-9, made of non-conductive material, according to the Accomplishment Instructions of Boeing Alert Service Bulletin DC9-24A189, Revision 02, dated October 8, 2002; excluding Evaluation Form.

(b) Replacements done before the effective date of this AD according to Boeing Alert Service Bulletin DC9-24A189, dated December 12, 2001; or Revision 01, dated August 5, 2002; both excluding Evaluation Form, are acceptable for compliance with the replacement required by paragraph (a) of this AD.

Part Installation

(c) As of the effective date of this AD, no person shall install an emergency power switch knob having part number 4957249-1, 4957249-501, or 4957249-503, on the overhead switch panel in the flight compartment of any airplane.

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. 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

(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) The replacement shall be done in accordance with Boeing Alert Service Bulletin DC9-24A189, Revision 02, dated October 8, 2002, excluding Evaluation Form. 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

(g) This amendment becomes effective on February 10, 2003.

Issued in Renton, Washington, on December 24, 2002.

Vi L. Lipski,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 03-30 Filed 1-3-03; 8:45 am]

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