

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

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

**[Docket No. 2000-NM-362-AD; Amendment 39-12618; AD 2002-01-24]**

**RIN 2120-AA64**

### **Airworthiness Directives; McDonnell Douglas Model DC-9-81, -82, -83, and -87 Series Airplanes, and Model 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 Model DC-9-81, -82, -83, and -87 series airplanes, and Model MD-88 airplanes, that requires replacing the dust seals of the passenger service unit (PSU) panels of the overhead stowage compartment with new dust seals. The AD provides two options to accomplish this. Operators can either replace the seals all at once or remove the seals and repetitively clean and inspect the area to defer the installation for an interim period. The actions specified by this AD are intended to ensure replacement of dust seals of the lower PSU panel that may contribute to the spread of a fire when ignition occurs from electrical arcing of a failed light holder assembly, which could cause damage to adjacent structure and smoke emitting from the PSU panel into the passenger cabin. This action is intended to address the identified unsafe condition.

**DATES:** Effective March 6, 2002.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of March 6, 2002.

**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:** Albert Lam, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5346; 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), applicable to certain McDonnell Douglas Model DC-9-81, -82, -83, and -87 series airplanes, and Model MD-88 airplanes, was published in the Federal

Register on August 3, 2001 (66 FR 40645). That action proposed to require replacement of the dust seals of the passenger service unit (PSU) panels of the overhead stowage compartment with new dust seals.

### **Explanation of Relevant Service Information**

Since the proposed AD was published, the FAA has reviewed and approved Boeing Service Bulletin MD80-25-377, Revision 01, dated July 17, 2001. (The proposed AD cited the original service bulletin as the appropriate source of service information for the procedures for the dust seal replacement.) Revision 01 was issued to clarify the procedures for trimming the dust seal to facilitate its installation; no other significant changes were made.

Boeing had previously issued Alert Service Bulletin MD80-25A376, dated September 21, 2000, which describes procedures for removal of the lower dust seals from the outboard PSU panels, repetitive cleaning of the oxygen canisters and PSU components (including the removal of all visible traces of dust and dirt particles from the oxygen canisters), and repetitive inspections to ensure that the oxygen masks, hoses, and lanyards do not bind in the PSU door. The repetitive cleaning and inspections would extend the time to install new PSU dust seals.

### **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 Provide Interim Actions**

Two commenters request that the proposed AD be revised to provide interim actions that would extend the compliance time to install new dust seals. The commenters state that, once a seal is removed from the airplane, and the PSU panel is periodically cleaned of accumulated dust and lint, the potential fire source from the affected seal no longer exists. The commenters suggest a compliance time of 6 months to initiate the interim actions, a repetitive interval of 14 months, and a compliance time of 5 years to replace the seal--based on the availability of materials, manpower, and maintenance facilities.

The FAA partially concurs. The FAA agrees that, once the affected dust seals are removed from the airplane, the potential fire source from the seals no longer exists. However, the accumulation of dust and lint on the oxygen canister and within the PSU panel may create another fire source, which would be minimized or mitigated by the installation of new dust seals. The FAA finds that repetitive cleaning and inspections are acceptable for a period of time, but reliance on these interim repetitive actions to provide an adequate degree of safety for the fleet over a 5-year period is not appropriate.

In determining the appropriate compliance time for the interim actions, the FAA considered the compliance time for the entire replacement action, as proposed, which indicated that no action is necessary for 24 months. Earlier inspections (e.g., at 6 months as the commenter suggests) are therefore unnecessary.

In determining the appropriate compliance time for the seal replacement, the FAA considered additional relevant factors. Certain airplanes affected by this AD are also subject to the requirements of AD 2000-11-01, amendment 39-11749 (65 FR 34322, May 26, 2000), which requires replacement of certain insulation blankets within 5 years. The FAA considers that replacing the insulation blankets and the dust seals concurrently would greatly reduce the cost of accomplishing the actions separately. In addition, extending the compliance times for the seal replacement will provide additional time for operators to procure parts and schedule maintenance. In consideration of these factors, as well as the safety implications, parts availability, and maintenance schedules for timely accomplishment of the actions, the FAA finds it appropriate to require the seal installation within 42 months.

Under the provisions of the Administrative Procedure Act, changing the proposed AD to shorten the proposed compliance time and add new actions would necessitate that the FAA reissue the notice, reopen the period for public comment, consider any additional comments received, and eventually issue a final rule. The FAA has determined that further delay of this action is not appropriate. Therefore, this final rule has been revised to provide operators two options to comply with this AD:

1. Accomplish the entire replacement within 24 months, as proposed; or
2. Accomplish the replacement action in three separate actions by removing the seals (within 24 months) and repetitively cleaning and inspecting the area thereafter (at 14-month intervals) until the new seals are installed (within 42 months).

### **Support for the Proposal**

One commenter, an operator, generally supports the proposal but offers an estimate of the cost impact on its fleet. The commenter states that replacing the dust seal would take approximately 32 work hours per airplane, rather than 24 work hours as estimated in the proposed AD, and the required materials would cost approximately \$1,500 per airplane, rather than \$3,000 as previously estimated.

In light of this information, the FAA considers it appropriate to revise the cost estimates in the final rule.

### **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 529 airplanes of the affected design in the worldwide fleet. The FAA estimates that 261 airplanes of U.S. registry will be affected by this AD.

It will take approximately 4 work hours per airplane to remove the dust seals, at an average labor rate of \$60 per work hour. Based on these figures, the estimated cost impact to remove the seals is \$240 per airplane.

It will take approximately 4 work hours per airplane to clean and inspect the PSU, at an average labor rate of \$60 per work hour. Based on these figures, the estimated cost impact of the cleaning and inspection is \$240 per airplane, per inspection cycle.

It will take approximately 30 hours to install new dust seals, at an average labor rate of \$60 per work hour. Required parts for the seal installation will cost approximately \$1,500 per airplane. Based on these figures, the estimated cost impact of the seal installation is \$3,300 per airplane.

The concurrent accomplishment of all seal replacement actions would result in a reduction in cost of approximately \$240 per inspection cycle that would no longer be required.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD, 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.

#### **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).

**2002-01-24 McDonnell Douglas:** Amendment 39-12618. Docket 2000-NM-362-AD.

*Applicability:* Model DC-9-81, -82, -83, and -87 series airplanes, and Model MD-88 airplanes, as listed in Boeing Service Bulletin MD80-25-377, dated March 14, 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 (c) 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 ensure replacement of dust seals of the lower passenger service unit (PSU) panel that may contribute to the spread of a fire when ignition occurs from electrical arcing of a failed light holder assembly, which could cause damage to adjacent structure and smoke emitting from the PSU panel into the passenger cabin, accomplish the following:

## Replacement of Dust Seals

(a) Do the actions specified by either paragraph (a)(1) or (a)(2) of this AD.

(1) Within 24 months after the effective date of this AD, replace dust seals of the PSU panels of the overhead stowage compartment with new dust seals (including removing adhesive, cleaning the PSU rail, and removing/installing tape), per Boeing Service Bulletin MD80-25-377, dated March 14, 2001, or Revision 01, dated July 17, 2001. After the effective date of this AD, only Revision 01 of the service bulletin may be used.

(2) At the applicable times, do the actions specified by paragraphs (a)(2)(i), (a)(2)(ii), and (a)(2)(iii) of this AD.

(i) Within 24 months after the effective date of this AD, remove all the lower dust seals having part number (P/N) CD1149 (any configuration) from the left and right outboard PSU panels from station Y = 218.000 to Y = 1307.000, per Boeing Alert Service Bulletin MD80-25A376, dated September 21, 2000.

(ii) Within 24 months after the effective date of this AD, remove all visible traces of dust and dirt particles from the oxygen canisters installed in the PSU panels, and perform a general visual inspection to ensure that oxygen masks, hoses, and lanyards do not bind in the PSU door; per Boeing Alert Service Bulletin MD80-25A376, dated September 21, 2000. Thereafter, repeat the actions specified by paragraph (a)(2)(ii) of this AD at least every 14 months until the requirements of paragraph (a)(2)(iii) of this AD have been accomplished.

**Note 2:** 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 checked."

(iii) Within 42 months after the effective date of this AD, install new dust seals, part number (P/N) CD1437, of the PSU panels of the overhead stowage compartment, per Boeing Service Bulletin MD80-25-377, Revision 01, dated July 17, 2001. Installation of the new dust seals terminates the requirements of paragraph (a)(2)(ii) of this AD.

**Note 3:** Installation of the dust seal prior to the effective date of this AD in accordance with Boeing Service Bulletin MD80-25-377, dated March 14, 2001, is acceptable for compliance with the requirements of paragraph (a)(2)(iii) of this AD.

### **Spares**

(b) As of the effective date of this AD, no person shall install a dust seal, P/N CD1149 (any configuration), on any airplane.

### **Alternative Methods of Compliance**

(c) 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 4:** 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**

(d) 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**

(e) The actions shall be done in accordance with Boeing Alert Service Bulletin MD80-25A376, dated September 21, 2000; Boeing Service Bulletin MD80-25-377, dated March 14, 2001; and Boeing Service Bulletin MD80-25-377, Revision 01, dated July 17, 2001. 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**

(f) This amendment becomes effective on March 6, 2002.

Issued in Renton, Washington, on January 18, 2002.

**Michael Kaszycki,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 02-1961 Filed 1-29-02; 8:45 am]

**BILLING CODE 4910-13-U**