

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. 96-NM-95-AD; Amendment 39-10176; AD 97-22-05]

RIN 2120-AA64

**Airworthiness Directives; McDonnell Douglas Model DC-9 Series Airplanes and C-9 (Military) Series Airplanes**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

**SUMMARY:** This amendment adopts a new airworthiness directive applicable to certain McDonnell Douglas Model DC-9 series airplanes and C-9 (military) series airplanes, that requires modification of the emergency internal release system of the tailcone and the accessory compartment. This amendment is prompted by a report that, due to failure of the tailcone release system, the tailcone did not deploy on an airplane during an emergency evacuation. The actions specified by this AD are intended to ensure that the emergency internal release system of the tailcone performs its intended function in the event of an emergency evacuation. The actions also are intended to prevent people on board the airplane from striking their heads on exposed metal frames in the tailcone area, which could cause injury and delay or impede their evacuation during an emergency.

**DATES:** Effective December 2, 1997.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of December 2, 1997.

**ADDRESSES:** The service information referenced in this AD may be obtained from The Boeing Company, Douglas Products 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:** Albert H. Lam, Aerospace Engineer,

Systems and Equipment Branch, ANM-130L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712; 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) that is applicable to certain McDonnell Douglas Model DC-9 series airplanes and C-9 (military) series airplanes was published in the **Federal Register** on September 13, 1996 (61 FR 48433). That action proposed to require modification of the emergency internal release system of the tailcone and the accessory compartment.

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

Two commenters support the proposed rule.

**Requests To Revise the Compliance Times of the Proposed Modifications**

One commenter requests that the compliance time for accomplishing the proposed modifications be extended from the proposed 36 months to 4 years. The commenter states that such an extension will allow the modifications to be accomplished during a regularly scheduled heavy maintenance check and will allow time for procurement of additional modification kits. The commenter also states that such an extension will allow time for revising the affected manual; training of inspection and maintenance personnel; drafting, checking, and approving engineering documents; and testing and debugging the proposed modifications.

Another commenter requests that the compliance times be shortened to 12 months. This commenter suggests that the proposed compliance times may be too long to fly with the potential of failure of the emergency internal release system of the tailcone.

The FAA does not concur with either of these commenters' request. In developing an appropriate compliance time for these modifications, the FAA considered not only the degree of urgency associated with addressing the unsafe condition, but the availability of required parts and the practical aspect of installing the required modifications within an interval of time that parallels normal scheduled maintenance for the majority of affected operators. The manufacturer has advised that an ample number of required parts will be available for modification of the U.S. fleet within the proposed compliance

period. Further, the FAA estimates that the affected airplanes will undergo two heavy maintenance checks during the proposed compliance time. In addition, the FAA finds that the 36-month compliance time is sufficient for operators to train their personnel and to incorporate the modifications into various documents. However, under the provisions of paragraph (c) of the final rule, the FAA may approve requests for adjustments to the compliance time if data are presented to justify such an adjustment.

**Request To Remove Modification Requirement**

Two commenters state that the modification specified in McDonnell Douglas DC-9 Service Bulletin 53-257, Revision 1, dated February 9, 1996 [which is referenced in paragraph (a) of the proposal as the appropriate source of service information] is difficult to accomplish and only adds more problems to the existing tailcone release system. One of these commenters contends that the tailcone release system described in the referenced service bulletin is unacceptable for an emergency exit system. This commenter also contends that the subject modification cannot be accomplished on airplanes equipped with aft ventral airstairs.

From these comments, the FAA infers that the commenters are requesting that the proposed modification in paragraph (a) of the AD be removed from the final rule. The FAA does not concur. The FAA acknowledges that there were some problems associated with accomplishing the modification in accordance with the original issue of McDonnell Douglas DC-9 Service Bulletin 53-257, dated May 18, 1994. However, the FAA finds that these problems were addressed and corrected in Revision 1 of this service bulletin. The FAA recognizes that Revision 1 of the service bulletin does not address airplanes on which the aft ventral airstair handle has not been deactivated. However, based on a survey conducted by McDonnell Douglas, the FAA finds that affected operators are willing to deactivate the aft ventral airstair handle to accommodate the modification required by this AD. In addition, paragraph (c) of the AD contains a provision for requesting approval of an alternative method of compliance to address these types of unique circumstances.

**Request To Add a New Requirement**

One commenter requests that paragraph (b) of the proposed AD be revised to include procedures for adding

protective padding between the added ceiling panel and beams, and on all other beams in the path of exiting passengers. The commenter contends that installation of ceiling panels [as required by paragraph (b) of the AD] provides a false sense of security and guidance to the flight attendants and evacuees. The commenter states that the ceiling panels could be damaged easily by tall and/or unruly passengers during emergency egress, which could expose the beams and supporting structure. Thus other passengers could strike their heads against the overhead beams. The commenter also states that the ceiling panels could detach from its support structure during an actual emergency, and consequently, also allow exposure of the beams and supporting structure. Further, the commenter states that the ceiling panels could fall in the path of the passengers that are exiting from the airplane. The FAA does not concur. The FAA has determined that installation of ceiling panels on the lower side of three frames and installation of a protective pad on the last frame in the aft accessory compartment provides an acceptable level of safety. In addition, the FAA finds that such an installation is comparable to other panel installations throughout the airplane. However, under provisions of paragraph (c) of the final rule, operators may apply for approval of an alternative methods of compliance if sufficient justification is presented to the FAA.

#### **Request To Address Deficiencies With Existing Tailcone Release System**

One commenter states that the existing tailcone release system contains many design and reliability deficiencies. The commenter points out that the proposed AD does not specify any requirements to replace or repair the existing tailcone release system. The commenter also contends that, due to such deficiencies, the new interior release handle [installed in accordance with the requirements of paragraph (b) of the proposed AD] will fail to perform its intended function. From this comment, the FAA infers that the commenter is requesting that the FAA address the problems associated with the existing tailcone release system in the proposed AD. The FAA does not concur. The FAA has previously issued several other AD's that concern the tailcone deployment system on Model DC-9 series airplanes, which was discussed previously in the Other Relevant Rulemaking Section in the preamble to the NPRM. Therefore, the FAA finds no change to the final rule is necessary.

#### **Request To Revise the Proposed Modification of the Emergency Internal Release System**

One commenter requests that the existing tailcone release system be replaced with an electro-mechanical system, which can be actuated from inside the airplane. The commenter states that it is more cost effective to install a modern and efficient system (i.e., electro-mechanical system), rather than a system with design technology standards that are 25 to 30 years old. The commenter also states that the existing system does not meet industry expectations. The FAA does not concur. The modification required by paragraph (b) of this AD was developed with operator, manufacturer, and FAA concurrence based on cost and technical feasibility. However, under the provisions of paragraph (c) of this AD, operators may apply for the approval of an alternative method of compliance, if sufficient justification is presented to the FAA.

#### **Request To Revise Various Manufacturer Manuals**

One commenter requests that the FAA require the manufacturer, rather than the affected operator(s), to update the affected Illustrated Parts Catalog, Airplane Maintenance Manual, Structural Repair Manual, and Wiring Diagram Manual to ensure continued airworthiness of the tailcone release system. The commenter states that an operator, who does not have "experience" with the modification required by the proposed AD, could enter erroneous information into these manuals. The FAA does not concur. The FAA finds that the subject service documents are not necessary to accomplish the modifications required by this AD. The FAA has been informed that the manufacturer is in the process of revising the DC-9 Airplane Maintenance Manual (AMM) to comply with the continued airworthiness requirements and will make the AMM available to operators.

#### **FAA's 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 878 McDonnell Douglas Model DC-9 series airplanes and C-9 (military) series airplanes of the affected design in the worldwide fleet. The FAA estimates that 590 airplanes of U.S. registry will be affected by this AD.

The modification of the emergency internal release system will take approximately 7 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts will cost approximately \$6,660 per airplane. Based on these figures, the cost impact of this modification required by this AD on U.S. operators is estimated to be \$4,177,200, or \$7,080 per airplane.

The modification of the accessory compartment will take approximately 10 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. For the 395 airplanes identified as "Group 1" in the referenced service bulletin, required parts will cost approximately \$1,777 per airplane. For the 195 airplanes identified as "Group 2" in the referenced service bulletin, required parts will cost \$5,369 per airplane. Based on these figures, the cost impact of this modification required by this AD on U.S. operators of Group 1 airplanes is estimated to be \$938,915, or \$2,377 per airplane; and on U.S. operators of Group 2 airplanes is estimated to be \$1,163,955, or \$5,969 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.

#### **Regulatory Impact**

The regulations adopted herein will not have substantial direct effects 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, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

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:

**97-22-05—McDonnell Douglas:** Amendment 39-10176. Docket 96-NM-95-AD.

**Applicability:** Model DC-9-10, -20, -30, -40, and -50 series airplanes and C-9 (military) series airplanes; as listed in McDonnell Douglas DC-9 Service Bulletin 53-257, Revision 1, dated February 9, 1996, and McDonnell Douglas DC-9 Service Bulletin 25-331, dated December 10, 1993; operating in a passenger or passenger/cargo configuration; certificated in any category.

**Note 1:** The requirements of this AD become applicable at the time an airplane operating in an all-cargo configuration is converted to a passenger or passenger/cargo configuration.

**Note 2:** This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise 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 that the emergency internal release system of the tailcone performs its intended function in the event of an emergency evacuation, accomplish the following:

(a) For airplanes listed in McDonnell Douglas DC-9 Service Bulletin 53-257, Revision 1, dated February 9, 1996: Within 36 months after the effective date of this AD, modify the emergency internal release system of the tailcone in accordance with the service bulletin.

(b) For airplanes listed in McDonnell Douglas DC-9 Service Bulletin 25-331, dated

December 10, 1993: Within 36 months after the effective date of this AD, modify the accessory compartment in accordance with the service bulletin.

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

(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.

(e) The actions shall be done in accordance with McDonnell Douglas DC-9 Service Bulletin 53-257, Revision 1, dated February 9, 1996, and McDonnell Douglas DC-9 Service Bulletin 25-331, dated December 10, 1993. 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 McDonnell Douglas Corporation, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Department 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.

(f) This amendment becomes effective on December 2, 1997.

Issued in Renton, Washington, on October 17, 1997.

**Darrell M. Pederson,**

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

[FR Doc. 97-28319 Filed 10-27-97; 8:45 am]

**BILLING CODE 4910-13-U**

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. 97-NM-229-AD; Amendment 39-10179; AD 97-22-07]

**RIN 2120-AA64**

**Airworthiness Directives; Boeing Model 737 Series Airplanes**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** This amendment supersedes an existing airworthiness directive (AD), applicable to certain Boeing Model 737 series airplanes, that currently requires repetitive inspections to detect cracking of the lower skin at the lower row of fasteners in the lap joints of the fuselage, and repair of any cracking detected. This amendment requires that the inspections be accomplished at more frequent intervals. This amendment also adds a requirement for modification of the fuselage lap joints at certain locations, which constitutes terminating action for repetitive inspections of modified areas. This amendment is prompted by reports of numerous fatigue cracks in the lower skin of the fuselage lap joints at the lower row of fasteners. The actions specified in this AD are intended to prevent such fatigue cracking, which could result in sudden decompression of the airplane.

**DATES:** Effective November 12, 1997.

The incorporation by reference of certain publications, as listed in the regulations, is approved by the Director of the Federal Register as of November 12, 1997.

The incorporation by reference of Boeing Alert Service Bulletin 737-53A1177, dated November 8, 1994, as listed in the regulations, was approved previously by the Director of the Federal Register as of December 27, 1994 (59 FR 63716, December 9, 1994).

Comments for inclusion in the Rules Docket must be received on or before December 29, 1997.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-103, Attention: Rules Docket No. 97-NM-229-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

The service information referenced in this AD may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Gregory L. Schneider or Nenita K. Odesa, Aerospace Engineers, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue, SW., Renton, Washington; telephone (425) 227-2028 or (425) 227-2557; fax (425) 227-1181.