

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

[Docket No. 2003–NM–69–AD; Amendment 39–13799; AD 2004–19–05]

RIN 2120–AA64

**Airworthiness Directives; McDonnell Douglas Model MD–11 and –11F Airplanes**

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

**SUMMARY:** This amendment supersedes an existing airworthiness directive (AD), applicable to certain McDonnell Douglas Model MD–11 and MD–11F airplanes, that currently requires replacing terminal strips and supports above the main cabin area and avionics compartment with new strips and supports, as applicable. That AD also requires performing an inspection to detect arcing damage of the surrounding structure of the terminal strips and electrical cables in the avionics compartment, and repairing or replacing any damaged component with a new component. This amendment expands the applicability of the existing AD to include additional airplanes. For certain airplanes, this action also requires replacement of the terminal board for the applicable item numbers in the aft passenger compartment. The actions specified by this AD are intended to prevent electrical arcing caused by power feeder cable terminal lugs grounding against terminal strip support brackets, which could result in smoke and fire in the main cabin or avionics compartment. This action is intended to address the identified unsafe condition.

**DATES:** Effective October 27, 2004.

The incorporation by reference of a certain publication, as listed in the regulations, is approved by the Director of the Federal Register as of October 27, 2004.

The incorporation by reference of a certain other publication, as listed in the regulations, was approved previously by the Director of the Federal Register as of August 23, 2002 (67 FR 47647, July 19, 2002).

**ADDRESSES:** The service information referenced in this AD may be obtained from Boeing Commercial Airplanes, 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 National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741–6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

**FOR FURTHER INFORMATION CONTACT:** Brett Portwood, Aerospace Engineer, Systems and Equipment Branch, ANM–130L, FAA, 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 2002–14–09, amendment 39–12809 (67 FR 47647, July 19, 2002), which is applicable to certain McDonnell Douglas Model MD–11 and MD–11F airplanes, was published in the **Federal Register** on May 27, 2004 (69 FR 30245). The action proposed to expand the applicability of the existing AD to include additional airplanes. For certain airplanes, the action also proposed to require replacement of the terminal board for the applicable item numbers in the aft passenger compartment.

**Comments**

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were submitted in response to the proposal or the FAA's determination of the cost to the public.

**Conclusion**

The FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

**Explanation of Change Made to Final Rule**

Because the language in Note 2 of the proposed AD is regulatory in nature, that note has been included in paragraph (d) of this final rule.

**Cost Impact**

There are approximately 154 airplanes of the affected design in the worldwide fleet listed in Boeing Alert Service Bulletin MD11–24A178. The FAA estimates that 61 airplanes of U.S. registry will be affected by this AD. The cost estimate for those airplanes is as follows:

1. The actions that are currently required by AD 2002–14–09 and retained in this AD take approximately 3 or 4 work hours per airplane (depending on airplane configuration) to accomplish, at an average labor rate of \$65 per work hour. Required parts cost approximately \$1,142 per airplane. Based on these figures, the cost impact of the currently required actions on U.S. operators is estimated to be \$1,337 or \$1,420 per airplane (depending on airplane configuration).

2. For Group 3 and 4 airplanes identified in Boeing Alert Service Bulletin MD11–24A178, the new actions that are required in this AD action take approximately 4 (kit/part number SA11240178–3) or 5 (kit/part number SA11240178–5) work hours per airplane to accomplish, at an average labor rate of \$65 per work hour. Required parts will cost approximately \$3,031 (kit/part number SA11240178–3) or \$617 per airplane (kit/part number SA11240178–5). Based on these figures, the cost impact of these new requirements of this AD on U.S. operators is estimated to be \$3,291 (kit/part number SA11240178–3) or \$942 (kit/part number SA11240178–5) per airplane.

There are approximately 103 airplanes of the affected design in the worldwide fleet listed in McDonnell Douglas Alert Service Bulletin MD11–24A177. The FAA estimates that 33 airplanes of U.S. registry will be affected by this AD.

For airplanes identified in Boeing Alert Service Bulletin MD11–24A177, the new replacement that is required in this AD action takes between 1 and 3 work hours per airplane to accomplish, at an average labor rate of \$65 per work hour. Required parts will cost between \$114 and \$876 per airplane. Based on these figures, the cost impact of the new replacement requirements of this AD on U.S. operators is estimated to be between \$5,907 and \$35,343, or between \$179 and \$1,071 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. 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 removing amendment 39–12809 (67 FR 47647, July 19, 2002), and by adding a new airworthiness directive (AD), to read as follows:

#### 2004–19–05 McDonnell Douglas:

Amendment 39–13799. Docket 2003–NM–69–AD. Supersedes AD 2002–14–09, Amendment 39–12809.

**Applicability:** Model MD–11 and –11F airplanes, as listed in Boeing Alert Service Bulletin MD11–24A178, Revision 02, dated March 11, 2003, and McDonnell Douglas Alert Service Bulletin MD11–24A177, dated July 18, 2003; certificated in any category.

**Compliance:** Required as indicated, unless accomplished previously.

To prevent electrical arcing caused by power feeder cable terminal lugs grounding against terminal strip support brackets,

which could result in smoke and fire in the main cabin or avionics compartment, accomplish the following:

#### Certain Requirements of AD 2002–14–09, Amendment 39–12809

##### *Replacement, Inspection, and Corrective Action If Necessary*

(a) For airplanes listed in the effectivity of McDonnell Douglas Alert Service Bulletin MD11–24A178, Revision 01, dated December 17, 2001: Within 18 months after August 23, 2002 (the effective date of AD 2002–14–09, amendment 39–12809), do the actions specified in paragraphs (a)(1) and (a)(2) of this AD per the service bulletin.

(1) Replace the applicable terminal strips in the avionics compartment with new terminal strips (including inspecting wires for damage, repairing any damaged wire, and removing the nameplate); and

(2) Perform a general visual inspection to detect arcing damage of the surrounding structure of the terminal strips and electrical cables in the avionics compartment. If any damage is detected, before further flight, repair or replace any damaged component with a new component, per the service bulletin; except if the type of structural material of the surrounding structure that has been affected is not covered in the Structural Repair Manual, repair per a method approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA.

**Note 1:** 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."

(b) Accomplishment of the replacement, inspection, and corrective action, before the effective date of this AD, per McDonnell Douglas Alert Service Bulletin MD11–24A178, dated May 14, 2001, is considered acceptable for compliance with the applicable actions specified in paragraph (a) of this AD.

#### New Requirements of This AD

##### *Replacement, Inspection, and Corrective Action If Necessary*

(c) For Groups 3 and 4 airplanes listed in the effectivity of Boeing Alert Service Bulletin MD11–24A178, Revision 02, dated March 11, 2003: Within 18 months after the effective date of this AD, do the actions specified in paragraphs (c)(1) and (c)(2) of this AD per the Accomplishment Instructions of the service bulletin. Although the service bulletin specifies to report inspection findings to the airplane manufacturer, this AD does not include such a requirement.

(1) Replace the applicable terminal strips in the avionics compartment with new terminal strips (including inspecting wires for damage, repairing any damaged wire, and removing the nameplate); and

(2) Perform a general visual inspection to detect arcing damage of the surrounding

structure of the terminal strips and electrical cables in the avionics compartment. If any damage is detected, before further flight, repair or replace any damaged component with a new component, per the service bulletin; except if the type of structural material of the surrounding structure that has been affected is not covered in the Structural Repair Manual, repair per a method approved by the Manager, Los Angeles ACO, FAA.

(d) For airplanes listed in McDonnell Douglas Alert Service Bulletin MD11–24A177, dated July 18, 2003: Within 18 months after the effective date of this AD, replace the terminal board for the applicable item numbers in the aft passenger compartment, per the Accomplishment Instructions of the service bulletin. Boeing Service Bulletin Information Notice MD11–24A177 IN 01, dated August 7, 2003, revises service kit numbers specified in paragraph 2.B., "Post-Warranty," of the service bulletin.

#### Alternative Methods of Compliance

(e)(1) In accordance with 14 CFR 39.19, the Manager, Los Angeles ACO, FAA, is authorized to approve alternative methods of compliance for this AD.

(2) Alternative methods of compliance, approved previously per AD 2002–14–09, amendment 39–12809, are approved as alternative methods of compliance with paragraph (a) of this AD.

#### Incorporation by Reference

(f) Unless otherwise specified in this AD, the actions shall be done in accordance with McDonnell Douglas Alert Service Bulletin MD11–24A178, Revision 01, dated December 17, 2001; Boeing Alert Service Bulletin MD11–24A178, Revision 02, excluding Appendix A, dated March 11, 2003; and McDonnell Douglas Alert Service Bulletin MD11–24A177, dated July 18, 2003, as revised by Boeing Service Bulletin Information Notice MD11–24A177 IN 01, dated August 7, 2003; as applicable.

(1) The incorporation by reference of Boeing Alert Service Bulletin MD11–24A178, Revision 02, excluding Appendix A, dated March 11, 2003; and McDonnell Douglas Alert Service Bulletin MD11–24A177, dated July 18, 2003, as revised by Boeing Service Bulletin Information Notice MD11–24A177 IN 01, dated August 7, 2003; as applicable; is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of McDonnell Douglas Alert Service Bulletin MD11–24A178, Revision 01, dated December 17, 2001, was approved previously by the Director of the Federal Register as of August 23, 2002 (67 FR 47647, July 19, 2002).

(3) Copies may be obtained from Boeing Commercial Airplanes, 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 National Archives and Records Administration

(NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

#### Effective Date

(g) This amendment becomes effective on October 27, 2004.

Issued in Renton, Washington, on September 13, 2004.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 04-21175 Filed 9-21-04; 8:45 am]

BILLING CODE 4910-13-P

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 2003-NM-185-AD; Amendment 39-13801; AD 2004-19-07]

RIN 2120-AA64

#### Airworthiness Directives; Bombardier Model DHC-8-102 Airplanes

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

**ACTION:** Final rule.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to certain Bombardier Model DHC-8-102 airplanes, that requires modification of the electrical power circuit. This action is necessary to prevent component failure in the radar indicator, resulting in an overcurrent condition and consequent overheating or burning of an internal component or the ribbon cable. This could lead to smoke in the cockpit, resulting in incapacitation of the flight crew and loss of control of the airplane. This action is intended to address the identified unsafe condition.

**DATES:** Effective October 27, 2004.

The incorporation by reference of a certain publication listed in the regulations is approved by the Director of the Federal Register as of October 27, 2004.

**ADDRESSES:** The service information referenced in this AD may be obtained from Bombardier, Inc., Bombardier Regional Aircraft Division, 123 Garratt Boulevard, Downsview, Ontario M3K 1Y5, Canada. 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, New York Aircraft Certification Office (ACO), 1600 Stewart Ave., suite 410, Westbury, New

York; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

#### FOR FURTHER INFORMATION CONTACT:

Doug Wagner, Aerospace Engineer, Systems and Flight Test Branch, ANE-172, FAA, New York Aircraft Certification Office, 1600 Stewart Ave., suite 410, Westbury, New York 11590; telephone (516) 228-7306; fax (516) 794-5531.

#### 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 Bombardier Model DHC-8-102 airplanes was published in the **Federal Register** on April 7, 2004 (69 FR 18306). That action proposed to require modification of the electrical power circuit.

#### Comments

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

#### Request To Give Credit for Modification Using Alternate Service Information

The commenter, an operator, requests that a paragraph be added to the proposed AD giving credit for reconfiguring the circuit breaker wiring as specified in Allied Signal RDS-86 Weather Radar System Manual 006-05996-0005, Revision 5 or higher. The commenter states that it has operated the affected Model DHC-8-102 airplanes continually since 1986, and that the performance of the RDS-86 weather radar system made consultation with the airplane and equipment manufacturers necessary. In 1996, the commenter reconfigured certain circuit breakers for the weather radar system per the equipment manufacturer's recommendations. The commenter notes that the airplane manufacturer did not provide documentation for this change until 2002, when it issued Bombardier Modification Summary Package (ModSum) IS8Q3450000, Revision A, dated October 15, 2002, which the proposed AD references as the appropriate source of service information for the proposed requirements.

The FAA does not agree. It is important to maintain proper configuration of airplane wiring to ensure proper airplane maintenance by

operators. The final rule requires modification of the power circuit per ModSum IS8Q3450000, Revision A. The ModSum identifies three installation configurations, and the ModSum installation instructions identify the correct interface buses to be modified and wires to be reconfigured. The Allied Signal RDS-86 Weather Radar System Manual shows only pin connections of the indicator and receiver/transmitter without any details of unique airplane interconnections. Such limited information provides no means of showing that appropriate wiring changes have been made and is insufficient to demonstrate that the unsafe condition has been addressed properly. We have not changed the final rule in this regard. However, under the provisions of paragraph (b) of the final rule, we may consider requests for approval of an alternative method of compliance if sufficient data are submitted to substantiate that such a design change would provide an acceptable level of safety.

#### Conclusion

After careful review of the available data, including the comment noted above, the FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

#### Cost Impact

The FAA estimates that 48 airplanes of U.S. registry will be affected by this AD, that it will take between 3 work hours and 9 work hours per airplane to accomplish the required actions, and that the average labor rate is \$65 per work hour. Required parts will cost approximately \$150 per airplane. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be between \$16,560 and \$35,280, or between \$345 and \$735 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. 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