

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2010-0639; Directorate Identifier 2009-NM-232-AD; Amendment 39-16463; AD 2010-21-03]

RIN 2120-AA64

Airworthiness Directives; McDonnell Douglas Corporation Model DC-8-31, DC-8-32, DC-8-33, DC-8-41, DC-8-42, and DC-8-43 Airplanes; Model DC-8-50 Series Airplanes; Model DC-8F-54 and DC-8F-55 Airplanes; Model DC-8-60 Series Airplanes; Model DC-8-60F Series Airplanes; Model DC-8-70 Series Airplanes; and Model DC-8-70F Series Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is superseding an existing airworthiness directive (AD) that applies to all of the McDonnell Douglas Corporation airplanes identified above. The existing AD currently requires revising the maintenance program to incorporate new airworthiness limitations for fuel tank systems to satisfy Special Federal Aviation Regulation No. 88 requirements. This new AD adds requirements to revise the maintenance program to incorporate specific Critical Design Configuration Control Limitations (CDCCL) information and install fuel tank float switch in-line fuses. This new AD also adds two Airworthiness Limitations inspections (ALIs). This AD results from a design review of the fuel tank systems. We are issuing this AD to prevent the potential for ignition sources inside fuel tanks caused by latent failures, alterations, repairs, or maintenance actions, which, in combination with flammable fuel vapors, could result in a fuel tank explosion and consequent loss of the airplane.

DATES: This AD becomes effective November 12, 2010.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of November 12, 2010.

On May 27, 2008 (73 FR 21523, April 22, 2008), the Director of the Federal Register approved the incorporation by reference of a certain other publication listed in the AD.

ADDRESSES: For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, California 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; e-mail dse.boecom@boeing.com; Internet <https://www.myboeingfleet.com>.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (telephone 800-647-5527) is the Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Samuel Lee, Aerospace Engineer, Propulsion Branch, ANM-140L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5262; fax (562) 627-5210.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that supersedes AD 2008-09-04, Amendment 39-15484 (73 FR 21523, April 22, 2008). The existing AD applies to all Model DC-8-31, DC-8-32, DC-8-33, DC-8-41, DC-8-42, and DC-8-43 airplanes; Model DC-8-50 series airplanes; Model DC-8F-54 and DC-8F-55 airplanes; Model DC-8-60 series airplanes; Model DC-8-60F series airplanes; Model DC-8-70 series airplanes; and Model DC-8-70F series airplanes. That NPRM was published in the Federal Register on June 25, 2010 (75 FR 36298). That NPRM proposed to continue to require revising the maintenance program. That NPRM also proposed to add requirements to revise the maintenance program to incorporate specific Critical Design Configuration Control Limitations (CDCCL) information and install fuel tank float switch in-line fuses. That NPRM also proposed to add two Airworthiness Limitations inspections (ALIs).

Relevant Service Information

We reviewed Boeing DC-8 Special Compliance Item Report, MDC-02K9030, Revision D, dated June 9, 2010. This service information does not add any additional work. We have revised paragraphs (j), (m), and (n) of this AD to refer to this report.

Comments

We provided the public the opportunity to participate in the development of this AD. No comments have been received on the NPRM or on the determination of the cost to the public.

Change to Paragraph Reference

We revised paragraph (l) of this AD to correct a typographical error that appeared in the NPRM. In paragraph (l) of the NPRM, we inadvertently referred to "paragraph (k)" instead of "paragraph (j)" of the AD. Paragraph (l) of this final rule correctly references paragraph (j) of this AD.

Explanation of Additional Change to NPRM

We also clarified the airplanes affected by paragraph (k) of this AD by referring to the airplanes identified in Boeing Service Bulletin DC8-28-090, dated October 9, 2009. Airplanes not listed in the effectivity of Boeing Service Bulletin DC8-28-090, dated October 9, 2009, are not required to do the installation required by paragraph (k) of this AD.

Conclusion

We have carefully reviewed the available data and determined that air safety and the public interest require adopting the AD with the changes mentioned previously.

Costs of Compliance

There are about 125 airplanes of the affected design in the worldwide fleet. The following table provides the estimated costs for U.S. operators to comply with this AD.

Estimated Costs						
Action	Work hours	Average labor rate per hour	Parts	Cost per airplane	Number of U.S.-registered airplanes	Fleet cost
Revising the Maintenance Program (required by AD 2008-09-04)	1	\$85	\$0	\$85	125	\$10,625
Revising the Airworthiness Limitation Section (new action)	1	\$85	\$0	\$85	125	\$10,625
Installing fuses (new action)	Up to 35 hours	\$85	\$0	Up to \$2,975	125	Up to \$371,875

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in subtitle VII, part A, subpart III, section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD 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.

For the reasons discussed above, I certify that this AD:

(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.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket. See the ADDRESSES section for a location to examine the regulatory evaluation.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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. The Federal Aviation Administration (FAA) amends § 39.13 by removing Amendment 39-15484 (73 FR 21523, April 22, 2008) and by adding the following new airworthiness directive (AD):



2010-21-03 McDonnell Douglas Corporation: Amendment 39-16463. Docket No. FAA-2010-0639; Directorate Identifier 2009-NM-232-AD.

Effective Date

- (a) This AD becomes effective November 12, 2010.

Affected ADs

- (b) This AD supersedes AD 2008-09-04, Amendment 39-15484.

Applicability

(c) This AD applies to all McDonnell Douglas Model DC-8-31, DC-8-32, DC-8-33, DC-8-41, DC-8-42, and DC-8-43 airplanes; Model DC-8-51, DC-8-52, DC-8-53, and DC-8-55 airplanes; Model DC-8F-54 and DC-8F-55 airplanes; Model DC-8-61, DC-8-62, and DC-8-63 airplanes; Model DC-8-61F, DC-8-62F, and DC-8-63F airplanes; Model DC-8-71, DC-8-72, and DC-8-73 airplanes; and Model DC-8-71F, DC-8-72F, and DC-8-73F airplanes; certificated in any category.

Note 1: This AD requires revisions to certain operator maintenance documents to include new inspections. Compliance with these inspections is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by these inspections, the operator may not be able to accomplish the inspections described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance (AMOC) in accordance with paragraph (o) of this AD. The request should include a description of changes to the required inspections that will ensure the continued operational safety of the airplane.

Subject

- (d) Air Transport Association (ATA) of America Code 28: Fuel.

Unsafe Condition

(e) This AD results from a design review of the fuel tank systems. The Federal Aviation Administration is issuing this AD to prevent the potential for ignition sources inside fuel tanks caused by latent failures, alterations, repairs, or maintenance actions, which, in combination with flammable fuel vapors, could result in a fuel tank explosion and consequent loss of the airplane.

Compliance

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Restatement of Requirements of AD 2008-09-04, With Revised Compliance Method

Revise the Maintenance Program

(g) Before December 16, 2008, revise the maintenance program to incorporate the information specified in Appendixes B, C, and D of the Boeing DC-8 Special Compliance Item Report, MDC-02K9030, Revision A, dated August 8, 2006.

No Reporting Requirement

(h) Although the Boeing DC-8 Special Compliance Item Report, MDC-02K9030, Revision A, dated August 8, 2006, specifies to submit certain information to the manufacturer, this AD does not require that action.

No Alternative Inspections, Inspection Intervals, or Critical Design Configuration Control Limitations (CDCCLs)

(i) Except as provided by paragraph (m) of this AD, after accomplishing the applicable actions specified in paragraph (g) of this AD, no alternative inspections, inspection intervals, or CDCCLs may be used unless the inspections, intervals, or CDCCLs are approved as an AMOC in accordance with the procedures specified in paragraph (o) of this AD.

New Requirements of This AD

Revise the Maintenance Program

(j) Within 30 days after the effective date of this AD, revise the maintenance program to incorporate the information required by paragraphs (j)(1), (j)(2), and (j)(3) of this AD.

(1) CDCCL 20-10, "DC-8 Float Switch Circuit" in Appendix B of Boeing DC-8 Special Compliance Item Report, MDC-02K9030, Revision C, dated January 5, 2010; or Revision D, dated June 9, 2010.

(2) ALI 30-1 "DC-8 Pneumatic System Decay Check" in Appendix C of Boeing DC-8 Special Compliance Item Report, MDC-02K9030, Revision C, dated January 5, 2010; or Revision D, dated June 9, 2010.

(3) ALI 28-1, "DC-8 Alternate and Center Auxiliary Tank Fuel Pump Control Systems Check," in Appendix C of Boeing DC-8 Special Compliance Item Report, MDC-02K9030, Revision C, dated January 5, 2010; or Revision D, dated June 9, 2010.

Install the In-Line Fuses

(k) For airplanes identified in Boeing Service Bulletin DC8-28-090, dated October 9, 2009: Within 60 months after the effective date of this AD, install the fuel tank float switch in-line fuses in the leading edges of the front spars of the left and right wings, in accordance with the Accomplishment Instructions of Boeing Service Bulletin DC8-28-090, dated October 9, 2009.

No Alternative Inspections, Inspection Intervals, or Critical Design Configuration Control Limitations (CDCCLs)

(l) After accomplishing the actions specified in paragraph (j) of this AD, no alternative inspections, inspection intervals, or CDCCLs may be used unless the inspections, intervals, or

CDCCLs are approved as an AMOC in accordance with the procedures specified in paragraph (o) of this AD.

(m) Revising the maintenance program to incorporate the information specified in Appendixes B, C, and D of the Boeing DC-8 Special Compliance Item Report, MDC-02K9030, Revision B, dated July 23, 2009; Revision C, dated January 5, 2010; or Revision D, dated June 9, 2010; is acceptable for compliance with the actions specified in paragraph (g) of this AD.

No Reporting Requirement

(n) Although the Boeing DC-8 Special Compliance Item Report, MDC-02K9030, Revision B, dated July 23, 2009; Revision C, dated January 5, 2010; and Revision D, dated June 9, 2010; specify to submit certain information to the manufacturer, this AD does not require that action.

Alternative Methods of Compliance (AMOCs)

(o)(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Samuel Lee, Aerospace Engineer, Propulsion Branch, ANM-140L, FAA, Los Angeles Aircraft Certification Office (ACO), 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5262; fax (562) 627-5210.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

Material Incorporated by Reference

(p) You must use the applicable service information contained in Table 1 of this AD to do the actions required by this AD, unless the AD specifies otherwise.

Table 1 – All material incorporated by reference

Document	Revision	Date
Boeing DC-8 Special Compliance Item Report, MDC-02K9030	A	August 8, 2006
Boeing DC-8 Special Compliance Item Report, MDC-02K9030	B	July 23, 2009
Boeing DC-8 Special Compliance Item Report, MDC-02K9030	C	January 5, 2010
Boeing DC-8 Special Compliance Item Report, MDC-02K9030	D	June 9, 2010
Boeing Service Bulletin DC8-28-090	Original	October 9, 2009

Boeing DC-8 Special Compliance Item Report, MDC-02K9030, Revision B, dated July 23, 2009, contains the following effective pages:

List of Effective Pages:

Page Title/ Description	Page Number(s)	Revision Number	Date Shown on Page(s)
Report Title Page	None shown	B	July 23, 2009

Index of Page Changes	ii, iii	B	None shown*
Table of Contents	iv, v	B	None shown*
Discussion	1	New	None shown*
Appendix A	A1-A4	New	None shown*
Appendix B	B1, B3, B4, B6-B12	New	None shown*
	B2, B5, B13-B24	B	None shown*
Appendix C	C1-C5	New	None shown*
	C6-C10	B	None shown*
Appendix D	D1	New	None shown*

Boeing DC-8 Special Compliance Item Report, MDC-02K9030, Revision C, dated January 5, 2010, contains the following effective pages:

List of Effective Pages:

Page Title/ Description	Page Number(s)	Revision Number	Date Shown on Page(s)
Report Title Page	None shown	C	January 5, 2010
Index of Page Changes	ii, iii	C	None shown*
Table of Contents	iv, v	C	None shown*
Discussion	1	C	None shown*
Appendix A	A1-A3	New	None shown*
	A4-A25	C	None shown*
Appendix B	B1, B3, B4, B6-B12	New	None shown*
	B2, B5, B13-B24	B	None shown*
Appendix C	C1-C5	New	None shown*
	C6-C10	B	None shown*
	C11-C14	C	None shown*
Appendix D	D1	New	None shown*

Boeing DC-8 Special Compliance Item Report, MDC-02K9030, Revision D, dated June 9, 2010, contains the following effective pages:

List of Effective Pages:

Page Title/ Description	Page Number(s)	Revision Number	Date Shown on Page(s)
Report Title Page	None shown	D	June 9, 2010

Attachment A	None shown	None shown	June 22, 2010
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Index of Page Changes	ii	B	None shown*
	iii	C	None shown*
Table of Contents	iv, v	C	None shown*
Discussion	1	C	None shown*
Appendix A	A1-A3	New	None shown*
	A4-A25	C	None shown*
Appendix B	B1, B3, B6, B7, B9, B12	New	None shown*
	B2, B13-B24	B	None shown*
	B4, B5, B8, B10, B11	D	None shown*
Appendix C	C1-C5	New	None shown*
	C6-C10	B	None shown*
	C11-C14	C	None shown*
Appendix D	D1	New	None shown*

(* The revision date of these documents is shown only on the title page of these documents.)

(1) The Director of the Federal Register approved the incorporation by reference of the service information contained in Table 2 of this AD under 5 U.S.C. 552(a) and 1 CFR part 51.

Table 2 – New material incorporated by reference

Document	Revision	Date
Boeing DC-8 Special Compliance Item Report, MDC-02K9030	B	July 23, 2009
Boeing DC-8 Special Compliance Item Report, MDC-02K9030	C	January 5, 2010
Boeing DC-8 Special Compliance Item Report, MDC-02K9030	D	June 9, 2010
Boeing Service Bulletin DC8-28-090	Original	October 9, 2009

(2) The Director of the Federal Register previously approved the incorporation by reference of Boeing DC-8 Special Compliance Item Report, MDC-02K9030, Revision A, dated August 8, 2006, on May 27, 2008 (73 FR 21523, April 22, 2008).

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, California 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; e-mail dse.boecom@boeing.com; Internet <https://www.myboeingfleet.com>.

(4) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may also review copies of the service information that is incorporated by reference 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.

Issued in Renton, Washington, on September 23, 2010.
Ali Bahrami,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.