



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-0805; Product Identifier 2017-NM-051-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all The Boeing Company Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87) airplanes, Model MD-88 airplanes, and Model MD-90-30 airplanes. This proposed AD was prompted by a report of loss of airspeed indication due to icing. This proposed AD would require modifying the air data heat (ADH) system. We are proposing this AD to address the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Standards Branch, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0805.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0805; 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 proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Eric Igama, Aerospace Engineer, Systems and Equipment Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5388; fax: 562-627-5210; email: roderick.igama@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2017-0805; Product Identifier 2017-NM-051-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory,

economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

We have received a report of both pilots' airspeed indicators freezing at 80 knots during takeoff. The outside air temperature was 25 degrees Fahrenheit and the wind was at approximately 20 knots in light snow. The airplane had been waiting in this weather condition for about two hours for de-icing before takeoff.

Air data sensors directly affect flight computers and flight deck instrumentation. The air data sensors have heaters to prevent blockage from ice formation in the sensor or from ice formation on the static plates. Incorrect airspeed indications can be the direct result of pitot tube icing. Failure to activate the ADH system in icing conditions could result in irregular airspeed or altitude indications, which could possibly result in a runway overrun during a high speed rejected takeoff (RTO) due to failure to rotate before the end of the runway, or a stall/overspeed during flight.

Related Service Information under 1 CFR part 51

We reviewed Boeing Alert Service Bulletin MD80-30A132, dated April 28, 2017; and Boeing Alert Service Bulletin MD90-30A031, dated June 2, 2017. This service information describes procedures for modifying the ADH system so that it activates when the left and right fuel switches are in the ON position. These documents are distinct since they apply to different airplane models. This service information is reasonably available

because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of these same type designs.

Proposed AD Requirements

This proposed AD would require accomplishment of the actions identified as "RC" (required for compliance) in the Accomplishment Instructions of the service information described previously, except for differences between this proposed AD and the service information that are identified in the regulatory text of this proposed AD. For information on the procedures, see this service information at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0805.

Master Minimum Equipment List relief may be developed and approved by the FAA Long Beach, CA Aircraft Evaluation Group (AEG) Flight Operations Evaluation Board (FOEB) to allow operation of an airplane with an ADH system modified in accordance with this proposed AD that is inoperable for a specified time period. This potential relief is specified in paragraph (i) of this proposed AD.

Differences Between this Proposed AD and the Service Information

Boeing Alert Service Bulletin MD80-30A132, dated April 28, 2017, specifies to contact the manufacturer for change instructions, but this proposed AD would require obtaining and doing those change instructions in one of the following ways:

- In accordance with a method that we approve; or
- Using data that meet the certification basis of the airplane, and that have been approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) whom we have authorized to make those findings.

Costs of Compliance

We estimate that this proposed AD affects 553 airplanes of U.S. registry. We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Modification, MD80 Group 1, 84 airplanes	56 work-hours X \$85 per hour = \$4,760	\$4,459	\$9,219	\$774,396
Modification, MD80 Group 2, 11 airplanes	57 work-hours X \$85 per hour = \$4,845	\$11,014	\$15,859	\$174,449
Modification, MD80 Group 3, 336 airplanes	57 work-hours X \$85 per hour = \$4,845	\$8,589	\$13,434	\$4,513,824
Modification, MD80 Group 4, 1 airplane	56 work-hours X \$85 per hour = \$4,760	\$4,479	\$9,239	\$9,239
Modification, MD80 Group 5, 37 airplanes	57 work-hours X \$85 per hour = \$4,845	\$11,034	\$15,879	\$587,523
Modification, MD90 Group 1, 84 airplanes	37 work-hours X \$85 per hour = \$3,145	\$4,395	\$7,540	\$633,360

We have received no definitive data that would enable us to provide cost estimates for doing the modification on MD80 Group 6 airplanes.

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.

This proposed AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) 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.

List of Subjects in 14 CFR Part 39

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

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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 FAA amends § 39.13 by adding the following new airworthiness directive (AD):

The Boeing Company: Docket No. FAA-2017-0805; Product Identifier 2017-NM-051-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all The Boeing Company Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87) airplanes, Model MD-88 airplanes, and Model MD-90-30 airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 3410; Flight environment data.

(e) Unsafe Condition

This AD was prompted by a report of loss of airspeed indication due to icing. We are issuing this AD to prevent operation of unheated air data sensors in icing conditions. Failure to activate the air data heat (ADH) system in icing conditions could result in irregular airspeed or altitude indications, which could possibly result in a runway overrun during a high speed rejected takeoff (RTO) due to failure to rotate before the end of the runway, or a stall/overspeed during flight.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

At the applicable time specified in paragraph (g)(1) or (g)(2) of this AD: Do all applicable actions identified as “RC” (required for compliance) in, and in accordance with, the Accomplishment Instructions of Boeing Alert Service Bulletin MD80-30A132, dated April 28, 2017; and Boeing Alert Service Bulletin MD90-30A031, dated June 2, 2017; as applicable; except as required by paragraph (h) of this AD.

(1) For Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87) model airplanes and Model MD-88 airplanes: Within 28 months after the effective date of this AD.

(2) For Model MD-90-30 airplanes: Within 27 months after the effective date of this AD.

(h) Exception to Service Information Specifications

Where Boeing Alert Service Bulletin MD80-30A132, dated April 28, 2017, specifies contacting Boeing, and specifies that action as “RC” (Required for Compliance): This AD requires using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

(i) Master Minimum Equipment List (MMEL)

In the event that the ADH system as modified by this AD is inoperable, an airplane may be operated as specified in the FAA-approved MMEL, provided MMEL provisions that address the modified ADH system are included in the MMEL and those provisions are included in the operator's Minimum Equipment List.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (k)(1) of this AD. Information may be emailed to:

9-ANM-LAACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO Branch, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) Except as required by paragraph (h) of this AD: For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (j)(4)(i) and (j)(4)(ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled “RC Exempt,” then the RC requirement is removed from that step or substep. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator’s maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(k) Related Information

(1) For more information about this AD, contact Eric Igama, Aerospace Engineer, Systems and Equipment Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5388; fax: 562-627-5210; email: roderick.igama@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Standards Branch, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on August 16, 2017.

Jeffrey E. Duven,
Director,
System Oversight Division,
Aircraft Certification Service.

[FR Doc. 2017-17839 Filed: 8/24/2017 8:45 am; Publication Date: 8/25/2017]