

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2009-1224; Directorate Identifier 2009-NM-118-AD; Amendment 39-16351; AD 2010-14-06]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Model 737-200, -300, -400, and -500 Series Airplanes

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

ACTION: Final rule.

SUMMARY: The FAA is superseding an existing airworthiness directive (AD), which applies to certain Model 737-300, -400, and -500 series airplanes. That AD currently requires an inspection to determine the manufacturer and manufacture date of the oxygen masks in the passenger service unit and the lavatory and attendant box assemblies, corrective action if necessary, and other specified action. This new AD expands the applicability in the existing AD. This AD results from a determination indicating that additional airplanes may be subject to the identified unsafe condition. We are issuing this AD to prevent the in-line flow indicators of the passenger oxygen masks from fracturing and separating, which could inhibit oxygen flow to the masks and consequently result in exposure of the passengers and cabin attendants to hypoxia following a depressurization event.

DATES: This AD becomes effective August 5, 2010.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of August 5, 2010.

On April 23, 2008 (73 FR 14666, March 19, 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, P.O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1, fax 206-766-5680; e-mail me.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: Nicholas Wilson, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6476; fax (425) 917-6590.

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 2008-06-24, Amendment 39-15436 (73 FR 14666, March 19, 2008). The existing AD applies to certain Model 737 -300, -400, and -500 series airplanes. That NPRM was published in the Federal Register on December 30, 2009 (74 FR 69040). That NPRM proposed to continue to require an inspection to determine the manufacturer and manufacture date of the oxygen masks in the passenger service unit and the lavatory and attendant box assemblies, corrective action if necessary, and other specified action. That NPRM also proposed to add airplanes to the applicability.

Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the comments that have been received on the NPRM.

Support for the NPRM

The Boeing Company concurs with the content of the NPRM.

Request To Issue Separate Rulemaking Action for Added Airplanes

All Nippon Airways (ANA) asks that we issue a separate AD for Model 737-200 airplanes only. ANA understands the necessity of expanding the airplane effectivity, but notes that the requirements in the existing AD clearly target Model 737 -300, -400, and -500 series airplanes. ANA states that a separate AD would avoid unnecessary paperwork for issuance of a new AD that includes Model 737-300, -400, and -500 series airplanes. ANA adds that we already approved Boeing Special Attention Service Bulletin 737-35-1099, Revision 1, dated April 23, 2009, which refers to B/E Aerospace Service Bulletin 174080-35-01, dated February 6, 2006; Revision 1, dated May 1, 2006; and Revision 2, dated May 28, 2008; as additional sources of guidance for modifying the oxygen mask assembly by replacing the flow indicator with an improved flow indicator. ANA concludes that the compliance time and requirements for the airplanes in the existing AD have not changed in the NPRM.

We do not agree with the commenter's request to issue a separate AD to address only Model 737-200 airplanes. As discussed in the NPRM, we reviewed Boeing Special Attention Service Bulletin 737-35-1099, Revision 1, dated April 23, 2009, which was issued after the existing AD was published and expanded the effectivity of Boeing Special Attention Service Bulletin 737-35-1099, dated April 9, 2007. (We cited Boeing Special Attention Service Bulletin 737-35-1099, dated April 9,

2007, in the existing AD as the appropriate source of service information for accomplishing the required actions.) In light of this new service information, we determined that the additional airplanes included in the effectivity of Boeing Special Attention Service Bulletin 737-35-1099, Revision 1, dated April 23, 2009, also are subject to the unsafe condition identified in the existing AD.

When we find that additional airplanes must be added to the applicability of an AD, the existing AD is typically superseded to include those airplanes. In addition, we consider that any further delay in issuing separate rulemaking would result in an unacceptable level of risk because doing so would allow the unsafe condition to continue for an indefinite length of time. Therefore, we have not changed the AD in this regard.

Request To Review Manufacturing Date Range of Affected Oxygen Masks and Issue Additional Rulemaking

The Civil Aviation Safety Authority of Australia suggests that we issue additional rulemaking to cover all airplanes that may have the affected B/E Aerospace oxygen mask flow indicator assemblies installed. The Civil Aviation Safety Authority asks that we review the manufacturing date range of the oxygen masks identified in the NPRM. The Civil Aviation Safety Authority states that data gathered from its service difficulty report system revealed the failure of three oxygen mask flow indicator assemblies similar to those identified in the NPRM. The Civil Aviation Safety Authority notes that those assemblies have a manufacturing date of September 13, 2001, which is prior to the date range specified in the NPRM (January 1, 2002-March 1, 2006), and the masks are installed on a different airplane model (Beech B300) that have a part/dash number not included in B/E Aerospace Service Bulletin 174080-35-01 (referred to in the NPRM as an additional source of guidance for modifying the oxygen mask assembly). The Civil Aviation Safety Authority adds that the part number is in the 174080 series (identified in the parts installation paragraph of the NPRM).

We acknowledge the commenter's concern and provide the following explanation. We are aware of the issue regarding the manufacturing date range of oxygen mask flow indicator assemblies installed on the small airplane model identified by the commenter. We are currently investigating that issue to determine if additional rulemaking action might be necessary for airplane models other than those specified in the applicability of this AD.

With regard to this specific AD, the failures were due to certain mask stowage box designs that cause higher than normal stresses on the flow indicator assemblies. The manufacturing date range was determined by the manufacturer, and we based the AD on a review of physical test data obtained from the oxygen masks that were available during that review. Based on those data, the manufacturing date range addressed in this AD is appropriate for the airplanes identified in the AD applicability. No change to this AD is necessary.

Explanation of Change to This AD

Boeing Commercial Airplanes has received an Organization Designation Authorization (ODA), which replaces the previous designation as a Delegation Option Authorization (DOA) holder. We have revised paragraph (k)(3) of this AD to add delegation of authority to Boeing Commercial Airplanes ODA to approve an alternative method of compliance for any repair required by this AD.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting the AD with the change described previously. We also determined that this change will not increase the economic burden on any operator or increase the scope of the AD.

Explanation of Change to Costs of Compliance

Since issuance of the NPRM, we have increased the labor rate in the Costs of Compliance from \$80 per work hour to \$85 per work hour. The Costs of Compliance information, below, reflects this increase in the specified hourly labor rate.

Costs of Compliance

There are about 1,981 airplanes of the affected design in the worldwide fleet. This AD affects about 666 airplanes of U.S. registry.

The actions that are required by AD 2008-06-24 and retained in this AD affect about 646 airplanes of U.S. registry. The required actions take about 16 work hours per airplane, for an average of 180 oxygen masks per airplane distributed in about 45 passenger service units/oxygen boxes, at an average labor rate of \$85 per work hour. Required parts cost about \$6 per oxygen mask, or \$1,080 per airplane. Based on these figures, the estimated cost of the existing AD for U.S. operators is \$1,576,240, or \$2,440 per airplane.

This AD is applicable to approximately 20 additional airplanes. Based on the figures discussed above, we estimate the costs for the additional airplanes imposed by this AD on U.S. operators to be \$48,800, or \$2,440 per airplane. This figure is based on assumptions that no operator of these additional airplanes has yet done any of the requirements of this AD, and that no operator will do those actions in the future if this AD is not adopted.

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 39-15436 (73 FR 14666, March 19, 2008) and by adding the following new airworthiness directive (AD):



2010-14-06 The Boeing Company: Amendment 39-16351. Docket No. FAA-2009-1224; Directorate Identifier 2009-NM-118-AD.

Effective Date

- (a) This AD becomes effective August 5, 2010.

Affected ADs

- (b) This AD supersedes AD 2008-06-24, Amendment 39-15436.

Applicability

- (c) This AD applies to The Boeing Company Model 737-200, -300, -400, and -500 series airplanes, certificated in any category; as identified in Boeing Special Attention Service Bulletin 737-35-1099, Revision 1, dated April 23, 2009.

Subject

- (d) Air Transport Association (ATA) of America Code 35: Oxygen.

Unsafe Condition

- (e) This AD results from a determination indicating that additional airplanes may be subject to the identified unsafe condition. The Federal Aviation Administration is issuing this AD to prevent the in-line flow indicators of the passenger oxygen masks from fracturing and separating, which could inhibit oxygen flow to the masks and consequently result in exposure of the passengers and cabin attendants to hypoxia following a depressurization event.

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 2008-06-24, With New Service Information

Inspection and Related Investigative/Corrective Actions if Necessary

- (g) For airplanes identified in Boeing Special Attention Service Bulletin 737-35-1099, dated April 9, 2007: Within 60 months after April 23, 2008 (the effective date of AD 2008-06-24), do a general visual inspection to determine the manufacturer and manufacture date of the oxygen masks in the passenger service unit and the lavatory and attendant box assemblies, and do the applicable corrective action and other specified action, by accomplishing all of the applicable actions specified in the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-35-1099, dated April 9, 2007; or Revision 1, dated April 23, 2009; except where these service bulletins specify

repairing the oxygen mask assembly, replace it with a new or modified oxygen mask assembly having an improved flow indicator. The corrective action and other specified action must be done before further flight. As of the effective date of this AD, use only Revision 1 of Boeing Special Attention Service Bulletin 737-35-1099.

New Requirements of This AD

Inspection and Related Investigative/Corrective Actions if Necessary

(h) For airplanes other than those identified in paragraph (g) of this AD: Within 60 months after the effective date of this AD, do a general visual inspection to determine the manufacturer and manufacture date of the oxygen masks in the passenger service unit and the lavatory and attendant box assemblies, and do the applicable corrective action and other specified action, by accomplishing all of the applicable actions specified in the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-35-1099, Revision 1, dated April 23, 2009; except where this service bulletin specifies repairing the oxygen mask assembly, replace it with a new or modified oxygen mask assembly having an improved flow indicator. The corrective action and other specified action must be done before further flight.

Note 1: Boeing Special Attention Service Bulletin 737-35-1099, dated April 9, 2007; and Revision 1, dated April 23, 2009; refer to B/E Aerospace Service Bulletin 174080-35-01, dated February 6, 2006; Revision 1, dated May 1, 2006; and Revision 2, dated May 28, 2008; as additional sources of guidance for modifying the oxygen mask assembly by replacing the flow indicator with an improved flow indicator.

Parts Installation

(i) As of the effective date of this AD, no person may install a B/E Aerospace oxygen mask assembly having a part number in the 174080 series or 174095 series with a manufacturing date after January 1, 2002, and before March 1, 2006, on any airplane, unless it has been modified in accordance with the requirements of paragraph (h) of this AD.

Credit for Actions Done in Accordance With Previous Issue of the Service Bulletin

(j) Actions done before the effective date of this AD, in accordance with Boeing Special Attention Service Bulletin 737-35-1099, dated April 9, 2007, are acceptable for compliance with the requirements of paragraphs (g) and (h) of this AD.

Alternative Methods of Compliance (AMOCs)

(k)(1) The Manager, Seattle 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: Nicholas Wilson, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 917-6476; fax (425) 917-6590. Or, e-mail information to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(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.

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

Material Incorporated by Reference

(1) You must use Boeing Special Attention Service Bulletin 737-35-1099, dated April 9, 2007; or Boeing Special Attention Service Bulletin 737-35-1099, Revision 1, dated April 23, 2009; as applicable; to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of Boeing Special Attention Service Bulletin 737-35-1099, Revision 1, dated April 23, 2009, under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The Director of the Federal Register previously approved the incorporation by reference of Boeing Special Attention Service Bulletin 737-35-1099, dated April 9, 2007, on April 23, 2008 (73 FR 14666, March 19, 2008).

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1, fax 206-766-5680; e-mail me.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 June 18, 2010.

Ali Bahrami,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.