

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2008-0176; Directorate Identifier 2007-NM-228-AD; Amendment 39-15748; AD 2008-24-08]**

**RIN 2120-AA64**

**Airworthiness Directives; Boeing Model 737-600, -700, -700C, -800 and -900 Series Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

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**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Boeing Model 737-600, -700, -700C, -800 and -900 series airplanes. This AD requires an inspection of the escape slides for the forward and aft entry and service doors to determine the part number and service bulletin number stenciled on the escape slide girt, and modification of the escape slide assemblies. This AD also requires concurrent modification of the escape slide latch assemblies; concurrent inspection of the escape slides to determine the part number and service bulletin number stenciled on the escape slide girts, and replacement of the trigger housing on the regulator valve with an improved trigger housing if necessary; and concurrent replacement of the rod in the pilot valve regulator with a new, improved rod; as applicable. This AD results from reports that certain escape slides did not automatically inflate when deployed or after the manual inflation cable was pulled. We are issuing this AD to prevent failure of an escape slide to inflate when deployed, which could result in the slide being unusable during an emergency evacuation and consequent injury to passengers or crewmembers.

**DATES:** This AD is effective January 2, 2009.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of January 2, 2009.

The Director of the Federal Register previously approved the incorporation by reference of Boeing Service Bulletin 737-25-1404, dated May 25, 2000 on August 28, 2001 (66 FR 38361, July 24, 2001).

**ADDRESSES:** For service information identified in this AD, contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124-2207; telephone (206) 544-9990; fax (206) 766-5682; e-mail [DDCS@boeing.com](mailto:DDCS@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:** Robert K. Hettman, 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) 917-6457, fax (425) 917-6590.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an airworthiness directive (AD) that would apply to certain Boeing Model 737-600, -700, -700C, -800 and -900 series airplanes. That NPRM was published in the Federal Register on February 15, 2008 (73 FR 8833). That NPRM proposed to require an inspection of the escape slides for the forward and aft entry and service doors to determine the part number and service bulletin number stenciled on the escape slide girt, and modification of the escape slide assemblies. That NPRM also proposed to require concurrent modification of the escape slide latch assemblies; concurrent inspection of the escape slides to determine the part number and service bulletin number stenciled on the escape slide girts, and replacement of the trigger housing on the regulator valve with an improved trigger housing if necessary; and concurrent replacement of the rod in the pilot valve regulator with a new, improved rod; as applicable.

### **Comments**

We gave the public the opportunity to participate in developing this AD. We considered the comments received from the three commenters.

### **Support for the NPRM**

Boeing concurs with the contents of the proposed rule.

### **Requests To Refer to Additional Goodrich Service Bulletin**

Goodrich, and Air Transport Association (ATA) on behalf of one of its members, American Airlines (AA), request that Boeing revise Boeing Service Bulletin 737-25-1491, dated April 23, 2007 (cited in the NPRM as the appropriate source of service information for accomplishing certain actions specified in the NPRM), to include a reference to Goodrich Service Bulletin 5A3307-25-339, Revision 2, dated March 31, 2004, as an alternative method of compliance (AMOC) to BFGoodrich Service Bulletin 25-308, dated January 21, 2000 (cited in the NPRM as a source of service information for accomplishing certain other actions specified in the NPRM). ATA and AA note that this service bulletin modifies the applicable slide to the latest standard offered by Goodrich. AA and Goodrich suggest that if Boeing Service Bulletin 737-25-1491, dated April 23, 2007, is not revised, the AD should state that it does not apply to Goodrich part number (P/N) 5A3307-5 slides and that

Goodrich Service Bulletin 5A3307-25-339, Revision 2, dated March 31, 2004, be identified as an AMOC for the slide portion of the AD.

We disagree with the request to revise the AD to refer to Goodrich Service Bulletin 5A3307-25-339, Revision 2, dated March 31, 2004. There are significant differences in the actions between BFGoodrich Service Bulletin 25-308, dated January 21, 2000 and Goodrich Service Bulletin 5A3307-25-339, Revision 2, dated March 31, 2004. Therefore, any request to use the procedures in Goodrich Service Bulletin 5A3307-25-339 is best handled through the AMOC process. Under the provisions of paragraph (k) of the AD, we will consider requests for approval of an AMOC if sufficient data are submitted to substantiate that the change would provide an acceptable level of safety. We have not changed the AD in this regard.

### **Request To Revise Unsafe Condition**

Goodrich notes that paragraph (g)(1) of the NPRM addresses an unsafe condition (escape slide latch assembly) that is not mentioned in paragraph (d), "Unsafe Condition," of the NPRM. Goodrich requests that we revise paragraph (d) to include a reference to the escape slide latch assembly.

We disagree with the request to revise the unsafe condition to refer to the escape slide latch assembly. The unsafe condition addressed by this AD (failure of an escape slide to inflate when deployed) is addressed by the inspection and modification required by paragraph (f) of this AD. However, the inspection and modification cannot be done unless the applicable concurrent requirements addressed by both paragraphs (g)(1) and (g)(2) of the AD are done before or concurrently with the actions required by paragraph (f) of this AD. Those concurrent requirements, in paragraph (g)(1) of this AD, are part of addressing the unsafe condition only in that they enable accomplishment of paragraph (f) of this AD. We have not changed the AD in this regard.

### **Request To Include Alternative Rod Replacement**

Goodrich notes that paragraph (g)(3) of the NPRM specifies rod replacement in the regulator valve in accordance with BFGoodrich Service Bulletin 25-308, dated January 21, 2000, for slides with P/Ns 5A3307-1 and -3. Goodrich states that the combination rod/bushing/trigger housing replacement in Goodrich Service Bulletin 5A3307-25-339, Revision 2, dated March 31, 2004, provides an acceptable alternative rod replacement. Goodrich recommends that we include this alternative in the AD.

We disagree with the request to revise the AD to refer to Goodrich Service Bulletin 5A3307-25-339, Revision 2, dated March 31, 2004. As stated previously, there are significant differences in the actions between BF Goodrich Service Bulletin 25-308, dated January 21, 2000 and Goodrich Service Bulletin 5A3307-25-339, Revision 2, dated March 31, 2004. Therefore, any request to use the procedures in Goodrich Service Bulletin 5A3307-25-339 is best handled through the AMOC process. Under the provisions of paragraph (k) of the AD, we will consider requests for approval of an AMOC if sufficient data are submitted to substantiate that the change would provide an acceptable level of safety. We have not changed the AD in this regard.

### **Request To Revise Costs of Compliance**

ATA on behalf of AA states that the Costs of Compliance provided by the NPRM do not accurately reflect the true costs associated with the proposed modification. The commenters state that accomplishment of the minimum required service bulletins would accrue approximately \$800 per airplane in material for modification of the slide in accordance with BFGoodrich Service Bulletin 25-308, dated January 21, 2000, and \$200 in labor for verification of incorporation of the new latch assembly.

We infer that the commenters would like us to revise the Costs of Compliance section of the NPRM. We disagree. We based our cost estimate of \$516 per airplane for parts for the modification

of the slide in accordance with BFGoodrich Service Bulletin 25-308, dated January 21, 2000, on information from the manufacturer. The commenters did not supply additional information to use as a basis for changing the Costs of Compliance section. Therefore, we do not find it necessary to change the AD in this regard.

## Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting the AD as proposed.

## Costs of Compliance

We estimate that this AD affects 480 airplanes of U.S. registry. We also estimate that it takes about 1 work-hour per product to comply with the inspection. The average labor rate is \$80 per work-hour. Based on these figures, we estimate the cost of this AD to U.S. operators to be \$38,400 or \$80 per product.

The following table provides the estimated costs, at an average labor rate of \$80 per work-hour, for U.S. operators to comply with the concurrent actions, if applicable.

| Estimated Concurrent Costs                                                            |            |         |                   |                 |
|---------------------------------------------------------------------------------------|------------|---------|-------------------|-----------------|
| Action                                                                                | Work hours | Parts   | Cost per airplane | Fleet cost      |
| Concurrent actions specified in Boeing Service Bulletin 737-25-1404                   | 2          | \$1,424 | \$1,584           | Up to \$760,320 |
| Concurrent actions specified in Boeing Special Attention Service Bulletin 737-25-1475 | 3          | \$1,740 | \$1,980           | Up to \$950,400 |
| Concurrent actions specified in BFGoodrich Service Bulletin 25-308                    | 3          | \$516   | \$756             | Up to \$362,880 |

## 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

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.

You can find our regulatory evaluation and the estimated costs of compliance in the AD Docket.

### **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 FAA amends § 39.13 by adding the following new AD:



**2008-24-08 Boeing:** Amendment 39-15748. Docket No. FAA-2008-0176; Directorate Identifier 2007-NM-228-AD.

### **Effective Date**

- (a) This airworthiness directive (AD) is effective January 2, 2009.

### **Affected ADs**

- (b) None.

### **Applicability**

- (c) This AD applies to Boeing Model 737-600, -700, -700C, -800 and -900 series airplanes, certificated in any category, as identified in Boeing Service Bulletin 737-25-1491, dated April 23, 2007.

### **Unsafe Condition**

- (d) This AD results from reports that certain escape slides did not inflate when deployed or after the manual inflation cable was pulled. We are issuing this AD to prevent failure of an escape slide to inflate when deployed, which could result in the slide being unusable during an emergency evacuation and consequent injury to passengers or crewmembers.

### **Compliance**

- (e) Comply with this AD within the compliance times specified, unless already done.

### **Inspection and Modification**

- (f) Within 36 months after the effective date of this AD, inspect the escape slides for the forward and aft entry and service doors to determine the Goodrich part number (P/N) and service bulletin number stenciled on the escape slide girts, and modify the escape slide assemblies, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 737-25-1491, dated April 23, 2007.

Note 1: Boeing Service Bulletin 737-25-1491, dated April 23, 2007, refers to Goodrich Service Bulletin 25-338, Revision 1, dated March 31, 2004, as an additional source of service information for modifying the escape slide assemblies.

### **Concurrent Requirements**

- (g) Prior to or concurrently with accomplishing the actions required by paragraph (f) of this AD, do the applicable actions specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD.

(1) For Model 737-600, -700, and -800 series airplanes identified in Boeing Service Bulletin 737-25-1404, dated May 25, 2000, equipped with any escape slide having P/N 5A3307-1, P/N 5A3307-3, P/N 5A3086-3, or P/N 5A3088-3: Modify the escape slide latch assembly in accordance

with Boeing Service Bulletin 737-25-1404, dated May 25, 2000, as required by paragraph (a) of AD 2001-15-01; or Boeing Service Bulletin 737-25-1404, Revision 1, dated April 18, 2002.

(2) For Model 737-600, -700, -700C, -800 and -900 series airplanes equipped with any escape slide having P/N 5A3086-3 or P/N 5A3088-3: Inspect the four escape slides to determine the part number and service bulletin number stenciled on the escape slide girts, and replace the trigger housing on the regulator valve with an improved trigger housing if BFGoodrich Service Bulletin 5A3086/5A3088-25-302 is not stenciled on the girt, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-25-1475, dated November 26, 2002. For airplanes identified as Group 2 in Boeing Special Attention Service Bulletin 737-25-1475, dated November 26, 2002, a records review may be done in lieu of the inspection to determine the part number.

Note 2: Boeing Special Attention Service Bulletin 737-25-1475, dated November 26, 2002, refers to Goodrich Service Bulletin 5A3086/5A3088-25-336, dated June 17, 2002, as an additional source of service information for replacing the trigger housing on the regulator valve with a new, improved trigger housing.

(3) For Model 737-600, -700, -700C, -800 and -900 series airplanes equipped with any escape slide having P/N 5A3307-1, P/N 5A3086-3, or P/N 5A3088-3; or P/N 5A3307-3 and BFGoodrich Service Bulletin 5A3307-25-309 stenciled on the girt: Replace the rod in the pilot valve regulator with a new, improved rod in accordance with BFGoodrich Service Bulletin 25-308, dated January 21, 2000.

### **Terminating Action for AD 2001-15-01**

(h) For Model 737-600, -700, and -800 series airplanes identified in Boeing Special Attention Service Bulletin 737-25-1403, dated May 4, 2000: Accomplishing the replacement of the regulator piston plug in the vespel piston with a new piston plug, installation of a new insulate pad on the valise, and removal of the trigger housing cover, in accordance with Goodrich Service Bulletin 25-338, Revision 1, dated March 31, 2004, terminates the modification specified in Boeing Special Attention Service Bulletin 737-25-1403, dated May 4, 2000, as required by paragraph (a) of AD 2001-15-01. All other applicable actions required by paragraph (a) of AD 2001-15-01 must be fully complied with.

(i) For Model 737-600, -700, and -800 series airplanes: Installation of a cover assembly on the trigger housing of the inflation cylinder on the escape slides in accordance with Boeing Special Attention Service Bulletin 737-25-1403, Revision 1, dated November 29, 2001, terminates the corresponding action required by paragraph (a) of AD 2001-15-01. All other applicable actions required by paragraph (a) of AD 2001-15-01 must be fully complied with.

(j) For Model 737-600, -700, and -800 series airplanes: Modification of the escape slide latch assembly in accordance with Boeing Service Bulletin 737-25-1404, Revision 1, dated April 18, 2002, terminates the corresponding action required by paragraph (a) of AD 2001-15-01. All other applicable actions required by paragraph (a) of AD 2001-15-01 must be fully complied with.

### **Alternative Methods of Compliance (AMOCs)**

(k)(1) The Manager, Seattle Aircraft Certification Office, FAA, ATTN: Robert K. Hettman, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6457, fax (425) 917-6590; has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

(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 appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

### **Material Incorporated by Reference**

(1) 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. If you accomplish the terminating actions for AD 2001-15-01 specified in this AD, you must use the applicable service information contained in Table 2 of this AD, unless the AD specifies otherwise.

**Table 1 – Material incorporated by reference for actions required in this AD**

| <b>Service Bulletin</b>                               | <b>Revision</b> | <b>Date</b>       |
|-------------------------------------------------------|-----------------|-------------------|
| Boeing Service Bulletin 737-25-1404                   | Original        | May 25, 2000      |
| Boeing Service Bulletin 737-25-1404                   | 1               | April 18, 2002    |
| Boeing Service Bulletin 737-25-1491                   | Original        | April 23, 2007    |
| Boeing Special Attention Service Bulletin 737-25-1475 | Original        | November 26, 2002 |
| BFGoodrich Service Bulletin 25-308                    | Original        | January 21, 2000  |

**Table 2 – Material incorporated by reference for the optional terminating action in this AD**

| <b>Service Bulletin</b>                               | <b>Revision</b> | <b>Date</b>       |
|-------------------------------------------------------|-----------------|-------------------|
| Boeing Service Bulletin 737-25-1404                   | 1               | April 18, 2002    |
| Boeing Special Attention Service Bulletin 737-25-1403 | 1               | November 29, 2001 |
| Goodrich Service Bulletin 25-338                      | 1               | March 31, 2004    |

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in Table 3 of this AD under 5 U.S.C. 552(a) and 1 CFR part 51.

**Table 3 – New material incorporated by reference**

| <b>Service Bulletin</b>                               | <b>Revision</b> | <b>Date</b>       |
|-------------------------------------------------------|-----------------|-------------------|
| Boeing Service Bulletin 737-25-1404                   | 1               | April 18, 2002    |
| Boeing Service Bulletin 737-25-1491                   | Original        | April 23, 2007    |
| Boeing Special Attention Service Bulletin 737-25-1475 | Original        | November 26, 2002 |
| Goodrich Service Bulletin 25-308                      | Original        | January 21, 2000  |

(2) The Director of the Federal Register previously approved the incorporation by reference of Boeing Service Bulletin 737-25-1404, dated May 25, 2000, on August 28, 2001 (66 FR 38361, July 24, 2001).

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124-2207; telephone (206) 544-9990; fax (206) 766-5682; e-mail DDCS@boeing.com; Internet <https://www.myboeingfleet.com>.



(4) You may review copies of the service information that is incorporated by reference at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; 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).

Issued in Renton, Washington, on November 16, 2008.  
Stephen P. Boyd,  
Assistant Manager, Transport Airplane Directorate,  
Aircraft Certification Service.