

[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [65 FR 3801 1/25/2000]

[Docket No. 98-NM-351-AD; Amendment 39-11521; AD 2000-02-03]

RIN 2120-AA64

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

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to certain Boeing Model 737-300, -400 and -500 series airplanes, that requires replacement, with new parts, of the existing actuators or the rod ends on the existing actuators at wing leading edge slat positions 1, 2, 5, and 6. This amendment is prompted by reports indicating that the rod ends on several leading edge slat actuators have fractured. The actions specified by this AD are intended to prevent fatigue cracking of the rod ends of the leading edge slat actuators, which could result in uncommanded deployment of the wing leading edge slat and consequent reduced controllability of the airplane.

**DATES:** Effective February 29, 2000.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of February 29, 2000.

**ADDRESSES:** The service information referenced in this AD may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. 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 Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Robert C. Jones, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98055-4056; telephone (425) 227-1118; fax (425) 227-1181.

**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 all Boeing Model 737-300, -400 and -500 series airplanes was published in the **Federal Register** on August 19, 1999 (64 FR 45211). That action proposed to require replacement, with new parts, of the existing actuators or the rod ends on the existing actuators at wing leading edge slat positions 1, 2, 5, and 6.

## Comments

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

## Support for the Proposal

One commenter supports the proposed rule.

## Request to Reference New Revision of Alert Service Bulletin

One commenter requests that the FAA revise the proposed rule to reference Boeing Alert Service Bulletin 737-27A1211, Revision 1, dated December 9, 1999, as an appropriate source of service information for accomplishment of the actions specified by the proposal. The proposed AD referenced the original issue of the alert service bulletin, dated November 19, 1998. The commenter states that referencing the revised alert service bulletin will minimize the amount of rework and parts necessary for airplanes that have received a certain other modification.

The FAA concurs with the commenter's request. The FAA has reviewed and approved Boeing Alert Service Bulletin 737-27A1211, Revision 1. The instructions contained in Revision 1 of the alert service bulletin are substantially similar to those in the original issue of the alert service bulletin, but Revision 1 adds references to new part numbers and kits that will provide new alternatives for compliance with this AD. In addition, as the commenter states, Revision 1 of the alert service bulletin provides alternative procedures for accomplishing the replacement on airplanes that have received a certain other modification. Therefore, paragraph (a) of this final rule has been revised to state that replacement of existing actuators or rod ends with new parts may be accomplished in accordance with either the original issue or Revision 1 of the alert service bulletin.

## Explanation of Additional Change

The SUMMARY section of the preamble of the proposed rule incorrectly states that the proposed AD would be applicable to all Boeing Model 737-300, -400, and -500 series airplanes. However, the applicability statement of the proposal correctly states that the proposed AD would be applicable to Boeing Model 737-300, -400, and -500 series airplanes having line numbers 1001 through 3063 inclusive. Accordingly, the SUMMARY section of this final rule has been corrected to state that this AD applies to certain Boeing Model 737-300, -400 and -500 series airplanes.

## Conclusion

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes previously described. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

## Cost Impact

There are approximately 1,897 Model 737-300, -400, and -500 series airplanes of the affected design in the worldwide fleet. The FAA estimates that 720 airplanes of U.S. registry will be affected by this AD.

Replacement of the leading edge slat actuator with an actuator that has a new rod end is one option for compliance with this AD. Replacement of the actuators on slat positions 1, 2, 5, and 6 will take approximately 3 hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts will cost approximately \$32,252 per airplane. Based on these figures, the cost impact of the installation of actuators with new rod ends, as provided as one option by this AD, on U.S. operators is estimated to be \$32,432 per airplane.

In lieu of installation of an actuator with a new rod end, this AD provides an option for replacement of the rod ends on the existing actuators. This action will take approximately 4 work hours per airplane, at an average labor rate of \$60 per work hour. Required parts will cost between approximately \$5,928 and \$21,544 per airplane. Based on these figures, the cost impact of the replacement of the rod ends, as provided as one option by this AD, on U.S. operators is estimated to be between \$6,168 and \$21,784 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.

### **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 adding the following new airworthiness directive:

SUPERSEDED

# AIRWORTHINESS DIRECTIVE



REGULATORY SUPPORT DIVISION  
P.O. BOX 26460  
OKLAHOMA CITY, OKLAHOMA 73125-0460

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Federal Aviation Regulations, Part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**2000-02-03 BOEING:** Amendment 39-11521. Docket 98-NM-351-AD.

Applicability: Model 737-300, -400, and -500 series airplanes, line numbers 1001 through 3063 inclusive; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent fatigue cracking of the rod ends on the leading edge slat actuators, which could result in uncommanded deployment of the wing leading edge slat and consequent reduced controllability of the airplane, accomplish the following:

## Replacement

(a) Within 24 months after the effective date of this AD: Replace the leading edge slat actuator with an actuator that has a new rod end, or replace the rod end on the existing slat actuator with a new rod end, at slat positions 1, 2, 5, and 6; in accordance with the Accomplishment Instructions in Boeing Alert Service Bulletin 737-27A1211, dated November 19, 1998, or Revision 1, dated December 9, 1999.

## Spares

(b) As of the effective date of this AD, no person shall install any part having a part number identified in the "Existing Part Number" column of Section 2.E. of Boeing Alert Service Bulletin 737-27A1211, dated November 19, 1998, on any airplane.

## **Alternative Methods of Compliance**

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

## **Special Flight Permits**

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

## **Incorporation by Reference**

(e) The actions shall be done in accordance with Boeing Alert Service Bulletin 737-27A1211, dated November 19, 1998; or Boeing Alert Service Bulletin 737-27A1211, Revision 1, dated December 9, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on February 29, 2000.

### **FOR FURTHER INFORMATION CONTACT:**

Robert C. Jones, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98055-4056; telephone (425) 227-1118; fax (425) 227-1181.

Issued in Renton, Washington, on January 18, 2000.

Donald L. Riggan, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.