Airworthiness Directive

Federal Register Information

Header Information
DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

Docket No. 98-NM-156-AD; Amendment 39-10600; AD **98-13-12** R1

RIN 2120-AA64

Airworthiness Directives; Boeing Model 737, 747, 757, 767, and 777 Series Airplanes
PDF Copy (If Available):

Preamble Information
AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that is applicable to certain Boeing Model 737, 747, 757, 767, and 777 series airplanes. This action requires a one-time inspection to detect discrepancies of the fasteners that connect the pushrods to the rudder pedal assemblies; and corrective actions, if necessary. This amendment is prompted by reports of loose and missing fasteners due to incorrect installation. The actions specified in this AD are intended to prevent loss of rudder control, jamming of the rudder system, uncommanded movement of the rudder system, and consequent reduced controllability of the airplane, due to loose or missing fasteners that connect the pushrods to the rudder pedal assemblies.

DATES: Effective December 28, 1998.
The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of July 6, 1998.
Comments for inclusion in the Rules Docket must be received on or before August 17, 1998.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 98-NM-156-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

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 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.

FOR FURTHER INFORMATION CONTACT: R.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: The FAA has received a report from an operator indicating that, on a Boeing Model 737-400 series airplane, during rollout after landing, the captain's right rudder pedal moved to the full travel position when it was pushed. The pedal failed to return to its normal position after it was released even though the rudder remained at the neutral position. Consequently, the first officer used his rudder pedals to control the rudder and the nose wheel steering. Investigation revealed that the forward end of the pushrod on the right rudder pedal was not connected to the rudder pedal assembly. The nut and washer of the pushrod were found in the lower forward compartment. This airplane had accumulated 17,600 total flight hours and 7,900 total flight cycles. A second operator reported that a pilot felt a loose rudder pedal. Investigation revealed that the fastener connecting the pushrod to the rudder pedal assembly was loose.

In addition, on a Boeing Model 737-500 series airplane, a nut that connects the pushrod to the rudder pedal assembly was loose. This airplane had accumulated 3,012 total flight hours and 2,658 total flight cycles. Maintenance inspections of 130 in-service Boeing Model 737 series airplanes revealed four other loose fasteners.

The cause of the loose and missing nuts and bolts has been attributed to incorrect installation of the fasteners that connect the pushrods to the rudder pedal assemblies during manufacture. If the nut is not installed correctly, the bolt can fall out or may be able to move far enough to touch the opposite rudder pedal assembly. These conditions, if not corrected, could result in potential loss of rudder control, jamming of the rudder system, uncommanded movement of the rudder system, and consequent reduced controllability of the airplane.

The rudder pedal assemblies on certain Boeing Model 747, 757, 767, and 777 series airplanes are similar in design to those on the affected Model 737 series airplanes. Therefore, the rudder pedal assemblies on all of these models may have been installed incorrectly. Consequently, all of these models may be subject to the same unsafe condition.

Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Alert Service Bulletins 737-27A1212, 747-27A2368, 757-27A0128, 767-27A0156, and 777-27A0029, all dated March 26, 1998. These alert service bulletins describe procedures for a one-time inspection to detect discrepancies of the fasteners (nuts, bolts, and washers) that connect the forward ends of the pushrods to the rudder pedal assemblies; and corrective actions, if necessary. Corrective actions include tightening nuts and bolts to specified torque limits, installing missing fasteners, and replacing incorrectly installed fasteners with new fasteners.

Explanation of the Requirements of the Rule

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design, this AD is being issued to prevent loss of rudder control, jamming of the rudder system, uncommanded movement of the rudder system, and consequent reduced controllability of the airplane, due to loose or missing fasteners that connect the pushrods to the rudder pedal assemblies. This AD requires accomplishment of the actions specified in the alert service bulletins described previously. This AD also requires that operators report results of findings of discrepancies to the FAA and to Boeing.

Interim Action

This is considered to be interim action until final action is identified, at which time the FAA may consider further rulemaking.

Determination of Rule's Effective Date

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified under the caption "ADDRESSES." All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 98-NM-156-AD." The postcard will be date stamped and returned to the commenter.

Regulatory Impact

The regulations adopted herein will not have substantial direct effects 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, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a “significant regulatory action” under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, 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:

Regulatory Information

98-13-12 R1 BOEING: Amendment 39-10930. Docket 98-NM-263-AD. Revises AD **98-13-12**, Amendment 39-10600.

Applicability: Model 737, 747, 757, 767, and 777 series airplanes; as listed in the following Boeing alert service bulletins; certificated in any category.

Alert Service Bulletin	**Date**
737-27A1212	March 26, 1998
747-27A2368, Revision 2	May 28, 1998
757-27A0128	March 26, 1998
767-27A0156	March 26, 1998
777-27A0029, Revision 1	October 1, 1998

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 loss of rudder control, jamming of the rudder system, uncommanded movement of the rudder system, and consequent reduced controllability of the airplane, due to loose or missing fasteners that connect the pushrods to the rudder pedal assemblies, accomplish the following:

(a) Within 90 days after July 6, 1998 (the effective date of AD **98-13-12**, amendment 39-10600), perform a one-time inspection to detect discrepancies of the fasteners that connect the ends of the pushrods to the rudder pedal assemblies; in accordance with Boeing Alert Service Bulletin 737-27A1212, dated March 26, 1998; 747-27A2368, dated March 26, 1998, Revision 1, dated May 7, 1998, or Revision 2, dated May 28, 1998; 757-27A0128, dated March 26, 1998; 767-27A0156, dated March 26, 1998; or 777-27A0029, Revision 1, dated October 1, 1998; as applicable.

(1) If no discrepancy is detected, no further action is required by this AD.

(2) If any discrepancy is detected, prior to further flight, perform the applicable corrective action in accordance with the applicable alert service bulletin.

NOTE 2: For Boeing Model 777 series airplanes, inspection and corrective action performed prior to the effective date of this AD in accordance with Boeing Alert Service Bulletin 777-27A0029, dated March 26, 1998, are considered acceptable for compliance with the applicable requirements of paragraph (a) of this AD.

(b) Submit a report of inspection findings (discrepant findings only) to the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; fax (425) 227-1181; and to the Boeing Commercial Airplane Group, Attention: Manager, Airline Support, P.O. Box 3707, Seattle, Washington 98124-2207; at the applicable time specified in paragraph (b)(1) or (b)(2) of this AD. The report must include a description of any discrepancy found, the airplane serial number, and the total number of landings and flight hours accumulated on the airplane. Discrepant findings include, but are not limited to, loose or missing fasteners, inadequately torqued fasteners, and fasteners incorrectly installed on the pedal assemblies or pushrod bearing surfaces. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) and have been assigned OMB Control Number 2120-0056.

(1) For airplanes on which the inspection is accomplished after July 6, 1998: Submit the report within 10 days after performing the inspection required by paragraph (a) of this AD.

(2) For airplanes on which the inspection has been accomplished prior to July 6, 1998: Submit the report within 10 days after the effective date of this AD.

(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 ACO. 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 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

(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.

(e) The actions shall be done in accordance with:

- Boeing Alert Service Bulletin 737-27A1212, dated March 26, 1998;
- Boeing Alert Service Bulletin 757-27A0128, dated March 26, 1998;
- Boeing Alert Service Bulletin 767-27A0156, dated March 26, 1998;
- Boeing Alert Service Bulletin 777-27A0029, Revision 1, dated October 1, 1998;
- Boeing Alert Service Bulletin 747-27A2368, dated March 26, 1998;
- Boeing Alert Service Bulletin 747-27A2368, Revision 1, dated May 7, 1998; or
- Boeing Alert Service Bulletin 747-27A2368, Revision 2, dated May 28, 1998.

(1) The incorporation by reference of Boeing Alert Service Bulletin 747-27A2368, Revision 1, dated May 7, 1998; Boeing Alert Service Bulletin 747-27A2368, Revision 2, dated May 28, 1998; and Boeing Alert Service Bulletin 777-27A0029, Revision 1, dated October 1, 1998, is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of Boeing Alert Service Bulletin 737-27A1212, dated March 26, 1998; Boeing Alert Service Bulletin 757-27A0128, dated March 26, 1998; Boeing Alert Service Bulletin 767-27A0156, dated March 26, 1998; and Boeing Alert Service Bulletin 747-27A2368, dated March 26, 1998; was approved previously by the Director of the Federal Register as of July 6, 1998 (63 FR 33246, June 18, 1998).

(3) 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 December 28, 1998.

Footer Information

Comments