[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [65 FR 51754 8/25/2000]

[Docket No. 2000-NM-289-AD; Amendment 39-11879; AD 2000-17-05]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 767-200, -300, and -300F Series Airplanes

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 767-200, -300, and -300F series airplanes. This action requires a functional check of the shear rivets in all six elevator power control actuator (PCA) bellcrank assemblies to determine the condition of the shear rivets, and replacement or rework of the bellcrank assemblies, if necessary. This action is necessary to detect and correct any failed or partially yielded shear rivets of the elevator PCA bellcrank assemblies. Failure of two bellcrank assemblies on one side can result in that single elevator surface moving to a hardover position independent of pilot command resulting in a significant pitch upset recoverable by the crew. Failure of three bellcrank assemblies on one side may result in loss of controllability of the airplane. This action is intended to address the identified unsafe condition.

DATES: Effective September 11, 2000.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of September 11, 2000.

Comments for inclusion in the Rules Docket must be received on or before October 24, 2000.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2000 NM 289-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address: 9-anm-iarcomment@faa.gov. Comments sent via fax or the Internet must contain "Docket No. 2000 NM-289-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

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: Kenneth Fairhurst, 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 reports that elevator bellcrank assemblies with failed shear rivets have been found on three Boeing Model 767 series airplanes. On one airplane, the failed shear rivets were found in both the left inboard and left center power control actuator (PCA) bellcrank assemblies. Investigation revealed that the left center PCA had been replaced two weeks earlier. The bellcrank shear rivets are designed to shear if a jam occurs and an input of approximately 50 pounds above normal feel forces is applied to the elevator system.

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Further testing by the manufacturer revealed that the single system hydraulic test of the elevator, which is mandated by a Certification Maintenance Requirement, may not detect failed shear rivets in an elevator bellcrank assembly. Failure of two bellcrank assemblies on one side can result in that single elevator surface moving to a hardover position independent of pilot command resulting in a significant pitch upset recoverable by the crew. Failure of three bellcrank assemblies on one side may result in loss of controllability of the airplane**.**

The FAA has received no factual information that indicates that this incident is related to an accident that occurred off the coast of Massachusetts involving a Boeing Model 767 series airplane. The cause of that accident is still under investigation.

Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Alert Service Bulletin 767-27A0166, dated August 17, 2000. That alert service bulletin describes procedures for a functional check of the shear rivets on all six elevator PCA bellcrank assemblies to determine the condition of the shear rivets. (The functional check entails, in part, inserting a pin into the center of the shear rivets and measuring the penetration depth of the pin.) The alert service bulletin also describes eventual replacement of the bellcrank assemblies with new or serviceable bellcrank assemblies if the penetration depth of the pin is 0.35 inch or more, but less than 0.50 inch; and, prior to further flight, rework or replacement of the bellcrank assemblies with new or serviceable bellcrank assemblies if the penetration depth of the pin is less than 0.35 inch. The alert service bulletin specifies repeating the functional check after any installation of a new or serviceable bellcrank assembly to ensure that the reworked or new bellcrank assembly is still in good condition after installation. Additionally, the alert service bulletin specifies that, if one or more bellcrank shear rivets have a penetration depth of the pin of less than 0.50 inch, the operator should send a report (provided in the alert service bulletin) to the manufacturer.

Explanation of the Requirements of the Rule

Since an unsafe condition has been identified that is likely to exist or develop on other Boeing Model 767 series airplanes of the same type design, this AD is being issued to detect and correct any failed or partially yielded shear rivets of the PCA elevator bellcrank assembly. Failure of two bellcrank assemblies on one side can result in that single elevator surface moving to a hardover position independent of pilot command resulting in a significant pitch upset recoverable by the crew. Failure of three bellcrank assemblies on one side may result in loss of controllability of the airplane, which could result in an elevator hardover and consequent reduced controllability or loss of controllability of the airplane. Except as described below, the actions are required to be accomplished in accordance with the alert service bulletin described previously.

Differences Between Proposed Rule and Service Bulletin

Operator should note that where requirements appear in this final rule that are different from the Boeing alert service bulletin, this AD prevails.

Operators should note that, although the alert service bulletin requests that operators send the completed PCA Elevator Bellcrank Assembly Shear Rivet Inspection Report (provided in the alert service bulletin) to the manufacturer, this AD requires that the report be sent to the FAA.

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.

Submit comments using the following format:

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- Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- For each issue, state what specific change to the AD is being requested.
- Include justification (e.g., reasons or data) for each request.

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 2000-NM-289-AD." The postcard will be date stamped and returned to the commenter.

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.

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:

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AIRWORTHINESS DIRECTIVE

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

U.S. Department
of Transportation
Federal Aviation Administration

AD's are posted on the internet at http://av-info.faa.gov

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) 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).

2000-17-05 BOEING: Amendment 39-11879. Docket 2000-NM-289-AD.

Applicability: Model 767-200, -300, and -300F series airplanes, with Line Numbers 1 through 800 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 detect and correct any failed or partially yielded shear rivets of the elevator power control actuator (PCA) bellcrank assembly, which could result in (1) failure of two bellcrank assemblies on one side of the airplane and consequent movement of the single elevator to a hardover position independent of pilot command, resulting in a significant pitch upset recoverable by the crew; or (2) failure of three bellcrank assemblies on one side and consequent loss of controllability of the airplane; accomplish the following:

(a) Within 30 days after the effective date of this AD, perform a functional check of one shear rivet in all six elevator PCA bellcrank assemblies to determine the condition of the shear rivets; in accordance with Paragraph 3, Accomplishment Instructions, of Boeing Alert Service Bulletin 767-27A0166, dated August 17, 2000.

(1) If all penetration depths when measured per Figure 2 of the alert service bulletin are 0.50 inch or more, no further action is required by this AD.

(2) If any penetration depth when measured per Figure 2 of the alert service bulletin is 0.35 inch or more, but less than 0.50 inch, rework or replace the bellcrank assembly with a new or serviceable bellcrank assembly within 400 flight hours after accomplishing the functional check. After installation of a new or serviceable bellcrank assembly, prior to further flight, repeat the functional check of all the bellcrank assemblies to make sure the rivets are still in good condition (as specified in the alert service bulletin) after installation, in accordance with Figure 2 of the alert service bulletin.

(3) If any penetration depth when measured per Figure 2 of the alert service bulletin is less than 0.35 inch, prior to further flight, rework or replace the bellcrank assembly with a new or serviceable bellcrank assembly. After installation of a new or serviceable bellcrank assembly, and prior to further flight, repeat the functional check of all the bellcrank assemblies to make sure the rivets are still in good (as specified in the alert service bulletin) condition after installation, in accordance with Figure 2 of the alert service bulletin.

(b) If one or more bellcrank shear rivets have a measured penetration depth of less than 0.50 inch, within 10 days after performing the initial functional check required by paragraph (a) of this AD: Submit a copy of the completed PCA Elevator Bellcrank Shear Rivet Inspection Report, as provided in Boeing Alert Service Bulletin 767-27A0166, dated August 17, 2000, to the following address: Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; fax (425) 227-1181.

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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 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 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) Except as provided by paragraph (b) of this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin 767-27A0166, dated August 17, 2000. 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 September 11, 2000.

FOR FURTHER INFORMATION CONTACT: Kenneth Fairhurst, 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 August 18, 2000.
John J. Hickey, Manager, Transport Airplane Directorate, Aircraft Certification Service.

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