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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2001-NM-310-AD; Amendment 39-12474; AD 2001-21-51]

RIN 2120-AA64

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

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This document publishes in the Federal Register an amendment adopting airworthiness directive (AD) 2001-21-51 that was sent previously to all known U.S. owners and operators of certain Boeing Model 737-600, -700, and -800 series airplanes by individual notices. This AD requires a detailed visual inspection for damage of the aft pressure bulkhead at body station (BS) 1016 and the forward attachment of the vertical fin at body section 48, and corrective action, if necessary. This action is prompted by a report of damage to the web of the aft pressure bulkhead at BS 1016. The actions specified by this AD are intended to find and fix damage of the aft pressure bulkhead at BS 1016 and the forward attachment of the vertical fin at body section 48, which could result in structural failure of the aft pressure bulkhead and consequent uncontrolled decompression, or loss of structural integrity of the forward support of the vertical fin, loss of the vertical fin, and consequent loss of control of the airplane.

DATES: Effective November 5, 2001, to all persons except those persons to whom it was made immediately effective by emergency AD 2001-21-51, issued October 12, 2001, which contained the requirements of this amendment.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of November 5, 2001.

Comments for inclusion in the Rules Docket must be received on or before December 31, 2001.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2001-NM-310-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. 2001-NM-310-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 applicable service information 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: Scott Fung, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington; telephone (425) 227-1221; fax (425) 227-1181.

SUPPLEMENTARY INFORMATION: On October 12, 2001, the FAA issued emergency AD 2001-21-51, which is applicable to certain Boeing Model 737-600, -700, and -800 series airplanes.

The FAA recently received a report indicating that an operator found damage to the web of the aft pressure bulkhead at body station (BS) 1016 on a Boeing Model 737-700 series airplane. One section of the web had two large dents that crossed a radial tearstrap and a crease common to one edge. During replacement of the damaged web sections of the bulkhead, additional damage to the vertical shear beam web and to the skin adjacent to the attachment fittings of the vertical fin at BS 1016 was found. The vertical shear beam webs are integral to the attachment fittings that attach the vertical fin to the fuselage. A shimmy event of the main landing gear (MLG) on that airplane also was reported, and was so severe that it damaged the MLG and resulted in replacement of the right MLG.

Subsequent to the first report, three other operators reported similar damage to the aft pressure bulkhead on other Boeing Model 737-700 series airplanes, following severe shimmy events which resulted in damage to the MLG. A 0.65-inch crack in the aft pressure bulkhead also was found on one of the damaged airplanes. Shimmy events are a possible cause of the aft pressure bulkhead damage; however, the actual cause is undetermined. Hard landings and tail strikes are other possible causes. Such damage, if not fixed, could result in structural failure of the aft pressure bulkhead and consequent uncontrolled decompression, or loss of structural integrity of the forward support of the vertical fin, loss of the vertical fin, and consequent loss of control of the airplane.

Boeing Model 737-600 and -800 series airplanes have identical structure in the subject area and may also be subject to the same unsafe condition described above.

Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Telegraphic Alert Service Bulletin, 737-53A1238, dated October 11, 2001, which describes procedures for a detailed visual inspection for damage of the aft pressure bulkhead at body station (BS) 1016 and the forward attachment of the vertical fin at body section 48. For airplanes on which damage is found, the service bulletin describes procedures for doing an additional detailed visual inspection of the vertical beam web installation. The service bulletin also specifies contacting Boeing for repair of any damage found, and reporting inspection results to Boeing.

Explanation of Requirements of the Rule

Since the unsafe condition described is likely to exist or develop on other airplanes of the same type design, the FAA issued emergency AD 2001-21-51 to find and fix damage of the aft pressure bulkhead at BS 1016 and the forward attachment of the vertical fin at body section 48, which could result in structural failure of the aft pressure bulkhead and consequent uncontrolled decompression,

or loss of structural integrity of the forward support of the vertical fin, loss of the vertical fin, and consequent loss of control of the airplane. The AD requires a detailed visual inspection for damage of the aft pressure bulkhead at body station 1016 and the forward attachment of the vertical fin at body section 48, and corrective action, if necessary. The actions are required to be accomplished in accordance with the service bulletin previously described, except as discussed below.

Differences Between This AD and the Telegraphic Service Bulletin

Although the service bulletin specifies that the manufacturer may be contacted for disposition of certain repair conditions, this AD requires the repair of those conditions to be accomplished per a method approved by the FAA, or per data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle Aircraft Certification Office, to make such findings.

The service bulletin also specifies doing a detailed visual inspection of the aft pressure bulkhead at body station 1016 and the forward attachment of the vertical fin at body section 48 for damage, within a compliance time that ranges between 5 and 30 days, depending upon airplane grouping. However, this AD also requires doing the detailed visual inspection before further flight if a severe shimmy event that damaged the main landing gear, a hard landing, or a tail strike occurs after the effective date of this AD.

Interim Action

This is considered to be interim action. The inspection reports that are required by this AD will enable the FAA to complete its evaluation of the need for final action. Once final action is developed, approved, and made available, the FAA may consider further rulemaking.

Determination of Rule's Effective Date

Since it was found that immediate corrective action was required, notice and opportunity for prior public comment thereon were impracticable and contrary to the public interest, and good cause existed to make the AD effective immediately by individual notices issued on October 12, 2001, to all known U.S. owners and operators of Boeing Model 737-600, -700, and -800 series airplanes; line numbers 1 through 405 inclusive, and line numbers 466, 585, 590, and 793. These conditions still exist, and the AD is hereby published in the Federal Register as an amendment to section 39.13 of the Federal Aviation Regulations (14 CFR 39.13) to make it effective to all persons.

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 2001-NM-310-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.

Sec. 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service Washington, DC

U.S. Department of Transportation Federal Aviation Administration

We post ADs on the internet at "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).

2001-21-51 Boeing: Amendment 39-12474. Docket 2001-NM-310-AD.

Applicability: Model 737-600, -700, and -800 series airplanes; line numbers 1 through 405 inclusive, and line numbers 466, 585, 590, and 793; 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 (f) 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 find and fix damage of the aft pressure bulkhead at body station 1016 and the forward attachment of the vertical fin at body section 48, which could result in structural failure of the aft pressure bulkhead and consequent uncontrolled decompression, or loss of structural integrity of the forward support of the vertical fin, loss of the vertical fin, and consequent loss of control of the airplane; accomplish the following:

Inspection

- (a) Do a detailed visual inspection for damage of the aft pressure bulkhead at body station 1016 and the forward attachment of the vertical fin at body section 48, according to Boeing Telegraphic Alert Service Bulletin, 737-53A1238, dated October 11, 2001. Except as provided by paragraph (b) of this AD, do the inspections at the time specified in paragraph (a)(1), (a)(2), or (a)(3) of this AD, as applicable.
- (1) For Group 1 airplanes as identified in paragraph 1.A., "Effectivity," of the service bulletin: Within 5 days after the effective date of this AD.
- (2) For Group 2 airplanes as identified in paragraph 1.A., "Effectivity," of the service bulletin: Within 10 days after the effective date of this AD.
- (3) For Group 3 airplanes as identified in paragraph 1.A., "Effectivity," of the service bulletin: Within 30 days after the effective date of this AD.

Note 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

- (b) For airplanes identified in paragraphs (b)(1) and (b)(2) of this AD: Do the inspection at the time specified in those paragraphs, as applicable.
- (1) For Group 2 or Group 3 airplanes on which a severe shimmy event that damaged the main landing gear before the effective date of this AD, or on which a hard landing or a tail strike occurred before the effective date of this AD: Do the inspection required by paragraph (a) of this AD at the time specified in paragraph (a)(1) of this AD.
- (2) For Group 3 airplanes on which a shimmy event that damaged the aircraft interior or the flaps occurred before the effective date of this AD: Do the inspection required by paragraph (a) of this AD at the time specified in paragraph (a)(2) of this AD.
- (c) Do the inspection required by paragraph (a) of this AD before further flight after any of the following events occurring after the effective date of this AD: A severe shimmy event that damaged the main landing gear, a hard landing, or a tail strike.

Corrective Action

(d) If any damage is found during the inspection required by this AD, before further flight, do a detailed visual inspection of the vertical beam web installation for damage, according to Boeing Telegraphic Alert Service Bulletin, 737-53A1238, dated October 11, 2001. If any damage is found, before further flight, repair all damage per a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA; or per data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the approval letter must specifically reference this AD.

Reporting Requirement

- (e) Submit a report of inspection findings (both positive and negative) to the Manager, Seattle ACO, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; fax (425) 227-1181; at the applicable time specified in paragraph (e)(1) or (e)(2) of this AD. The report must include the following: The approximate date of inspection; whether the shimmy dampers were installed subsequent to aircraft delivery; a description of any structural damage found and its location, as well as the extent and depth of the damage, or whether structural damage was NOT found; whether any shimmy event, hard landing, engine-out, or tail strike has occurred; the airplane serial number; and the number of landings and flight hours on the airplane. 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 the effective date of this AD: Submit the report within 5 days after performing the inspection required by paragraph (a) of this AD.
- (2) For airplanes on which the inspection has been accomplished prior to the effective date of this AD: Submit the report within 5 days after the effective date of this AD.

Alternative Methods of Compliance

(f) 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, FAA. 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.

Special Flight Permits

(g) 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

- (h) Except as provided by paragraph (d) of this AD, the actions shall be done in accordance with Boeing Telegraphic Alert Service Bulletin, 737-53A1238, dated October 11, 2001. 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.
- (i) This amendment becomes effective on November 5, 2001, to all persons except those persons to whom it was made immediately effective by emergency AD 2001-21-51, issued on October 12, 2001, which contained the requirements of this amendment.

Issued in Renton, Washington, on October 22, 2001.

Ali Bahrami,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 01-27188 Filed 10-30-01; 8:45 am]

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