

§ 39.13 [Amended]

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

Boeing: Docket 96-NM-151-AD.

Applicability: All Model 737-100, -200, -300, -400, and -500 series airplanes, certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise 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 sudden uncommanded yawing of the airplane due to potential failures within the yaw damper system, and consequent injury to passengers and crewmembers, accomplish the following:

(a) Within 3,000 hours time-in-service after the effective date of this AD, and thereafter at intervals not to exceed 6,000 hours time-in-service: Perform tests to verify the integrity of the yaw damper coupler, in accordance with procedures specified in the Honeywell Component Maintenance Manual 22-10-27, Revision 6, dated September 1, 1992.

(1) If the yaw damper coupler passes the tests, prior to further flight, remove the rate gyroscope in accordance with Section 4E, page 103, of the Honeywell Component Maintenance Manual; and perform tests to verify the integrity of the rate gyroscope, in accordance with procedures specified in Honeywell Engineering Specification No. IT2589124, "Integrated Test Specification for Rate Gyroscope, Part Number 2589124-902," dated October 9, 1992.

(i) If the rate gyroscope passes the tests, reinstall the rate gyroscope in accordance with Section 3F, page 504, of the Honeywell Component Maintenance Manual.

(ii) If the rate gyroscope fails the tests, prior to further flight, accomplish either paragraph (a)(1)(i)(A) or (a)(1)(ii)(B) of this AD.

(A) Overhaul the rate gyroscope in accordance with Sperry Overhaul Manual 24-09-20, "RG1000 Miniature Rate Gyroscope, Part No. 2589124-902;" and reinstall the rate gyroscope in accordance with Section 3F, page 504, of the Honeywell Component Maintenance Manual. Or

(B) Replace the rate gyroscope with a new part in accordance with Section 3F, page 504, of the Honeywell Component Maintenance Manual.

(2) If the yaw damper coupler fails the tests, prior to further flight, accomplish either paragraph (a)(2)(i) or (a)(2)(ii) of this AD.

(i) Repair the coupler in accordance with the Honeywell Component Maintenance Manual, and perform tests specified in

paragraph (a)(1) of this AD to verify the integrity of the rate gyroscope. Or

(ii) Replace the coupler with a new coupler, or with a serviceable coupler on which the integrity of the rate gyroscope has been verified in accordance with paragraph (a)(1) of this AD. Accomplish the replacement in accordance with procedures specified in the Honeywell Component Maintenance Manual.

(b) Within 18 months after the effective date of this AD: Perform a one-time inspection of the engage solenoid valve of the yaw damper to determine the P/N of the valve. If any valve having P/N 10-60881-1, -3, or -9 is installed, prior to further flight, replace it with a valve having P/N 10-60881-8 or -13. Accomplish the actions in accordance with Chapter 27-20-01 of the Boeing 737 Overhaul Manual.

Note 2: Boeing In-Service Activities Report 95-03-2725-10, dated February 16, 1995 (for Model 737-100 and -200 series airplanes), or 95-04-2725-10, dated February 24, 1995 (for Model 737-300, -400, and -500 series airplanes), provide additional information concerning interchangeability of solenoid valve part numbers.

(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, 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 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.

Issued in Renton, Washington, on August 21, 1996.

Ronald T. Wojnar,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 96-21883 Filed 8-23-96; 9:03 am]

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14 CFR Part 39

[Docket No. 96-NM-152-AD]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 737-100 and -200 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to all Boeing Model 737-100 and -200 series

airplanes. This proposal would require replacement of certain outboard and inboard wheel halves with improved wheel halves. This proposal also would require cleaning and inspecting certain outboard and inboard wheel halves for corrosion, missing paint in large areas, and cracks; and repair or replacement of the wheel halves with serviceable wheel halves, if necessary. This proposal is prompted by a review of the design of the flight control systems on Model 737 series airplanes. The actions specified by the proposed AD are intended to prevent failure of the wheel flanges, which could result in failure of the hydraulics systems, jammed flight controls, loss of electrical power, or other combinations of failures; and consequent reduced controllability of the airplane.

DATES: Comments must be received by October 24, 1996.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-103, Attention: Rules Docket No. 96-NM-152-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.

The service information referenced in the proposed rule may be obtained from Allied Signal Aerospace Company, Bendix Wheels and Brakes Division, South Bend, Indiana 46624; and Bendix, Aircraft Brake and Strut Division, 3520 West Mestmoor Street, South Bend, Indiana 46624. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: David Herron, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington; telephone (206) 227-2672; fax (206) 227-1181.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed 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 above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed 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 summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 96-NM-152-AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM-103, Attention: Rules Docket No. 96-NM-152-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Discussion

In October 1994, the FAA organized a team to conduct a Critical Design Review (CDR) of the flight control systems installed on Boeing Model 737 series airplanes in an effort to confirm the continued operational safety of these airplanes. The formation of the CDR team was prompted by questions that arose following an accident involving a Model 737-200 series airplane that occurred near Colorado Springs, Colorado, and one involving a Model 737-300 series airplane that occurred near Pittsburgh, Pennsylvania. The CDR team's analysis of the flight control systems was performed independent of the investigations of these accidents, which are conducted by the National Transportation Safety Board (NTSB). The cause of the accidents has not yet been determined.

The CDR team was composed of representatives from the FAA, the NTSB, other U.S. government organizations, and foreign airworthiness authorities. The team reviewed the service history and the design of the flight control systems of Model 737 series airplanes. The team completed its review in May 1995. The recommendations of the team include various changes to the design of the flight control systems of these airplanes, as well as correction of certain design deficiencies. This proposed AD is one of nine rulemaking actions being issued by the FAA to address the recommendations of the CDR team.

Reports Received by FAA

The FAA received a report indicating that failure of the wheel flanges can result in metallic debris impacting the hydraulics systems and other critical elements associated with control of the airplane that are within the proximity of the wheel. Such impact can result in failure of the hydraulics systems, jammed flight controls, loss of electrical power, or other combinations of failures. These conditions, if not corrected, could result in reduced controllability of the airplane.

Explanation of Relevant Service Information

The FAA has reviewed and approved Bendix Service Information Letter (SIL) 392, Revision 1, dated November 15, 1979, which describes procedures for replacement of any outboard wheel half having serial number (S/N) H-999 and lower with an outboard wheel half having part number (P/N) 2607047; and replacement of any inboard wheel half having S/N H-1799 and lower with a wheel half having P/N 2607046. These replacements must be accomplished on airplanes equipped with a Bendix main wheel assembly having part number (P/N) 2601571-1, S/N B-5999 and lower. The improved wheel halves incorporate additional material that will ensure greater tolerance for corrosion and handling damage of the wheel.

The FAA also has reviewed and approved Allied Signal Service Bulletin No. 737-32-026, dated April 26, 1988, including Attachments 1 and 2. The service bulletin describes procedures for cleaning any outboard wheel half having P/N 2601454, S/N H0001 through H1049 inclusive, and any inboard wheel half having P/N 2601567, S/N H0001 through H1799 inclusive; inspecting the wheel halves for corrosion or missing paint in large areas, stripping or removing any paint, and removing any corrosion; and performing an eddy current inspection for cracks. These actions must be accomplished on airplanes equipped with a Bendix main wheel assembly having P/N 2601571, S/N B0001 through B5999 inclusive.

Explanation of Requirements of Proposed Rule

Since an unsafe condition has been identified that is likely to exist or develop on other products of this same type design, the proposed AD would require replacement of certain outboard and inboard wheel halves with improved wheel halves. The proposed AD also would require cleaning and inspecting certain outboard and inboard wheel halves for corrosion, missing paint in large areas, and cracks; and

repair or replacement of the wheel halves with serviceable wheel halves, if necessary. Replacement of inboard and outboard wheel halves would be required to be accomplished in accordance with the SIL described previously. The cleaning and inspection would be required to be accomplished in accordance with the service bulletin described previously.

Explanation of Proposed Compliance Time

In developing an appropriate compliance time for the proposed actions, the FAA's intent is that it be performed during a regularly scheduled maintenance visit for the majority of the affected fleet, when the airplanes would be located at a base where special equipment and trained personnel would be readily available, if necessary. In addition, the FAA considered the availability of necessary parts. The FAA finds that 180 days corresponds closely to the interval representative of most of the affected operators' normal maintenance schedules. The FAA considers that this interval will provide an acceptable level of safety.

Cost Impact

There are approximately 634 Model 737-100 and -200 series airplanes of the affected design in the worldwide fleet. The FAA estimates that 241 airplanes of U.S. registry would be affected by this proposed AD.

The FAA estimates that it would take approximately 4 work hours per airplane to accomplish the proposed replacement of wheel halves, and that the average labor rate is \$60 per work hour. Required parts would cost approximately \$20,212 per airplane. Based on these figures, the cost impact of the proposed replacement on U.S. operators is estimated to be \$4,928,932, or \$20,452 per airplane.

The FAA also estimates that it would take approximately 2 work hours per airplane to accomplish the proposed cleaning and inspection, and that the average labor rate is \$60 per work hour. Based on these figures, the cost impact of the proposed cleaning and inspection on U.S. operators is estimated to be \$28,920, or \$120 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the proposed requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

The FAA recognizes that the obligation to maintain aircraft in an airworthy condition is vital, but sometimes expensive. Because AD's require specific actions to address

specific unsafe conditions, they appear to impose costs that would not otherwise be borne by operators. However, because of the general obligation of operators to maintain aircraft in an airworthy condition, this appearance is deceptive. Attributing those costs solely to the issuance of this AD is unrealistic because, in the interest of maintaining safe aircraft, prudent operators would accomplish the required actions even if they were not required to do so by the AD.

A full cost-benefit analysis has not been accomplished for this proposed AD. As a matter of law, in order to be airworthy, an aircraft must conform to its type design and be in a condition for safe operation. The type design is approved only after the FAA makes a determination that it complies with all applicable airworthiness requirements. In adopting and maintaining those requirements, the FAA has already made the determination that they establish a level of safety that is cost-beneficial. When the FAA, as in this proposed AD, makes a finding of an unsafe condition, this means that the original cost-beneficial level of safety is no longer being achieved and that the proposed actions are necessary to restore that level of safety. Because this level of safety has already been determined to be cost-beneficial, a full cost-benefit analysis for this proposed AD would be redundant and unnecessary.

Regulatory Impact

The regulations proposed herein would 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 proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this proposed regulation (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) if promulgated, 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 copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the

location provided under the caption "ADDRESSES."

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend 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:

Boeing: Docket 96-NM-152-AD.

Applicability: All Model 737-100 and -200 series airplanes, certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise 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 (d) 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 failure of the wheel flanges, which could result in failure of the hydraulics systems, jammed flight controls, loss of electrical power, or other combinations of failures; and consequent reduced controllability of the airplane, accomplish the following:

(a) For airplanes equipped with a Bendix main wheel assembly having part number (P/N) 2601571-1, serial number (S/N) B-5999 or lower: Within 180 days after the effective date of this AD, accomplish the actions specified in paragraphs (a)(1) and (a)(2) of this AD, in accordance with Bendix Service Information Letter (SIL) 392, Revision 1, dated November 15, 1979.

(1) Remove any outboard wheel half having S/N H-999 or lower, and replace it with an outboard wheel half having P/N 2607047; and

(2) Remove any inboard wheel half having S/N H-1799 or lower, and replace it with a wheel half having P/N 2607046.

(b) For airplanes equipped with a Bendix main wheel assembly having P/N 2601571, S/N B0001 through B5999 inclusive, accomplish the following:

(1) Within 180 days after the effective date of this AD, and thereafter at each tire change, accomplish the actions specified in paragraphs (b)(1)(i), (b)(1)(ii), and (b)(1)(iii) of this AD, in accordance with the Accomplishment Instructions of Allied Signal Service Bulletin No. 737-32-026, dated April 26, 1988, including Attachments 1 and 2.

(i) Clean any outboard wheel half having P/N 2601454, S/N H0001 through H1049 inclusive, and any inboard wheel half having P/N 2601567, S/N H0001 through H1799 inclusive; and

(ii) Inspect the wheel halves for corrosion or missing paint in large areas, strip or remove any paint, and remove any corrosion; and

(iii) Perform an eddy current inspection to detect cracks.

(2) If any cracking is found during the inspections required by this paragraph, prior to further flight, repair or replace the wheel halves with serviceable wheel halves in accordance with procedures specified in the Component Maintenance Manual.

(c) As of the effective date of this AD, no person shall install an outboard wheel half having S/N H-999 or lower, or an inboard wheel half having S/N H-1799 or lower, on a main wheel assembly having P/N 2601571, S/N B0001 through B5999 inclusive, on any airplane.

(d) 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.

(e) 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.

Issued in Renton, Washington, on August 21, 1996.

Ronald T. Wojnar,

Manager, Transport Airplane Directorate,
Aircraft Certification Service.

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14 CFR Part 39

[Docket No. 96-NM-153-AD]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 737 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).