

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-145-AD.

Applicability: Model 737-100 and -200 series airplanes; as listed in Boeing Service Bulletin 27-1033, dated February 13, 1970; 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 an unexpected, significant control upset due to mechanical interference within the lateral control system transfer mechanism, which could result in reduced travel of a control wheel and above normal control wheel forces during a jam override, accomplish the following:

(a) Within 18 months after the effective date of this AD: Accomplish the

requirements of either paragraph (a)(1) or (a)(2) of this AD, in accordance with Boeing Service Bulletin 27-1033, dated February 13, 1970.

(1) Replace the aileron control transfer mechanism, part number (P/N) 65-54200-4 or -5, with a new modified mechanism in accordance with Procedure I of the Accomplishment Instructions of the service bulletin. Or

(2) Rework the existing aileron control transfer mechanism, P/N 65-54200-4 or -5, in accordance with Procedure II of the Accomplishment Instructions of the service bulletin.

(b) As of the effective date of this AD, no person shall install an aileron control transfer mechanism having P/N 65-54200-4 or -5 unless it has been reworked in accordance with the requirements of paragraph (a)(2) 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 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.

(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. 96-21877 Filed 8-23-96; 9:01 am]

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14 CFR Part 39

[Docket No. 96-NM-146-AD]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 737 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 certain Boeing Model 737 series airplanes. This proposal would require replacement of the flow restrictors of the aileron and elevator power control units (PCU's) with new flow restrictors. 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 reduced roll and/or pitch rate control of the airplane and consequent increased pilot workload as a result of fragments from a deteriorated flow restrictor filter screen becoming lodged in the PCU.

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-146-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 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.

FOR FURTHER INFORMATION CONTACT: Don Kurle, Senior Engineer, Systems and Equipment Branch, ANM-130S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (206) 227-2798; 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-146-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-146-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.

Report Received by FAA

The FAA received a report indicating that, prior to its installation on a Model 737 series airplane, an aileron/elevator power control unit (PCU) failed a functional test for maximum rate capability. Investigation revealed that the PCU was contaminated at the main control valve. The source of this contamination was a filter screen from a flow restrictor. These filter screens were manufactured using a new forming process that results in deterioration of the screens when proof pressure is applied during functional testing.

If the filter screen deteriorates, fragments of the screen could migrate to the main control valve, the damping orifice, or the bypass valve. If a fragment lodges in the main control valve, one of the slides could jam or a control port could be blocked partially. A jammed slide could result in reduced hinge moment of the PCU and reduced rate capability of the elevator or aileron in one direction. A partially blocked control port could result in reduced aileron/spoiler or elevator maximum rate and, consequently, reduction of the airplane pitch or roll rate capability. Lodging of a fragment in the damping orifice could result in blockage of the orifice and consequent small amplitude aileron or elevator limit cycling on the ground.

Jamming of the bypass valve in the power-off (bypass) position could cause one PCU to remain unpowered. The other PCU will continue to function at its full capacity, but the total surface hinge moment and maximum airplane pitch or roll rate capability will be reduced. Subsequent loss of hydraulic power to the other PCU could result in manual reversion control of the elevator or ailerons.

Jamming of the bypass valve in the power-on position would have no effect on the operation of the system as long as both hydraulic systems remain powered. If the hydraulic system that powers the non-contaminated PCU is lost, the effect would be essentially the same as if a bypass valve jams in the bypass condition: one PCU will be unpowered, and the contaminated PCU will continue to function at its full capacity, but the total surface hinge moment and maximum airplane pitch or roll rate capability will be reduced. If the hydraulic system that powers the contaminated PCU is lost, the other PCU will continue to function at its full capacity. However, the maximum aileron/spoiler or elevator maximum rate would be reduced and, consequently, pitch or roll rate would be reduced because the contaminated PCU will not go into bypass mode.

Reduced roll and/or pitch rate control of the aileron could result in increased pilot workload.

Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Service Letter 737-SL-27-71-A, dated June 19, 1992, including Attachment 1, which describes procedures for replacement of the four flow restrictors, part number (P/N) JETA1875500D, on the aileron and elevator PCU's, P/N 65-45180-29, serial numbers 182 through 1297 inclusive,

with flow restrictors having P/N JETX0527100B.

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 the flow restrictors of the aileron and elevator power control units (PCU's) with new flow restrictors. The actions would be required to be accomplished in accordance with the service letter described previously.

Explanation of Proposed Compliance Time

In developing an appropriate compliance time for the proposed replacement, 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 18 months 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 244 Model 737 series airplanes of the affected design in the worldwide fleet. The FAA estimates that 146 airplanes of U.S. registry would be affected by this proposed AD, that it would take approximately 12 work hours per airplane to accomplish the proposed actions, and that the average labor rate is \$60 per work hour. Required parts would cost approximately \$2,960 per airplane. Based on these figures, the cost impact of the proposed AD on U.S. operators is estimated to be \$537,280, or \$3,680 per airplane.

The cost impact figure discussed above is 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.

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-146-AD.

Applicability: Model 737 series airplanes equipped with an aileron or elevator power control unit (PCU) having part number (P/N) 65-45180-29, serial numbers 182 through 1297 inclusive; certificated in any category.

Note 1: Originally, aileron or elevator PCU's having P/N's and serial numbers identified in the applicability of this AD may have been installed on Model 737 series airplanes having line numbers 1793 through 2036 inclusive. In addition, some of these PCU's may have been used as spares; therefore, specific airplane line numbers equipped with such PCU's cannot be provided in this AD.

Note 2: PCU's having P/N 65-45180-29 consist of a PCU assembly having P/N 65-44761-21 plus associated hydraulic fittings. Both PCU P/N's 65-45180-29 and 65-44761-21 are serialized. PCU's subject to the requirements of this AD may be more easily identified using serial numbers for P/N 65-44761-21. The following serial numbers correspond to P/N 65-44761-21:

8549A,
8550A,
8552A,
8556A,
8557A,
8561A,
8563A through 8718A inclusive,
8720A through 8726A inclusive,
8728A through 8745A inclusive,
8749A,
8750A through 8758A inclusive,
8760A through 8873A inclusive,
8876A through 9004A inclusive,
9007A through 9012A inclusive,
9014A through 9040A inclusive,
9042A through 9066A inclusive,
9068A through 9340A inclusive,
9342A through 9388A inclusive,
9390A through 9529A inclusive,
9531A through 9676A inclusive, and
9678A through 9688A inclusive.

Note 3: 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 reduced roll and/or pitch rate control of the aileron and consequent increased pilot workload, accomplish the following:

(a) Within 18 months after the effective date of this AD, replace the four flow restrictors, part number (P/N) JETA1875500D, on the aileron and elevator power control units (PCU's), P/N 65-45180-29, serial numbers 182 through 1297 inclusive, with flow restrictors having P/N JETX0527100B, in accordance with Boeing Service Letter 737-SL-27-71-A, dated June 19, 1992, including Attachment 1.

(b) As of the effective date of this AD, no person shall install a flow restrictor having P/N JETA1875500D on an aileron or elevator PCU having P/N 65-45180-29, serial numbers 182 through 1297 inclusive, of any airplane.

(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 4: 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. 96-21878 Filed 8-23-96; 9:01 am]

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14 CFR Part 39

[Docket No. 96-NM-147-AD]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 737-100, -200, -300, -400, and -500 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, -200, -300, -400, and -500 series airplanes. This proposal would require operational tests of the standby rudder power control unit (PCU) to ensure correct operation of the rudder, and correction of any discrepancy found; and repetitive inspections to detect galling on the input shaft and bearing of the standby PCU, and replacement of the standby rudder actuator with a serviceable actuator, if necessary. This proposal also would require eventual replacement of the input bearing of the standby PCU with an improved bearing, which constitutes terminating action for the inspections to detect galling. 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 corrosion of the servo valve and bypass valve sleeves of the standby PCU, and galling on the input shaft and bearing of the standby PCU, which could result in uncommanded movement of the rudder or increased pedal forces. These conditions, if not corrected, could result in 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-147-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this