

Proposed Rules

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This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2001-NM-274-AD]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 737-300, -400, and -500 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the superseding of an existing airworthiness directive (AD), applicable to certain Boeing Model 737-300, -400, and -500 series airplanes, that currently requires replacement, with new parts, of the existing actuators or the rod ends on the existing actuators at wing leading edge slat positions 1, 2, 5, and 6. This new action would add a one-time inspection of all the rod ends on the actuators of the wing leading edge slats to determine if vibro-engraving was used to identify the parts, and corrective action, if necessary. This proposal is prompted by reports indicating that vibro-engraving was found on new rod ends during installation; such part markings create stress risers that reduce the fatigue life of the rod ends. The actions specified by the proposed AD are intended to prevent fatigue cracking, which could result in failure of the rod ends, uncommanded deployment of the wing leading edge slat, and consequent reduced controllability of the airplane. This action is intended to address the identified unsafe condition.

DATES: Comments must be received by August 2, 2002.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2001-NM-274-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-nprmcomment@faa.gov*. Comments sent via fax or the Internet must contain "Docket No. 2001-NM-274-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 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: Douglas Tsuji, 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) 227-1506; fax (425) 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 action may be changed in light of the comments received.

Submit comments using the following format:

- 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 proposed 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 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 action must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2001-NM-274-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-114, Attention: Rules Docket No. 2001-NM-274-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Discussion

On January 18, 2000, the FAA issued AD 2000-02-03, amendment 39-11521 (65 FR 3801, January 25, 2000), applicable to certain Boeing Model 737-300, -400 and -500 series airplanes, to require replacement, with new parts, of the existing actuators or the rod ends on the existing actuators at wing leading edge slat positions 1, 2, 5, and 6. That action was prompted by reports indicating that the rod ends on several leading edge slat actuators had fractured. The requirements of that AD are intended to prevent fatigue cracking of the rod ends of the leading edge slat actuators, which could result in uncommanded deployment of the wing leading edge slat and consequent reduced controllability of the airplane.

Actions Since Issuance of Previous Rule

Since the issuance of AD 2000-02-03, the FAA has received a report indicating that vibro-engraving was found on a new rod end during accomplishment of Boeing Alert Service Bulletin 737-27A1211 (which was referenced in that AD as the appropriate source of service information for accomplishing the replacement of the existing actuators or the rod ends on the existing actuators with new parts). Subsequent to the first report, a second report was received that indicated vibro-engraving was found on

two sides of certain rod ends. Vibro-engraving creates stress risers in the rod ends that reduce the fatigue life of the part and can cause fatigue cracking. The manufacturer's rod end assembly drawings do not allow vibro-engraving as an acceptable part-marking method. Fatigue cracking of the rod ends on the actuators of the leading edge slats could result in failure of the rod ends, uncommanded deployment of the wing leading edge slat, and consequent reduced controllability of the airplane.

Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Alert Service Bulletin 737-27A1243, dated July 26, 2001. The service bulletin describes procedures for a visual inspection of all six rod ends on the actuators of the wing leading edge slats to determine if vibro-engraving was used to identify the parts, and corrective action if vibro-engraving is found on any rod end. The corrective action consists of rework or replacement of the affected rod end with a new rod end. Accomplishment of the actions specified in the service bulletin is intended to adequately address the identified unsafe condition.

We also have reviewed and approved Boeing Alert Service Bulletin 737-27A1211, Revision 2, dated December 21, 2000, including information notice (IN) 737-27A1211 IN 03, dated July 26, 2001. (The original version and Revision 1 of this service bulletin are referenced in the existing AD as service information for accomplishment of the specified actions). There are no significant changes to Revision 2; however, Information Notice 737-27A1211 IN 03 addresses vibro-engraving as an incorrect method of identification of the rod ends and instructs operators to return vibro-engraved parts to the vendor, or to do the procedures specified in Boeing Alert Service Bulletin 737-27A1243 (described above).

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 supersede AD 2000-02-03 to continue to require replacement, with new parts, of the existing actuators or the rod ends on the existing actuators at wing leading edge slat positions 1, 2, 5, and 6. This new action would add a one-time inspection of the rod ends on the actuators of the wing leading edge slats to determine if vibro-engraving was used to identify the parts, and corrective

action, if necessary. The actions would be required to be accomplished in accordance with the service bulletins described previously, except as discussed below.

Difference Between This Proposed AD and the Service Bulletin

The service bulletin recommends a visual inspection of all six rod ends on the actuators of the wing leading edge slats "at the earliest convenient maintenance opportunity" to determine if vibro-engraving was used to identify the rod ends, then reworking or replacing the parts that have vibro-engraving within 42 months after incorporation of Boeing Service Bulletin 737-27A1211 (described above). However, the FAA has determined that "at the earliest convenient maintenance opportunity" may not ensure that the identified unsafe condition is addressed in a timely manner. In developing an appropriate compliance time for this proposed AD, we considered not only the manufacturer's recommendation, but the degree of urgency associated with addressing the subject unsafe condition, the average utilization of the affected fleet, and the time necessary to accomplish the proposed AD. In light of all of these factors, we find a compliance time of 12,000 flight cycles or 42 months after doing the replacement required by AD 2000-02-03, whichever is first; or 12,000 flight cycles or 42 months after the effective date of the AD, whichever is first; as applicable; to be warranted, in that it represents an appropriate interval of time allowable for affected airplanes to continue to operate without compromising safety.

Cost Impact

There are approximately 1,963 airplanes of the affected design in the worldwide fleet. The FAA estimates that 799 airplanes of U.S. registry would be affected by this proposed AD.

Replacement of the leading edge slat actuator with an actuator that has a new rod end is one option for compliance with the actions currently required by AD 2000-02-03. Replacement of the actuators on slat positions 1, 2, 5, and 6 takes approximately 3 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts cost approximately \$32,252 per airplane. Based on these figures, the cost impact of the installation of actuators with new rod ends, as provided as one option by this AD, is estimated to be \$32,432 per airplane.

In lieu of installation of an actuator with a new rod end, AD 2000-02-03

provides an option for replacement of the rod ends on the existing actuators. This action takes approximately 4 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts cost between approximately \$5,928 and \$21,544 per airplane. Based on these figures, the cost impact of the replacement of the rod ends, as provided as a second option by this AD, is estimated to be between \$6,168 and \$21,784 per airplane.

The new inspection that is proposed in this AD action would take approximately 2 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the inspection proposed by this AD on U.S. operators is estimated to be \$95,880, or \$120 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the current or proposed requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Should an operator be required to accomplish the replacement of the rod end, it would take approximately 1 work hour per rod end to accomplish the replacement, at an average labor rate of \$60 per work hour. Required parts would cost between \$2,917 and \$5,527 per rod end. Based on these figures, the cost impact of any replacement action is estimated to be between \$2,977 and \$5,587 per rod end.

Should an operator be required to accomplish the rework of the rod end, it would take approximately 2 work hours per rod end to accomplish the rework, at an average labor rate of \$60 per hour. Based on these figures, the cost impact of the rework is estimated to be \$120 per rod end.

Regulatory Impact

The regulations proposed herein would 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 proposal would not have federalism implications under Executive Order 13132.

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 removing amendment 39-11521 (65 FR 3801, January 25, 2000), and by adding a new airworthiness directive (AD), to read as follows:

Boeing: Docket 2001-NM-274-AD.
Supersedes AD 2000-02-03,
Amendment 39-11521.

Applicability: Model 737-300, -400, and -500 series airplanes; line numbers 1001 through 3132 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 (e)(1) 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 fatigue cracking of the rod ends of the actuators of the leading edge slats,

which could result in failure of the rod ends, uncommanded deployment of the wing leading edge slat, and consequent reduced controllability of the airplane, accomplish the following:

Restatement of Requirements of AD 2000-02-03

Replacement

(a) Within 24 months after February 29, 2000 (the effective date of AD 2000-02-03, amendment 39-11521): Replace the leading edge slat actuator with an actuator that has a new rod end, or replace the rod end on the existing slat actuator with a new rod end, at slat positions 1, 2, 5, and 6; in accordance with the Accomplishment Instructions in Boeing Alert Service Bulletin 737-27A1211, dated November 19, 1998; Revision 1, dated December 9, 1999; or Revision 2, dated December 21, 2000, including information notice (IN) 737-27A1211 IN 03, dated July 26, 2001.

Spares

(b) As of February 29, 2000, no person shall install any part having a part number identified in the "Existing Part Number" column of Section 2.E. of Boeing Alert Service Bulletin 737-27A1211, dated November 19, 1998, on any airplane.

New Requirements of This AD

One-Time Inspection/Corrective Action

(c) Do a one-time general visual inspection of all six rod ends on the actuators of the wing leading edge slats to determine if vibro-engraving was used to identify the rod ends, at the time specified in paragraph (c)(1) or (c)(2) of this AD, as applicable, per the Work Instructions of Boeing Alert Service Bulletin 737-27A1243, dated July 26, 2001. If vibro-engraving is found, rework or replace the affected rod end with a new rod end at the time specified in paragraph (c)(1) or (c)(2) of this AD, as applicable, per the service bulletin. If no vibro-engraving is found, no further action is required by this paragraph.

Note 2: For the purposes of this AD, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made from within touching distance unless otherwise specified. A mirror may be necessary to enhance visual access to all exposed surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or droplight and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

(1) For airplanes on which the rod ends were replaced as required by paragraph (a) of this AD: Within 12,000 flight cycles or 42 months after doing the replacement per paragraph (a) of this AD, whichever is first.

(2) For all other airplanes: Within 12,000 flight cycles or 42 months after the effective date of this AD, whichever is first.

Spares

(d) After the effective date of this AD, no person shall install on any airplane a rod end having vibro-engraving, or other part

markings that penetrate the surface, unless that part has been reworked as required by this AD.

Alternative Methods of Compliance

(e)(1) 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. 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.

(2) Alternative methods of compliance, approved previously in accordance with AD 2000-02-03, amendment 39-11521, are approved as alternative methods of compliance with paragraph (a) of this AD.

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

(f) 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 June 7, 2002.

Ali Bahrami,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 02-15244 Filed 6-17-02; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2001-NM-176-AD]

RIN 2120-AA64

Airworthiness Directives; Bombardier Model CL-600-2B19 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 Bombardier Model CL-600-2B19 series airplanes. This proposal would require, for certain airplanes, a one-time inspection to detect chafing or other damage of the integrated drive generator (IDG) cables and the firewall separators of the pylon, and corrective action if necessary. For other airplanes, this proposal would require identification of the part number of the clamps, and replacement with new