



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety

Washington, D.C. 20594

AIRCRAFT MAINTENANCE RECORDS FACTUAL REPORT

DCA09MA021

Attachment C
Airworthiness Directives

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

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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).

2005-20-39 Boeing: Amendment 39-14336. Docket No. FAA-2005-21346; Directorate Identifier 2005-NM-031-AD.

Effective Date

- (a) This AD becomes effective November 17, 2005.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to all Boeing Model 737-100, -200, -200C, -300, -400, and -500 series airplanes, certificated in any category.

Unsafe Condition

- (d) This AD results from twelve reports of severe corrosion on one or more of three components of the main landing gear (MLG). We are issuing this AD to prevent collapse of the MLG, or damage to hydraulic tubing or the aileron control cables, which could result in possible departure of the airplane from the runway and loss of control of the airplane.

Compliance

- (e) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Service Bulletin Reference

- (f) The term "service bulletin," as used in this AD, means the Accomplishment Instructions of Boeing Service Bulletin 737-32A1367, Revision 1, dated December 23, 2004.

Records Examination and Compliance Times

- (g) For all airplanes: Before the inspection required by paragraph (h) of this AD, examine the airplane records to determine if the MLG has been overhauled, and, for any overhauled MLG, if JC5A corrosion inhibiting compound (CIC) was used on the trunnion pin or other parts of the MLG.

(1) For airplanes identified in the service bulletin as Group 2 and Group 4: If records indicate conclusively that the MLG has not been overhauled, no further action is required by this paragraph or paragraph (h) of this AD.

(2) For airplanes identified in the service bulletin as Group 1, Group 2, Group 3, and Group 4: If records indicate conclusively that the MLG has been overhauled and that CIC JC5A was not used on the trunnion pins or other parts of the MLG during the most recent overhaul, no further action is required by this paragraph or paragraph (h) of this AD.

Inspection and Corrective Action

(h) For all airplanes, except as provided by paragraph (g)(1) and (g)(2) of this AD: At the applicable compliance time in paragraph (h)(1) or (h)(2) of this AD, do a detailed inspection for discrepancies of the applicable MLG components specified in the service bulletin. Do all applicable corrective actions before further flight after the inspection. Do all the actions in accordance with the service bulletin, except as required by paragraph (i) of this AD.

(1) For airplanes identified in the service bulletin as Group 1 and Group 3 for which records indicate conclusively that the MLG has not been overhauled: Inspect at the later of the times in paragraph (h)(1)(i) and (h)(1)(ii) of this AD.

(i) Within 48 months after the date of issuance of the original standard airworthiness certificate or the date of issuance of the original export certificate of airworthiness.

(ii) Within 6 months after the effective date of this AD.

(2) For airplanes identified in the service bulletin as Group 1, Group 2, Group 3, and Group 4, for which records indicate conclusively that the MLG has been overhauled, and for which records indicate conclusively that CIC JC5A was used during the most recent overhaul; and for airplanes for which records do not show conclusively which CIC compound was used during the most recent overhaul: Inspect at the later of the times in paragraph (h)(2)(i) or (h)(2)(ii) of this AD.

(i) Within 48 months after the landing gear was installed.

(ii) Within 6 months after the effective date of this AD.

Note 1: For the purposes of this AD, a detailed inspection is: "An intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirror, magnifying lenses, etc., may be necessary. Surface cleaning and elaborate procedures may be required."

Contact Seattle Aircraft Certification Office (ACO) or Delegation Option Authorization (DOA) Organization for Certain Corrective Actions

(i) If any discrepancy is found during any inspection required by this AD, and the service bulletin specifies to contact Boeing for appropriate action: Before further flight, do the action using a method approved in accordance with paragraph (l) this AD.

Use of JC5A Prohibited

(j) As of the effective date of this AD, no person may use CIC JC5A on an MLG component on any airplane.

Actions Done According to Previous Revision of Service Bulletin

(k) Actions done before the effective date of this AD in accordance with Boeing Alert Service Bulletin 737-32A1367, dated August 19, 2004, are considered acceptable for compliance with the corresponding action specified in this AD.

Alternative Methods of Compliance (AMOCs)

(1)(1) The Manager, Seattle ACO, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD, if it is approved by an Authorized Representative for the Boeing Commercial Airplanes DOA Organization who has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(3) Before using any AMOC approved in accordance with § 39.19 on any airplane to which the AMOC applies, notify the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

Material Incorporated by Reference

(m) You must use Boeing Service Bulletin 737-32A1367, Revision 1, dated December 23, 2004, to perform the actions that are required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference of this document in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124-2207, for a copy of this service information. You may review copies at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., room PL-401, Nassif Building, Washington, DC; on the Internet at <http://dms.dot.gov>; or at the National Archives and Records Administration (NARA). For information on the availability of this material at the NARA, call (202) 741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on September 30, 2005.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 05-20262 Filed 10-12-05; 8:45 am]

BILLING CODE 4910-13-P

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
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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).

2003-24-08 Boeing: Amendment 39-13377. Docket 2003-NM-249-AD. Supersedes AD 2002-22-05, Amendment 39-12929.

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

Compliance: Required as indicated, unless accomplished previously.

To detect and correct cracked, corroded, or fractured carriage spindles and to prevent severe flap asymmetry, which could result in reduced control or loss of controllability of the airplane, accomplish the following:

Requirements of AD 2002-22-05, Amendment 39-12929

Repetitive Inspections

(a) Do general visual and nondestructive test (NDT) inspections of each carriage spindle (two on each flap) of the left and right outboard mid-flaps to find cracks, fractures, or corrosion at the later of the times specified in paragraphs (a)(1) and (a)(2) of this AD, as applicable, per the Work Instructions of Boeing Alert Service Bulletin 737-57A1277, dated July 25, 2002. Repeat the inspection at least every 180 days until paragraph (d) or (f) of this AD is done.

(1) Before the accumulation of 12,000 total flight cycles or 8 years in-service on new or overhauled carriage spindles, whichever is first.

(2) Within 90 days after November 15, 2002 (the effective date of AD 2002-22-05).

Note 1: 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."

Corrective Action

(b) If any crack, fracture, or corrosion is found during any inspection required by paragraph (a) of this AD: Before further flight, do the applicable actions for that spindle as specified in paragraph (b)(1) or (b)(2) of this AD, per the Work Instructions of Boeing Alert Service Bulletin 737-57A1277,

dated July 25, 2002. Then repeat the inspections required by paragraph (a) of this AD every 12,000 flight cycles or 8 years, whichever is first; on the overhauled or replaced spindle only until paragraph (d) or (f) of this AD is done.

(1) If any corrosion is found in the carriage spindle, overhaul the spindle.

(2) If any crack or fracture is found in the carriage spindle, replace with a new or overhauled carriage spindle.

New Actions Required by This AD

Compliance Times for New Actions

(c) The tables in paragraph 1.E., "Compliance" of Boeing Alert Service Bulletin 737-57A1277, Revision 1, dated November 25, 2003, specify the compliance times for this AD. For carriage spindles that have accumulated the number of flight cycles or years in service specified in the "Threshold" column of the tables, accomplish the gap check and NDT and general visual inspections specified in paragraphs (d) and (f) of this AD within the corresponding interval after the effective date of this AD, as specified in the "Interval" column. Repeat the gap check and NDT and general visual inspections at the same intervals, except:

(1) The gap check does not have to be done at the same time as an NDT inspection; after doing an NDT inspection, the interval for doing the next gap check can be measured from the NDT inspection; and

(2) As carriage spindles gain flight cycles or years in service and move from one category in the "Threshold" column to another, they are subject to the repetitive inspection intervals corresponding to the new threshold category.

Work Package 2: Gap Check

(d) Perform a gap check of the inboard and outboard carriage of the left and right outboard mid-flaps to determine if there is a positive indication of a severed carriage spindle, in accordance with Work Package 2 of paragraph 3.B., "Work Instructions" of Boeing Alert Service Bulletin 737-57A1277, Revision 1, dated November 25, 2003. Accomplishment of the gap check terminates the repetitive inspection requirements of paragraphs (a) and (b) of this AD.

Work Package 2: Corrective Actions

(e) If there is a positive indication of a severed carriage spindle during the gap check required by paragraph (d) of this AD, before further flight, remove the carriage spindle and install a new or serviceable carriage spindle in accordance with Work Package 2 of paragraph 3.B., "Work Instructions" of Boeing Alert Service Bulletin 737-57A1277, Revision 1, dated November 25, 2003. If, as a result of the detailed inspection described in paragraph 4.b. of Work Package 2 of the service bulletin, a carriage spindle is found not to be severed and no corrosion or crack is present, it can be reinstalled on the mid-flap per the service bulletin.

Work Package 1: Inspections

(f) Perform a NDT inspection and general visual inspection for each carriage spindle of the left and right outboard mid-flaps to detect cracks, corrosion, or severed carriage spindles, in accordance with Work Package 1 of paragraph 3.B., "Work Instructions" of Boeing Alert Service Bulletin 737-57A1277, Revision 1, dated November 25, 2003. Accomplishment of these inspections terminates the repetitive inspection requirements of paragraphs (a) and (b) of this AD.

Work Package 1: Corrective Actions

(g) If any corroded, cracked, or severed carriage spindle is found during any inspection required by paragraph (f) of this AD, before further flight, remove the carriage spindle and install a new or serviceable carriage spindle in accordance with Work Package 1 of paragraph 3.B., "Work Instructions" of Boeing Alert Service Bulletin 737-57A1277, Revision 1, dated November 25, 2003.

Parts Installation

(h) Except as provided in paragraph (e) of this AD: As of the effective date of this AD, no person may install on any airplane a carriage spindle that has been removed as required by paragraph (e) or (g) of this AD, unless it has been overhauled per paragraph 3.B., "Work Instructions" of Boeing Alert Service Bulletin 737-57A1277, Revision 1, dated November 25, 2003; except that, to be eligible for installation under this paragraph, the carriage spindle must have been overhauled per the requirements of paragraph (i) of this AD.

(i) During accomplishment of any overhaul specified in paragraph (h) of this AD, use the procedures specified in paragraphs (i)(1) and (i)(2) of this AD during application of the nickel plating to the carriage spindle in addition to those specified in Boeing 737 Standard Overhaul Practices Manual, Chapter 20-42-09.

(1) The maximum deposition rate of the nickel plating in any one plating/baking cycle must not exceed 0.002-inches-per-hour.

(2) Begin the hydrogen embrittlement relief bake within 10 hours after application of the plating, or less than 24 hours after the current was first applied to the part, whichever is first.

Exception to Reporting Recommendations in Service Bulletins

(j) Although the service bulletins recommend that operators report inspection findings to the manufacturer, this AD does not contain such a reporting requirement.

Alternative Methods of Compliance

(k)(1) In accordance with 14 CFR 39.19, the Manager, Seattle Aircraft Certification Office (ACO), FAA, is authorized to approve alternative methods of compliance (AMOCs) for this AD.

(2) Alternative methods of compliance, approved previously per AD 2002-22-05, amendment 39-12929, are approved as alternative methods of compliance for paragraphs (a) and (b) of this AD.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD, if it is approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings.

Incorporation by Reference

(l) Unless otherwise specified in this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin 737-57A1277, dated July 25, 2002; and Boeing Alert Service Bulletin 737-57A1277, Revision 1, dated November 25, 2003.

(1) The incorporation by reference of Boeing Alert Service Bulletin 737-57A1277, Revision 1, dated November 25, 2003, is approved by the Director of the Federal Register, in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of Boeing Alert Service Bulletin 737-57A1277, dated July 25, 2002, was approved previously by the Director of the Federal Register as of November 15, 2002 (67 FR 66316, October 31, 2002).

(3) Copies may be obtained from Boeing Commercial Airplanes, 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.

Effective Date

(m) This amendment becomes effective on December 4, 2003.

Issued in Renton, Washington, on November 24, 2003.

Ali Bahrami,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 03-29784 Filed 11-25-03; 11:56 am]

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AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

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2003-07-12 Boeing: Amendment 39-13108. Docket 2000-NM-343-AD.

Applicability: Model 737-100, -200, -200C, -300, -400, and -500 series airplanes; certificated in any category; line numbers 1 through 3132 inclusive.

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 (g) 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 landing gear parts, which could lead to landing gear collapse, accomplish the following:

Inspection of Parts and/or Records

(a) Within 10 years from the effective date of this AD, examine records and/or landing gear parts per Boeing Service Bulletin 737-32-1322, Revision 1, excluding Evaluation Form, dated September 27, 2001, to determine whether parts have serial numbers and whether the number of flight cycles for each part has been tracked. If landing gear parts have serial numbers, as listed in the service bulletin, and the number of flight cycles has been tracked, no further action is necessary for paragraphs (a), (b), or (c) of this AD.

Assignment of Serial Numbers and Flight Cycles

(b) If any part examined, as mandated in paragraph (a) of this AD, does not have a serial number, within 10 years from the effective date of this AD, do the actions required by paragraphs (b)(1) and (b)(2) of this AD.

(1) Assign a serial number to each part per Part 1.B. of the Accomplishment Instructions of Boeing Service Bulletin 737-32-1322, Revision 1, excluding Evaluation Form, dated September 27, 2001; or per a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA.

(2) Mark the serial number on each part per Boeing Service Bulletin 737-32-1322, Revision 1, excluding Evaluation Form, dated September 27, 2001.

(c) If flight cycles for any part examined, as mandated in paragraph (a) of this AD, have not been tracked, within 10 years from the effective date of this AD, assign a number of lifetime flight cycles to that part per Part 2.B. of the Accomplishment Instructions of Boeing Service Bulletin 737-32-1322, Revision 1, excluding Evaluation Form, dated September 27, 2001.

Removal From Service at Life Limit

(d) When any landing gear part has reached its life-limit number of flight cycles, as described in Part 2.B. of the Accomplishment Instructions of Boeing Service Bulletin 737-32-1322, Revision 1, excluding Evaluation Form, dated September 27, 2001, before further flight, remove that part from service and replace it with a landing gear part having a serial number and a lifetime flight cycle number per the service bulletin.

Parts Installation

(e) As of the effective date of this AD, no person shall install on any airplane a life-limited landing gear part unless it has been assigned a serial number and a lifetime flight cycle number per the requirements of this AD.

(f) As of the effective date of this AD, no person shall install on any airplane a life-limited landing gear part that has reached its life limit of flight cycles, per Boeing Service Bulletin 737-32-1322, Revision 1, excluding Evaluation Form, dated September 27, 2001.

Alternative Methods of Compliance

(g) 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

(h) 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

(i) Unless otherwise provided in this AD, the actions shall be done in accordance with Boeing Service Bulletin 737-32-1322, Revision 1, excluding Evaluation Form, dated September 27, 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.

Effective Date

(j) This amendment becomes effective on May 20, 2003.

Issued in Renton, Washington, on April 4, 2003.

Ali Bahrami,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 03-8739 Filed 4-14-03; 8:45 am]

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Airworthiness Directive

▼ Federal Register Information

[Federal Register: May 12, 1999 (Volume 64, Number 91)]

[Page 25424]

▼ Header Information

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [64 FR 25424 No. 91 05/12/99]

Docket No. 99-NM-68-AD; Amendment 39-11165; **AD 99-10-12**

RIN 2120-AA64

Airworthiness Directives; Boeing Model 737-100, -200, -300, -400, and -500 Series Airplanes

PDF Copy (If Available):

▼ Preamble Information

AGENCY: Federal Aviation Administration, DOT

ACTION: Final rule; request for comments

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to certain Boeing Model 737-100, -200, -300, -400, and -500 series airplanes, that currently requires repetitive inspections to detect cracking, plating degradation, and corrosion of the main landing gear (MLG) actuator beam arms and actuator beam attach bolts; and rework or replacement, if necessary. The existing AD also provides for optional terminating action for the repetitive inspections. This amendment removes the requirement to inspect the actuator beam attach bolts, expands the applicability of the existing AD to include additional airplanes, and removes the optional terminating action. This amendment is prompted by reports of cracked MLG actuator beam arms. The actions specified in this AD are intended to detect and correct corrosion and cracking of the MLG actuator beam arm, which could result in damage to the control cables for the aileron and spoiler and consequent reduced controllability of the airplane.

DATES: Effective May 27, 1999.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of May 27, 1999.

Comments for inclusion in the Rules Docket must be received on or before July 12, 1999.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 99-NM-68-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

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: Rick Kawaguchi, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1153; fax (425) 227-1181.

SUPPLEMENTARY INFORMATION: On February 13, 1991, the FAA issued AD 91-05-16, amendment 39-6913 (56 FR 7561, February 25, 1991), applicable to certain Boeing Model 737-100, -200, -300, -400, and -500 series airplanes. That AD requires repetitive visual and ultrasonic inspections of the main landing gear (MLG) actuator beam arms and actuator beam attach bolts for cracking, plating degradation, and corrosion; and rework or replacement, if necessary. The existing AD also provides for optional terminating action for the repetitive inspections. That action was prompted by reports of failure of the actuator beam arm and trunion pin due to corrosion. The actions required by that AD are intended to prevent structural damage and severing of control cables and hydraulic tubing in this area, which could result in reduced controllability of the airplane.

Actions Since Issuance of Previous Rule

Since the issuance of that AD, the FAA has received reports of cracking of an actuator beam arm on the MLG on three Boeing Model 737-300 series airplanes. Two operators reported damage to the landing gear, wing structure, fluid lines, and aileron and spoiler control cables; the damage has been attributed to fractures of the MLG actuator beam arm. One of those operators subsequently conducted a fleet-wide inspection and found a cracked actuator beam arm on another airplane. The beam arm fractures originated from corrosion pits in the actuator beam arm clevis. All three fractured actuator beam arms had been reworked in accordance with AD 91-05-16. In one case, the fracture occurred 7 years (at approximately 13,500 flight cycles) after completion of the terminating action in compliance with that AD.

FAA's Conclusions

The FAA has determined that rework or replacement of the actuator beam arm, which AD 91-05-16 provides as either optional corrective action or optional terminating action for the repetitive inspections, does not adequately prevent corrosion and subsequent cracking of the clevis area. Therefore, the FAA finds that, to ensure the continued safety of the fleet, it is necessary to require that repetitive inspections to detect cracks and corrosion in the actuator beam arm clevis must be performed on all affected airplanes, including those on which the rework or replacement has been accomplished. Paragraph B. of AD 91-05-16, which provided for optional terminating action for the repetitive inspections, has not been included in this AD.

In addition, AD 91-05-16 requires a one-time inspection of the actuator beam attach bolts. However, there have been no known reports of bolt fractures since the effective date of AD 91-05-16. Therefore, the FAA has determined that further inspection of those bolts is unnecessary, and the corresponding requirement of AD 91-05-16 (paragraph A.2.) has not been included in this AD. The inspection requirements of this AD are limited to the actuator beam arm clevis.

Furthermore, the FAA finds it necessary to expand the applicability of this AD to include additional airplanes. The applicability of AD 91-05-16 currently excludes in-production Model 737 series airplanes. However, the design change for incorporation on in-production airplanes can produce the same result as that of the preventive modification (rework) specified by Boeing Alert Service Bulletin 737-32A1224, Revision 1, dated April 12, 1990-which has been shown to be ineffective in preventing the unsafe condition. (That alert service bulletin is referenced as the appropriate source of service information in AD 91-05-16 for accomplishment of the rework.)

Therefore, the applicability of this AD includes all Model 737-100, -200, -300, -400, and -500 series airplanes.

Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Service Bulletin 737-32A1224, Revision 2, dated April 25, 1991. The content of Revision 2 is similar to that of Revision 1, which was cited as the appropriate source of service information for accomplishment of the requirements of AD 91-05-16. Revision 2 was issued to clarify the actions and to revise the effectivity for various actions.

The FAA also has reviewed and approved Boeing Alert Service Bulletin 737-32A1314, dated April 15, 1999, which describes procedures

for repetitive inspections of the clevis on certain actuator beam arm assemblies; the inspections include a visual inspection to detect corrosion and an ultrasonic inspection to detect cracking. The alert service bulletin also describes procedures for replacement of any beam arm having a cracked or corroded clevis with a new actuator beam arm.

The note in Figure 1 of Boeing Alert Service Bulletin 737-32A1314 references Temporary Revision (TR) 04-14 to the 737 Nondestructive Test (NDT) Manual. That note states that the TR would be issued prior to May 14, 1999; in fact, the manufacturer released that TR by telegraphic release on April 26, 1999. The TR contains new information that is needed to perform ultrasonic inspections for airplanes having certain actuator beam arm assemblies. Specifically, the TR provides instructions for procuring or fabricating NDT transducers that are needed to accomplish the inspections for those certain airplanes.

Explanation of Requirements of Rule

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of this same type design, this AD supersedes AD 91-05-16 to continue to require repetitive inspections to detect cracking of the actuator beam arm clevis of the MLG, and rework or replacement, if necessary. These actions are required to be accomplished in accordance with Boeing Alert Service Bulletin 737-32A1224, Revision 1, or Boeing Service Bulletin 737-32A1224, Revision 2.

This AD adds repetitive detailed visual inspections to detect corrosion and repetitive ultrasonic inspections to detect cracking of the actuator beam arm clevis; these actions terminate the repetitive inspections described in Boeing Alert Service bulletin 737-32A1224, Revision 1, or Boeing Service Bulletin 737-32A1224, Revision 2. These inspections are required to be accomplished in accordance with Boeing Alert Service Bulletin 737-32A1314.

For airplanes on which any corrosion or cracking is found during any of the newly added inspections, this AD requires replacement of the actuator beam arm with a new actuator beam arm in accordance with Boeing Alert Service Bulletin 737-32A1314.

Difference Between the Rule and the Relevant Service Information

Operators should note that Alert Service Bulletin 737-32A1314 specifies compliance in terms of either years or flight cycles. However, the threshold and repetitive interval required by paragraph (b) of this AD are specified in terms of calendar time only; i.e., 4 years and 90 days, respectively. The unsafe condition identified by this AD is caused by corrosion, which is a function of time rather than accumulated flight cycles.

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.

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 99-NM-68-AD." The postcard will be date stamped and returned to the commenter.

Regulatory Impact

The regulations adopted herein will 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 final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

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 removing amendment 39-6913 (56 FR 7561, February 25, 1991), and by adding a new airworthiness directive (AD), amendment 39-11165, to read as follows:

▼ Regulatory Information

99-10-12 BOEING: Amendment 39-11165. Docket 99-NM-68-AD. Supersedes AD 91-05-16, Amendment 39-6913.

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 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 detect and correct corrosion and cracking of the actuator beam arm of the main landing gear (MLG), which could result in damage to the control cables of the aileron and spoiler and consequent reduced controllability of the airplane, accomplish the following: Restatement of the Requirements of AD 91-05-16, Amendment 39-6913:

(a) For airplanes listed in Boeing Alert Service Bulletin 737-32A1224, Revision 1, dated April 12, 1990: Prior to the accumulation of 10,000 landings or 4 years of service, after new or overhauled MLG installation, whichever occurs first, or within the next 600 landings after April 1, 1991 (the effective date of AD 91-05-16, amendment 39-6913), whichever occurs later, perform visual and ultrasonic

inspections of the actuator beam arm clevis for evidence of cracking, in accordance with Boeing Alert Service Bulletin 737-32A1224, Revision 1, dated April 12, 1990, or Revision 2, dated April 25, 1991.

(1) If cracks are found, prior to further flight, remove and rework, or replace, the actuator beam arm in accordance with the service bulletin.

(2) If no cracks are found, repeat the ultrasonic inspections in accordance with the service bulletin, at intervals not to exceed 600 landings, until the initial inspection required by paragraph (b) of this AD has been accomplished.

New Requirements of this AD:

(b) Inspect the actuator beam arm clevis, by performing a detailed visual inspection to detect corrosion and an ultrasonic inspection to detect cracking, at the latest of the times specified in paragraphs (b)(1), (b)(2), (b)(3), and (b)(4) of this AD; in accordance with Boeing Alert Service Bulletin 737-32A1314, dated April 15, 1999. Accomplishment of these inspections constitutes terminating action for the requirements of paragraph (a) of this AD. Repeat the inspections specified by paragraph (b) of this AD thereafter at intervals not to exceed 90 days.

(1) Inspect within 4 years since date of manufacture or installation of new landing gear.

(2) Inspect within 4 years since the most recent landing gear overhaul.

(3) Inspect within 4 years since accomplishment of the replacement of the actuator beam arm clevis performed in accordance with the alert service bulletin, or the rework performed in accordance with Boeing Alert Service Bulletin 737-32A1224, Revision 1, dated April 12, 1990, or Boeing Service Bulletin 737-32A1224, Revision 2, dated April 25, 1991.

(4) Inspect within 90 days after the effective date of this AD.

NOTE 2: The NOTE in Figure 1 of Boeing Alert Service Bulletin 737-32A1314 contains a reference to Temporary Revision (TR) 04-14 to the 737 Nondestructive Test Manual (NDT). The TR was issued April 26, 1999, by telegraphic release. The TR provides instructions for procuring or fabricating NDT transducers needed to accomplish ultrasonic inspections on airplanes having certain actuator beam arm assemblies. Incorporation of the TR into the general revisions of the NDT is acceptable, provided that the information contained in the general revisions is identical to that specified in the TR.

Corrective Actions

(c) If any corrosion or cracking is detected during any inspection required by paragraph (b) of this AD, prior to further flight, replace the actuator beam arm with a new actuator beam arm in accordance with Boeing Alert Service Bulletin 737-32A1314, dated April 15, 1999. Repeat the inspections required by paragraph (b) of this AD within 4 years after accomplishment of the replacement, and thereafter at intervals not to exceed 90 days.

Alternative Methods of Compliance

(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). 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

(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.

Incorporation by Reference

(f) The actions shall be done in accordance with Boeing Alert Service Bulletin 737-32A1224, Revision 1, dated April 12, 1990; Boeing Service Bulletin 737-32A1224, Revision 2, dated April 25, 1991; or Boeing Alert Service Bulletin 737-32A1314, dated April 15, 1999; as applicable. 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.

(g) This amendment becomes effective on May 27, 1999.

▼ Footer Information

▼ Comments

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