

PŘÍKAZ K ZACHOVÁNÍ LETOVÉ ZPŮSOBILOSTI

CAA-AD-052/2002

Datum vydání: 26. dubna 2002

LETOUN - KONSTRUKCE TRUPU - DEFEKTOSKOPICKÁ KONTROLA

Týká se: letadel Boeing Model 737-200, -200C, -300, -400 a -500, majících pořadová čísla na výrobní lince 292 až 2565 včetně, certifikovaných v kterékoliv kategorii.

Datum účinnosti: 13. června 2002

Provést v termínech: Jak je popsáno v FAA AD 2002-07-08, od data účinnosti tohoto PZZ.

Postup provedení prací: Dle FAA AD 2002-07-08 (příloha tohoto PZZ).

Poznámky: Provedení tohoto PZZ musí být zapsáno do letadlové knihy. Případné dotazy týkající se tohoto PZZ adresujte na ÚCL sekce technická - Ing. Toman. Pokud to vyžaduje povaha tohoto PZZ, musí být zapracován do příslušné části dokumentace pro obsluhu, údržbu a opravy letadla. Tento PZZ byl vypracován na základě FAA AD 2002-07-08.

Ing. Pavel MATOUŠEK
Ředitel sekce technické
Úřad pro civilní letectví

2002-07-08 Boeing: Amendment 39-12702. Docket 98-NM-196-AD. Supersedes AD 97-22-07, Amendment 39-10179.

Applicability: Model 737-200, -200C, -300, -400, and -500 series airplanes having line numbers 292 through 2565 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 (o)(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 find and fix cracking of certain fuselage lap joints, which could result in sudden decompression of the airplane, accomplish the following:

Repetitive Low Frequency Eddy Current (LFEC) Inspections--Crown Areas

(a) Do an LFEC inspection to find cracking of the lower skin at the lower row of fasteners in the lap joints of the fuselage as specified in Part 1.E.1. ("Compliance") of Boeing Service Bulletin 737-53A1177, Revision 6, dated May 31, 2001; per PART I ("Inspection") of the Accomplishment Instructions of the service bulletin; at the time specified in paragraph (b) or (c) of this AD, as applicable.

(b) For airplanes that have accumulated more than 65,000 total flight cycles but not more than 70,000 total flight cycles as of the effective date of this AD: Do the inspection at the earlier of the times specified in paragraphs (b)(1) and (b)(2) of this AD. Repeat the inspection after that at intervals not to exceed 1,200 flight cycles until accomplishment of the lap joint repair required by paragraph (g) of this AD.

(1) Within 1,200 flight cycles after the effective date of this AD.

(2) Within 1,200 flight cycles after the last inspection, if any, accomplished in accordance with AD 97-22-07, amendment 39-10179.

(c) For airplanes that have accumulated at least 45,000 total flight cycles but not more than 65,000 total flight cycles as of the effective date of this AD: Do the inspection at the earlier of the times specified in paragraphs (c)(1) and (c)(2) of this AD. Repeat the inspection after that at intervals not to exceed 1,200 flight cycles until accomplishment of the lap joint repair required by paragraph (g) of this AD.

(1) At the later of the times specified in paragraphs (c)(1)(i) and (c)(1)(ii) of this AD.

(i) Before the accumulation of 50,000 total flight cycles.

(ii) Within 1,200 flight cycles after the effective date of this AD.

(2) Within 1,200 flight cycles after the last inspection, if any, accomplished in accordance with AD 97-22-07, amendment 39-10179.

Crack Repair

(d) Except as provided by paragraph (e) of this AD: If any cracking is found during any inspection required by this AD, before further flight, repair per PART II ("Crack Repair") of the Accomplishment Instructions of Boeing Service Bulletin 737-53A1177, Revision 6, dated May 31, 2001.

(e) If any cracking is found during any inspection required by this AD, and Boeing Service Bulletin 737-53A1177, Revision 6, dated May 31, 2001, specifies to contact Boeing for repair instructions: Repair any cracking, before further flight, per a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA; or per data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative (DER) who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the approval letter must specifically reference this AD.

Compliance Plan

(f) For airplanes on which the applicable lap joint modification as required by paragraph (g) or (h) of this AD, as applicable, has not been done as of the effective date of this AD: Within 3 months after the effective date of this AD, submit a plan to the FAA identifying a schedule for compliance with paragraph (g) and (h) of this AD, as applicable. This schedule must include, for each of the operator's affected airplanes, the estimated dates when the required actions will be accomplished. For the purposes of this paragraph, "FAA" means the Principal Maintenance Inspector (PMI) for operators that are assigned a PMI, or the cognizant Flight Standards District Office for other operators. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*) and have been assigned OMB Control Number 2120-0056.

Note 2: Operators are not required to submit revisions to the compliance plan required by paragraph (f) of this AD to the FAA.

Lap Joint Modification (Repair)—Crown Areas

(g) Except as provided by paragraph (h) of this AD: Install the lap joint repair as specified in Part 1.E.1. ("Compliance") of Boeing Service Bulletin 737-53A1177, Revision 4, dated September 2, 1999; Revision 5, dated February 15, 2001; or Revision 6, dated May 31, 2001; per PART III or IV ("Lap Joint Repair"), as applicable, of the Accomplishment Instructions of the applicable service bulletin; at the time specified in paragraph (g)(1), (g)(2), (g)(3), (g)(4), or (g)(5) of this AD, as applicable. Accomplishment of this repair terminates the repetitive inspections required by paragraphs (b), (c), and (j) of this AD.

(1) For airplanes that have accumulated 70,000 total flight cycles or more as of the effective date of this AD: Within 600 flight cycles after the effective date of this AD, do the lap joint repair.

(2) For airplanes that have accumulated 65,000 total flight cycles or more, but less than 70,000 total flight cycles as of the effective date of this AD: Do the repair at the later of the times specified in paragraphs (g)(2)(i) and (g)(2)(ii) of this AD.

(i) Before the accumulation of 70,000 total flight cycles.

(ii) Within 600 flight cycles after the effective date of this AD.

(3) For airplanes that have accumulated 45,000 total flight cycles or more, but less than 65,000 total flight cycles as of the effective date of this AD: Within 5,000 flight cycles after the effective date of this AD.

(4) For airplanes that have accumulated less than 45,000 total flight cycles as of the effective date of this AD: Before the accumulation of 50,000 total flight cycles.

(5) Notwithstanding the times specified in paragraphs (g)(1), (g)(2), (g)(3), and (g)(4) of this AD, for airplanes on which the "Preventive Change" (NACA modification) has been accomplished per PART III of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1177, Revision 1, dated September 19, 1996; Revision 2, dated July 24, 1997; or Revision 3, dated September 18, 1997: Within 18,000 flight cycles after accomplishment of the NACA modification.

(h) For Groups 3 and 5 airplanes as listed in Boeing Service Bulletin 737-53A1177, Revision 6, dated May 31, 2001: Install the lap joint repair at stringers 4R and 10R, as specified in Part 1.E.1. ("Compliance") of Boeing Service Bulletin 737-53A1177, Revision 6, dated May 31, 2001; at the time specified in paragraph (g)(1), (g)(2), (g)(3), (g)(4), or (g)(5) of this AD, as applicable; per a method approved by the Manager, Seattle ACO; or per data meeting the type certification basis of the airplane approved by a Boeing Company DER who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the approval letter must specifically reference this AD.

Repetitive LFEC Inspections—Outside Crown Areas

(i) Before the accumulation of 70,000 total flight cycles, or within 2,500 flight cycles after the effective date of this AD, whichever comes later: Do an LFEC inspection to find cracking of the lap joints of the fuselage, as specified in Part 1.E.2. ("Compliance") of Boeing Service Bulletin 737-53A1177, Revision 6, dated May 31, 2001, and as identified in Figures 2 through 6 of the Accomplishment Instructions of the service bulletin. Do the inspection per the service bulletin. Repeat the inspection after that at intervals not to exceed 5,000 flight cycles.

Post-NACA Modification Inspections—Crown Areas

(j) For airplanes that have the "Preventive Change" (NACA modification) of the crown lap joint stringers ("Crown Laps") done per PART III of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1177, Revision 1, dated September 19, 1996; Revision 2, dated July 24, 1997; or Revision 3, dated September 18, 1997: Within 12,000 flight cycles after accomplishment of the NACA modification, or within 750 flight cycles after the effective date of this AD, whichever is later, do either an external (Figure 8) or internal (Figure 9) LFEC inspection to find cracking and corrosion as specified in Part 1.E.4.a. ("Compliance") of Boeing Service Bulletin 737-53A1177, Revision 6, dated May 31, 2001; per PART I ("Inspection") of the Accomplishment Instructions of Revision 6 of the service bulletin.

(1) If the external inspection is done: Repeat the inspection after that at intervals not to exceed 1,500 flight cycles until accomplishment of the lap joint repair required by paragraph (g) of this AD.

(2) If the internal inspection is done: Repeat the inspection after that at intervals not to exceed 4,500 flight cycles until accomplishment of the lap joint repair required by paragraph (g) of this AD.

Post-NACA Modification Inspections—Outside Crown Areas

(k) For airplanes that have the "Preventive Change" (NACA modification) outside the crown areas done per PART III of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1177, Revision 1, dated September 19, 1996; Revision 2, dated July 24, 1997; or Revision 3, dated September 18, 1997: Before the accumulation of 20,000 flight cycles after accomplishment of the NACA modification or within 750 flight cycles after the effective date of this AD, whichever is later, do either an external (Figure 8) or internal (Figure 9) LFEC inspection to find cracking and corrosion as specified in Part 1.E.4.b. ("Compliance") of Boeing Service Bulletin 737-53A1177, Revision 6, dated May 31, 2001, per PART I ("Inspection") of the Accomplishment Instructions of Revision 6 of the service bulletin.

(1) If the external inspection is done: Repeat the external inspection after that at intervals not to exceed 1,500 flight cycles.

(2) If the internal inspection is done: Repeat the internal inspection after that at intervals not to exceed 4,500 flight

cycles.

Modification of Tear Strap Splice Straps

(l) For airplanes that have the "lap joint repair," as specified in Part IV of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1177, Revision 2, dated July 24, 1997, or Revision 3, dated September 18, 1997: Within 45,000 flight cycles after accomplishment of this lap joint repair, modify the splice straps per Figures 10, 11, and 12 of the Accomplishment Instructions of Boeing Service Bulletin 737-53A1177, Revision 6, dated May 31, 2001.

Follow-On LFEC Inspections

(m) Within 45,000 flight cycles after accomplishment of the lap joint repair required by paragraph (g) or (h) of this AD, as applicable: Do either an external or internal (Figure 9) LFEC inspection as specified in Part 1.E.7. ("Compliance") of Boeing Service Bulletin 737-53A1177, Revision 6, dated May 31, 2001, to find cracking of the lap joint repair, per PART I ("Inspection") of the Accomplishment Instructions of the service bulletin. Repeat the inspection after that at intervals not to exceed 2,800 flight cycles.

Repetitive High Frequency Eddy Current (HFEC) Inspections—Window Corners

(n) For airplanes having line numbers 520 through 2565 inclusive: Before the accumulation of 50,000 total flight cycles or within 2,250 flight cycles after the effective date of this AD, whichever comes later, do an HFEC inspection to find cracking as specified in Part 1.E.10 ("Compliance") of Boeing Service Bulletin 737-53A1177, Revision 6, dated May 31, 2001, per PART V ("Window Corner Fastener Hole Cracking, Inspection and Repair") of the Accomplishment Instructions of the service bulletin. Repeat the inspection after that at intervals not to exceed 4,500 flight cycles. Accomplishment of the modification (which includes removing and discarding fasteners, oversizing fastener holes, and installing rivets or Hi-Lok fasteners, as applicable), per PART V of the Accomplishment Instructions of Boeing Service Bulletin 737-53A1177, Revision 5, dated February 15, 2001, or Revision 6, dated May 31, 2001, constitutes terminating action for the inspections required by this paragraph.

Alternative Methods of Compliance

(o)(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 ACO. Operators shall submit their requests through an appropriate FAA PMI, who may add comments and then send it to the Manager, Seattle ACO.

(2) Alternative methods of compliance, approved in accordance with AD 97-22-07, amendment 39-101-79 are approved as alternative methods of compliance with paragraphs (a), (b), (d), (e), (g), and (i) 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

(p) 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

(q) Except as provided by paragraphs (e), (f), and (h) of this AD, the actions shall be done in accordance with Boeing Service Bulletin 737-53A1177, Revision 4, dated September 2, 1999; Boeing Service Bulletin 737-53A1177, Revision 5, dated February 15, 2001; or Boeing Service Bulletin 737-53A1177, Revision 6, dated May 31, 2001, as applicable. This incorporation by reference is 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

(r) This amendment becomes effective on May 17, 2002.

