Airworthiness Directive

Federal Register Information

Header Information
DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2002-NM-150-AD; Amendment 39-13367; AD 2003-23-03]

RIN 2120-AA64

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

PDF Copy (If Available):

032303.pdf

Preamble Information

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to certain Boeing Model 737-100, -200, and -200C series airplanes, that currently requires repetitive inspections to detect discrepancies in the upper and lower skins of the fuselage lap joint, and repair if necessary. This amendment adds new inspections, reduces the repetitive inspection intervals for certain airplanes, and mandates a terminating modification. The actions specified by this AD are intended to detect and correct discrepancies in the upper and lower skins of the fuselage lap joint and circumferential joint, which could result in sudden fracture and failure of a lap joint or circumferential joint and rapid decompression of the airplane fuselage. This action is intended to address the identified unsafe condition.


The incorporation by reference of Boeing Alert Service Bulletin 737-53A1224, Revision 1, dated March 14, 2002, as listed in the regulations, is approved by the Director of the Federal Register as of December 23, 2003.
The incorporation by reference of Boeing Alert Service Bulletin 737-53A1224, dated August 17, 2000, as listed in the regulations, was approved previously by the Director of the Federal Register as of September 11, 2000 (65 FR 51750, August 25, 2000).


ADDRESSES: 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 Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 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: Suzanne Lucier, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 917-6438; fax (425) 917-6590.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by superseding AD 2000-17-04, amendment 39-11878 (65 FR 51750, August 25, 2000), which is applicable to certain Boeing Model 737-100, -200, and -200C series airplanes, was published in the Federal Register on July 21, 2003 (68 FR 43045). The action proposed to require repetitive inspections to detect discrepancies in the upper and lower skins of the fuselage lap joint, and repair if necessary. The action proposed adding new inspections, reducing the repetitive inspection intervals for certain airplanes, and mandating a terminating modification.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were submitted in response to the proposal or the FAA’s determination of the cost to the public.

Conclusion

The FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

Change to Labor Rate Estimate

We have reviewed the figures we have used over the past several years to calculate AD costs to operators. To account for various inflationary costs in the airline industry, we
find it necessary to increase the labor rate used in these calculations from $60 per work hour to $65 per work hour. The cost impact information, below, reflects this increase in the specified hourly labor rate.

**Cost Impact**

There are approximately 291 airplanes of the affected design in the worldwide fleet. The FAA estimates that 60 airplanes of U.S. registry will be affected by this AD.

The inspections that are currently required by AD **2000-17-04** take approximately 575 work hours per airplane to accomplish, at an average labor rate of $65 per work hour. Based on these figures, the cost impact of the currently required inspections on U.S. operators is estimated to be $2,242,500, or $37,375 per airplane.

The new inspections that are required by this new AD will take approximately 341 work hours per airplane to accomplish, at an average labor rate of $65 per work hour. Based on these figures, the cost impact of the new inspections of this AD on U.S. operators is estimated to be $1,329,900, or $22,165 per airplane.

The terminating modification that is required by this new AD will take approximately 15,000 work hours per airplane to accomplish, at an average labor rate of $65 per work hour. Based on these figures, the cost impact of the modification of this AD on U.S. operators is estimated to be $58,500,000, or $975,000 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the 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.

**Regulatory Impact**

The regulations adopted herein will 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 final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) 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 final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it 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 39-11878 (65 FR 51750, August 25, 2000), and by adding a new airworthiness directive (AD), amendment 39-13367, to read as follows:

Regulatory Information


Applicability: Model 737-100, -200, and -200C series airplanes; line numbers 1 through 291 inclusive; certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct discrepancies in the upper and lower skins of the fuselage lap joint and circumferential joint, which could result in sudden fracture and failure of a lap joint or circumferential joint and rapid decompression of the airplane fuselage, accomplish the following:

Requirements of AD 2000-17-04, Amendment 39-11878

Initial and Repetitive Inspections

(a) Perform the applicable (initial and repetitive) inspections as specified in Figures 1.
through 4 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1224, dated August 17, 2000, to detect discrepancies (i.e., cracks, pillowing, corrosion, delamination, or loose or missing fasteners) in the upper and lower skins of the fuselage lap joint. Perform the inspections at the applicable times specified in Tables 1 and 2 of section 1.E. 'Compliance' of the alert service bulletin, in accordance with the alert service bulletin; except that where Table 1 specifies a compliance time of "airplane flight cycles at time of service bulletin release," this AD requires a compliance time of "airplane flight cycles as of September 11, 2000 (the effective date of AD 2000-17-04, amendment 39-11878)."

**Repair**

(b) Prior to further flight: Repair any discrepancies detected during any inspection required by paragraph (a) of this AD in accordance with Boeing Alert Service Bulletin 737-53A1224, dated August 17, 2000; repair any discrepancies detected during any inspection required by paragraph (c) of this AD in accordance with Boeing Alert Service Bulletin 737-53A1224, Revision 1, dated March 14, 2002. If any discrepancy is detected and the alert service bulletin specifies that the manufacturer may be contacted for disposition of certain repairs, prior to further flight, repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings.

**New Requirements of This AD**

**Compliance Times**

(c) Where the compliance times in Section 1.E. 'Compliance' of Boeing Alert Service Bulletin 737-53A1224, Revision 1, dated March 14, 2002, specify a compliance time interval calculated "from release of service bulletin," this AD requires compliance within the interval specified in the service bulletin "after the effective date of this AD." In addition, where the compliance time for the initial and repetitive inspections in Tables 1 through 3 of section 1.E. 'Compliance' of the service bulletin specifies "airplane flight cycles at time of service bulletin release," this AD requires a compliance time of "airplane flight cycles as of the effective date of this AD."

**Initial and Repetitive Inspections**

(d) Except as provided by paragraph (e) of this AD: Perform the applicable (initial and repetitive) inspections as specified in Figures 1 through 9 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1224, Revision 1, dated March 14, 2002, to detect discrepancies (i.e., cracks, pillowing, corrosion, delamination, or loose or missing fasteners) in the upper and lower skins of the fuselage lap joint and circumferential joint. Perform the inspections at the applicable times specified in Tables 1 and 2 of section 1.E. "Compliance" of the alert service bulletin, in accordance with the
alert service bulletin, until accomplishment of paragraph (f) of this AD. Accomplishment of this paragraph terminates the inspections required by paragraph (a) of this AD.

(e) For airplanes that have accumulated more than 70,000 total flight cycles as of the effective date of this AD: Do the first repeat inspection at the earlier of the times specified in paragraph (e)(1) or (e)(2) of this AD, and repeat the inspection thereafter at intervals not to exceed 1,000 flight cycles.

(1) Within 2,000 flight cycles after the last inspection done per AD 2000-17-04.

(2) Within 1,000 flight cycles after the last inspection done per AD 2000-17-04, or within 500 flight cycles after the effective date of this AD, whichever is later.

Terminating Modification

(f) Perform the modification of the skin of all fuselage lap joints between body stations 259.5 and 1016 per part IV of the Work Instructions of Boeing Alert Service Bulletin 737-53A1224, Revision 1, dated March 14, 2002; at the applicable times specified in Table 3 of section 1.E. "Compliance" of the alert service bulletin; in accordance with the alert service bulletin. Accomplishment of this paragraph terminates the repetitive inspection requirements of this AD.

Alternative Methods of Compliance

(g)(1) In accordance with 14 CFR 39.19, the Manager, Seattle ACO, is authorized to approve alternative methods of compliance (AMOC) for this AD.

(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 a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings.

Incorporation by Reference

(h) Unless otherwise specified by this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin 737-53A1224, dated August 17, 2000; and Boeing Alert Service Bulletin 737-53A1224, Revision 1, dated March 14, 2002; as applicable.

(1) The incorporation by reference of Boeing Alert Service Bulletin 737-53A1224, Revision 1, dated March 14, 2002, 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 737-53A1224, dated August 17, 2000, was approved previously by the Director of the Federal Register as of September 11, 2000 (65 FR 51750, August 25, 2000).
(3) 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

(i) This amendment becomes effective on December 23, 2003.

Footer Information
Kalene C. Yanamura, Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.
[FR Doc. 03-28492 Filed 11-17-03; 8:45 am]

Comments