



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2012-0425; Directorate Identifier 2011-NM-273-AD; Amendment 39-17604; AD 2013-19-22]**

**RIN 2120-AA64**

**Airworthiness Directives; The Boeing Company Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for all The Boeing Company Model 717-200 airplanes. This AD was prompted by multiple reports of cracks of overwing frames. This AD requires repetitive inspections for cracking of the overwing frames, and corrective actions if necessary. We are issuing this AD to detect and correct such cracking that could sever a frame, which may increase the loading of adjacent frames, and result in damage to the adjacent structure and consequent loss of structural integrity of the airplane.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane

Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** George Garrido, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5357; fax: 562-627-5210; email: [george.garrido@faa.gov](mailto:george.garrido@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

We issued an SNPRM (supplemental notice of proposed rulemaking) to amend 14 CFR part 39 by adding an airworthiness directive (AD) that would apply to the specified products. The SNPRM published in the Federal Register on May 6, 2013 (78 FR 26286). We preceded the SNPRM with a notice of proposed rulemaking (NPRM) that published in the Federal Register on May 9, 2012 (77 FR 27142). The NPRM (77 FR 27142, May 9, 2012) proposed to require repetitive inspections for cracking of the overwing frames, and corrective actions if necessary. The SNPRM proposed to revise the initial compliance time and provide an optional modification that would extend the compliance time for the next repetitive inspection.

## **Comments**

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the SNPRM (78 FR 26286, May 6, 2013) and the FAA's response to each comment.

### **Request to Correct Service Bulletin Title**

Boeing noted an error in the title of a service bulletin referenced in paragraphs (h) and (h)(2) of the SNPRM (78 FR 26286, May 6, 2013). Boeing requested the word "Alert" be removed with reference to "Boeing 'Alert' Service Bulletin 717-53-0035, dated June 8, 2012."

We agree with Boeing's request. We have revised paragraphs (h) and (h)(2) of this final rule to correct the service bulletin title accordingly, since the referenced service bulletin is not an "Alert" service bulletin.

### **Request to Provide Credit for Previous Actions**

Boeing stated that cracked overwing frames had been found during scheduled inspections done in accordance with 717 Maintenance Task 53-129-01, and that the frames were replaced as a consequence. Boeing requested that we revise the SNPRM (78 FR 26286, May 6, 2013) to allow credit for work done prior to the effective date of the SNPRM using 717 Maintenance Task 53-129-01. Boeing stated those new frames should be given the same credit as the frames that were replaced using Boeing Alert Service Bulletin 717-53A0034, dated October 5, 2011.

We disagree with the request to allow credit for frames replaced using 717 Maintenance Task 53-129-01, which references the manufacturer's original production drawing. Paragraph (i) of the SNPRM (78 FR 26286, May 6, 2013) was added to allow credit for work done prior to the effective date of this final rule using Boeing Alert Service Bulletin 717-53A0034, dated October 5, 2011, which references Service Rework Drawing SR95530013. We disagree with changing this final rule because due to a large

number of configurations, Boeing would be required to release numerous proprietary production drawings. However, operators may apply for approval of an alternative method of compliance (AMOC) (for credit for previously replaced frames) in accordance with the provisions of paragraph (j) of this AD. We have not changed this final rule in this regard.

**Conclusion**

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously – and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the SNPRM (78 FR 26286, May 6, 2013) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the SNPRM (78 FR 26286, May 6, 2013).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

**Costs of Compliance**

We estimate that this AD affects 129 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

**Estimated costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Inspections	46 work-hours X \$85 per hour = \$3,910 per inspection cycle	\$0	\$3,910	\$504,390
Installation of optional modification	30 work-hours X \$85 per hour = \$2,550 per inspection cycle	Up to \$2,727	Up to \$5,277	Up to \$680,733

We estimate the following costs to do any necessary replacements/repairs that would be required based on the results of the inspections. We have no way of determining the number of aircraft that might need these replacements:

**On-condition costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>
Blendout repair	12 work-hours X \$85 per hour = \$1,020	\$0	\$1,020
Replacement of a frame station	130 work-hours X \$85 per hour = \$11,050	Up to \$86,977	Up to \$98,027

**Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

**Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD 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.

For the reasons discussed above, I certify that this AD:

(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),

(3) Will not affect intrastate aviation in Alaska, and

(4) 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.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

**Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2013-19-22 **The Boeing Company**: Amendment 39-17604 ; Docket

No. FAA-2012-0425; Directorate Identifier 2011-NM-273-AD.

**(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to all The Boeing Company Model 717-200 airplanes, certificated in any category.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 53, Fuselage.

**(e) Unsafe Condition**

This AD was prompted by multiple reports of cracks of overwing frames. We are issuing this AD to detect and correct such cracking that could sever a frame, which may increase the loading of adjacent frames, and result in damage to the adjacent structure and consequent loss of structural integrity of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Inspections and Corrective Actions**

At the later of the times specified in paragraphs (g)(1) and (g)(2) of this AD: Do a general visual inspection and a high frequency eddy current (HFEC) inspection for cracking of the left-side and right-side overwing frames at stations 674, 696, and 715; and do all applicable corrective actions; in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 717-53A0034, Revision 1, dated November 7, 2012. Repeat the inspections thereafter at the applicable time specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 717-53A0034, Revision 1, dated November 7, 2012, except as provided by paragraph (h) of this AD.

(1) Before the accumulation of 12,000 total flight cycles.

(2) Within 24 months or 8,275 flight cycles after the effective date of this AD, whichever occurs first.

**(h) Optional Terminating Action**

Modification of left-side and right-side overwing frames at stations 674, 696, and 715, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 717-53-0035, dated June 8, 2012, terminates the inspections required by paragraph (g) of this AD, and extends the compliance time of the modified area for the next repetitive HFEC inspection to 45,000 flight cycles after the modification, provided that the actions specified in paragraphs (h)(1), (h)(2), and (h)(3) of this AD are accomplished, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 717-53-0035, dated June 8, 2012. Do the inspections specified in paragraph (g) of this AD prior to, or concurrently with, the modification specified in paragraph (h) of this AD.

(1) The overwing frame improvement modification of left-side and right-side overwing frames at stations 674, 696, and 715 is installed and HFEC inspection is done within 45,000 flight cycles from the time the modification is installed, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 717-53-0035, dated June 8, 2012.

(2) If no crack is found during any inspection specified by paragraph (h)(1) of this AD, the HFEC inspections at the modified area are repeated thereafter at the applicable time specified in paragraph 1.E., "Compliance," of Boeing Service Bulletin 717-53-0035, dated June 8, 2012.

(3) If any crack is found during any inspection specified by paragraph (h)(1) of this AD, the frame is repaired or replaced using a method approved in accordance with the procedures specified in paragraph (j) of this AD, before further flight.

**(i) Credit for Previous Actions**

This paragraph provides credit for the actions required by paragraph (g) of this AD, if the general visual inspection and HFEC inspection for cracking of the left-side and right-side overwing frames at stations 674, 696, and 715, and the applicable related investigative and corrective actions, were performed before the effective date of this AD using Boeing Alert Service Bulletin 717-53A0034, dated October 5, 2011, which is not incorporated by reference in this AD.

**(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (k)(1) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(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 the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane and 14 FR 25.571, Amendment 45, and the approval must specifically refer to this AD.

**(k) Related Information**

(1) For more information about this AD, contact George Garrido, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5357; fax: 562-627-5210; email: [george.garrido@faa.gov](mailto:george.garrido@faa.gov).

(2) Service information identified in this AD that is not incorporated by reference in this AD may be obtained at the addresses specified in paragraphs (l)(3) and (l)(4) of this AD.

**(l) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Alert Service Bulletin 717-53A0034, Revision 1, dated November 7, 2012.

(ii) Boeing Service Bulletin 717-53-0035, dated June 8, 2012.

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; Internet <https://www.myboeingfleet.com>.

(4) You may view this service information at FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on September 17, 2013.

Ross Landes,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

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