



## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2023-1048; Project Identifier AD-2023-00620-A,T; Amendment 39-22440; AD 2023-10-04]

RIN 2120-AA64

#### Airworthiness Directives; Boeing Airplanes

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

**ACTION:** Final rule; request for comments.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for all Boeing Model B-17E, B-17F, and B-17G airplanes. This AD was prompted by a report indicating that the left front spar lower fitting had completely separated at the wing-to-fuselage joint, and the equivalent joint on the right side of the airplane was cracked. This AD requires inspections of the wing terminal-to-spar chord joints, and repair if necessary.

The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The FAA must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to [regulations.gov](https://www.regulations.gov). Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

*AD Docket:* You may examine the AD docket at [regulations.gov](https://www.regulations.gov) by searching for and locating Docket No. FAA-2023-1048; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The street address for Docket Operations is listed above.

**FOR FURTHER INFORMATION CONTACT:** For more information about this AD, contact Eric Schrieber, Aerospace Engineer, Airframe Section, FAA, Airframe Section, West Certification Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone 562-627-5348; email [Eric.Schrieber@faa.gov](mailto:Eric.Schrieber@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Background**

During walk-around checks performed in 2021 prior to takeoff of a Model B-17 airplane, it was discovered that the left wing had shifted away from the fuselage by about 2 inches. Further investigation was conducted when both wings were removed in 2023 and found complete separation of the left front spar lower fitting at the wing-to-fuselage joint as well as additional cracking on the equivalent joint on the right side of the airplane. This condition, if not addressed, could result in fatigue cracking of the wing terminal-to-spar chord joints, which could result in loss of control of the airplane and reduced structural integrity of the airplane. The FAA is issuing this AD to address the unsafe condition on these products.

AD 2001-22-06, Amendment 39-12485 (66 FR 54111, October 26, 2001), requires an inspection of the holes in the spar chord at the same location where the cracks were recently discovered in the steel fitting. However, that inspection has not been effective in reliably detecting cracks in the steel fitting inside the spar chord tube. For this reason, the FAA has determined that a new inspection procedure is required.

Some of these airplanes are operated under experimental airworthiness certificates. The FAA has intentionally included these airplanes in the applicability of this AD because of the risks associated with passenger-carrying operations frequently conducted by these airplanes.

### **FAA's Determination**

The FAA is issuing this AD because the agency has determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

### **AD Requirements**

This AD requires inspections of the wing terminal-to-spar chord joints to detect cracking and corrosion, using one of two options:

- a magnetic particle inspection of the terminal fittings and an eddy current inspection of the spar chord, or
- an eddy current bolt hole inspection on the steel terminal fittings and the aluminum spar chord.

This AD also requires repairing cracking and corrosion and sending all inspection results (both positive and negative) to the FAA.

### **Interim Action**

The FAA considers this AD to be an interim action. The inspection reports that are required by this AD will enable the FAA to obtain better insight into the nature, cause, and extent of the discrepancies found on the affected airplanes. The information

from the reports will help the FAA evaluate the risk to develop a long-term solution that will address the unsafe condition. Once final action has been identified, the FAA might consider further rulemaking.

### **Justification for Immediate Adoption and Determination of the Effective Date**

Section 553(b)(3)(B) of the Administrative Procedure Act (APA) (5 U.S.C. 551 *et seq.*) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for “good cause,” finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under this section, an agency, upon finding good cause, may issue a final rule without providing notice and seeking comment prior to issuance. Further, section 553(d) of the APA authorizes agencies to make rules effective in less than thirty days, upon a finding of good cause.

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies forgoing notice and comment prior to adoption of this rule because fatigue cracking of the wing terminal-to-spar chord joints could result in loss of control of the aircraft and reduced structural integrity of the airplane. Accordingly, notice and opportunity for prior public comment are impracticable and contrary to the public interest pursuant to 5 U.S.C. 553(b)(3)(B).

In addition, the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d) for making this amendment effective in less than 30 days, for the same reasons the FAA found good cause to forgo notice and comment.

### **Comments Invited**

The FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under ADDRESSES. Include Docket No. FAA-2023-1048 and Project Identifier AD-2023-00620-A,T at the beginning of your comments. The most helpful comments reference a specific portion of the final rule,

explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this final rule.

### **Confidential Business Information**

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to Eric Schrieber, Aerospace Engineer, Airframe Section, FAA, Airframe Section, West Certification Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone 562-627-5348; email [Eric.Schrieber@faa.gov](mailto:Eric.Schrieber@faa.gov). Any commentary that the FAA receives that is not specifically designated as CBI will be placed in the public docket for this rulemaking.

### **Regulatory Flexibility Act**

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and

comment. Because the FAA has determined that it has good cause to adopt this rule without notice and comment, RFA analysis is not required.

### **Costs of Compliance**

The FAA estimates that this AD affects 18 airplanes of U.S. registry. Of those, only 3 are currently in flying condition and several others are undergoing restoration. The FAA is also aware of one additional aircraft in operation in the United Kingdom. The FAA estimates 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*	25 work-hours X \$85 per hour = \$2,125	\$25	\$2,150	\$38,700
Reporting	1 work-hour X \$85 per hour = \$85	\$0	\$85	\$1,530

\*Estimates are provided for the eddy current bolt hole inspections of the most inboard fastener only.

Although this AD provides two inspection options for compliance, only the cost estimates for the eddy current bolt hole inspections are provided. The FAA has received no definitive data on which to base the cost estimates for the magnetic particle inspection. Further, the magnetic particle inspection requires major disassembly, whereas the bolt hole inspections require only disassembling one bolt. Therefore, the FAA predicts most operators will choose to do the eddy current bolt hole inspections, which do not require major disassembly.

The FAA has received no definitive data on which to base the cost estimates for the on-condition repairs specified in this AD.

### **Paperwork Reduction Act**

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act

unless that collection of information displays a currently valid OMB Control Number.

The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

### **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.

The FAA is 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, and
- (2) Will not affect intrastate aviation in Alaska.

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

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

**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:

**2023-10-04 Boeing:** Amendment 39-22440; Docket No. FAA-2023-1048; Project Identifier AD-2023-00620-A,T.

**(a) Effective Date**

This airworthiness directive (AD) is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to all Boeing Model B-17E, B-17F, and B-17G airplanes, certificated in any category.

**(d) Subject**

Air Transport Association (ATA) of America Code 57, Wings.



**(e) Unsafe Condition**

This AD was prompted by a report indicating that the wing of one airplane had shifted away from the fuselage by about 2 inches, and the left front spar lower fitting had completely separated at the wing-to-fuselage joint, and additional cracking was found on the equivalent joint on the right side of the airplane. The FAA is issuing this AD to address these conditions, which, if not addressed, could result in loss of control of the airplane and reduced structural integrity of the airplane.

**(f) Compliance**

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

**(g) Inspection**

Before further flight: Perform inspections to detect cracking and corrosion by doing the actions specified in either paragraph (g)(1) or (2) of this AD. No action is required by this AD if all wing terminal fittings have been inspected in accordance with paragraph (b)(1) of AD 2001-22-06, Amendment 39-12485 (66 FR 54111, October 26, 2001), and, as of the effective date of this AD, no more than 10 years or 2,500 flight hours have accumulated since that inspection.

(1) Separate all 8 wing terminal-to-spar chord joints (wings off) and perform a magnetic particle inspection of the steel terminal fittings and an eddy current inspection of the 8 inboard holes in the end of the spar chord, in accordance with procedures approved by the Manager, West Certification Branch, FAA.

(2) On the left and right lower forward terminal fitting-to-spar chord joint assemblies, remove the most inboard fastener common to the spar cord and the terminal fitting, and do an eddy current bolt hole inspection on the steel terminal fittings and on the aluminum spar chord in accordance with procedures approved by the Manager, West Certification Branch, FAA.

**(h) Repair**

If any cracking or corrosion is found during the inspections required by paragraph (g) of this AD, repair before further flight using a method approved by the Manager, West Certification Branch, FAA.

**(i) Report**

At the applicable time specified in paragraph (i)(1) or (2) of this AD, submit a report of all findings (positive and negative) from the inspections required by paragraph (g) of this AD. The report must include a statement that no discrepancies were found or a description of any discrepancies found including the condition of the wing terminal-to-spar chord joints (terminal fitting and spar chord), the inspection procedure used, the airplane serial number, and the number of flight hours on the airplane. Submit the report to Eric Schrieber, Senior Engineer, West Certification Branch Airframe Section, email [Eric.Schrieber@faa.gov](mailto:Eric.Schrieber@faa.gov).

(1) If the inspection was done on or after the effective date of this AD: Submit the report within 10 days after the inspection.

(2) If the inspection was done before the effective date of this AD: Submit the report within 10 days after the effective date of this AD.

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

(1) The Manager, West Certification Branch, 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 responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (k) of this AD. Information may be emailed to [9-ANM-LAACO-AMOC-Requests@faa.gov](mailto:9-ANM-LAACO-AMOC-Requests@faa.gov).

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

**(k) Related Information**

For more information about this AD, contact Eric Schrieber, Aerospace Engineer, Airframe Section, FAA, Airframe Section, West Certification Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone 562-627-5348; email [Eric.Schrieber@faa.gov](mailto:Eric.Schrieber@faa.gov).

**(l) Material Incorporated by Reference**

None.

Issued on May 12, 2023.

Gaetano A. Sciortino, Acting Director,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

[FR Doc. 2023-10624 Filed: 5/15/2023 4:15 pm; Publication Date: 5/17/2023]