



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2023-2005; Project Identifier AD-2022-01523-A; Amendment 39-22646; AD 2023-26-03]

RIN 2120-AA64

Airworthiness Directives; WACO Classic Aircraft Corporation Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain WACO Classic Aircraft Corporation Model 2T-1A-2 airplanes. This AD was prompted by reports of multiple types of cracks at the leading edge former ribs and trailing edge former ribs in the upper wing center section. This AD requires installing maneuver restriction placards in the front and rear cockpits, inspecting the leading and trailing edge former ribs for cracking, replacing any cracked ribs, modifying the upper wing center section assembly, and removing the maneuver restriction placards after completing the modification. The FAA is issuing this AD to address the unsafe condition on these products.

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 a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES:

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-2005; 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 address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor,

Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

Material Incorporated by Reference:

- For service information identified in this final rule, contact WACO Classic Aircraft Corporation, 15955 South Airport Road, Battle Creek, MI 49015; phone: (269) 565-1000; email: hello@wacoaircraft.com; website: wacoaircraft.com.
- You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available at regulations.gov under Docket No. FAA-2023-2005.

FOR FURTHER INFORMATION CONTACT: Tim Eichor, Aviation Safety Engineer, FAA, 1801 S Airport Road, Wichita, KS 67209; phone: (847) 294-7141; email: tim.d.eichor@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain WACO Classic Aircraft Corporation Model 2T-1A-2 airplanes. The NPRM published in the *Federal Register* on October 27, 2023 (88 FR 73780). The NPRM was prompted by reports of multiple types of cracks after low flight hours on WACO Classic Aircraft Corporation Model 2T-1A-2 airplanes. The cracks were approximately 1 to 1.5 inches long and located in the leading edge former ribs and trailing edge former ribs in the upper wing center section, along the top flange where the ribs attach to the spar. Due to the cracking, the fabric support channels have come close to separating from the trailing edge former ribs. When fabric support channels detach from a rib, they would still be attached to the fabric, but the upper center wing airfoil may not maintain its shape due to the fabric support channels being pulled up by aerodynamic loads, which could lead to unexpected and unknown flight characteristics. The type certificate holder determined that this unsafe condition affects airplane serial numbers 1200 and subsequent with the upper wing center section assembly 30116-100 configuration. In the NPRM, the FAA proposed to require installing maneuver restriction placards in the front and rear cockpits, inspecting the leading and

trailing edge former ribs for cracking, replacing any cracked ribs, modifying the upper wing center section assembly, and removing the maneuver restriction placards after completing the modification. The FAA is issuing this AD to address the unsafe condition on these products.

Discussion of Final Airworthiness Directive

Comments

The FAA received no comments on the NPRM or on the determination of the costs.

Conclusion

The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. This AD is adopted as proposed in the NPRM.

Related Service Information under 1 CFR Part 51

The FAA reviewed WACO Great Lakes 2T-1A-2 Service Bulletin GL-SB0002, Revision NR, dated July 6, 2023 (WACO SB 2T-1A-2, Revision NR). This service information specifies procedures for inspecting the leading edge former ribs and trailing edge former ribs in the upper wing center section for cracking, replacing any cracked ribs, and modifying the upper wing center section assembly by installing new fabric support channels, saddles, and brackets. Modifying the upper wing center section assembly changes the configuration from the 30116-100 upper wing center section assembly configuration to the 30116-104 upper wing center section assembly configuration.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Difference Between this AD and the Service Information

Although section B of the Accomplishment Instructions in WACO SB 2T-1A-2, Revision NR, specifies to record the locations of all identified cracks found on the leading edge former ribs and the trailing edge former ribs and share this information with WACO Aircraft, this AD does not require those actions.

Costs of Compliance

The FAA estimates that this AD affects 19 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

Estimated costs

Action	Labor Cost	Parts Cost	Cost per product	Cost on U.S. operators
Maneuver restriction placard installation/removal	1 work-hour x \$85 per hour = \$85	\$10	\$95	\$1,805
Rib inspection	4 work-hours x \$85 per hour = \$340	\$0	\$340	\$6,460
Upper wing center assembly modification	185 work-hours x \$85 per hour = \$15,725	\$4,063	\$19,788	\$375,972

The FAA estimates the following costs to do any necessary rib replacement that would be required based on the results of the inspection. The agency has no way of determining the number of airplanes that might need this replacement:

On-condition costs

Action	Labor Cost	Parts Cost	Cost per product
Rib replacement (8 ribs)	16 work-hours x \$85 per hour = \$1,360 (8 ribs)	\$1,032 (8 ribs)	\$2,392 (8 ribs)

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,
- (2) Will not affect intrastate aviation in Alaska, 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.

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:

2023-26-03 WACO Classic Aircraft Corporation: Amendment 39-22646; Docket No. FAA-2023-2005; Project Identifier AD-2022-01523-A.

(a) Effective Date

This airworthiness directive (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 WACO Classic Aircraft Corporation Model 2T-1A-2 airplanes, serial numbers 1200 and subsequent with the 30116-100 upper wing center section assembly configuration, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC) Code 5712, Wing, Rib/Bulkhead.

(e) Unsafe Condition

This AD was prompted by reports of multiple cracks at the leading edge former ribs and trailing edge former ribs in the upper wing center section along the top flange where the ribs attach to the spar after low flight hours. The FAA is issuing this AD to detect and correct cracks in the leading and trailing edge former ribs in the upper wing center section. The unsafe condition, if not addressed, could result in reduced structural integrity of the airplane and the reduced ability of the flightcrew to maintain the safe flight and landing of the airplane.

(f) Compliance

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

(g) Required Actions

(1) Within 30 days after the effective date of this AD, insert maneuver restriction placards on the instrument panel of the front and rear cockpits, and next to the operating placard in the rear cockpit, stating “NO AEROBATIC MANEUVERS ALLOWED.”

(2) Within 100 hours time-in-service (TIS) or within 12 months after the effective date of this AD, whichever occurs first, accomplish the following:

(i) Inspect the leading edge former ribs and trailing edge former ribs in the upper wing center section for cracking in accordance with section B and before further flight, replace any cracked rib in accordance with section C of the Accomplishment Instructions in WACO Great Lakes 2T-1A-2 Service Bulletin GL-SB0002, Revision NR, dated July 6, 2023 (WACO SB 2T-1A-2, Revision NR). Although section B of the Accomplishment Instructions in WACO SB 2T-1A-2, Revision NR, specifies to record the locations of all identified cracks found on the leading edge former ribs and the trailing

edge former ribs and share this information with WACO Aircraft, this AD does not require those actions.

(ii) Modify the center section to the 30116-104 upper wing center section assembly configuration in accordance with section C of the Accomplishment Instructions in WACO SB 2T-1A-2, Revision NR.

(3) After replacing all cracked ribs and modifying the center section to the 30116-104 upper wing center section assembly configuration, aerobatic maneuvers can resume and the “NO AEROBATIC MANEUVERS ALLOWED” maneuver restriction placards can be removed from the front and rear cockpits.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Central 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 local Flight Standards District Office, as appropriate. If sending information directly to the manager of the Central Certification Branch, send it to the attention of the person identified in paragraph (i) 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.

(i) Additional Information

For more information about this AD, contact Tim Eichor, Aviation Safety Engineer, FAA, 1801 S Airport Road, Wichita, KS 67209; phone: (847) 294-7141; email: tim.d.eichor@faa.gov.

(j) 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) WACO Great Lakes 2T-1A-2 Service Bulletin GL-SB0002, Revision NR, dated July 6, 2023.

(ii) [Reserved]

(3) For service information identified in this AD, contact WACO Classic Aircraft Corporation, 15955 South Airport Road, Battle Creek, MI 49015; phone: (269) 565-1000; email: hello@wacoaircraft.com; website: wacoaircraft.com.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit www.archives.gov/federal-register/cfr/ibr-locations or email fr.inspection@nara.gov.

Issued on December 21, 2023.

Caitlin Locke,
Director, Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2023-28877 Filed: 1/2/2024 8:45 am; Publication Date: 1/3/2024]