



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0003; Product Identifier 2017-CE-033-AD; Amendment 39-19326; AD 2018-14-06]

RIN 2120-AA64

Airworthiness Directives; American Champion Aircraft Corp.

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) (AD) 2017-07-10 for certain American Champion Aircraft Corp. (ACAC) Model 8KCAB airplanes.

AD 2017-07-10 required fabrication and installation of a placard to prohibit aerobatic flight, inspection of the aileron hinge rib and support, and a reporting requirement of the inspection results to the FAA. This AD requires repetitive inspections of the aileron hinge support, installation of the aileron hinge support reinforcement kit, and incorporation of revised pages into the service manual. This AD was prompted by a report of a cracked hinge support and cracked hinge ribs, which resulted in partial loss of control with the aileron binding against the cove. We are 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 certain publications listed in this AD as of [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 other publication listed in this AD as of April 12, 2017 (82 FR 17542, April 12, 2017).

ADDRESSES: For service information identified in this final rule, contact American Champion Aircraft Corp., P.O. Box 37, 32032 Washington Ave., Rochester, Wisconsin 53167; telephone: (262) 534-6315; fax: (262) 534-2395; email: aca-engineering@tds.net; Internet: <http://www.americanchampionaircraft.com/service-letters.html>. You may review copies of the referenced service information at the FAA, Policy and Innovation Division, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0003.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0003; 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, the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone: 800-647-5527) is U.S. Department of Transportation, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Wess Rouse, Small Airplane Program Manager, 2300 East Devon Avenue, Room 107, Des Plaines, Illinois 60018; telephone: (847) 294-8113; fax: (847) 294-7834; email: wess.rouse@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to remove AD 2017-07-10, Amendment 39-18849 (82 FR 17542, April 12, 2017) (“AD 2017-07-10”), and add a new AD. AD 2017-07-10 applied to certain American Champion Aircraft Corp. (ACAC) Model 8KCAB airplanes. AD 2017-07-10 required fabricating and installing a placard to prohibit aerobatic flight, inspecting the aileron hinge rib and support, and reporting the inspection results to the FAA. We issued AD 2017-07-10 to prevent failure of the aileron support structure, which may lead to excessive deflection, binding of the control surface, and potential loss of control.

The NPRM published in the *Federal Register* on January 11, 2018 (83 FR 1311). The NPRM was prompted by a report of a cracked hinge support and cracked hinge ribs, which resulted in partial loss of control with the aileron binding against the cove. The NPRM proposed to retain the placard and one-time inspection requirements of AD 2017-07-10 and remove the reporting requirement. The NPRM also proposed to require repetitive inspections of the aileron hinge support, installation of the aileron hinge support reinforcement kit, and incorporation of revised pages into the service manual. We are issuing this AD to address the unsafe condition on these products.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM and the FAA’s response to each comment.

Request to Remove the Reinforcement Kit Requirement

Scott Austin, Chris Murley, Moritz Bartsch, David Trost, and an anonymous individual requested the AD not require installation of the reinforcement kit. In support of this request, the commenters state the airplanes with failures that prompted the AD had different horsepower, different wingtips, and were used repeatedly in “hard” aerobatic operations. The commenters felt that airplanes with these design differences and those used in normal operations would be safely mitigated with repetitive inspections and installation of the reinforcement kit only if cracks are found.

We do not agree. The commenters did not provide data to support a position that the unsafe condition is affected by the differences in horsepower or wing design. Additionally, all Model 8KCAB airplanes are certificated to the same operational limits. We have no safety basis to only rely on 100-hour/annual inspections to mitigate the unsafe condition. We have not changed this AD based on this comment.

Additional Changes Made to This AD

We have deleted paragraph (g)(1) of the NPRM and renumbered paragraphs (g)(2) and (g)(3) to (g)(1) and (g)(2) respectively in this AD. Paragraphs (g)(2) and (g)(3) of the NPRM basically presented the actions that were specified in paragraph (g)(1) of the NPRM, thus making it redundant and unnecessary.

We have also corrected minor typographical errors in paragraphs (h)(1), (h)(3), and (h)(4) in this AD.

Lastly, we have clarified the document title of the airworthiness limitations in paragraphs (h)(6) and (h)(7) in this AD.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule as proposed, except for the changes described previously. These changes are consistent with the intent of the proposals in the NPRM and will not increase the economic burden on any operator nor increase the scope of the AD.

Related Service Information under 1 CFR part 51

We reviewed American Champion Aircraft Corp. Service Letter 442, Revision A, dated August 18, 2017 (ACAC SL No. 442); American Champion Aircraft Corp. Service Letter 444 Initial Revision, dated August 18, 2017 (ACAC SL No. 444); and page 4-1, Manual Revision B, of the Airworthiness Limitations section and page 5-9, Manual Revision B, of the Time and Maintenance Checks section, both dated October 3, 2017, and included in American Champion Aircraft Corporation SM-601 8KCAB Service Manual, Reissue B, dated October 3, 2017. ACAC SL No. 442 describes procedures and inspection intervals for inspection of the aileron hinge rib and hinge support. ACAC SL No. 444 provides instructions for the installation of the aileron hinge reinforcement kit. Page 4-1 and page 5-9 are revised pages that add a repetitive inspection to the 8KCAB Service Manual, SM-601, Reissue B, dated October 3, 2017. 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.

Costs of Compliance

We estimate that this AD affects 64 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Fabrication of placard, inspection of aileron hinge rib and support	2 work-hours X \$85 per hour = \$170.00	\$100	\$270.00	\$17,280
Repetitive 100-hour TIS inspections	1.5 work-hours X \$85 per hour = \$127.50	N/A	\$127.50	\$8,160
Installation of aileron hinge support reinforcement kit	50 work-hours X \$85 per hour = \$4,250	\$2,200	\$6,450	\$412,800

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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to small airplanes, gliders, balloons, airships, domestic business jet transport airplanes, and associated appliances to the Director of the Policy and Innovation Division.

Regulatory Findings

We have determined that 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 removing Airworthiness Directive (AD) 2017-07-10, Amendment 39-18849 (82 FR 17542, April 12, 2017), and adding the following new AD:

2018-14-06 **American Champion Aircraft Corp.**: Amendment 39-19326; Docket No. FAA-2018-0003; Product Identifier 2017-CE-033-AD.

(a) Effective Date

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

(b) Affected ADs

This AD replaces AD 2017-07-10, Amendment 39-18849 (82 FR 17542, April 12, 2017) (“AD 2017-07-10”).

(c) Applicability

This AD applies to any American Champion Aircraft Corp. Model 8KCAB airplane, certificated in any category, that either has:

(1) A serial number in the range of 1116-2012 through 1120-2012 or 1122-2012 through 1170-2017; or

(2) Is equipped with part number 4-2142 exposed balance ailerons.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 57, Wings.

(e) Unsafe Condition

AD 2017-07-10 was prompted by a report of a cracked hinge support and cracked hinge ribs, which resulted in partial loss of control with the aileron binding against the cove. This AD incorporates a newly designed aileron hinge support reinforcement kit. We are issuing this AD to prevent failure of the aileron support structure, which may lead to excessive deflection, binding of the control surface, and potential loss of control.

(f) Compliance

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

(g) Restrict Airplane Operation

(1) Before further flight after April 12, 2017 (the effective date retained from AD 2017-07-10), fabricate a placard using at least 1/8 inch letters with the words “AEROBATIC FLIGHT PROHIBITED” on it and install the placard on the instrument panel within the pilot’s clear view.

(2) This action may be performed by the owner/operator (pilot) holding at least a private pilot certificate and must be entered into the aircraft records showing compliance with this AD in accordance with 14 CFR 43.9 (a)(1) through (4) and 14 CFR 91.417(a)(2)(v). The record must be maintained as required by 14 CFR 91.417, 121.380, or 135.439.

(h) Inspection and Reinforcement

(1) Within the next 10 hours time-in-service (TIS) after April 12, 2017 (the effective date retained from AD 2017-07-10), inspect the aileron hinge rib and support for cracks or other damage by following American Champion Aircraft Corporation Service Letter (SL) 442, dated February 16, 2017, or American Champion Aircraft Corp. Service Letter (SL) 442, Revision A, dated August 18, 2017 (ACAC SL No. 442, Revision A).

(2) If no cracks or other damage is found during the initial inspection required in paragraph (h)(1) of this AD, the placard prohibiting aerobatic flight required in paragraph (g)(1) of this AD can be removed.

(3) Within 100 hours TIS from the initial inspection required in paragraph (h)(1) of this AD or within 10 hours TIS after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), whichever occurs later, and repetitively thereafter at intervals not to exceed 100 hours TIS, inspect the aileron hinge rib and support for cracks or other damage following ACAC SL No. 442, Revision A.

(4) If cracks or other damage is found during any inspection required in paragraph (h)(1) or (3) of this AD, before further flight, replace any retained parts or structure that are cracked or damaged, and install the aileron hinge reinforcement kit by following American Champion Aircraft Corp. Service Letter 444, dated August 18, 2017 (ACAC SL No. 444). Unless already removed as specified in paragraph (h)(2) of this AD, after completing the corrective actions required by this paragraph, the placard prohibiting aerobatic flight required in paragraph (g)(1) of this AD can be removed.

(5) Within 400 hours after the initial inspection required in paragraph (h)(1) of this AD, if not already done as required in paragraph (h)(4) of this AD, install the aileron hinge reinforcement kit following the procedures in ACAC SL No. 444.

(6) After installation of the aileron hinge reinforcement kit required in paragraph (h)(4) or (5) of this AD, as applicable, insert page 4-1, Manual Revision B, of the Airworthiness Limitations section and page 5-9, Manual Revision B, of the Time and Maintenance Checks section, both dated October 3, 2017, from the American Champion Aircraft Corporation SM-601 8KCAB Service Manual, Reissue B, dated October 3, 2017, into the maintenance program (service manual).

(7) Installing the aileron hinge reinforcement kit as required in paragraph (h)(4) or (h)(5) of this AD and the insertion of page 4-1, Manual Revision B, of the Airworthiness Limitations section and page 5-9, Manual Revision B, of the Time and Maintenance Checks section, both dated October 3, 2017, of the American Champion Aircraft Corporation SM-601 8KCAB Service Manual, Reissue B, dated October 3, 2017, into the maintenance program (e.g., service manual), as required in paragraph (h)(6) of this AD is terminating action to this AD. The revised Airworthiness Limitations section includes a 100- hour/annual inspection requirement for the aileron hinge supports.

(i) Reporting Requirement

Although ACAC SL No. 442, Revision A, and ACAC SL No. 444 specify submitting certain information to the manufacturer, this AD does not require that action.

(j) Special Flight Permit

No aerobatic flight permitted with a special flight permit.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Chicago ACO 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 ACO, send it to the attention of the person identified in paragraph (l) 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.

(l) Related Information

For more information about this AD, contact Wess Rouse, Small Airplane Program Manager, 2300 East Devon Avenue, Room 107, Des Plaines, Illinois 60018; telephone: (847) 294-8113; fax: (847) 294-7834; email: wess.rouse@faa.gov.

(m) 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) American Champion Aircraft Corp. Service Letter 442, Revision A, dated August 18, 2017.

(ii) American Champion Aircraft Corp. Service Letter 444, Initial Revision, dated August 18, 2017.

(iii) Page 4-1, Manual Revision B, of the Airworthiness Limitations section of American Champion Aircraft Corporation SM-601 8KCAB Service Manual, Reissue B, dated October 3, 2017;

(iv) Page 5-9, Manual Revision B, of the Time and Maintenance Checks section of American Champion Aircraft Corporation SM-601 8KCAB Service Manual, Reissue B, dated October 3, 2017.

(3) The following service information was approved for IBR on April 12, 2017 (82 FR 17542, April 12, 2017).

(i) American Champion Aircraft Corporation Service Letter 442, dated February 16, 2017.

(ii) Reserved.

(4) For service information identified in this AD, contact American Champion Aircraft Corp., P.O. Box 37, 32032 Washington Ave., Rochester, Wisconsin 53167; telephone: (262) 534-6315; fax: (262) 534-2395; email: aca-engineering@tds.net; Internet: <http://www.americanchampionaircraft.com/service-letters.html>.

(5) You may view this referenced service information at the FAA, Policy and Innovation Division, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(6) 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 Kansas City, Missouri, on June 29, 2018.

Melvin J. Johnson,
Deputy Director, Policy & Innovation Division,
Aircraft Certification Service.

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