



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2018-0003; Directorate Identifier 2017-CE-033-AD;]**

**RIN 2120-AA64**

**Airworthiness Directives; American Champion Aircraft Corp.**

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to supersede Airworthiness Directive (AD) 2017-07-10, which applies to certain American Champion Aircraft Corp. (ACAC) Model 8KCAB airplanes. AD 2017-07-10 requires 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 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. Since we issued AD 2017-07-10, ACAC redesigned the aileron hinge supports with a reinforcement kit to strengthen the supports and prevent future damage from developing. This proposed AD would 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 proposing this AD to address the unsafe condition on these products.

**DATES:** We must receive comments on this proposed 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 <http://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.

For service information identified in this NPRM, 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](mailto: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.

### **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 the Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**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:**

**Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2018-0003; Directorate Identifier 2017-CE-033-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

**Discussion**

We issued AD 2017-07-10, Amendment 39-18849 (82 FR 17542, April 12, 2017), (“AD 2017-07-10”), for certain American Champion Aircraft Corp. (ACAC) Model 8KCAB airplanes. AD 2017-07-10 requires 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. AD 2017-07-10 resulted from 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 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.

### **Actions Since AD 2017-07-10 Was Issued**

Since we issued AD 2017-10, ACAC redesigned the aileron hinge supports with a reinforcement kit. This kit, when incorporated, strengthens the supports and prevents future damage from developing.

### **Related Service Information under 1 CFR part 51**

We reviewed American Champion Aircraft Corp. Service Letter (SL) 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 of the Airworthiness Limitations section and page 5-9 of the Time and Maintenance Checks, 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.

### **FAA's Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

### **Proposed AD Requirements**

This proposed AD would retain the placarding requirement of AD 2017-07-10 to prohibit aerobatic flight until completion of the initial 10-hour inspection. This proposed AD would also require repetitive 100-hour inspections until a maximum of 400 hours is

reached, installation of the aileron hinge reinforcement kit, and incorporation of pages into the Airworthiness Limitations and Time and Maintenance Checks sections of the service manual. The existing AD contained a reporting requirement for the inspection results. This proposed NPRM will not include a reporting requirement.

Provided no damage is found during the inspections, an airplane could have up to five inspections before incorporating the reinforcement kit (initially at 10 hours TIS with the retained inspection from AD 2017-07-10, and then four 100-hour inspections up to a maximum of 400 hours TIS).

### **Differences Between this Proposed AD and the Service Information**

ACAC SL No. 442 and ACAC SL No. 444 both require installation of the aileron hinge support reinforcement kit within 100 hours TIS for airplanes used for competitive aerobatics. Since the FAA has no way of tracking airplanes used for competitive aerobatics, we require installation of the reinforcement kit within 400 hours TIS. ACAC SL No. 444 requires 100-hour repetitive inspections after installation of the reinforcement kit. This proposed AD does not write those actions into the AD requirements; however, the revised pages of the Airworthiness Limitations section in the service manual include that inspection requirement. Both ACAC SL No. 442 and ACAC SL No. 444 have reporting requirements, but this AD does not include a reporting requirement. The actions of this AD take precedence over the service information.

### **Costs of Compliance**

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

We estimate the following costs to comply with this proposed 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, domestic business jet transport airplanes, and associated appliances to the Director of the Policy and Innovation Division.

### **Regulatory Findings**

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 the proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the 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.

### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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:

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

**(a) Comments Due Date**

The FAA must receive comments on this AD action by [INSERT DATE 45 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:

- (i) a serial number in the range of 1116-2012 through 1120-2012 or 1122-2012 through 1170-2017; or
- (ii) 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) As of April 12, 2017 (the effective date retained from AD 2017-07-10), the airplane is restricted to non-aerobatic flight until the actions required in paragraphs (g)(2) through (3) of this AD are done.

(2) 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.

(3) 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)-(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 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).

(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)(2) 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 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.

(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 following American Champion Aircraft Corp. Service Letter 444, dated August 18, 2017 (ACAC SL No. 444).

(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 of the Airworthiness Limitations section and page 5-9 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 of the Airworthiness Limitations section and page 5-9 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 (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 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 (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.

**(l) Related Information**

(1) 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.

(2) 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>. 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.

Issued in Kansas City, Missouri, on January 3, 2018.

Melvin J. Johnson,  
Deputy Director, Policy & Innovation Division,  
Aircraft Certification Service  
[FR Doc. 2018-00178 Filed: 1/10/2018 8:45 am; Publication Date: 1/11/2018]