

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2011-0302; Directorate Identifier 2011-CE-008-AD; Amendment 39-16650; AD 2011-07-13]

RIN 2120-AA64

Airworthiness Directives; CPAC, Inc. (Type Certificate Formerly Held by Commander Aircraft Corporation, Gulfstream Aerospace Corporation, and Rockwell International) Models 112, 112B, 112TC, 112TCA, 114, 114A, 114B, and 114TC Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for the products listed above. This AD requires an inspection of the elevator spar for cracks and, if any crack is found, either replacement with a serviceable elevator spar that is found free of cracks or repair/modification with an FAA-approved method. This AD also requires reporting to the FAA the results of the inspection. This AD was prompted by reports of a total of nine elevator spar cracks across seven of the affected airplanes, including a crack of 2.35 inches just below the outboard hinge of the right-hand elevator. We are issuing this AD to prevent structural failure of the elevator spar due to such cracking, which could result in separation of the elevator from the airplane with consequent loss of control.

DATES: This AD is effective April 4, 2011.

We must receive comments on this AD by May 19, 2011.

ADDRESSES: You may send comments 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: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

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 street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: T.N. Baktha, Senior Aerospace Engineer, Wichita Aircraft Certification Office (ACO), FAA, 1801 Airport Road, Room 100; phone: (316) 946-4155; fax: (316) 946-4107; e-mail: t.n.baktha@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA has received a report from CPAC, Inc. describing a crack of 2.35 inches just below the outboard hinge of the right-hand elevator on a CPAC, Inc. Model 114 airplane. The Models 112, 112B, 112TC, 112TCA, 114, 114A, 114B, and 114TC have the same design of the elevator spar and are all part of Type Certificate A12SO. There have been a total of nine elevator spar cracks across seven of these airplanes.

Type Certificate A12SO does not include Models 112A and 115. The Model 112A is a Rockwell "marketing name" for the Model 112. The Model 115 is a Rockwell "marketing name" for the Model 114.

If not corrected, structural failure of the elevator spar could result in separation of the elevator from the airplane with consequent loss of control.

Relevant Service Information

We have included in this AD procedures for removing the elevator and inspecting the forward and aft sides of the right-hand and left-hand elevator forward spar web near and around the outboard hinge area.

FAA's Determination

We are issuing 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.

AD Requirements

This AD requires an inspection of the elevator spar for cracks and, if any crack is found, replacement of the elevator spar with a serviceable spar that is found free of cracks or repair/modification with an FAA-approved method. This AD also requires reporting to the FAA of the results of the inspection.

Interim Action

We consider this AD interim action. We are requiring a one-time inspection of the elevator spar with a report to the FAA of the results. We will work with the type certificate holder to evaluate that information to determine repetitive inspection intervals and subsequent terminating action. Based on

this evaluation, we may initiate further rulemaking action to address the unsafe condition identified in this AD.

FAA's Justification and Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because structural failure of the elevator spar would result in potential separation of the elevator with consequent loss of control.

Therefore, we find that notice and opportunity for prior public comment are impracticable and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, we invite you to send any written data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include the docket number FAA-2011-0302 and Directorate Identifier 2011-CE-008-AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD 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 AD.

Costs of Compliance

We estimate that this AD affects 773 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
Inspection of the elevator spar	8 work-hours × \$85 per hour = \$680	N/A	\$680	\$525,640

Currently, there is no FAA-approved repair/modification for a cracked elevator spar. Further flight is prohibited until an FAA-approved repair/modification is submitted to the FAA and FAA-approved. A cracked elevator spar could be replaced with a serviceable one if one is available. The FAA does not have availability and cost information on serviceable elevator spars. Therefore, at this time, the FAA has no way of determining any on-condition costs associated with cracks found in the elevator spar.

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, 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):



2011-07-13 CPAC, Inc. (Type Certificate Formerly Held by Commander Aircraft Corporation, Gulfstream Aerospace Corporation, and Rockwell International): Amendment 39-16650; Docket No. FAA-2011-0302; Directorate Identifier 2011-CE-008-AD.

Effective Date

- (a) This AD is effective April 4, 2011.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to CPAC, Inc. (type certificate formerly held by Commander Aircraft Corporation, Gulfstream Aerospace Corporation, and Rockwell International) Models 112, 112B, 112TC, 112TCA, 114, 114A, 114B, and 114TC airplanes, all serial numbers, certificated in any category. Type Certificate No. A12SO does not include Models 112A and 115. The Model 112A is a Rockwell "marketing name" for the Model 112. The Model 115 is a Rockwell "marketing name" for the Model 114. Since they are type-certificated as Model 112 and Model 114, this AD is applicable to the Models 112A and 115.

Subject

(d) Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 55, Stabilizers.

Unsafe Condition

(e) This AD was prompted by reports of a total of nine elevator spar cracks across seven of the affected airplanes, including a crack of 2.35 inches just below the outboard hinge of the right-hand elevator. We are issuing this AD to prevent structural failure of the elevator spar due to such cracking, which could result in separation of the elevator from the airplane with consequent loss of control.

Compliance

- (f) Comply with this AD within the compliance times specified.

Inspection/Repair

(g) Within the next 5 hours time-in-service after the effective date of this AD, do the following for the left-hand and right-hand elevators:

- (1) Disconnect the elevator trim pushrod at the trim tab.
- (2) Remove the hinge bolts at the horizontal stabilizer points.

- (3) Remove six screws and two bolts at the inboard end of the elevator and remove the elevator.
- (4) Remove all fasteners common to the elevator outboard aft end rib, part number (P/N) 44330, and elevator skin, P/N 44323.
- (5) Remove the remaining two fasteners common to the elevator outboard aft End rib (P/N 44330) and the elevator spar, P/N 44211.
- (6) Remove the elevator aft end rib, P/N 44330, to gain access to the aft side of the elevator spar.
- (7) Remove the four bolts, washers, and nuts that secure the outboard elevator hinge, P/N 44285.
- (8) Remove elevator hinge, P/N 44285, from the elevator spar.
- (9) Clean in and around the location of the outboard bracket on the elevator spar and visually inspect for cracks. Use a 10X magnifier to facilitate the detection of any crack.
- (10) If cracks are found, before further flight, do the following:
 - (i) Either replace the elevator spar with a serviceable spar that is found free of cracks or repair/modify the elevator spar following a procedure approved for this AD by the FAA, Wichita Aircraft Certification Office (ACO); and
 - (ii) Reassemble the elevator assembly, rebalance the elevator, and reinstall on the airplane following standard repair practices. Ensure elevator rigging is within tolerance, and that the system operates with ease, smoothness, and positiveness appropriate to its function.

Note: Elevator rigging and rebalancing, torque values, and other general maintenance information can be found in the maintenance manual.

Reporting Requirement

- (h) Report the results of the inspection to the FAA, Wichita ACO, FAA, Attn: T.N. Baktha, Senior Aerospace Engineer, 1801 Airport Road, Room 100; phone: (316) 946-4155; fax: (316) 946-4107; e-mail: t.n.baktha@faa.gov. Include the following information:
 - (1) Airplane model and serial number.
 - (2) Hours time-in-service at time of inspection.
 - (3) Annotate any cracking found, including the exact location and length of any cracks.
 - (4) Any installations, repairs, modifications, etc. that have been done on your airplane in the elevator spar area or that could have affected the elevator spar.
 - (5) Type of operation primarily flown in.

Paperwork Reduction Act Burden Statement

(i) 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 current 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 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave., SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

Alternative Methods of Compliance (AMOCs)

(j)(1) The Manager, Wichita 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 the Related Information section 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.

Related Information

(k) For more information about this AD, contact T.N. Baktha, Senior Aerospace Engineer, Wichita ACO, FAA, 1801 Airport Road, Room 100; phone: (316) 946-4186; fax: (316) 946-4107; e-mail: t.n.baktha@faa.gov.

Issued in Kansas City, Missouri, on March 28, 2011.
Earl Lawrence,
Manager, Small Airplane Directorate,
Aircraft Certification Service.

SUPERSEDED