

[Federal Register: April 30, 2009 (Volume 74, Number 82)]  
[Rules and Regulations]  
[Page 19873-19876]  
From the Federal Register Online via GPO Access [wais.access.gpo.gov]  
[DOCID:fr30ap09-1]

---

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2009-0395; Directorate Identifier 2009-CE-023-AD; Amendment 39-15895; AD 2009-09-09]**

**RIN 2120-AA64**

**Airworthiness Directives; Cessna Aircraft Company (Type Certificate Previously Held by Columbia Aircraft Manufacturing (Previously The Lancair Company)) Models LC40-550FG, LC41-550FG, and LC42-550FG Airplanes**

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

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

---

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Cessna Aircraft Company (Type Certificate previously held by Columbia Aircraft Manufacturing (previously The Lancair Company)) Models LC40-550FG, LC41-550FG, and LC42-550FG airplanes. This AD requires you to repetitively inspect the rudder hinges and the rudder hinge brackets for damage, i.e., cracking, deformation, and discoloration. If damage is found during any inspection, this AD also requires you to replace the damaged rudder hinge and/or rudder hinge bracket. This AD results from reports that cracked lower rudder hinge brackets were found on two of the affected airplanes. We are issuing this AD to detect and correct damage in the rudder hinges and the rudder hinge brackets, which could result in failure of the rudder. This failure could lead to loss of control.

**DATES:** This AD becomes effective on May 11, 2009.

On May 11, 2009, the Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD.

We must receive any comments on this AD by June 29, 2009.

**ADDRESSES:** Use one of the following addresses to comment on this AD.

- 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.

To get the service information identified in this AD, contact Cessna Aircraft Company, Product Support, P.O. Box 7706; Wichita, Kansas 67277; telephone: (316) 517-5800; fax: (316) 942-9006; Internet: <http://www.cessna.com>.

To view the comments to this AD, go to <http://www.regulations.gov>. The docket number is FAA-2009-0395; Directorate Identifier 2009-CE-023-AD.

**FOR FURTHER INFORMATION CONTACT:** Gary Park, Aerospace Engineer, Wichita Aircraft Certification Office (ACO), 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4123; fax: (316) 946-4107; e-mail: [gary.park@faa.gov](mailto:gary.park@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

We have received reports that a cracked lower rudder hinge bracket was found on two Cessna Aircraft Company Model LC41-550FG airplanes.

One of the airplanes had 106 hours time-in-service (TIS) and the rudder hinge was fully fractured. The other airplane had 225 hours TIS and the rudder hinge was partially fractured.

The cracks occurred because of corrosion of the anodized 2024 aluminum brackets. By design, the bearings are pressed into hinge elements and then staked on either side. In the staking process, the anodized protection is lost.

Investigation is ongoing to determine to the best approach to take to incorporate a modification or a design change to prevent the rudder hinges and the rudder hinge brackets from becoming damaged, i.e., cracked, deformed, and discolored.

This condition, if not corrected, could result in failure of the rudder. This failure could lead to loss of control.

### **Relevant Service Information**

We reviewed Cessna Aircraft Company Single Engine Service Bulletin SB09-27-01, dated April 13, 2009. The service information describes procedures for repetitively inspecting the rudder hinges and the rudder hinge brackets for damage, i.e., cracking, deformation, and discoloration. The service information also describes procedures for replacing any damaged rudder hinge and/or rudder hinge bracket.

### **FAA's Determination and Requirements of This AD**

We are issuing this AD because we evaluated all the information and determined the unsafe condition described previously is likely to exist or develop on other products of the same type design. This AD requires repetitively inspecting the rudder hinges and the rudder hinge brackets for damage. If damage is found during any inspection, this AD also requires replacing the damaged rudder hinge and/or rudder hinge bracket.

Cessna Aircraft Company is reviewing the information related to the occurrences referenced in this AD and may develop a modification that, when incorporated, would eliminate the need for the repetitive inspections required by this AD. The FAA will review any modification that is developed, determine whether it would eliminate the need for the requirements of this action, and then determine whether additional AD action is necessary.

## **FAA's 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 rudder failure could lead to loss of control. Therefore, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in fewer than 30 days.

## **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and an opportunity for public comment. We invite you to send any written relevant data, views, or arguments regarding this AD. Send your comments to an address listed under the ADDRESSES section. Include the docket number "FAA-2009-0395; Directorate Identifier 2009-CE-023-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the AD. We will consider all comments received by the closing date and may amend the AD in light 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 concerning this AD.

## **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**

We 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); 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.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

## **Examining the AD Docket**

You may examine the AD docket that contains the AD, the regulatory evaluation, any comments received, and other information 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 Docket Office (telephone (800) 647-5527) is located at the street address stated in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**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 adding the following new airworthiness directive (AD):



**2009-09-09 Cessna Aircraft Company (Type Certificate previously held by Columbia Aircraft Manufacturing (previously The Lancair Company)): Amendment 39-15895; Docket No. FAA-2009-0395; Directorate Identifier 2009-CE-023-AD.**

**Effective Date**

(a) This AD becomes effective on May 11, 2009.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to the following airplane models and serial numbers that are certificated in any category:

| <b>Model</b> | <b>Serial Nos.</b>                          |
|--------------|---|
| LC40-550FG   | 40001 through 40079.                        |
| LC41-550FG   | 41001 through 41800, 411001 and subsequent. |
| LC42-550FG   | 42001 through 42569, 421001 and subsequent. |

**Unsafe Condition**

(d) This AD is the result of reports that cracked lower rudder hinge brackets were found on two of the affected airplanes. We are issuing this AD to detect and correct damage, i.e., cracking, deformation, and discoloration, in the rudder hinges and the rudder hinge brackets, which could result in failure of the rudder. This failure could lead to loss of control.

**Compliance**

(e) To address this problem, you must do the following per Cessna Aircraft Company Single Engine Service Bulletin SB09-27-01, dated April 13, 2009, unless already done:

| <b>Condition</b>  | <b>Initial Inspection</b>   | <b>Repetitive Inspection</b>  |
|---|---|---|
| (1) For airplanes with 25 hours time-in-service (TIS) or more as of May 11, 2009 (the effective date of this AD): | <p>With the rudder removed and using 10X visual magnification, inspect all three rudder hinges and rudder hinge brackets for damage, i.e., cracking, deformation, and discoloration, at whichever of the following occurs first:</p> <p>(i) Within the next 10 hours TIS after May 11, 2009 (the effective date of this AD); or</p> <p>(ii) Within the next 30 days after May 11, 2009 (the effective date of this AD).</p> | <p>Thereafter inspect as follows:</p> <p>(A) Every 25 hours TIS or 3 months, whichever occurs first, without removing the rudder, visually inspect all three rudder hinges and rudder hinge brackets for damage; and</p> <p>(B) Every 50 hours TIS or 6 months, whichever occurs first, with the rudder removed and using 10X visual magnification, inspect all three rudder hinges and rudder hinge brackets for damage.</p> |
| (2) For airplanes with less than 25 hours TIS as of May 11, 2009 (the effective date of this AD):                 | <p>Without removing the rudder, visually inspect all three rudder hinges and rudder hinge brackets for damage, at whichever of the following occurs later:</p> <p>(i) Upon accumulating 25 hours TIS; or</p> <p>(ii) Within the next 10 hours TIS after May 11, 2009 (the effective date of this AD).</p>   | <p>Thereafter inspect as follows:</p> <p>(A) Every 25 hours TIS or 3 months, whichever occurs first, without removing the rudder, visually inspect all three rudder hinges and rudder hinge brackets for damage.</p> <p>(B) Every 50 hours TIS or 6 months, whichever occurs first, with the rudder removed and using 10X visual magnification, inspect all three rudder hinges and rudder hinge brackets for damage.</p>     |

(3) If damage is found on any of the rudder hinges and/or rudder hinge brackets during any inspection required in paragraphs (e)(1) or (e)(2), before further flight, replace the damaged rudder hinges and/or rudder hinge brackets with new parts and inspect following the Repetitive Inspection procedures specified in paragraphs (e)(1) or (e)(2) of this AD.

(4) If the repetitive inspections required in paragraphs (e)(1) and (e)(2) of this AD become due at the same time, credit for both inspections will be given by doing the rudder removal and 10X visual inspection.

(5) Use the form (Figure 1 of this AD) to report the results of the following inspections required in this AD to the FAA at the address specified in paragraph (f) of this AD:

(i) Initial inspections required in paragraphs (e)(1) and (e)(2) of this AD, report within 10 days after the inspection or within 10 days of May 11, 2009 (after the effective date of this AD), whichever occurs later.

(ii) Repetitive inspections required in paragraphs (e)(1) and (e)(2) of this AD ONLY if cracks are found, report within 10 days after the inspection.

(iii) The Office of Management and Budget (OMB) approved the information collection requirements contained in this regulation under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) and assigned OMB Control Number 2120-0056.

| <b>AD 2009-09-09 INSPECTION REPORT</b>  |    |                                |
|---|----|--------------------------------|
| Airplane Model  |    |                                |
| Airplane Serial Number  |    |                                |
| Airplane Tach Hours at Time of Inspection                                     |    |                                |
| Is Upper Rudder Bracket Damaged?  | NO | YES, describe extent of damage |
| Is Middle Rudder Bracket Damaged?   | NO | Yes, describe extent of damage |
| Is the Lower Rudder Bracket Damaged?<br>(Models LC40-550FG & LC42-550FG only) | NO | Yes, describe extent of damage |
| Is Lower Rudder Hinge Damaged?<br>(Model LC40-550FG)                          | NO | Yes, describe extend of damage |
| Were any other discrepancies noticed during the inspection?                   |    |                                |
| Name:   |    |                                |
| Telephone and/or e-mail address:  |    |                                |
| Date:   |    |                                |

Send report to: Gary Park, Aerospace Engineer, ACE-118W, Wichita  
Aircraft Certification Office (ACO), 1801 Airport Road, Room 100,  
Wichita, Kansas 67209; fax: (316) 946-4107; e-mail: gary.park@faa.gov.

Figure 1

**Alternative Methods of Compliance (AMOCs)**

(f) The Manager, Wichita Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to Attn: Gary Park, Aerospace Engineer, ACE-118W, Wichita Aircraft Certification Office (ACO),

1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4123; fax: (316) 946-4107; e-mail: gary.park@faa.gov. Before using any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

### **Material Incorporated by Reference**

(g) You must use Cessna Aircraft Company Single Engine Service Bulletin SB09-27-01, dated April 13, 2009, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Cessna Aircraft Company, Product Support, P.O. Box 7706; Wichita, Kansas 67277; telephone: (316) 517-5800; fax: (316) 942-9006; Internet: <http://www.cessna.com>.

(3) You may review copies of the service information incorporated by reference for this AD at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the Central Region, call (816) 329-3768.

(4) You may also review copies of the service information incorporated by reference for this AD 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/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Kansas City, Missouri, on April 23, 2009.

Scott A. Horn,  
Acting Manager, Small Airplane Directorate,  
Aircraft Certification Service.