



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2012-0845; Directorate Identifier 2012-CE-013-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Revo, Incorporated Airplanes**

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

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

**SUMMARY:** We propose to supersede an existing airworthiness directive (AD) that applies to certain Revo, Incorporated Models COLONIAL C-1, COLONIAL C-2, LAKE LA-4, LAKE LA-4A, LAKE LA-4P, and LAKE LA-4-200 airplanes. The existing AD currently requires a one-time dye-penetrant inspection of the horizontal stabilizer attachment fitting and repetitive visual inspections of the fitting for any evidence of fretting, cracking, or corrosion (with necessary replacement and modification); replacement of the fitting upon reaching the 850-hours time-in-service (TIS) safe life; and reporting to the FAA the results of the initial inspection and any cracks found on repetitive inspections. Since we issued AD 2005-12-02, Revo, Incorporated informed the FAA that while the drawing numbers are different, the attachment fittings on the Model COLONIAL C-1 airplanes are identical in every other respect to those installed on the airplanes referenced in AD 2005-12-02. This proposed AD would retain the actions required by AD 2005-12-02, add the Model COLONIAL C-1 airplanes to the Applicability, and add an optional terminating action for the requirements. We are proposing this AD to correct 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 AD, contact Revo, Incorporated, 1396 Grandview Boulevard, Kissimmee, FL 34744; telephone: (407) 847-8080; email: [support@teamlake.com](mailto:support@teamlake.com); Lake Central Air Services, Muskoka Airport, R. R. #1, Gravenhurst, Ontario, Canada P1P 1R1; telephone: (705) 687-4343; email: [akecent@muskoka.com](mailto:akecent@muskoka.com); Internet: [www.lakecentral.com](http://www.lakecentral.com); and Robert L. Copeland, 418B Bartow Municipal Airport, Bartow, FL 33830; telephone: none; email: none; Internet: none. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust St., 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>; 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 proposed 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:** Hal Horsburgh, Aerospace Engineer, Atlanta Aircraft Certification Office, FAA, 1701 Columbia Avenue, College Park, Georgia 30337; phone: (404) 474-5553; fax: (404) 474-5606; email: hal.horsburgh@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-2012-0845; Directorate Identifier 2012-CE-013-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed 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 proposed AD.

**Discussion**

On June 2, 2005, we issued AD 2005-12-02, amendment 39-14118 (70 FR 33820, June 10, 2005), for all Revo, Incorporated (Type Certificate 1A13 formerly held by Colonial Aircraft Company, Lake Aircraft Corporation, Consolidated Aeronautics, Inc., and Global Amphibians LLC) Models COLONIAL C-2, LAKE LA-4, LAKE LA-4A, LAKE LA-4P, and LAKE LA-4-200 airplanes. That AD requires a one-time dye-penetrant inspection of the horizontal stabilizer attachment fitting and repetitive visual inspections of the fitting for any evidence of fretting, cracking, or corrosion (with necessary replacement and modification); replacement of the fitting upon reaching the

850-hours TIS safe life; and reporting to the FAA the results of the initial inspection and any cracks found on repetitive inspections. That AD resulted from several reports of fatigue cracks found in the horizontal stabilizer attachment fitting (part number (P/N) 2-2200-21) of Model LA-4-200 airplanes that were in compliance with AD 98-10-12 (63 FR 26964, May 15, 1998). We issued that AD to detect, correct, and prevent future cracks in the horizontal stabilizer attachment fitting, which could result in failure of the horizontal stabilizer attachment fitting. This failure could result in loss of control of the airplane.

#### **Actions Since Existing AD Was Issued**

Since we issued AD 2005-12-02 (70 FR 33820, June 10, 2005), Revo, Incorporated on January 10, 2012, informed the FAA that while the drawing numbers are different, the attachment fittings on the Model COLONIAL C-1 airplanes are identical in every other respect to those installed on the airplanes referenced in AD 2005-12-02.

Also, since we issued AD 2005-12-02 (70 FR 33820, June 10, 2005), we determined that installation of Supplemental Type Certificate (STC) SA02153NY (part number (P/N) LC-2200-21) or STC SA03217AT (P/N XLS-2-2200-221L/R) terminates the requirements of this AD. The actions required in the instructions for continued airworthiness for the STCs would still apply to airplanes with those STCs installed. We propose to include installation of STC SA02153NY or STC SA03217AT as options to this AD.

#### **Relevant Service Information**

We reviewed Revo, Inc. Service Bulletin B-78 R3, dated January 10, 2012; Revo, Inc. Service Bulletin B-78 R2, dated October 26, 2011; and Revo, Inc. Service Bulletin B-78, dated April 3, 1998. The service information describes procedures for:

- Removing the fitting and inspecting (both visual and dye penetrant) for cracks, fretting, or corrosion;

- Replacing the attachment fitting with a new fitting;
- Measuring the gap between the attachment fitting and the horizontal stabilizer skin for proper clearance; and
- Trimming the stabilizer skin to provide proper clearance.

We reviewed Lake Central Aircraft Services Lake Amphibian Stabilizer Fitting LC-2200-21 Installation Instructions, Rev B, dated August 26, 2005, and Lake Central Air Services Stabilizer Fitting LC-2200-21 Maintenance Manual Supplement Document MS-LC-2200-21, Rev B, dated August 26, 2005. The service information describes procedures for installation of the Lake Central Aircraft Services Lake Amphibian stabilizer fitting (STC SA02153NY).

We reviewed XLS Company, LLC Report XLS-2-2200-500, Installation Instructions and Instructions for Continued Airworthiness, Revision B, November 18, 2005. The service information describes procedures for installation of the XLS Co., LLC horizontal stabilizer support fitting system (STC SA03217AT).

### **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 all requirements of AD 2005-12-02 (70 FR 33820, June 10, 2005), add airplanes to the Applicability section, and add an optional terminating action for the requirements of this AD.

### **Costs of Compliance**

We estimate that this proposed AD affects 253 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

**Estimated costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Inspect the horizontal stabilizer attachment fitting	24 work-hours X \$85 per hour = \$2,040	Not Applicable	\$2,040	\$516,120
Measure the gap between the horizontal skin and the horizontal stabilizer attachment fitting; trim the skin to provide gap	1 work-hour X \$85 per hour = \$85	Not Applicable	\$85	\$21,505

We estimate the following costs to do any necessary replacement that would be required based on the results of the proposed inspection. We have no way of determining the number of aircraft that might need these replacements:

**On-condition costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>
Replace the horizontal stabilizer attachment fitting	24 work-hours X \$85 per hour = \$2,040	\$761	\$2,801

**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 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) 2005-12-02, Amendment 39-10524 (70 FR 33820, June 10, 2005), and adding the following new AD:

**Revo, Incorporated:** Docket No. FAA-2012-0845; Directorate Identifier 2012-CE-013-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 supersedes AD 2005-12-02, Amendment 39-10524 (70 FR 33820, June 10, 2005).

#### **(c) Applicability**

This AD applies to the following Revo, Incorporated Models COLONIAL C-1, COLONIAL C-2, LAKE LA-4, LAKE LA-4A, LAKE LA-4P, and LAKE LA-4-200 airplanes, all serial numbers, that are certificated in any category, and have installed horizontal stabilizer attachment fittings part number (P/N) 1-2200-14, 2200-14, or 2-2200-21.

#### **(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by information from Revo, Incorporated that while the drawing numbers are different, the attachment fittings on the Model COLONIAL C-1 airplanes are identical in every other respect to those installed on the airplanes referenced in AD 2005-12-02 (70 FR 33820, June 10, 2005). We are issuing this AD to retain the actions required by AD 2005-12-02, add the Model COLONIAL C-1 airplanes to the Applicability, and add an optional terminating action for the requirements. We are adopting this AD to correct the unsafe condition on these products.

**(f) Compliance**

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

**(g) Dye Penetrant Inspection on the Horizontal Stabilizer Attachment Fitting**

(1) For airplanes with less than 825 hours time-in-service (TIS) on any horizontal stabilizer attachment fitting: Remove the horizontal stabilizer attachment (P/N 1-2200-14, 2200-14, or 2-2200-21) from the airplane and inspect for cracks (using dye penetrant), fretting, or corrosion using the applicable compliance times stated below. To take “already done” credit for this inspection, you must have removed the horizontal stabilizer attachment from the airplane when the inspection was done.

(i) For COLONIAL C-2, LAKE LA-4, LAKE LA-4A, LAKE LA-4P, and LAKE LA-4-200 airplanes: Within the next 25 hours TIS after July 8, 2005 (the effective date of AD 2005-12-02 (70 FR 33820, June 10, 2005)). Follow Revo Inc. Service Bulletin B-78 R3, dated January 10, 2012; or Revo Inc. Service Bulletin B-78 R2, dated April 3, 1998.

(ii) For COLONIAL C-1 airplanes: Within the next 25 hours TIS after the effective date of this AD. Follow Revo Inc. Service Bulletin B-78 R3, dated January 10, 2012.

(2) If cracks, fretting, or corrosion is found during the inspection required in either paragraph (g)(1)(i) or (g)(1)(ii) of this AD, before further flight, replace with P/N

2-2200-21. P/N 2-2200-21 is an approved replacement for P/N 1-2200-14 or 2200-14. Follow Revo Inc. Service Bulletin B-78 R3, dated January 10, 2012.

**(h) Repetitive Inspections of the Horizontal Stabilizer Attachment Fitting**

(1) For all airplanes: After the dye-penetrant inspection required in paragraph (g) of this AD or after replacement of the fitting, at intervals not to exceed 50 hours TIS or 12 months, whichever occurs first, repetitively inspect (visual) the horizontal stabilizer attachment fitting using the following procedures:

(i) Move the elevator as required to see the fitting, ensuring that the aft face of the fitting is visible.

(ii) Clean the fitting. Pay special attention to the radius edges of the fitting just outboard of the fitting ear.

(iii) Visually inspect the fitting for cracks using a flashlight (a small magnifying glass or borescope is recommended). Pay special attention again to the radius edges just outboard of the fitting ear. Also, inspect as far forward on the edge that is possible because some cracks progress along the forward face of the fitting that is mostly hidden by the horizontal stabilizer rear beam.

(iv) Reference the sketch on page 1 of Revo Inc. Service Bulletin B-78 R3, dated January 10, 2012, to see where the crack is likely to begin.

(2) If any cracks are found during any of the inspections required in paragraph (h) of this AD, before further flight, replace the fitting following Revo Inc. Service Bulletin B-78 R3, dated January 10, 2012.

**(i) Replace the Horizontal Stabilizer Attachment Fitting**

(1) For COLONIAL C-2, LAKE LA-4, LAKE LA-4A, LAKE LA-4P, and LAKE LA-4-200 airplanes: Before or when the horizontal stabilizer attachment fitting accumulates 850 hours TIS or within 25 hours TIS after July 8, 2005 (the effective date of AD 2005-12-02 (70 FR 33820, June 10, 2005)), whichever occurs later, and

repetitively thereafter at intervals not to exceed 850 hours TIS replace the horizontal stabilizer attachment fitting P/N 1-2200-14, 2200-14, or 2-2200-21. P/N 2-2200-21 is an approved replacement part for P/N 1-2200-14 or 2200-14. Follow Revo Inc. Service Bulletin B-78 R3, dated January 10, 2012; or Revo Inc. Service Bulletin B-78 R2, dated April 3, 1998.

(2) For COLONIAL C-1 airplanes: Before or when the horizontal stabilizer attachment fitting accumulates 850 hours TIS or within 25 hours TIS after the effective date of this AD, whichever occurs later, and repetitively thereafter at intervals not to exceed 850 hours TIS replace the horizontal stabilizer attachment fitting P/N 1-2200-14, 2200-14, or 2-2200-21. P/N 2-2200-21 is an approved replacement part for P/N 1-2200-14 or 2200-14. Follow Revo Inc. Service Bulletin B-78 R3, dated January 10, 2012.

(3) For all airplanes: You may at any time install the following supplemental type certificates (STC) to terminate the requirements of this AD; however, the actions required by the limitations section in the instructions for continued airworthiness for the STCs still apply:

(i) Lake Central Aircraft Services Lake Amphibian stabilizer fitting (STC SA02153NY) following Lake Central Aircraft Services Lake Amphibian Stabilizer Fitting LC-2200-21 Installation Instructions, Rev B, dated August 26, 2005; and Lake Central Air Services Stabilizer Fitting LC-2200-21 Maintenance Manual Supplement Document MS-LC-2200-21, Rev B, dated August 26, 2005; or

(ii) XLS Co., LLC horizontal stabilizer support fitting system (STC SA03217AT) following XLS Company, LLC Report XLS-2-2200-500, Installation Instructions and Instructions for Continued Airworthiness, Revision B, November 18, 2005.

Note for paragraph (i)(3)(ii) of this AD: New parts are not currently available for STC SA03217AT; however, the STC number has been included here for future reference if the parts do become available.

(4) You may install airworthy horizontal stabilizer attachment fitting, P/N 1-2200-14, 2200-14, or 2-2200-21, provided it has less than 850 hours TIS and has been inspected following paragraph (g) of this AD and found free of cracks, fretting, or corrosion.

**(j) Measure the Gap Between the Horizontal Skin and the Horizontal Stabilizer Attachment Fitting; Trim the Skin to Provide Gap**

(1) For all airplanes: Measure the gap between the horizontal skin and the horizontal stabilizer attachment fitting (P/N 1-2200-14, 2200-14, or 2-2200-21). If gap is less than 1/16-inch, trim the skin to provide at least 1/16 inch gap.

(2) Perform the actions in paragraph (j)(1) before further flight after any inspection required by paragraph (g)(1)(i) or (g)(1)(ii) of this AD, or replacement of the fitting required by paragraph (g)(2) or (h)(2) of this AD.

**(k) Report the Results of the Initial Inspection**

For all airplanes: Using the form in Appendix 1 of this AD report the results of the inspections required in paragraphs (g) and (h) of this AD. Send the results to the FAA using the following contact information: Hal Horsburgh, FAA Atlanta Aircraft Certification Office (ACO), 1701 Columbia Ave., College Park, GA 30337; fax (404) 474-5606; or email: hal.horsburgh@faa.gov. Send the results within the following compliance times:

(1) Within 30 days after the inspection required in paragraph (g) of this AD even if no damage is found.

(2) Within 30 days after any inspection required by paragraph (h) of this AD if cracks are found.

**(l) Special Flight Permit**

Special flight permits are allowed for this AD with these limitations:

- (1) Vne reduced to 121 m.p.h. (105 knots); and
- (2) No flight into known turbulence.

**(m) Paperwork Reduction Act Burden Statement**

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.

**(n) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Atlanta 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.

(3) AMOCs approved for AD 2005-12-02 (70 FR 33820, June 10, 2005) are approved as AMOCs for this AD.

**(o) Related Information**

(1) For more information about this AD, contact Hal Horsburgh, Aerospace Engineer, Atlanta ACO, FAA, 1701 Columbia Avenue, College Park, Georgia 30337; phone: (404) 474-5553; fax: (404) 474-5606; email: hal.horsburgh@faa.gov.

(2) For service information identified in this AD, contact Revo, Incorporated, 1396 Grandview Boulevard, Kissimmee, FL 34744; telephone: (407) 847-8080; email: support@teamlake.com; Internet: none; Lake Central Air Services, Muskoka Airport, R. R. #1, Gravenhurst, Ontario, Canada P1P 1R1; telephone: (705) 687-4343; email: akecent@muskoka.com; Internet: www.lakecentral.com; and Robert L. Copeland, 418B Bartow Municipal Airport, Bartow, FL 33830; telephone: none; email: none; Internet: none. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust St., Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

**Appendix 1 to Docket No. FAA-2012-0845**

**INSPECTION REPORT for**

**Revo, Incorporated Models COLONIAL C-1, COLONIAL C-2, LAKE LA-4,  
LAKE LA-4A, LAKE LA-4P, and LAKE LA-4-200 Airplanes**

<b>Docket No. FAA-2012-0845</b> <b>INSPECTION REPORT for</b> <b>Revo, Incorporated Models COLONIAL C-1, COLONIAL C-2, LAKE LA-4,</b> <b>LAKE LA-4A, LAKE LA-4P, and LAKE LA-4-200 Airplanes</b>	
1. <i>Inspection Performed By:</i>	2. <i>Telephone:</i>
3. <i>Aircraft Model:</i>	4. <i>Aircraft Serial Number:</i>
5. <i>Date of AD Inspection:</i>	6. <i>Total hours time-in-service (TIS) on the fitting:</i>
7. <i>Cracks found?</i>  <input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>  <input type="checkbox"/> <i>Left fitting</i> <input type="checkbox"/> <i>Right fitting</i>	8. <i>Length of Crack(s):</i>  <i>Left fitting:</i>  <i>Right fitting</i>
9. <i>Fretting found?</i>  <input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>  <input type="checkbox"/> <i>Left fitting</i> <input type="checkbox"/> <i>Right fitting</i>	10. <i>Corrosion found?</i>  <input type="checkbox"/> <i>Yes</i> <input type="checkbox"/> <i>No</i>  <input type="checkbox"/> <i>Left fitting</i> <input type="checkbox"/> <i>Right fitting</i>
Send to: Hal Horsburgh email hal.horsburgh@faa.gov FAA ACO, Attn: Hal Horsburgh 1701 Columbia Ave College Park, GA 30337 Facsimile: 404-474-5606	

Figure 1 to Appendix 1.

Issued in Kansas City, Missouri, on August 9, 2012.

Earl Lawrence,  
Manager, Small Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2012-20107 Filed 08/15/2012 at 8:45 am; Publication Date: 08/16/2012]