

**Burl's Aircraft, LLC**  
**P.O. Box 671487**  
**Chugiak, Alaska 99567-1487**  
**(907)688-3715 (907)688-5031 fax**  
Email~ [burl@biginalaska.com](mailto:burl@biginalaska.com) web: [www.burlac.com](http://www.burlac.com)

September 15, 2011

## MANDATORY SERVICE BULLETIN

No. 15AC06-08-10,

**Amendment B** September 15, 2011

Rev. Original, June 8, 2010

### **Brief history:**

Over the past 12 years it has become apparent that there is a potential problem brewing in relation to the main wing spar cap angles in the Rogers (Aeronca) 15AC Series Sedan.

Since first discovered in June of 1998, there have been at least 34 wings that have had intergranular corrosion and exfoliation of either the upper or lower, or both, wing main spar cap angles **or suffered crash damage and needed repair parts. Corrosion remained the main cause for replacement.**

Sedan owners have up until now been verbally warned of this potential problem and were given fairly cursory advice and instruction on how to inspect the main wing spar cap angles for this type of corrosion.

Those that were found to have the problem have been corrected with the installation of new, replacement, PMA'd spar cap angles to facilitate the necessary repairs.

This problem has *never* been linked to any one particular cause. At first it was thought the corrosion was caused by stress (over loading the aircraft) or poor heat treat process of the main spar cap angles or both. The fact that some aircraft have been operated as agricultural sprayers was looked at as possible scenario. Saltwater operation was thought to play a part in this problem, too. To date, no one particular cause or set of operational circumstances has been determined to be the culprit for this anomaly.

**Mandatory Service Bulletin No. 15AC06-08-10, Amendment B** continued;

**Immediate action required:**

Within the next twenty-five (25) hours of operation or six months (6), whichever is earlier, after receipt of this Service Bulletin, the following preliminary initial inspection must be completed:

First, remove the cotter pin, nut and attaching AN4-7 bolt on the aileron push-pull rod, P/N 3-983 from the 2-1164 aileron actuating arm/bracket on the aileron. Rotate the aileron on its hinges up and forward on top of the wing to allow access to the lightening holes in the rear spar.

Using a good quality, strong halogen flashlight or equivalent light source, looking through the afore mentioned rear spar lightening holes, in the areas 30-36 inches inboard and outboard of the wing lift strut attachment fitting that is riveted to the main spar web, carefully inspect the exposed trailing edges of both the upper and lower main spar cap angles for signs of cracking, intergranular corrosion or exfoliation.

This type of corrosion is characterized by the similarity in appearance to a stack of newspapers as seen from the cut edges. Refer to AC43.13-1B, Change 1, 9-27-01, Chapter 6, Section 2, page 6-7, para. 6-17 and page 6-8, para. 6-18.

If no corrosion is found during this phase of inspection then proceed to the next step.

**Within twelve (12) months, after receipt of this Service Bulletin**, install new wing inspection hole skin reinforcement doublers, P/N 2-1272-2 and the associated 2-1285-2 cover plate at the locations indicated, fore and aft, of the main wing spar along the length of both wings as per the enclosed sketch, SK 15AC06-08-10.

During the cover plate and doubler installation, re-inspect the main spar caps, both upper and lower to determine if there is any (further) evidence of corrosion.

**Mandatory Service Bulletin No. 15AC11-08-08, Amendment B continued;**

Install the covers and doublers in accordance with Installation Instruction No. SB 15AC06-08-10, Sketch No. SB 15AC06-08-10 and, if desired, Drawing No. 2-1272 SPLICE.

Upon completion of cutting the holes for the doublers, provided no corrosion is evident or very slight evidence of corrosion is present, spray the spar cap angles, upper and lower, with ACF-50 corrosion inhibitor or equivalent AFTER painting or repainting of the wing if painting is required.

Finish installation of the doublers and paint the rivet heads with an artist's brush to match the wing color. Paint the covers to match and install on the aircraft.

**If heavy or severe corrosion is found** no further flight is permitted until the proper repairs have been undertaken.

No splicing of the spar cap angles is approved. They must be replaced in their entirety as a single piece. Replace any and all affected wing skins, spar webs, doubler plates, etc. as necessary.

New upper cap angle, P/N 7-817-5 and lower spar cap angle, P/N 7-817-6, the wing inspection hole reinforcement doubler, P/N 2-1272 and cover plates, P/N 2-1285 are available from Burl's Aircraft, LLC, P.O. Box 671487, Chugiak, Alaska 99567. Phone (907)688-3715.

**FAA Approval**

The technical aspects of this Service Bulletin been approved by the FAA on October 11, 2011.