

From: "Tandy C. Walker" <tandyw@flash.net>

To: [Undisclosed-Recipient:](#)

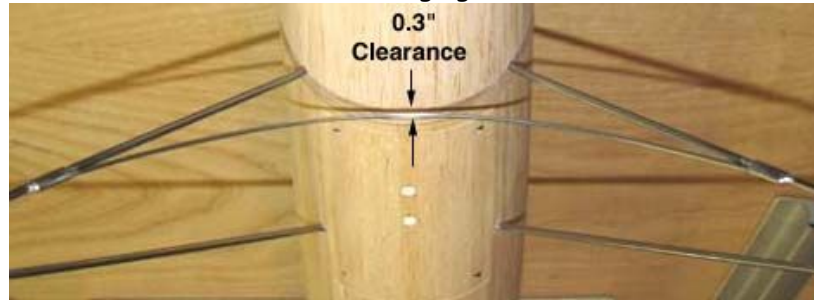
Date: 8/24/2009 7:48:06 PM

Subject: 162 Sailplane Landing Gear Modification and Wing Trailing Edge Protection Plate

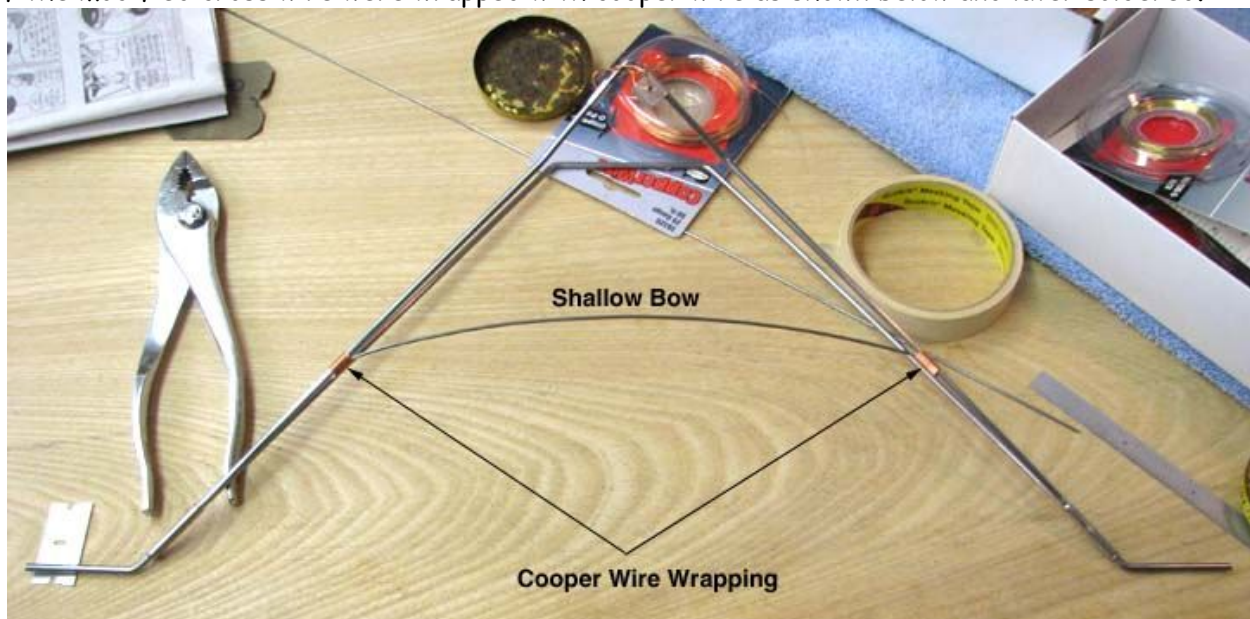
Comet Sailplane Project

Landing Gear Modification

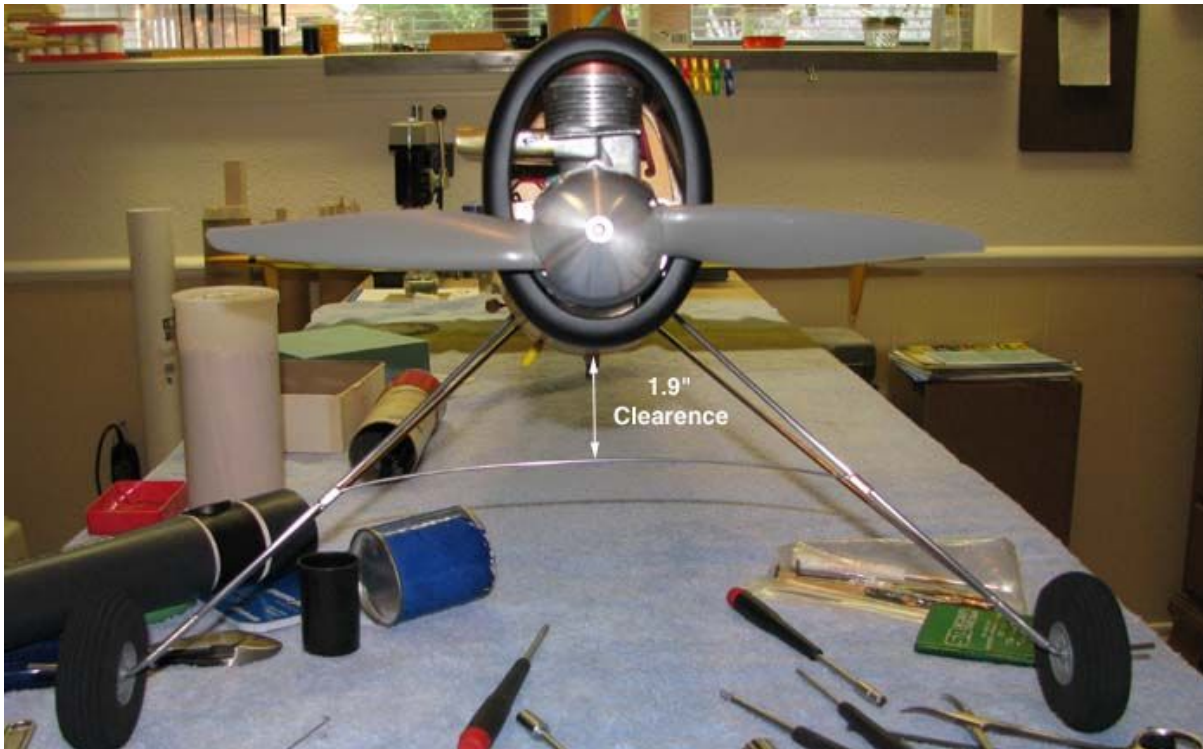
As I was looking at the assembled Sailplane today, I suddenly became aware that the landing gear cross wire was too close to the bottom of the cowl and had too big of an arch in it as shown in an earlier construction picture below. In a hard landing, the landing gear would spread out too far and then snap back probably driving the cross wire up into the bottom of the cowl and damaging it.



There was nothing to do but to disassemble the front end of the Sailplane's fuselage and remove the landing gear. A Dremel cut off wheel was used to cut the cooper wire wrappings of the cross wire ends, unsolder it, and remove it. 80% of the arch in the cross wire was taken out, leaving a shallow bow as shown below. The ends of the modified cross wire were wrapped with cooper wire as shown below and later soldered.



The modified landing gear was reinstalled and the front end of the Sailplane's fuselage was assembled. The modified cross wire is now almost 2" below the bottom of the cowl and will limit the spread of the landing gear on a hard landing as shown below.

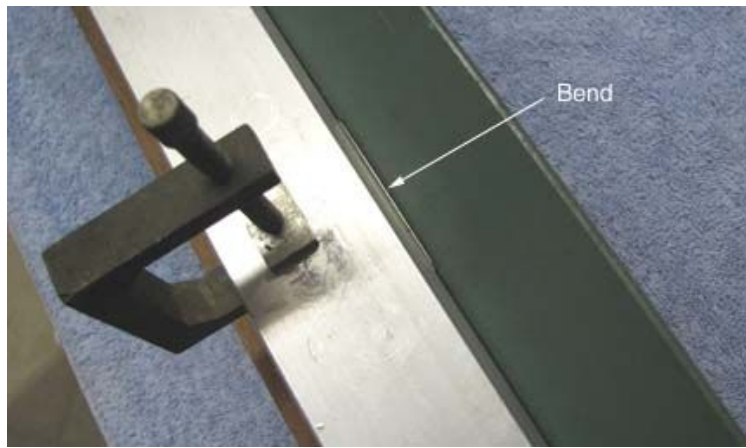


Wing Trailing Edge Protector Plate

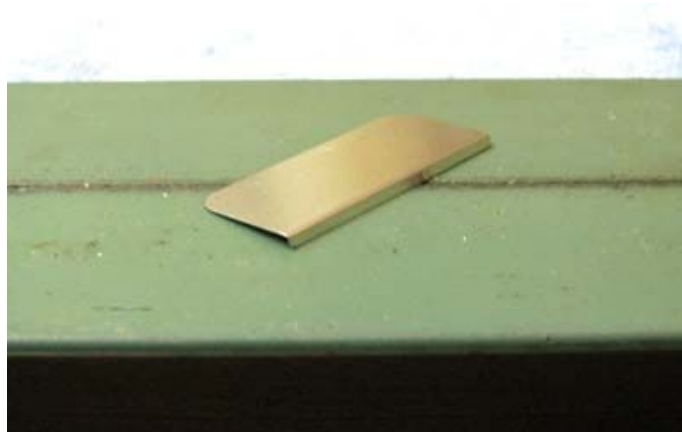
I use a protector plate to keep the multiple rubber bands that hold the wing on from crushing the wing's training edge. The plate is made out of a piece of .008" tin and has a small lip that wraps around the trailing edge. I called my friend Jerry Burk yesterday and he loaned me his little hand brake shown below to bend in the lip with.



This shows a close up of the initial bend in the plate using the hand brake.



This shows the finished protector plate. The lip is only bent to an angle of about 80 to 85 degrees to fit the trailing edge profile.



Dow Corning clear silicone shown below is used to attach the protection plate to the wing's trailing edge. The excess is cleaned off with alcohol which does not hurt the wing's finish.



This shows the protection plate bonded to the wing's trailing edge.



This picture shows how the protection plate's lip wraps around the trailing edge and keeps the multiple rubber bands that hold the wing on from crushing the wing's trailing edge.....Tandy

