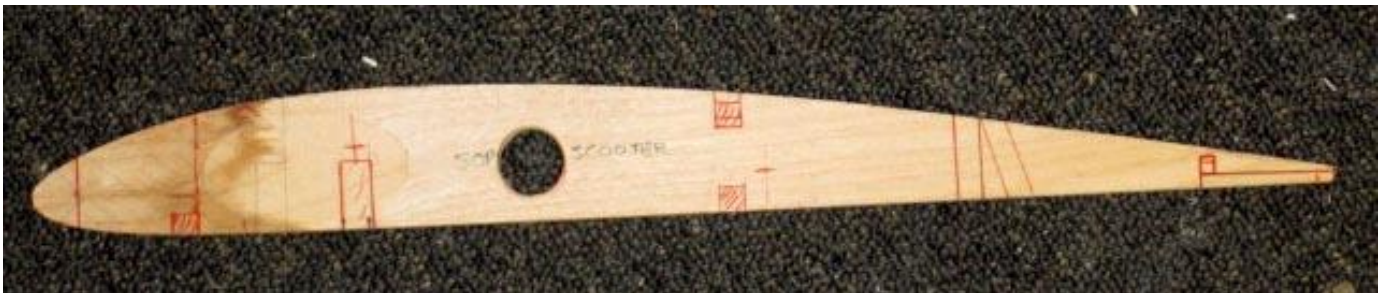
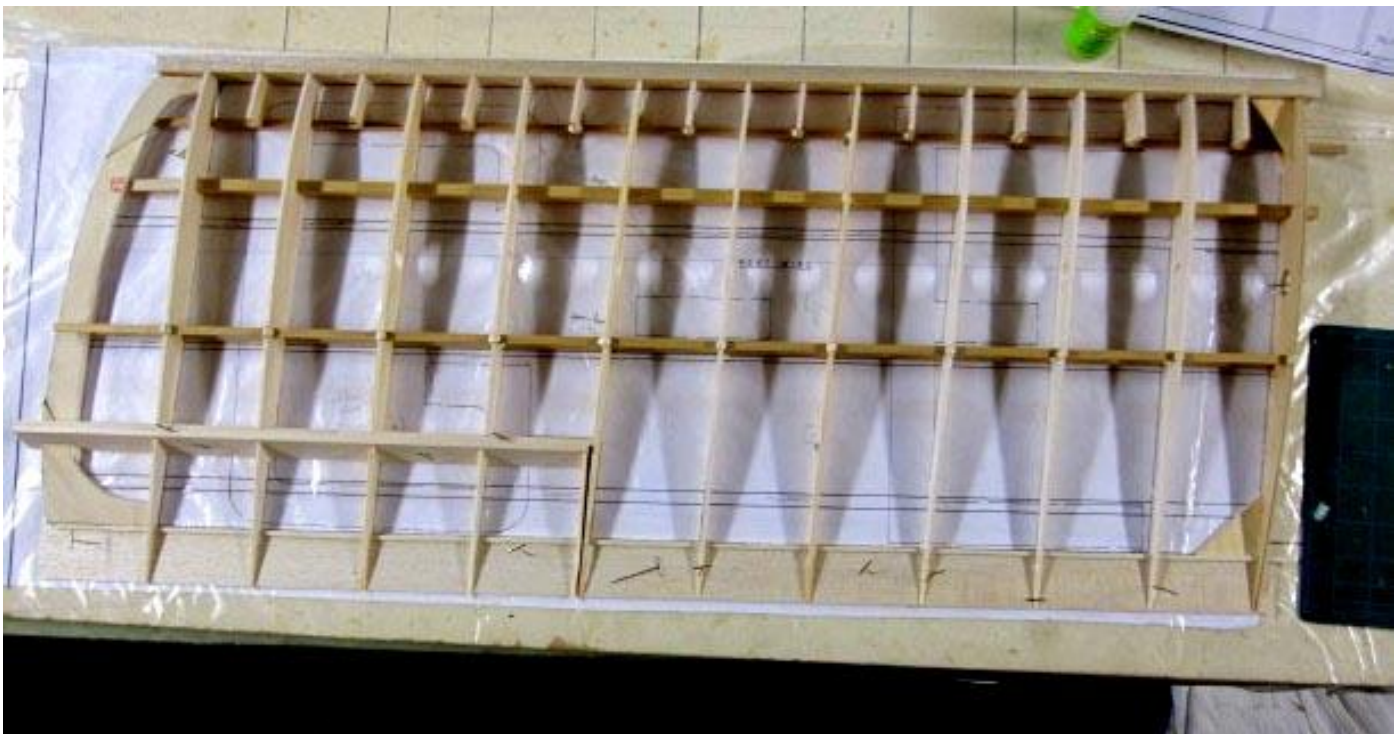


So I now have a pile of 1/8" balsa ribs cut using a 1/8" ply master but the next question is to decide on the internal structure. Each side of the wing is suspended by 4 landing wires radiating from a post over the centre section and 4 flying wires that are attached to the bottom of the fuselage. The real plane



has no spars showing through the top surface covering so I decided on this structure. The LE is $\frac{3}{4} \times \frac{1}{2}$ " balsa; the front spar supporting the riblets is $\frac{1}{4}$ " sq hardwood (from Bunnings); the main spar is $\frac{3}{4} \times \frac{5}{16}$ " hardwood (also from Bs) and the 2 rear spars are $\frac{1}{4}$ " sq hardwood. The top one of the rear two is recessed so it won't show when covered. The TE is 2" x 1/8" hard balsa with an 1/8" sq stiffener along the top. The hole is for the aileron connection.

Building them is pretty straightforward using conventional tips (note the lines under the wing from the original drawings using a different structure) and ply



ribs are used where the rigging wires will be attached, but the centre section needed a bit more thought. It has to be mounted on 4 struts above the fuselage - but how far above?

Wikipedia tells us "The Scooter used a normal Camel fuselage, with the wing mounted just above the fuselage, with a very small gap and formed the basis of a fighter derivative later known as the Sopwith Swallow which also used the fuselage of a Camel, but it had a larger wingwhich was mounted higher above the fuselage to allow the pilot to access the two Vickers machine guns." But that is not a lot of help!

When I first looked at the drawings done by Peter Cooksley, in his usual elegant

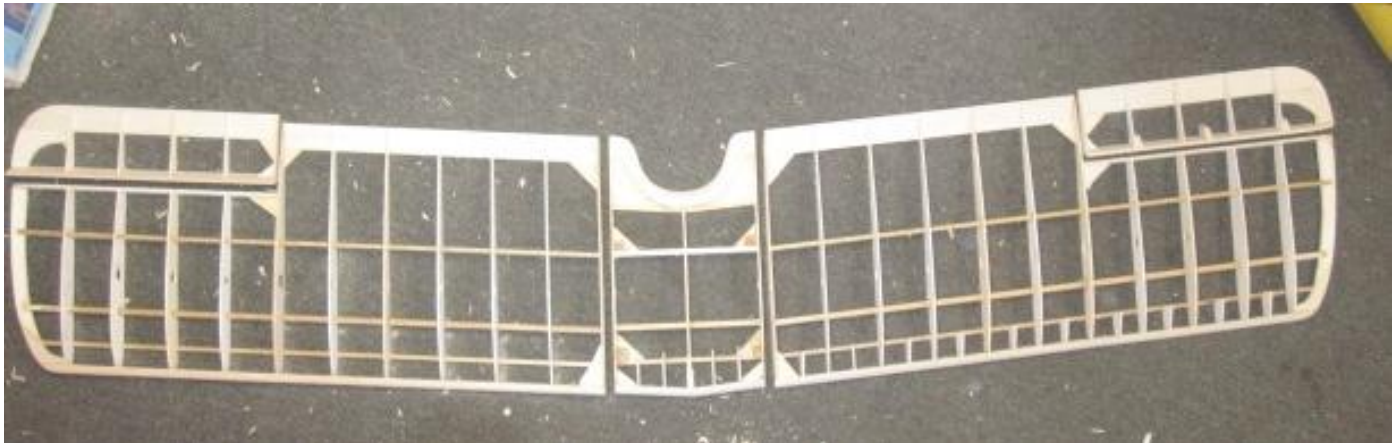


fashion, in the Radio Control Scale Model Aircraft magazine published in Autumn 1988 I reckoned I could guess a probable distance but on reflection it looked like it would be very difficult for the pilot to get into the cockpit and if he could he would have the cut-out on the T/E about 2" from his nose! See this view of the plan and side elevation to see why! So I wrote to him and he very kindly replied and told me - I quote "our knowledge of the Scooter is so limited one has to more than a little informed conjecture, You may like to refer to my drawing of the Swallow in and 'juggle' that drawing to suit the Scooter" - so I did some juggling!

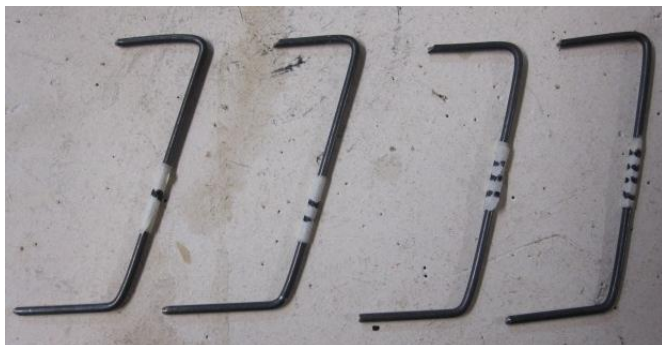
This meant I set the cockpit a little bit further back and made the cut out in the T/E a bit deeper - who's gonna spot the difference? The other thing about the centre section is that it will carry the plug in wings and the stress of the landing loads so I made the ribs out of 1/8" ply and bunged in a load of gussets. I also put in vertical blocks to support the "pyramid" of piano wire to which



the landing wires will be attached. When they are all laid out they make up the 79" span (it was supposed to be 80" but I guess I got the enlargement of the free plan wrong!)



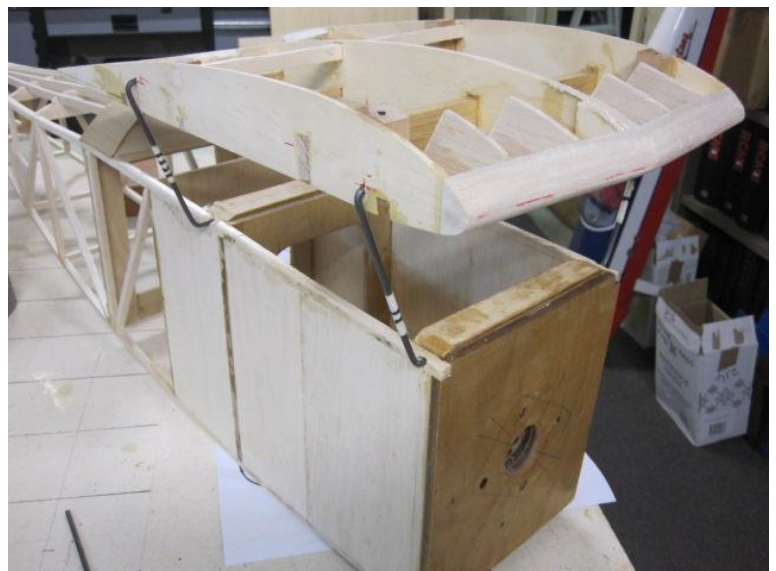
One of the joys of carving a LE from rectangular balsa is the satisfaction of a smooth curve and a lot of balsa shavings! So now to make the struts - bending 4 pieces of piano wire so that the front 2 are 3mm longer than the rear ones to get the correct incidence on the wing - easier said than done!



They turned out pretty well and they can now be fitted in place. They slide into tubes I mounted in the centre section of the wing and the fuselage so all the

finishing and covering can be finished before they are fixed.

OK, enough for now. Next time I'll fit the servos and sort out the wing joining dowel.



Mike