

Double Skinned Wing Another Way – Leigh Richardson

As told to Chris Brainwood

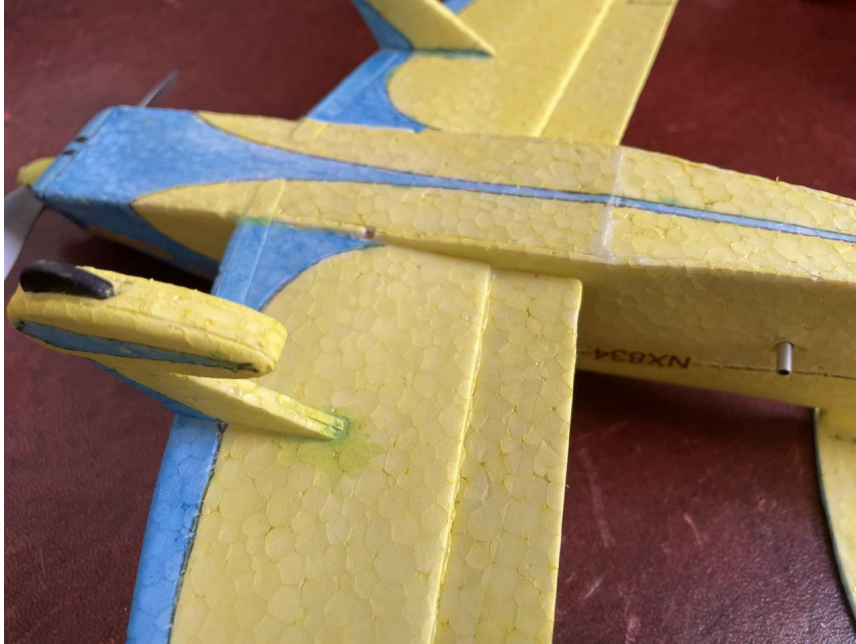
Today I had the good fortune to visit Leigh Richardson. Leigh has been building models from wall foam for many years and has developed many great techniques to make quite complex structures including a peanut sized Albatross DV with its multi-curvature fuselage using depron formers and skinning it with smaller panels

Leigh has a very neat way of making a double skinned wing as featured on his Experimental US Pylon Racer 'Amazon Swift' that could work well in this challenge



The top panel of the is cut to the size desired and $1/32'' \times 1/8''$ balsa stuck the underside as with the single skinned wing I described earlier. The lower skin is doesn't extend all the way to the trailing edge but stops about $3/4$ chord short. This Leigh found gives a thinner edge and better flying performance. The skin is glued only at the L.E. along the spar and at the part where it meets the top skin just short of the trailing edge.

This gives thin airfoil section, which looks better and has considerably more strength than a single skin



Note how the lower skin stops short of the TE.

Leigh paints his models with artist acrylic paint , unlike poster paint this is waterproof. The numbers are cut from tissue and stuck on

Another method Leigh has used is to add a full depth balsa spar to more delicate structures like the tailplane to keep it flat and add some strength

