

Wheel Pant Mounting Idea

Dave Dent - (CA) I have been working with NASA and Rutan's Scaled Composites dealing with Remote Piloted Aircraft for several years. During the testing of the Raptor demonstrator remote piloted vehicle for NASA's aeronautics division, a set of low drag wheel pants were designed by Cory Bird, one of Scaled's engineers. Cory is one of the best when it comes to low drag with most anything. He built the wing for the famous "Nemesis" formula one aircraft.

Cory loaned me the plugs and John Meyer and I built molds. In a few weeks we had a real good set of molds for some very low drag wheel pants.

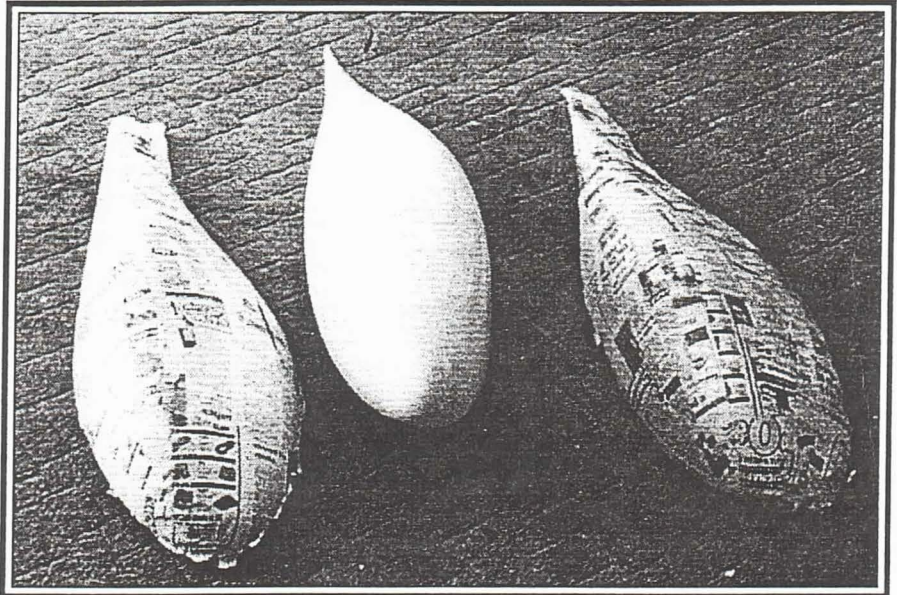
I made the pants out of carbon and West system materials. It turned out to be a perfect combination. They were hand laid by wetting them out while in the sun. They came out like they were vacuum bagged. The parts weighed in at 1.5 pounds each with a left and right set. They are a little long for the EZ but the proper placement on the gear overcomes most of this problem. If I were to make another set I would shorten them a little.

Next came the hard part, locating holes and fitting the pants to the gear strut. I didn't want to cut up good parts to find the proper mounting location. My wife, Carol, came up with the fantastic idea of making a set of pants of paper mache to determine mounting location. There would be no loss of anything but some newspaper and liquid starch. It worked perfectly. I was able to cut and paste to my heart's content and develop the perfect fit and pattern I needed before cutting the real thing.

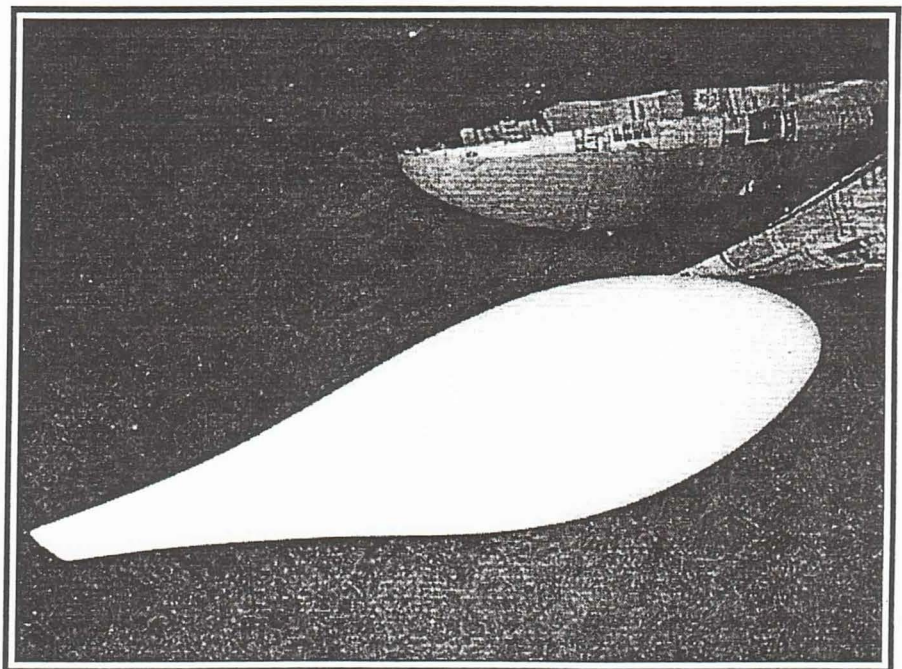
If you ever have to make a first and are not sure of the fit try this method. This idea may not be new to others but it was to me. The performance of the pants proved to be very good, in fact, super good. I am not quoting any speed increases but they are better than what I had before.

During construction I avoided pin holes by the following method. Before laying up glass in the mold I sprayed some kind of primer over the mold release and let it dry. Next lay up $\frac{1}{4}$ oz deck cloth. Then, while still wet, put two plies of glass on. After cure, in the mold, you will find there are no or very few pinholes in your part. I use a cheap spray can of

primer from the hardware store. I wish the vendors of my prefab parts had taken just ten more minutes to do this. It would have prevented the hours of extra work to fill the pin holes and eliminate the extra weight of the filler. This system works great and is a solution to a long time problem. You will find this makes finish work much easier, faster and lighter.



Paper pants solve a building problem



For Sale

Hershey Kiss prop spinner - \$60.

6" prop extension, SAE #1, with crush plate - \$100

Contact: Ron Verderame
702-395-8315
VADER@POWERNET.NET