

Homebrew F3f (Part Deux)

Sorry for the delay in part 2, but I've been working on this for Adam







Jimmy supplied the fuz and I made the wings, tail and a new hatch. Yet to fly (18th Mar 2007, due to crap weather)

Things have moved along a bit since Part 1. The centre wing panels have been joined with 3 degrees of dihedral. Bottom spars of carbon fibre tow are in on all panels and the carbon fibre shear web is in. This photo shows the end of the centre panel with the bottom spar, shear web, cut out for joiner tube and the tunnel for the servo cables.






Once the joiner tubes are in, the tube spar will be laid up, capturing the tube. The joiners themselves are being made out of carbon tow, pulled through the same size tube as the joiner. The spars will then be filled to the wing profile using epoxy and microballoons

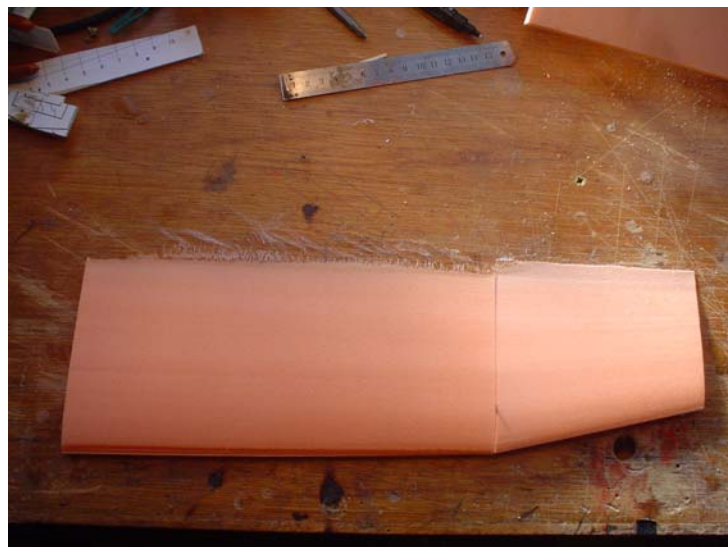
The joiners are going to be 10mm carbon rod in brass tube. The cf tows are wetted out and then pulled through the tube. The number of tows was previously determined by drawing them through dry until I got a nice tight fit. The addition of epoxy resin made for an even tighter fit and a fair struggle to get them through the tubes. The whole lot was then put in the oven at 150C to set. The joiners were then removed from the tubes and trimmed.

			
Joiner tube	Tube & cf tows	Tows pulled through tube	Finished joiners

The tubes were then set in to the wing, bonded to the shear web. I decided to use 2 joiners for safety.

		
Tubes in place	Carbon spar and caps on	End view

The tail halves have been also been cut and are ready for joining and finishing.



The keel has been cut, along with the support for the wing seat and is in the process of being glassed



Keel in place in fuz:



As the wings are turning out significantly heavier than expected, I have decided to clad with balsa and film. I'll probably build a second set at some point and bag them (I may do DLG wings first)

That's it for now. Part 3 when I get the chance