

Sopwith Pup

The nose is very short so the tail needs to be built light, with all the gear as far forward as possible. I chose to use two servos for the ailerons, one in each wing. The rudder and elevator servos are installed just aft of F4, bringing them further forward would help but would make the pushrods longer.

I fitted

4 X SuperTec JP EN ER G Super Micro 6g servos
Speed (sec): 0.10 Torque (Kg.cm): 0.90

Axi 2208/34 with a 9X4.7 alternatively a UH Hacker Style Brushless Outrunner 20-28M

Various 850mah 3cell Lipos

Cheap and 12g 15A Esc

Corona 4g synthesized 4ch Rx

Cut out all the parts from 3 & 6mm Depron, and the firewall from 3mm Liteply. Note the different positions for the firewall tabs in the two fuselage sides. The port cutout is shown red and the starboard green. These tabs will provide 2deg down and 2deg right thrust.

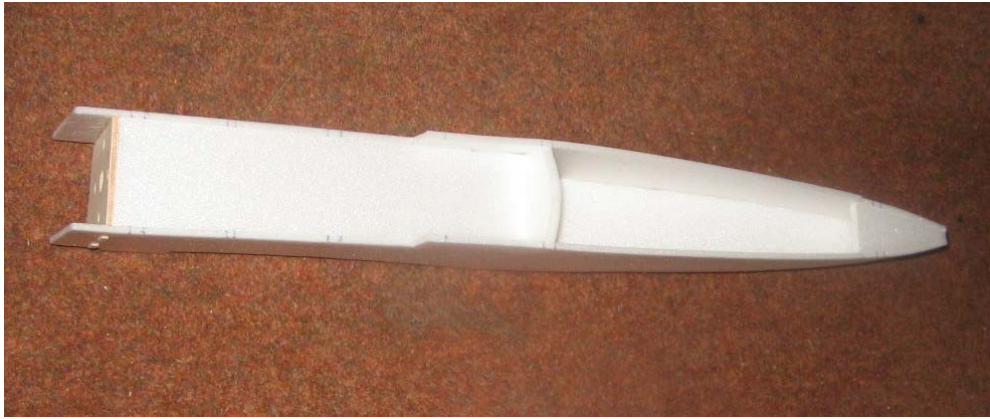


Pin down the starboard fuselage side and glue on the formers, firewall and fuselage front top deck.



Fit the other fuselage side and add the top deck under the tailplane





Then add the rear fuselage bottom.



Glue together the Cowling front and mid rings.

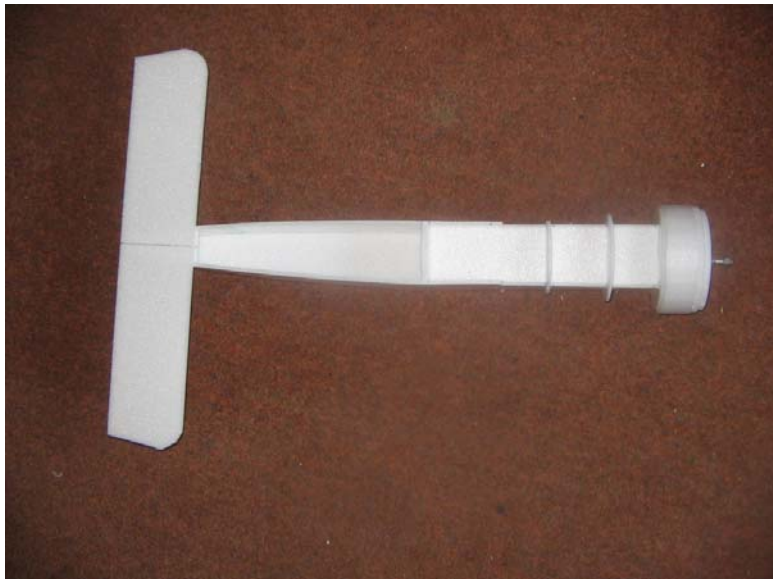
Put tape onto the outer face of the cowling rear ring and roll it. Match it up to the rear face of the cowling mid ring, trim as necessary and glue together including the inner section of F1.



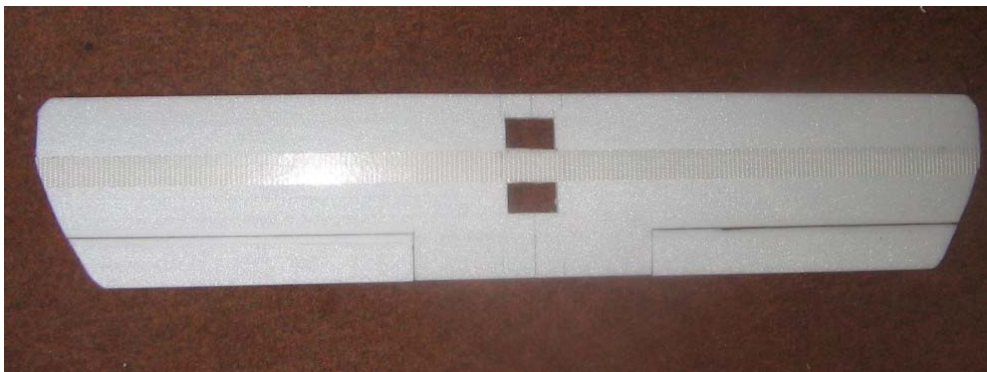
Fit the outer sections of F2 & F3 onto the fuselage ...



and glue on the cowling. The rear face of the cowling mid ring butts up against the fuselage ends.



Fit the tailplane, getting it parallel to the wings.



Form the wings with a 4% @ 40% (6mm curve with the max point at 63mm from the leading edge).

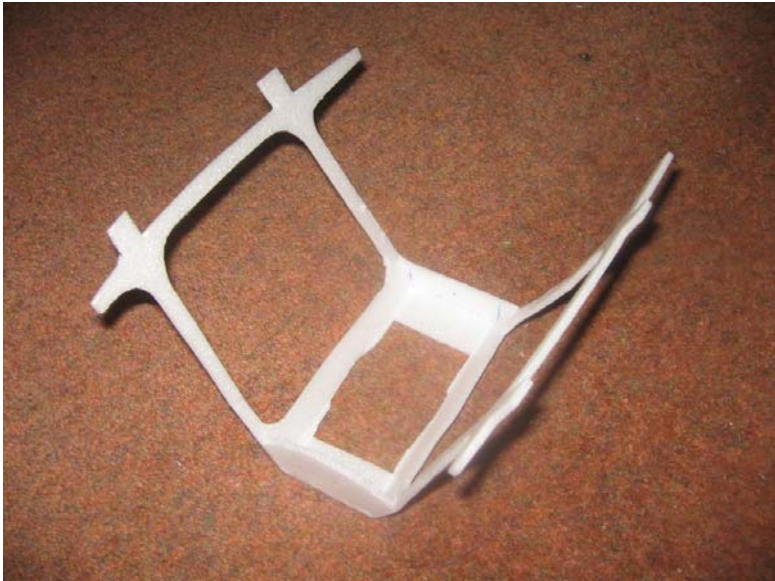
Cut out the ailerons after forming the whole wing. I added reinforcement tape top and bottom at the 40% chord line.

I also cut 45 deg bevels on all the moving surfaces and used

Blenderm tape for the hinges.



Glue the lower wing to the fuselage, ensuring that it is parallel to the tailplane.



Fold up the cabin strut using a steel edge for the fold lines. Glue it together, and add 3 x 0.6 CF to the outer faces of the uprights.



Glue it in place on the fuselage



Roll the top rear deck to shape ready for fitting

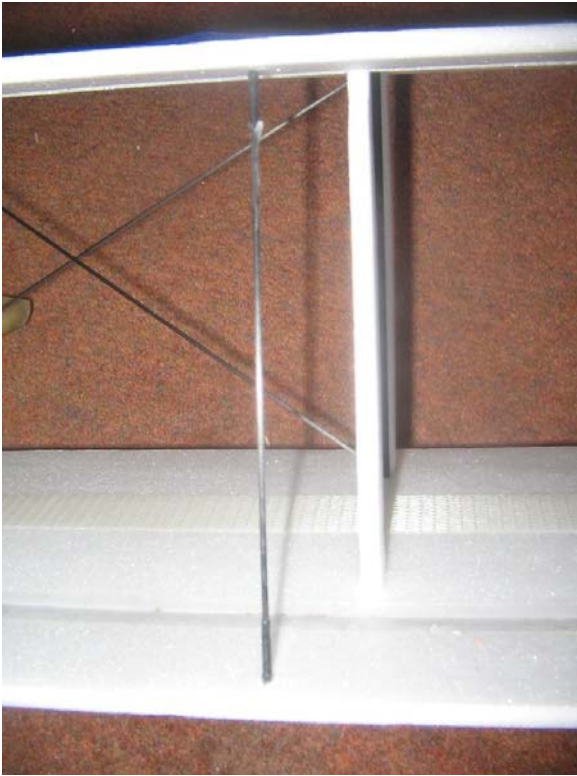


The wing struts are from 6mm Depron with 3 x 0.6 CF along the trailing edge of the front one

Add 1.5mm dia CF stiffeners to each wing.

These are important because I tried without and the wings bent upwards alarmingly !





I used 1.5mm dia CF for the aileron joining struts, each cut about 3mm short, and with each end superglued into a heatshrink tube. The tubes were then glued into holes in each aileron. To get the ailerons synchronised I pinned the aileron inner edge to the wing panel.

The under carriage is bent up from 2 pieces of 1.5mm piano wire, superglued together and bound with Kevlar line. I mounted the horizontal section on 2mm liteply and taped the whole thing to the fuselage. Its strong enough to do rolling take offs and landings



The Lipo stands vertically and is Velcro'd to the firewall.

