Dirk Jan Registered User

Joined Feb 2015

13 Posts

Build Log

Scratch build: Cozy F1 Tunnel

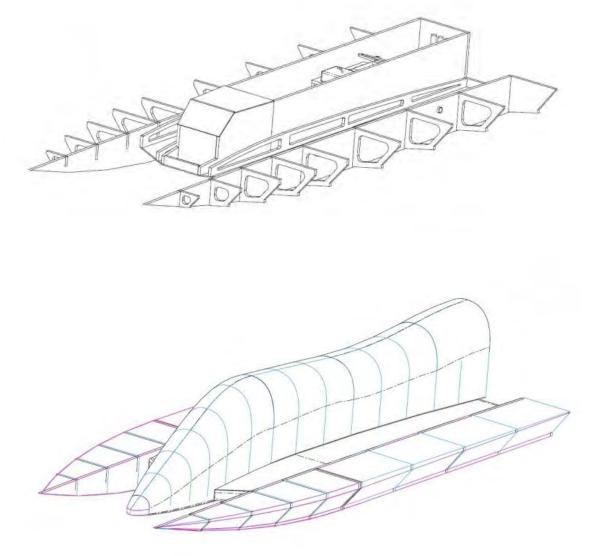
Hi fellow rc boat enthusiasts 🙂 I read along for a while and I thought it might be nice to share my latest build with you.

I designed my own F1 Tunnel hull, called Cozy F1 Tunnel. It's 23.6 inches long and it will get the following setup:

- Hobbyking/TFL outboard 3S 3Ah lipo Turnigy
- 60A Marine esc
- total weight: 3,3 lbs

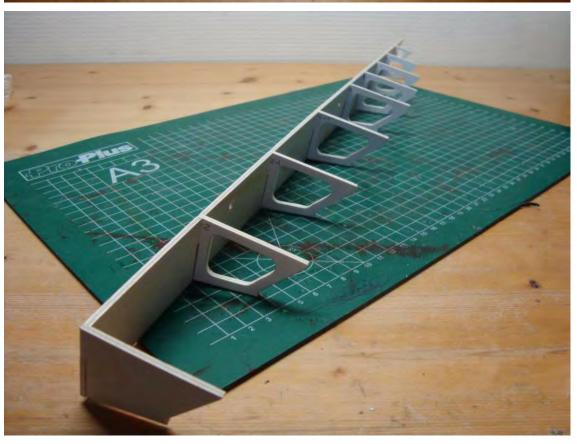
The cowl I will make myself from glass fabric and epoxy, using a mold.

I designed the hull in Pro/Engineer CAD software:

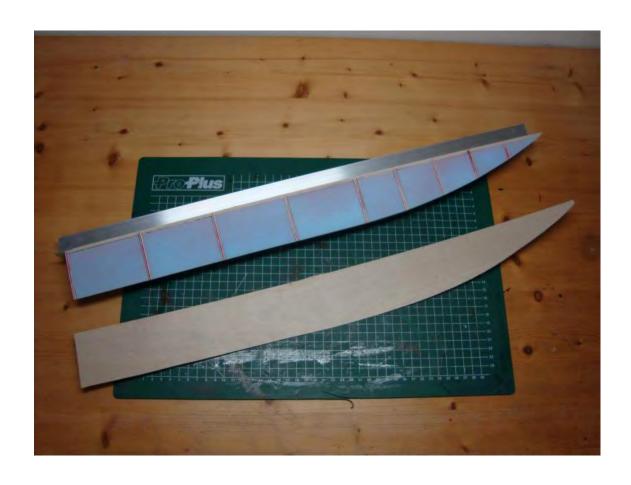


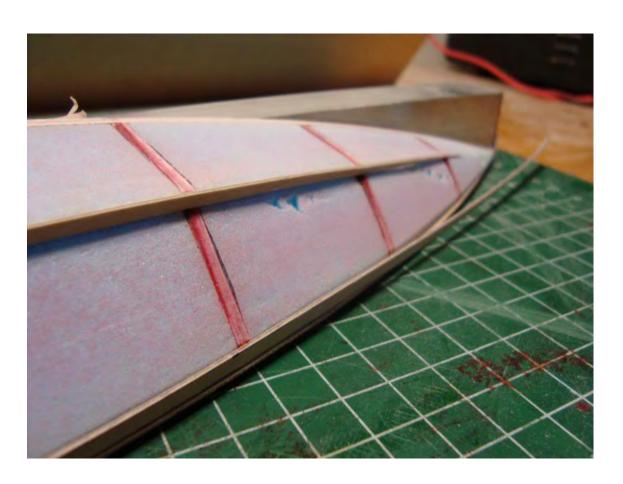
I make all frames myself by using a hand saw, no laser kit here 🕲









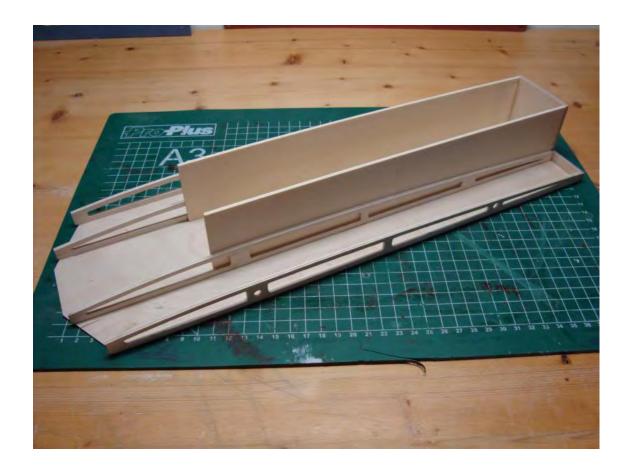


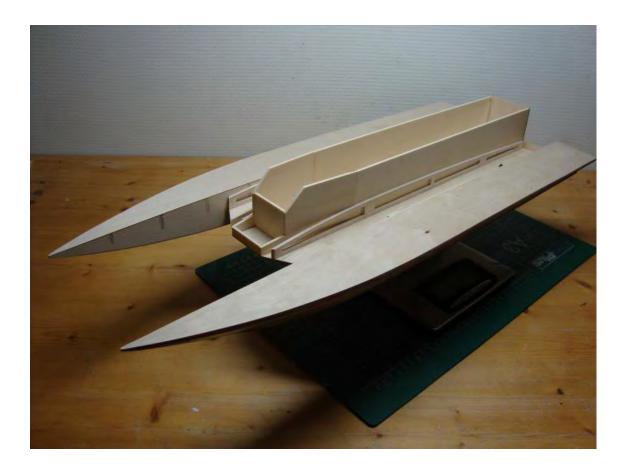




And starting with the tunnel itself:





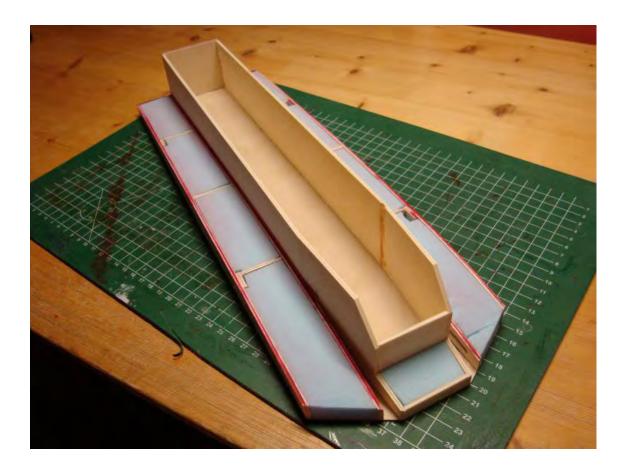






Reinforcing the tunnel with some ribs and adding some high density foam for flotation:







Will be continued 3

Finishing the tunnel and laminating the hull with 50 grams glass fabric.



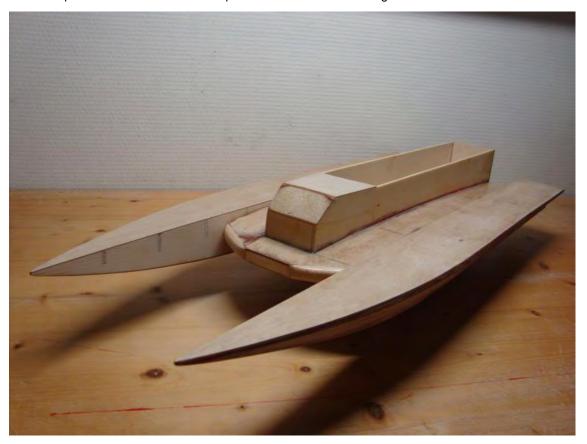




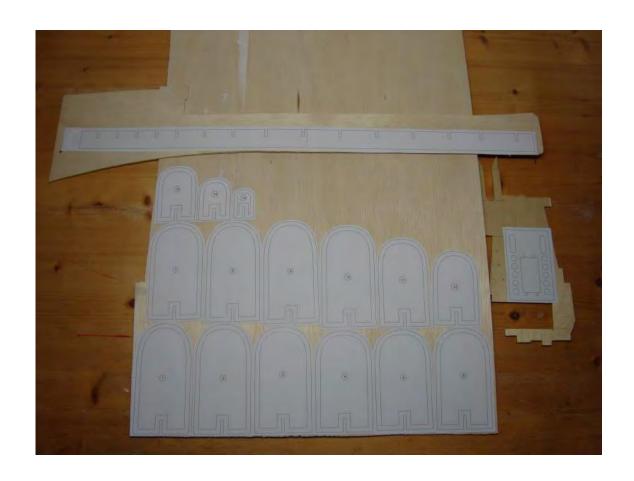


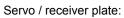


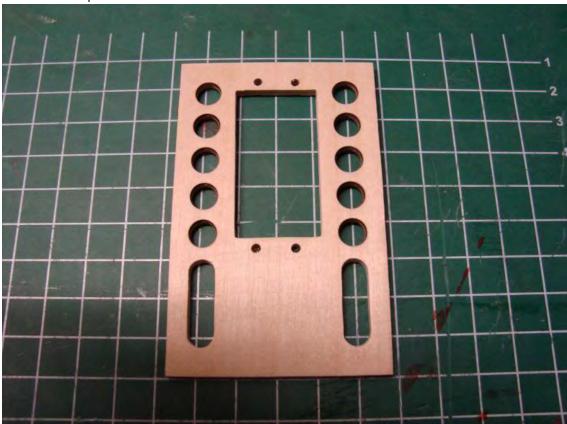
Some more photos from the hull with the sponsons attached and starting to work on the cowl mold.



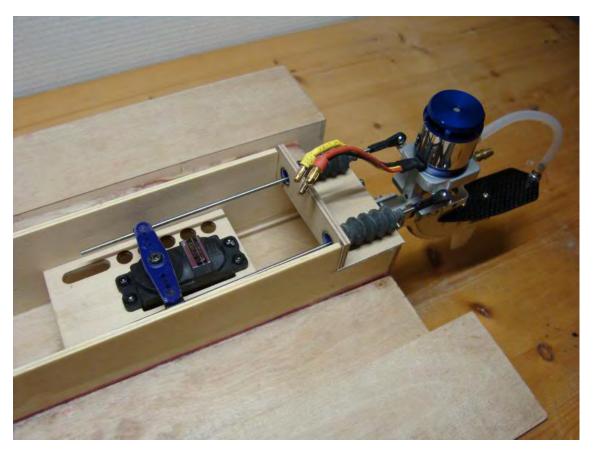








Modifying the back of the tunnel a bit for more room for the steering links:



And the hull so far. The servo plate is not glued yet. It will move more backwards finally.

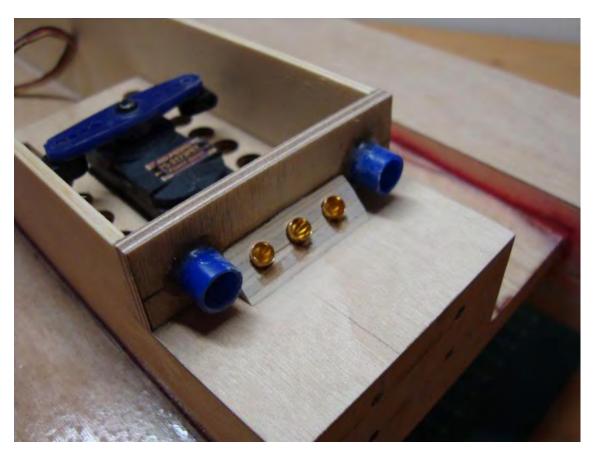


Here's the next update, build post #6

Making the cowl mold:

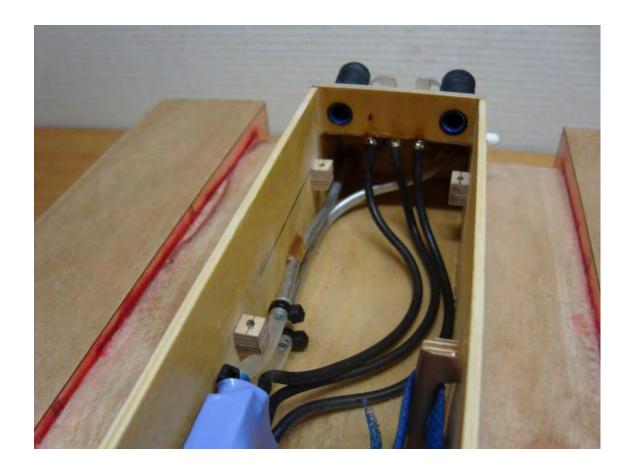


Power plugs from esc to the motor:



The hull with electronics installed:





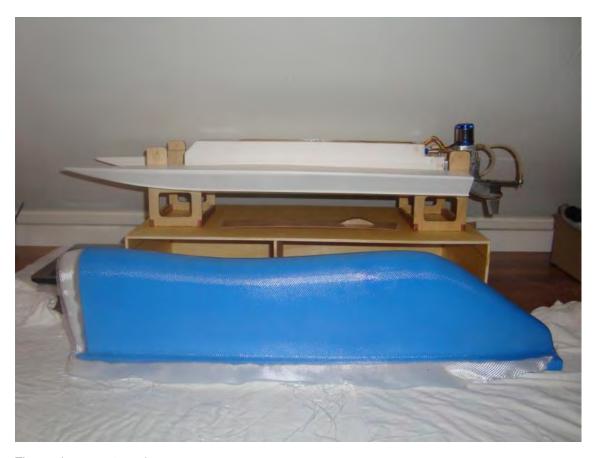




The mold is finished:

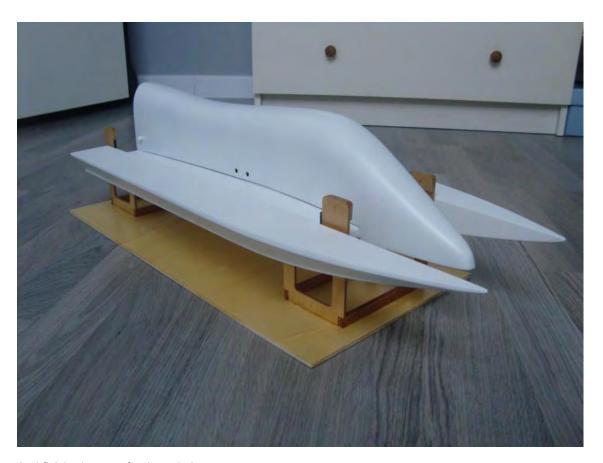


Applying 4 layers of 110 grams/m 2 glass fabric over the mold to make the cowl:



The cowl came out good:





And finished except for the paint!



It runs very well. The hull runs nicely above the water and turns very sharp. Top speed is 31.5mph. I'm still experimenting a bit with the setup to improve the performance. But so far I'm happy!

Here's a video:

Cozy F1 Tunnel - 6th run (2 min 4 sec)



If anybody is interested in the plans (PDF) send me a message. I share the plans for free.



I made a template for the cockpit window from some thick paper. Just put it on the cowl and mark the outline. Then masking it with some fine line tape.

