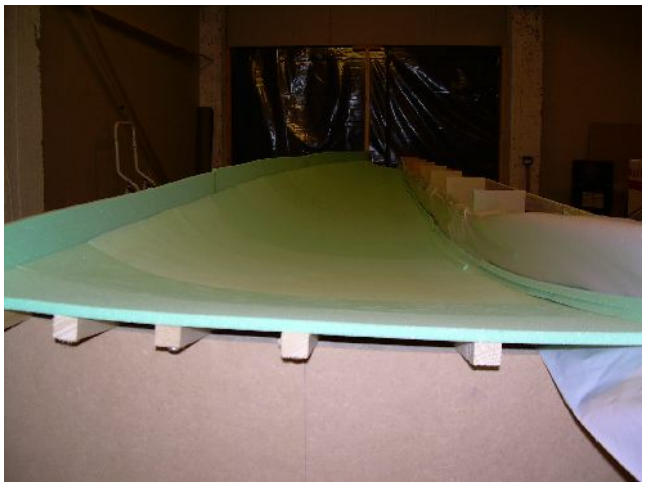
Building of the F-22 #11

First I built the workshop in an old basement earlier used for pig's manure...

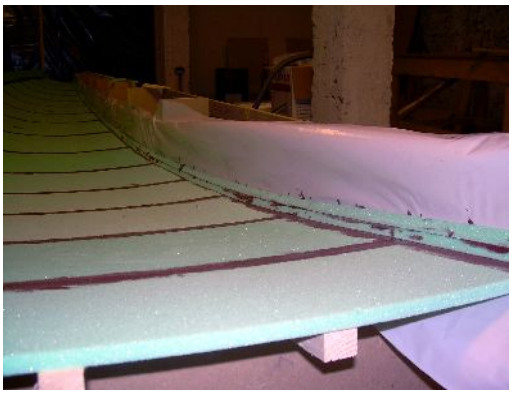



After the strongback and the formframes were in place the planking of the first float half started




Laying the foam with a little extra along the keel line, and with a Dremel cutting out for the airtight seams. I tried to make an airtight seam between the foam and the deck flange form (covered by a plastic film) but this later proved not to work as I hoped.

Then I filled the grooves with bog and covered it all with vacuum film.



This turned out not to work at all. Air entered the bag diffusely and there was no way to tell from where. I had to make some panels while thinking, in order to come up with a solution to the technical problems.

The vacuum pump


Overflow chamber with removable bucket and pressure gauge


Testing bog vs no-bog


Infusing all bulkheads for both floats in one panel, both sides simultaneously

Even more enthusiastic about the vacuum process and found out there is no way to make a tight seal between foam and vacuum tape, there has to be a line of bog in between. But I made some nice bulkheads.

Laying up for infusion of bulkheads, first the reinforcements

The finished panel, 239 cm by 100 cm

Trial fit

I use a hybrid of aramid and carbon as the basic fabric and carbon in all reinforcements, hence the strange colours of the laminate.

Finally I achieved vacuum on the float half:

Basic fabric

Reinforcements and bow stringer with UD carbon

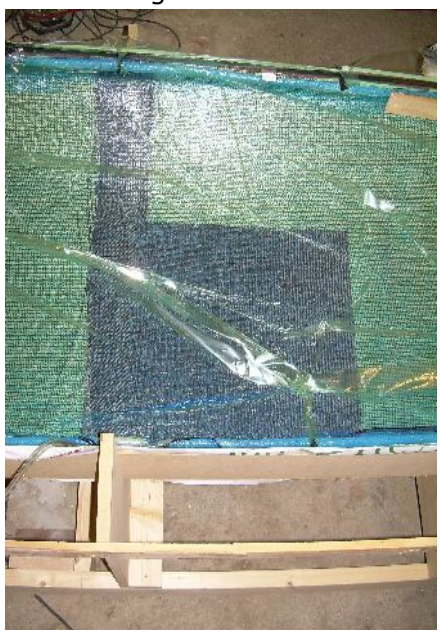
All layers in place except the deck flange

Peel ply

RDM

Vacuum bag

Infusing, a cat builder inspecting the process



Backing for the carbon shroud

The infusion worked very well, but I will change in and out the next time to work against the gravity (to obtain a higher pressure difference at the end of the process). Henny, my main tutor and source of inspiration in this infusion process, confirmed that this was the way to do it. I will also make some new arrangements in order to include the deck flange in the infusion, and possibly the backing plate for the carbon shroud.

The infusion was celebrated with family and friends and Champagne on December 3rd...

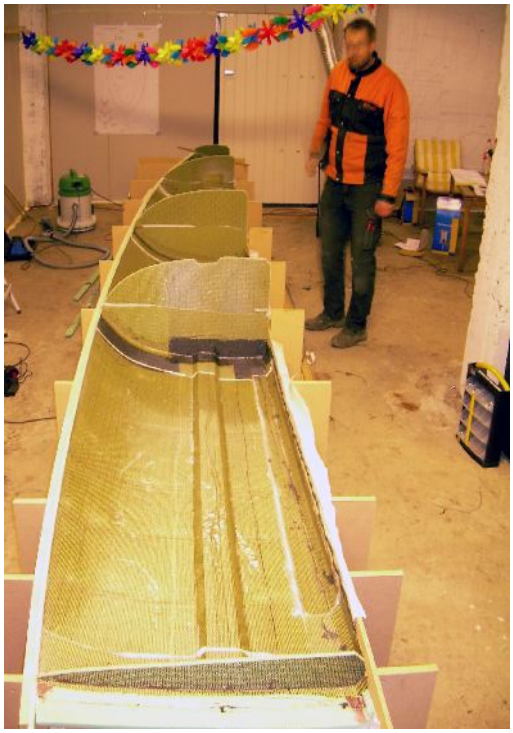

Tearing off the vacuum film and RDM, I'm the one with the beard.


Laying up the deck flange by hand, lots of dirty work and 2nd grade result. I will lay down one layer before infusion next time, to use as an air tight form.


Setting up and gluing the bulkheads in bog.


Laminating bulkheads and vacuum bagging the shroud backing plate

Finished and ready to leave the form frames! Came out as hoped and expected, I have not weighed it but a guess is around 12 kg on this part (can be held with one hand straight out).



I'm looking forward to start on the next half. There is a problem with the time though, everything would have been easier if I didn't have to show up at work all the time...

Anyway, to me it is more important that I make a boat with little room for regrets about things I didn't do than to finish as soon as possible. I have a Telstar 26 on the water, and a Snipe, and I enjoy building!