



Southwind SF20 Cuddy Cab Renovation (P-3)

Part 3 of 3, by Ben Kincade

We've all thought about it, talked about it, dreamed about it. And with hard work and no little resolve (especially when the going gets rotten) it can work out well: a bigger, better boat - yours, for a lot less cost.

Okay, the floor replacement had been planned out, the electrics were all but complete and we were well on our way to getting the boat back in the water.

This chapter will have a look at the underfloor structure itself and the fuel tank & lines and why we made the decisions we did.

Firstly to the new stringers and bulkheads. Chris straight up suggested that we use 19mm marine ply as it had the extra strength over the 16mm ply some others had

suggested. Now, I am told that the only difference between structural ply and marine ply are the glues used to hold it all together. The marine ply glue is resistant to water ingress.

Some fibreglass businesses will argue that structural ply is fine because if it is sealed properly in the first place then water ingress is not an issue. And they are probably right in saying that.

However, as I was still feeling just a bit 'burned' by the whole ply rotting issue, using marine ply seemed

like a safer way to go; bugger the extra cost.

Chris' apprentices then leveled up the boat on the trailer using a laser level before measuring and rough cutting the new stringers, bulkheads and braces. This process was fairly time consuming in order to get them just right and it was several days later before all were being held in place prior to any fibreglass coatings.

We had opted to make use of the forward well in the cabin to be an underfloor esky and so drainage from this esky

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through to the bilge was going to be something we had to get right. There would be nothing worse than a dead fish smell beneath the floor that no matter what we do we just can't get rid of.

Adrian and I had first thought we would simply keep the whole underfloor well drained and clear all the way through to the bilge with no possible obstructions.

Bat said that he ran a similar underfloor esky in the Valhalla and suggested we put a big 40mm bung in the esky and then a correspondingly large hose running all the way to the bilge.

Chris on the other hand was leaning towards cutting a bit of 40mm PVC in half and glassing it in for the full length back to the bilge so nothing could get caught anywhere.

The final decision still hadn't been made on this when we arranged for Norweld to come down and measure up to fabricate the new fuel tank. We wanted the drainage to be as good as it could be for the boat's design, but I'll come back to this issue.

The 170ltr tank that was original on the Southwind was made of stainless steel, but was only 2mm sheet and for a tank that was nearly 2m long, only had two baffles in it. Stainless steel is the duck's nuts when it comes to underfloor marine fuel tanks, but, not apparently if it is too thin, and in the opinions of several fabricators, 2mm was borderline for this size tank and could be a risk of weld cracks due to flex.

Now, this might be correct or might not. I'm not in a position to offer an educated opinion, but I hadn't seen any other reports of cracked fuel

tanks on Southwinds before, and these tanks were no doubt used in quite a lot of boats in the early 90's and beyond. Either way, we wanted to have a larger tank.

The options were that we could get this one extended or we could have a totally new tank fabricated in 3mm aluminium for not much more. If we went with the tank extension we limited our volume options to a length extension as the fittings were all on the top of

explain why the tank was bolted to the stringers at the top and not sitting snugly on the hull while secured on top to stop movement.

I'm guessing this was also a cost cutting measure, but I'm not sure. Either way, we now decided we wanted a new custom designed aluminium tank that would fit the inside hull profile properly and would not only be longer by at least 30cm, but higher by at least 7 or 8cm, quite a lot of volume when added up.

“This would possibly explain why the tank was bolted to the stringers at the top and not sitting snugly on the hull while secured on top to stop movement ”



the tank so we couldn't lift the height. The bottom of this tank was also a typical V shape due to the hull. And this is where we found that the V angle was the same from front to back, whereas the hull deadrise angle changed in this length. This would possibly

Enter Norweld and some good advice from Earl.

First up, in raising the ceiling of the fuel tank, we would need to have the fittings for the filler and the fuel line coming out the aft end of the tank, instead of on the top.

Earl suggested that he