

# Cargo Proa Prototype

## Building Blog



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Rob Rassy (who also took the pics)

We continue to be impressed with the size and weirdness of the vessel our labours have produced. It's probably a form/function thing that gives it the radical business like appearance, but whatever it is, it will attract attention when first sighted. The current focus is on getting the two mast bottom sections built so that we can get things aligned and completed as we proceed with the assembly. Lately Rob seems to be constantly cutting and sanding carbon strips as each day we glue a bundle of pairs together. It's quite impressive how much carbon is going into the masts, as well as time and effort. After helping Rob with the carbon gluing in the mornings I have been fitting dummy stub masts, cutting "V" gaps in the WW hull and lifting the beams into place. Once the beams were fitted and photos taken I parked my car under one of the beams to show the clearance and prove we are not adverse to the occasional publicity stunt. To get an overall perspective of position and scale one of the rudders was put into place as well. On Friday Rob took a break from his carbon chores to trial fit the deck piece and help me lift the toy box into place. The work has both a fun and daunting aspect to it now, as the more we assemble the more we realize how many extra jobs need to be done.

Rob D

We are at the stage where many of my "no need to be exact, if it looks right, it probably is", "we can sort that out later" and "no idea, let's hope for some inspiration when it is assembled" jobs are coming home to roost.

As well as getting the top and middle sections of the first mast built, we rough assembled the boat for a video presentation next week. This involved Rob R putting the beams, cockpit and toybox in place. It is starting to look like a boat, although not much like anything currently available.

The pultruded strip mast build method is still a WIP. Getting better, but not yet ideal. We are doing more hand laminating and less infusion or vac bagging wet laminates, which adds a couple of kgs, but makes strip alignment much easier. Laying light laminates over a tube is a rare instance where hand laminating can give a better product than infusion as the laminate does not get crinkled. It will be interesting to test them and see what gives. The bottom section is nearly ready to roll, then we need to figure out the best way to add more strips to it.

The cockpit is a sheet of infused fibreglass over a net to reduce the number of strings, keep the crew dry and prevent things falling through it. The plan is 6 strings fore and aft tied to the beams and ~40

athwartships tied onto the cabin side and the toybox. For the video, we set it up with just 2 strings fore and aft. It does not look quite the way I envisaged it, if more strings don't work, we may need to add some stringers.

The toybox is big. It is going to require some imaginative support once it has anchors, tyres/fenders and other stuff in it. Plus the winch loads and people sitting on it.

Rob R cut the slots in the ww hull decks for the beams and came up with a better way to fair them in. He also made temporary masts to support them on the lee hull. The beams slope to winward and look decidedly weird, but have over a metre clearance on the lee end so should not hit any waves and have plenty of room to get the tender under. Filling in the rest of the space between the beams, the tender and the lee hull is still in the "waiting for inspiration" basket. We also need some more standing room at the masts unless we can make sail raising/lowering/furling controllable from the cockpit. The first 2 are easy enough, furling not so much, especially if the sails are epoxy/fibreglass cloth, which is (maybe was) one of the options to be tested.



4 cyl car of beam clearance



Dolphins view



1st beam fitted



Rudder fitted



2nd beam fitted



Toy box in place

