Bo Jest

23 June 2006



Here are some photos of my Bo-Jest construction. I started taking pictures a bit late in the process. Here is the hull frame ready for fairing. The keel is a solid piece of DF, straight grain without any knots. The wood that I'm using is DF. It is very plentiful up here in British Columbia, Canada.



Here is a stern view. I have already started fairing the chine. I increased the length by 10%. The boat will be just shy of 20 ft.



I messed up with my chine angle to the stem, so I added another piece so that there is enough wood for fairing.



I decided to add a piece of 3/8 plywood behind the chine near the stem. It just gives it a bit more strength and it won't spit when I screw on the side planking. The second picture is the faired chine with the added piece.



I decided to scarf the plywood sides together rather than butt them together. Here I'm practicing with a couple of plywood strips, just to make sure I'm doing it right. Glen-L Boatbuilding with Plywood book gives good instructions as to how to do this. The glue you see is PL Premium PU glue. It's easy to work with, waterproof and strong.



Here are three sheets of 3/8" plywood scarfed together. I used a hand held electric planer to do the work



Here are a couple of photos of the sides being put on. The first side was much easier than the second side.

12 May 2006



I sealed up the joints on the chine, sheer, and frames. It was much easier to do it with the boat upside-down and no bottom planking. You are looking at the transom and the side.



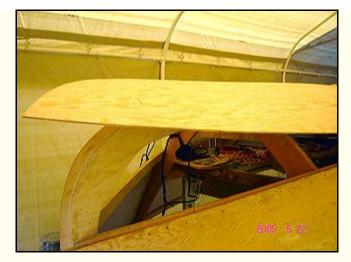
That gives me six layers of ply. 23 May 2006 Everything has been faired and I've started to put down the bottom plywood. The whole bottom was fitted with two layers of 1/4" DF.



We are putting on the first layer of $\frac{1}{2}$ plywood. The blocks are to hold the first layer down while the glue dries. The entire first layer will be glued down, with the second layer glued and screwed.



Here is my Dad (retired cabinet maker) helping out with some final fairing before the front sheet goes on.



This is the first bottom front sheet to go on. These sheets are tricky to fit. It took a few hours of cutting, shaping and measuring to get it to fit just right. Take your time.



29 May 2006

The first layer of ¼ inch plywood, forward bottom, being glued in. You can see the transition point.



Once the pieces were fitted, they bent into place very easily. I didn't have to wet them at all. You can see that I tried to extend the battens as far as possible.



Here is part of the second layer of 1/4 inch plywood already glued down. The aft plywood is easy to put down compared to the forward layers.



Here are a few more pictures of the "Master Boat Builder" fitting the second layer of ¼ inch plywood...





31 May 2006



Starting on the skeg. It's made from a combination of oak and DF. I'm creating the shape in the workshop first, then I'll do the final shaping and planning once it's glued on to the boat.



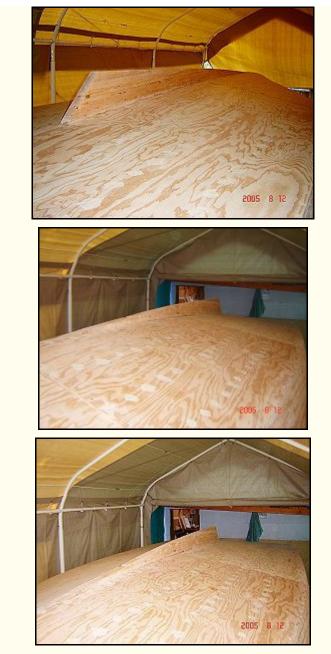


Here the hull is flattened so the skeg will mate to a flat surface. The skeg in this picture is not glued, only temporarily screwed for fitting purposes.



The skeg is now glued and screwed to the hull. Only a bit more sanding and plaining need to be done.





Screw holes are filled and reading for final sanding. Fiberglass is next.

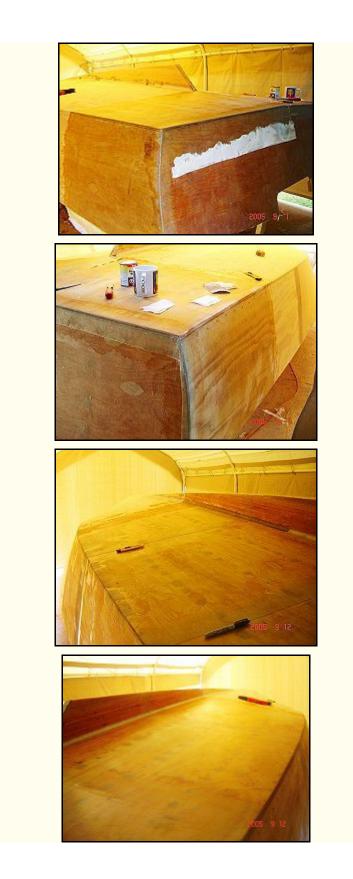
5 June 2006



Before I started glassing on the boat, I decided to practice on a test piece first. I used epoxy resin that I got from Massy's Marine in Ladner BC. (very helpful folks). Ron at the store advised me to use two layers of 6 oz cloth, in case I ever wanted to pull the boat up on the beach. The cloth was not wide enough to go the length of the boat, so I went sideway instead. Glen-L's How to Fiberglass book is very helpful. I also used a manual that the West System puts out on glassing wooden boats. Everything went quite smoothly.



I rounded the inside edges with a mixture of epoxy and silica.





The boat will be on a trailer, so I don't need antifouling paint. I used a two part epoxy paint manufactured by Interlux. (nasty stuff). She is now ready to flip over.

8 June 2006



I got about 15 guys to help me flip it over. I didn't want to take any chances. I built a frame around the outside of the boat to support the sides.





Here are three of my five little ones already trying the boat on for size. There is always time to build a boat, even if you have five kids. (plus a fantastic and understanding wife)

6 September 2006



The bottom is painted with marine enamel paint. The framing is installed for the deck. I increased the area of the cabin by about two inches by decreasing the width of the walk around deck.



Fitting the plywood for the deck



My little helper



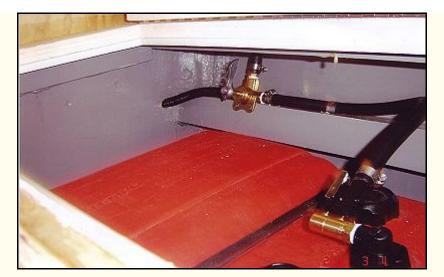
Facing aft, the two sections for the port and starboard fuel tanks are completed. Later there will be cushions on top for seating. The motor well will hang a Yamaha 9.9 high thrust outboard. Below the well will be the battery compartment



This is looking inside the fuel tank compartment.



There will be two 6-gallon tanks.



I installed a fuel selector switch.

6 September 2006



The frames have been glued on for the bulwark. The railing is next.



Most of the railing consisted of two long pieces of DF. I didn't put in pieces between the frames for stability because the decking would be added to provide the stability.



Going around the corner required thin pieces of fir 1/8 inch thick.



This required two layers of 1/8" plywood to make up the tight corner.



The decking is straight grain, old growth DF planking that I got from an old house that was being renovated. These silly people were going to throw away 300 sq feet of beautiful flooring. Luckily I saved it. I used marine polysulfide caulking. It's a bit expensive, but very easy to work with.

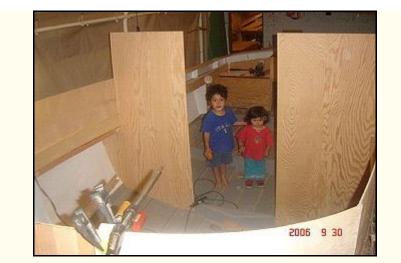


Here is the continuation of the decking. The screws were removed and the holes were filled. Installing the decking was tricky and time consuming. However, now that it's completed, it very nice and worth the effort. (more pictures to come)

26 October 2006



I have installed (with my two little helpers) the two bulkheads and some of the bed framing for the trunk cabin.



Looking aft.



This is the front of the trunk cabin. I'm gluing on DF strips. They're 1 $\frac{3}{4}$ inches wide and $\frac{3}{16}$ inches thick. They will be on the entire outside of the cabin.



This is one of two storage closets in the trunk cabin. Its made from birch plywood with mahogany trim.



The deck is made from 3/8 thick Douglas-fir and glued down with PU glue. I made the cap rail fit the entire part of the stem.



This is the cap rail looking aft. The curve section was made with 1/8 thick layers glued together. The decking was very time consuming to install, but worth it.

15 January 2007



Most of this boat has been built from recycled lumber. I just picked up an old workshop bench made from old growth edge grain Douglas-fir.



Here is the bed inside the trunk cabin. I have storage on each side plus an access to fill my 15-gallon water tank.



Here are the two beams to hold up the roof. It's some of that old DF.



The attachment to the front wall.



Finishing up the sides and adding a 6 inch portlight



The wall is not thick enough so I put a pine insert.



I covered the top of the trunk with ¼ in plywood. I found that 3/8" was too difficult to bend. Also, I found that 3/8" put a lot of downward pressure on the two beams.

8 February 2007



I trimmed the edges of the trunk cabin with a router. The opening is for the hatch.



This is looking forward in the trunk cabin. The ceiling will later be painted white with the sides and frames stained and varnished.





3/8" plywood flooring will have ¼" inch DF strips glued on top.



I made a floor opening so I have access to the hull. The glue you see there is Pro-bond wood glue. It's stainable and weather resistant.

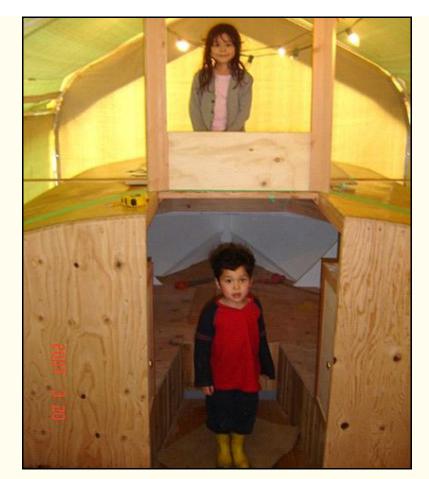
8 February 2007

I picked up my boat trailer from Road Runner trailer. They were very helpful and friendly.



The front window being fitted





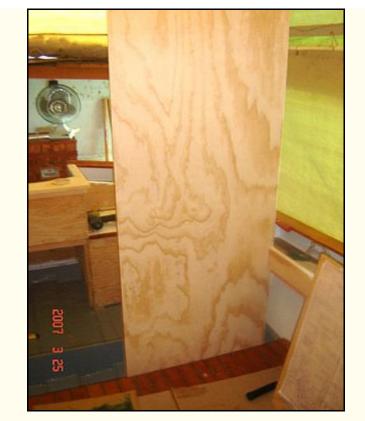
Two of my little helpers



The window frames are one complete unit. The corner posts are made from one solid piece instead of two pieces.







The door is going to be in the middle, so this is half of the back wall.



Sorry about the light, I'll make sure they're off next time.

19 April 2007



Here is the railing being install on top of the bulwark. The curved section is made from six 1/8" layers glued together.



Trimming the railing to the correct width.



Here is a picture of the motor well. I installed aluminum plates so the motor does not hang directly on the fiberglass. The tube on the left hand side is for the steering cable/rod.



The window holes and frames are made before being installed on the boat.





The back wall is installed.



Framing up the helm.

8 May 2007



The helm is finished and connected to the motor. The top is removable so I can later put in gauges and have easy access for maintenance.



I bought a used 2002 9.9 Yamaha High Thrust.



I'm finishing up the cockpit floor with an access door. The boards (oak) are 3 inches wide and ¼ inch thick. They are just glued down.



Here is the prep work before applying the caulking. The tape keeps the edges nice and clean.



Marine caulking is \$20.00 per tube, so instead I used polyurethane roofing seal at \$7.00 per tube. It's waterproof and does not come off.



I've installed 6 hawes pipes. There are three on each side. I added extra support on the inside of the bulwark to accommodate the extra thickness.

29 May 2007



This is the hatch that will be on top of the trunk cabin. It's made from red cedar and needs a couple more coats of varnish. The insert is a piece of laminated glass.



I hired some top notch painters. (cute ones too!)



I extended the roof to cover the cockpit area. Eventually that will be enclosed with custom vinyl sides



Looking up at the extended roof.



I got a couple of discarded mahogany bi-fold doors and made my cabin door. I saved about \$250 in material.



Here is the finished product.

21 June 2007



The staining and varnishing take time. I like the natural wood look.



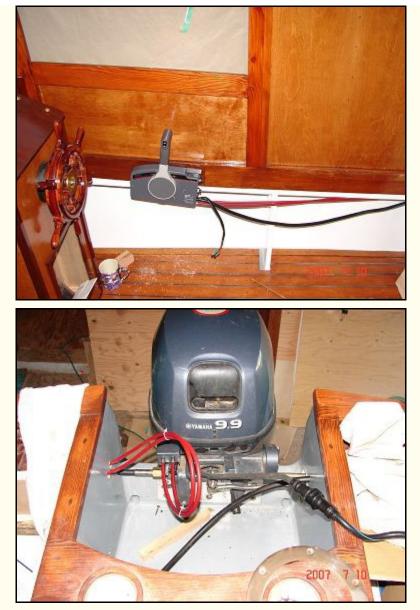
Underneath the finished roof.



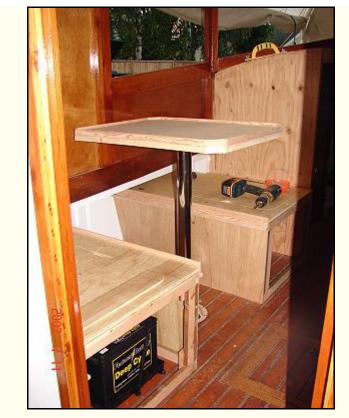


The window frames are made separate, then finished and put in later.

31 August 2007



Hooking up the remote for the outboard.



The table from the dinette will go down for some tiny sleepers. You can see where the batteries and electrical will be placed.



31 August 2007



The galley cabinet taking shape. There will be a small twelve-volt fridge in there.



All of the windows were put into frames which were then attached to the boat.



We're getting the boat ready to be put on the trailer.



On the trailer and a perfect fit. There is a lot of construction happening with both my neighbor and me building new houses.



Here it's on its way to the water.



The S.K. are our family initials and "Ohana" means Family in Hawaiian.



Getting ready for the first cruise.



I'm guessing that she cruises about 5 knots. The waterline is exactly where it's supposed to be and it sits perfectly straight in the water. Fantastic design!

31 August 2007





I would like to thank all the people that helped me make this possible.

First my family, especially my wife for giving me all the time to build this thing.

To my kids for helping me build and paint.

To Stan, Thomas, and Ben for supplying me with high quality (free) lumber.

To my dad for all his help and woodworking expertise.

To my mom for helping watch the kids. To my mother-in-law and father-in-law for also watching the kids.

Thanks to Glen-L for all the tech help over the phone.

I'm having an enclosure for around the cockpit. I'll send pictures later.



Here we are at Port Browning Marina on Pender Island.



Cruising around Pender Island with the kids on the





Scenes you can only see from a boat.



The enclosure was made by John Floyd in Ladner BC. It's like adding another room.



Some more cruising pictures...









If it wasn't for this person (my lovely wife), this boat would have never been made.

21 November 2007

Dear Glen-L

I just had my Bojest surveyed and it was valued at \$60,000.00. I didn't expect that. All my materials including trailer and engine cost about \$19,000.00

Rick Klemm

14 January 2008



Here is "S.K. Ohana" waiting on Pender Island for the spring and summer boating season. As time goes on I'll do some winter boating.