

GP14 Self Build

Hello, my name is Dave and being retired two years and aged 70 I have started to fulfil a long time wonder/dream.

For my 70th birthday Sue, my wife, gave me a delightful little book called "How to build a Boat" by Jonathan Gornall. This book does not, however, actually tell you how to build a boat as it's more about his efforts over the last two years to build a clinker-built boat intertwined with his life as a boy and the fact that he is now a new father at the age of 58. Realising that he may not be around for too long he decides to leave something which will outlast him and provide his daughter with lots of good memories.

I have two sons Mark 48 and Luke 41. This last December either side of my 70th on the 12th three grandchildren were gifted us. Marks twins Samuel and Evie born on the 11th and Luke's daughter Holly born on the 14th. Will they remember me, I think back to my younger years and my own Grandparents realising possibly not. Can I rectify that, may be, and so to take a leaf out of Jonathan Gornall's book I decided to build a boat.

After a lot of research I realised that a clinker build was going to take too long and a stitch and glue seemed too simple. The GP14 though stood out from the other dinghies as I realised there is still an active racing and cruising fleet around the country. And so to sourcing a Self-Build Kit.

David Rabbetts



Drawings for the build were obtained via a pdf from the GP14 Association-*thank you Julie*. I then got these printed up to A-O size for easy reading, although not to scale.

March 2019

First job is to make a build frame, but realising I would be tripping all over the place with a frame on the floor I decided to make a build box 4.8 mtr long x 60 cm wide and 50 cm high. It would also save bending over too much (dodgy knees). The only disadvantage to raising the building process was the need to climb up onto the boat to plane the ply skins flat ready for the keel.

Using the dimensions from the drawings I proceeded to fix timbers across the build box at all station positions.

The Kit was purchased from Phil Hodgkins of Ginger Boats at Nichol End Marina Keswick. We picked the kit up in the middle of April 2019.

Phil offered the Kit in various stages of finish which would leave me with doing less or more of the finishing to the hardwood sections. Not being from a sailing background and even less familiar with the terminology I decided to go for a flight cut Kit. Phil is always at the other end of the phone or email to help with the build from start to finish also providing photos from some of his builds.

I soon realised that not all the bulkheads fix to the positions as mentioned on the drawings. Check with the Kit supplier for any deviations in positions of bulkheads. You also need the set of measurements given to the kit supplier when his boat was first measured by the GP14 Association.

At each end of the build box I decided to fix a timber already marked off with every keel to



baseline measurement. These were fixed to one side of the centre line so a string line could be pulled between and bulkheads lined up.

I started using a laser level fairly early on in the build and this negated the need for the string line.

April 2019

Before fixing any bulkheads in position I decided that assembling the Plate case and splines would be best done now as the build box could be marked up with all the necessary measurements

Finishing of the internal face of plate case was best done by Gingerboats as an extra.



Transom First on

I decided to make temporary bulkheads for the positions where the floor bearers are fixed using measurements, I calculated from the Kit's finished sizes given by the GP14 association.

All bulkheads when in position are then braced given a very sturdy build platform for the Floor bearers (FB), Spline and Plate case then Hog, chine and gunwale stringers.

May 2019

Floor bearers on



Plate case and splines next followed by the Hog



June 2019

Before shaping the hog I fixed the skin stringers into position as they help to achieve the correct angle when planning the hog to shape.

So far, no screws have been used in the actual construction of the dinghy apart from some temporary ones to hold the Hog in position while the epoxy sets. All holes are filled with slithers of cedar and epoxy.

The fitting of the stringers at the Stem is done with care, nibbling a little at a time until a good fit is achieved. I found the Japanese Hassunme Crosscut Saw to be ideal for this purpose.



Up until now, no steaming has been required on any of the timbers

With all the stringers fully fitted and planed to shape came that pleasant feeling of achievement now the shape and size of the dinghy can be clearly seen.

Summer is upon us and the garden takes over from the GP14 build not to mention visits from the twins.

Next instalment: "How" many cramps do I need?



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How many cramps do I need? - Following on from the last article. The chine and gunwale stringers have all been planned to shape with care being taken on the chine stringer towards the stem to accept the two ply sheets that butt together. The stem itself has been carefully planed until the leading edge is quite fine allowing for the regulation width.

Attaching the ply skin - Starting with the aft bottom sheets work out where the scarf joints will be and place a solid support fitted flush between the hog and chine stringer.



This is done in preparation for fixing the forward bottom sheet at the scarf joint and so making sure this joint is tight when glued.

With both aft bottom sheets fixed I turned my attention to the dreaded front sheets which need to bend nearly 80 degs in toward the stem (An impossible task I thought at first, then I remembered many Wooden dinghies have been

built) A cheap wallpaper stripper was purchased so as to apply steam and heat to the forward part of the sheet. I realised that the steam would only penetrate through one laminate of ply but all help is going to be appreciated. I did a dry run (no epoxy) on port and starboard sides and in doing so wondered How many cramps do I need. Twelve more were promptly purchased.

Care needs to be taken at this stage as during this dry run I knocked one of the starboard cramps off near the stem. This resulted in a split appearing in the ply (approx. 7 cm. long) The Assembly notes say not to worry about





splits and so this proved not to be a problem during the epoxying of the forward skins.

Once the epoxy on the bottom skins has set the centre joint needs to be planed to accept the keel and once it is fixed in place with s/steel screws I decided to fix the bilge keels before attaching the side skins as access under the assembly would be desirable as the bilge keel screws fix to blocks glued to the inside of the skin.

The side skins can now be attached with careful attention given to the stem end of the forward sheets where the side and bottom sheet butt together. The dreaded split can be seen between the first and second washer.



A little careful attention is given to the keel at the stem to form a pleasing curve for the keel band to attach to. With all the keels faired in and the skins all sanded it is time to turn the dinghy over ready to fit the floor.

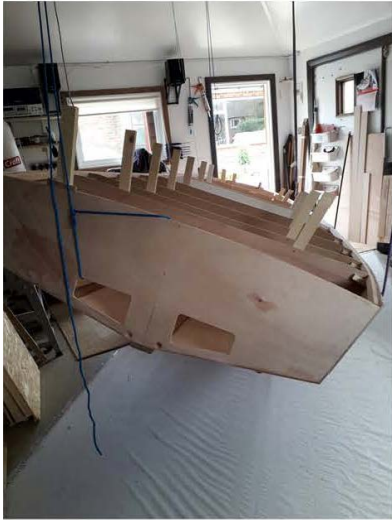
Although turning the dinghy could be turned over by one person I employed the help of a neighbour (Just in case) I was able to place strops around the hull and hoist the hull aloft and then turn her in the strops. She was lowered into a cradle that mirrored the baseline to keel measurements meaning that the dinghy is (Level) and the inside fit-out can commence.

Before the floor goes in strengthening for the mast foot is required along with extra cedar timber strips to take all the floor joints. Once the floor has been dry fitted it's time to coat up all the under floor components with 3 coats of epoxy. At the same time 18 mm ply blocks are strategically fixed to the underside



of the floor to take the foot strap fixings.





Before gluing the floor into position the floor bearer positions need to be marked on the insides of the hull ready for the side tank bulkheads as these must sit directly above the floor bearers.

Being mid-summer and as temperatures have risen I was soon to learn that large amounts of mixed epoxy have a short pot life. If there are two of you then one mixing and one spreading is the way forward. Unfortunately there was just me so, how to keep mixed epoxy cool. I poured an amount of cold water in a bowl with a little ice and mixed three separate smaller containers of epoxy and kept this in the bowl of water until it was required, I found this to work. Once epoxy is spread thinly it can't heat itself up so quickly (by exothermic heat).



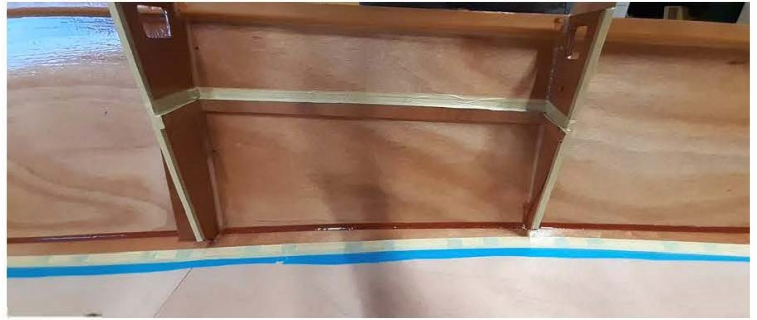
Floor in-all side tank bulkheads are glued and filleted into position directly above the floor bearers ready to take the side tank panels.

Although I read the instructions regarding fixing the side tank panels I decided instead of joining the two sheets together first before fitting into the hull it would be easier to first fit the forward panel and then the aft panel. Big mistake. Although easier to handle on their own for fitting purposes I ended up with a gap of approx. 20 mm at the joint. This necessitated the purchase of a new 8' x 4' x 4 mm thick marine ply sheet from Robbins, not cheap!! Clearly I hadn't thought through the implication of departing from the instructions. Lesson learned. LOL

The actual fixing of the side tank panels into the final positions with epoxy is best done by two persons as was the case. I tend to use a lot of masking tape to keep the epoxy from getting spread everywhere



A dry fix run just to make sure all is ready. Back side of the panels all epoxied before fixing into position. Where the panels join the bulkheads its best to leave the



epoxy off until the final fix.



I decided to epoxy the inside of the hull walls before fixing the side tank Panels as less room behind once in position. All taped up and ready to rumble. (Epoxy). Side Panel fixed and filleted. Side tank panel to Transom showing the Bung hole in the rear air tight tank.

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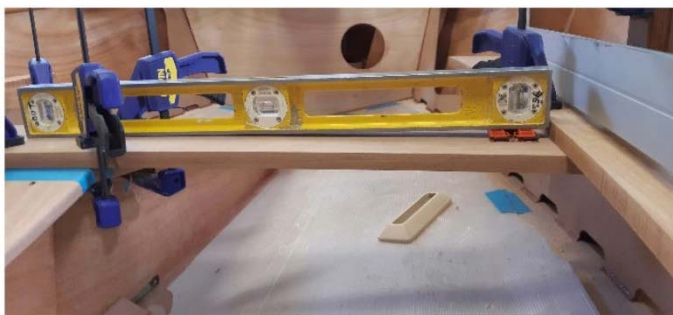
The internal fit out

Started January and completed end of June. This involved a good deal of thought regarding measuring once, twice and once more just to make sure. Also involves quite a bit of dry fitting (once again just to make sure, if you've not done it before)

Forward deck beam, king plank and stringers all glued in ready for cleaning off to take forward deck.



Rear deck beam, king plank and stringers ready for fixing. Notice the side tank panels not yet fixed as easier to work out position of rear curved beam and then cut slots in side tank panels. Slots need to be neat as these are the rear buoyancy tanks. Care is also taken to ensure all regulations are adhered to regards deck widths and depths.



The Plate case top, thwart and seat positions all need working and setting out beforehand as they are all interlinked. Also, the mainsheet post needs forming and fixing before the plate case top is fixed into position.



The Thwart curves down at the bench ends. This gives support to the side-benches midway. I must say this takes some working out with patience needed.



The thwart ends are fixed to the side tank panels via beveled and slotted Maple blocks. Forming items like this gave me much pleasure.

It was decided to take advantage of the new rule that came out earlier this year that allows the spinnaker to be stored through the decks. All measurements kindly supplied by Phil Hodgkins of Ginger Boats. These were used in conjunction with the rules about widths of side decks etc.

Forming and fixing the coamings around the mast chock was an interesting job involving laminating maple blocks to obtain depth of timber. Then routing and boring to form two curved sections. I cut a few spares, just in case!! Inner coaming support and one piece outer rubbing bead support have been sourced fairly locally and once these are all in position the 4mm deck panels can be sorted and rough cut ready for gluing.



Thankfully Phil had sent me two 4mm sheet for the decks that were mirror images of one another, the grain was of matching flower (joinery term). This gives a very pleasing look, helping to make the dinghy attractive.

Fore, rear and side decks are all mirrored.



Once the decks are fixed it's time to source the inner coaming material. Maple is probably best here as it's quite dense but, I'd used ripple sycamore for a table a couple of years earlier and liked the effect of the grain. This I managed to source at the end of an 8hr return drive to Ipswich and in the process pick up a session on a driver training course.

This sycamore was used on all inner coamings except for the pieces around the mast chock. Maple was used here.

The outer rubbing strips were single length pieces and I manage to attach these without temporary screwing them to their supports.



With all timber edges sweetened (rounded off) and necessary holes bored the process of cleaning up (sanding) begins and continues as I contemplate taking my three 2 year old grandchildren for gentle rows on the sheltered waters of the Solent next summer. Also thinking about paint and varnish coats as I'm told that finishing the hull and topsides can cost up to £4000 if done by a professional, so me thinks I need to invest in some rollers and tipping off brushes.

If anyone is thinking of venturing down the route of a self-build then I would be willing to help provide information and photo's once you've sourced a kit from a supplier. I think the work involved is within most people's grasp as long as you have some proficiency with wood cutting tools. Don't forget measure twice, cut once lol.

Full build

