

# Whereas

the first 6 weeks at IBTC were all about straight flats, winding sticks and being able to create a perfectly square joint, the second 6 weeks were all about curving edges, rounded spars, twisting wires and billowing sails. In these weeks, I was reminded that nothing about boatbuilding (or any of its sister aspects, such as spar making, wire splicing or sailmaking) has anything to do with being straight or square. In fact, nothing is square and nothing is straight. We talk about a square sail... there is not one square bit in any plane about it. We draw a grid with square lines to loft a boat... not one line on any plane that is drawn in there is straight. They dance around in a 3D space as if they have a will of their own. The curves of a boat, the camber of a sail, the twists of the wire and rope, these are the aspects that make boats addictive, alive, and beautiful.

So,

I decided to do something  
with this idea for my creative report.  
Therefore, the theme of this month is

## DON'T BE A SQUARE

I made a stop-motion video that shows a simplified version of spar making. I drew all the images and photographed them. I then digitalised them and made each frame by moving the images slightly compared to the frame before it. I put them all in order in a movie-making programme, and the result is here. It was a great project, albeit very time consuming. And I did not have a lot of time because my time at IBTC had come to an end and I had to move to Brightlingsea to start my placement at the Pioneer Sailing Trust. I found a house in Wivenhoe, thanks to a friendly student at IBTC. But first, I will tell you a bit more about our second term and the exciting things that we learned at IBTC.



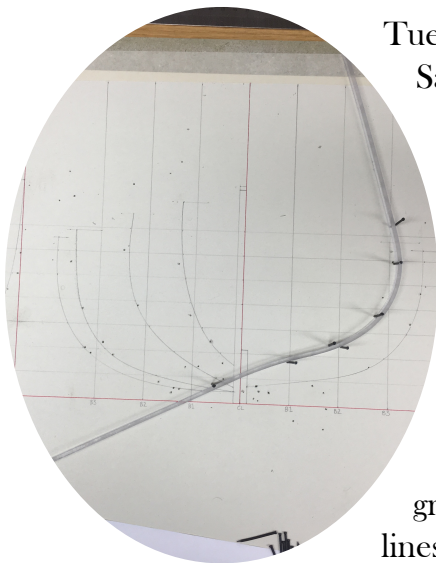
Spar making with Maynard in the first week was fun. I had done spar making before in New Zealand, where I made a bow sprite and two booms for main and mizzen mast. The process here was a little bit different as we first made a spar gauge and used that to measure up the sides. We made a boat hook as a final piece.



Monday we had a practice of hand tools. We used an electric belt sander, track saw, circular multitool, drill, and an angle. Rob explained to us the involved (such as dust, vibration, sparks/fire rotating parts that like long showed us how to use them



using power plane, router, saw, grinder. dangers noise, hazards, hair) and safely.

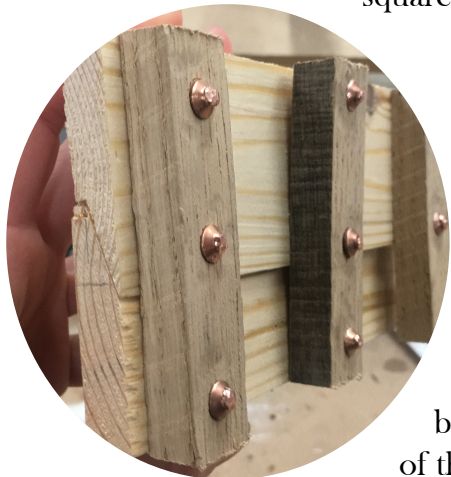


Tuesday and Wednesday we were taught the theory of lofting with Dave Sales. We were to loft a 9-foot stem dinghy on a small scale (wallpaper size). We first drew a grid and then Dave taught us how to read the table of offsets. The first plane we had to draw in was the profile view, meaning the side view of the boat. First the sheer (topside longitudinally), and then the stem and keel. Then the transom (aft vertically). This gave us the outline of the boat, seen from the side. The second plane we drew in was the fore and aft view, or the body plan. This gave us some wonderful S-shaped curves in the battens we drew our lines along. We used tiny nails to keep the battens in place on our paper. The third view we had to draw in the grid was the half plan, or, the boat seen from top/bottom, i.e. the water lines. These lines were taken from the body plan lines and the profile lines. It was great drawing a boat like this as you could really visualise the boat in 3 dimensions, as if you were flying through it any way you wanted. We then drew the lines

inside the profile plan, from the waterlines and body plan. The last one showed some nice tumblehome. Lastly we had to draw 3 diagonals. They were strange but fair, which was important as they show you if the lines you drew were indeed fair. If the diagonals were wobbly, you had to go back and correct some of the points you drew in the body plan. The accuracy level on this small a scale is very high, but we all ended up with beautiful drawings.



Thursday we did adzing with Maynard. It was amazing to see how well and precise you could shape a piece of wood with that big and rather frightening a tool. It wasn't. The adze was incredibly beautiful to use. It was hefty, true, and it did make your arms sore, but it was very precise when you were wielding it correctly. We shaped a stem piece with it and it was a good practice, because how else are you going to shape a massive piece of wood like that? Another one of those traditional boatbuilding skills that not many people have anymore... what's square about that?!



rebate, to give it a twisting effect. This was then offered up to the beveled edge of the next plank and riveted into place.

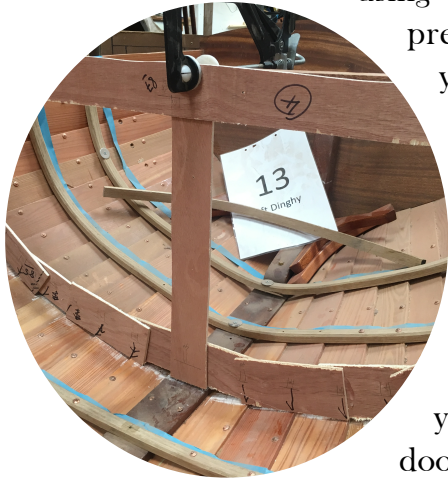
The next week we spent two days learning how to fit a plank. First we learned about clinker planking and how to shape the 'lands', i.e. the overlapping parts of a clinker boat. This was not easy as the bevel ran down the rebated end of the plank but also down from the



Second we learned in theory how to replace a carvel plank. It is made by using a rough pattern and dummy sticks to mark the edge of the plank. You'd rough out a shape and nail it

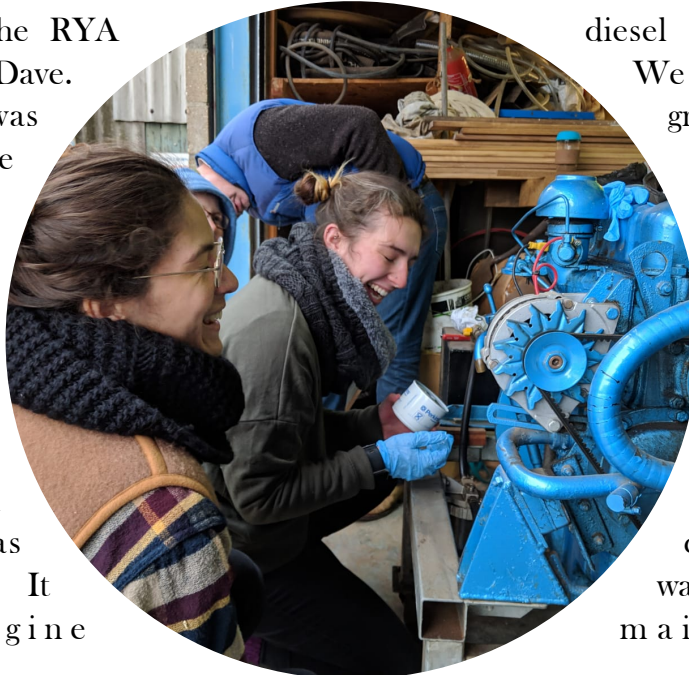


to the frames. Then you take your dummy stick and mark on your pattern how far the top and bottom edge is precisely, every foot or so. You transfer this to the wood that you are using and so get a precise shape of your replacement plank.



This process is the same for making any shape you wish. Pattern making, which we spent the next days doing, was very simple and very useful. A roughed out shape of the thing you want to make (perhaps with the help of a glue gun) and together with your [...] you can create anything you want... bulkheads, floors, doors, etc. Another one of those non-square skills.

Thursday we did the RYA course, again with Dave. practical, which was marine diesel engine the different systems fuel system, the the lubrication practical part, we bleed the engine check the heat exchanger and (cooling system), and change as well as (lubrication system). It for simple engine understanding.



diesel engine maintenance We alternated theory with great. We picked the apart by looking at it consists of: the cooling system and system. For the learned how to (fuel system), thermostat, the the impeller performed an oil changed the oil filter was a very useful course maintenance and



And then it was wire splicing!! The art I had looked forward to learning so much. I had once seen a guy in New Zealand do it and it had seemed so magical and at the same time so practical, down-to-earth and marlinspikey. I just had to learn one day. And that day had come. And it was as good as I thought... it was just as I thought - magical and marlinspikey at the same time. There was some technique involved,



which I really started to master by the end of the three days, but it wasn't difficult really. We learned the Liverpool splice, where you splice the strands back in with the lay of the wire. And also the Board-of-Trade splice, which goes against the lay. We also learned how to parcel and serve, how to seize an eye, and how to splice to length. Rob taught us with his usual calm and peaceful demeanour; he is a great teacher. I am very grateful for having had him as our tutor.

When our wire splicing course came to an end on Thursday we drove to Chatham in the evening and checked in to the Travel lodge next to the Historic Dockyard. In the morning, in sleet and wind and icy cold, we were greeted by the Head of Ship-keeping, Chris, who gave us a tour of the yard. Chatham Historic Dockyard is very old and very interesting. It is a fantastic place to go if you have a weekend to spare. There is so much to see and explore, really! Chris gave us a tour of HMS Gannet, HMS Cavalier and the submarine HMS Ocelot. He also took us around the Victorian ropery (where they still produce all kinds of rope today!) and the RNLI lifeboats display. The ropery was fantastic - it is 1/4 mile long walk. When you come to the end you can see strands of rope disappear into the distance. A great sight. And a great smell as well. They use mostly natural fibres, so it smells authentic and deliciously old.



We talked about the concept of a ship with Chris. Or rather, explored the question: what makes a ship a ship? Is it her shape? Her intended purpose? Her design? Is a ship still a ship if she doesn't float (anymore)? It made me think of Plato's idea of forms. For Plato, forms are more real than the world of objects, i.e. the objects that we perceive in our own world. He held that these forms transcend our world of substances and that this is the essential basis of reality. So, when Chris asked us, what is a ship?, I think he asked us a trick question. Because we know the idea/form of a ship, and we know that THAT is a ship in our mind. Yet the worldly manifestations of ships come in many forms. They are but reflections of what a ship is essentially. A ship is so much more than her form though, even her idea of form. It represents a whole world in itself! A ship is a world of ideas and dreams, both of the past and the future. It is a reflection of the human mind.

And when things couldn't get any better, there was the kind smile and joyful mischievous eyes of Tom Cunliffe. On Saturday, we were invited to a Traditional rig & navigation masterclass given by this man, who is a respected and well-known sailor and author. It was such a good day, because the feeling with which Mr. Cunliffe spoke about sailing and boats was very much a feeling that I knew and understood and recognised. I recognised it not just in my mind, but in my heart. That reassured me, because now I knew that I could trust that. The way he spoke about sailing was that it was simple, using your common sense, and trusting your feeling. It was the same feeling as when I was young and sailed away in my Optimist, going on grand adventures. You just had to make sure you have the wind in your sail, look around you and see where you're going, use your head, and trust your instinct. So simple. So true. A bit more

knowledge and experience has come my way since that time. It's easy to be distracted by and become uncertain from all that knowledge. The stories that Tom told about sailing put it right back to where it should be: in my heart.

Back at IBTC on Monday we were introduced to sail making & repairs with Lucy Harris. Lucy is a student at IBTC herself, but also an excellent sail maker. She explained to us about the various types of sails, sail terminology, different fabrics, and the ways in which you can shape a sail. Then, we learned how to 'flat seam' with a palm. It was much easier to do on your lap sitting on a low bench than sitting at the table. We did repairs to another student's old sail by darning, sewing on a patch, and stitching over some broken seams. Lucy taught us about roping (sewing a rope around the edge of a sail for strength) and how to attach reefing ties. We also did leatherwork and made leather oar collars, just like lacing up a corset (although I have only seen that in movies). I made a canvas bucket with a wooden bottom and also a protective leather sheath for my ax. On the last day, our new palms arrived so we spent some time revising and fitting the palm. Let the ditty bag project begin!

And suddenly, the last week of IBTC was upon us. Monday was a great day because we learned how to weld. We did this with Steve, who has a business and workshop just down the road from the college. It was only one day, so of course, a bit short to learn how to weld properly, but we got the basics of stick welding and MIG welding and came home with some fantastical sculptures.

Tuesday and Wednesday I spend some time on the lathe, which was something that I really wanted to do. Jenna and I both made a little bowl and some green wood mushrooms. I loved the lathe and would like to do more of it in the future.

The future... a formless energy, a blank canvas. But not a canvas, because that would be too square. No, a possibility yet without form - but with the ideas of form. Ideas which then manifest in the most unimaginable splendour of existence. So don't be a square. Don't be another brick in the wall. The reality of the world of forms is incredibly exciting and beautiful. Fuller, wider and more diverse than you could ever imagine.

