ZORA ONE YEAR ON Rhys Walters

To bring you up to speed if you missed *Zora*'s debut in *Flying Fish* 2019/1, we (Rhys and Niamh) have spent the last 24 months fitting out a 38ft bare steel hull called *Zora* (she had suffered a serious fire some years previously) while also working full-time, living aboard and getting some sailing in when we can. As anyone who has done this will tell you, this is no small task. In the first part of this saga I described how we found *Zora* in a yard in Baltimore, Ireland and, after eight months, sailed a still bare hull to Kinsale. We've made a lot of progress since then...



Zora en route to Kinsale in September 2018 as a bare hull

Niamh sitting in a cold, uninsulated saloon

In the past year *Zora* has gone from being a cold, noisy, empty steel shell to what can almost be called a home. Past are the evenings spent sitting in the bilge on freezing February nights fitting the cabin sole, or waking up to a frozen nose and condensation dripping in my ears ... to be replaced by a warm,





cosy, quiet boat, all thanks to 2in of spray foam insulation and a 4kW diesel heater. The steel scantlings and internal structure of the hull are now covered with tongue-and-groove panelling and iroko cabinetry, and the hammock I spent my nights in has been replaced with a bunk and 4in of memory foam, a very welcome change.

The first of the big challenges to overcome in the long and extended fit-out was to prepare the boat for her 2in coating of spray foam from bow to stern, which took several arduous months of planning and fitting wooden fixing points to the interior of the hull. The goal was to put enough of these fixings in place so that when it became time to fit panelling and cabinetry there would be points to which everything could be attached. Once this was complete it was a case of waiting for the weather to improve so that the contractors tasked with the foam spraying could do it, which didn't happen until late in April.

On the morning that the crew arrived to apply the foam, we moved *Zora* over to Kinsale village, secured alongside the pier (with permission from the always helpful harbour master) and the lads got to work. Getting the foam to the correct thickness and into all the tight and awkward spots of the hull proved a difficult task, but nine hard hours later (while I watched from the pub across the road) they tidied up their gear and went home, leaving a giant marshmallow of warm insulation on *Zora*'s interior. The effects were noticeable immediately – she felt warmer and quieter as we motored back to our berth, excited about the next phase of the project. That night we slept well, comforted by the fact that a major phase in the project was done and we could really begin the fit-out in earnest.

Once the insulation was done, visual progress happened quickly as we started to fit tongue-and-groove panelling over the foam, trimming it back flush wherever it had expanded beyond the fixing battens. After a lick of paint and some rough cabinetry

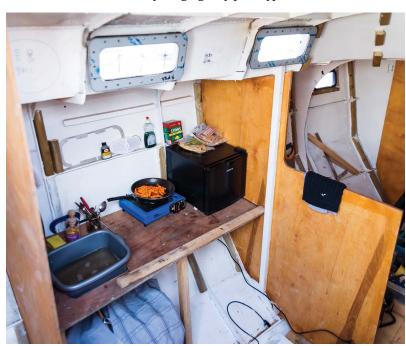
The saloon once the insulation was complete

started to go in, Zora really began to feel like a boat and less like a shipping container with sails. Some jobs took way longer than planned while others happened a lot quicker and



gave huge visual satisfaction, such as painting the interior to protect the wood and in some places fitting large ply sheets over the insulation. A rough galley frame was fitted, as was a chart table and saloon seating, and a good friend who is a joiner brought his talents aboard to fit the iroko locker doors. Some of the iroko we used for the fit-out was taken from a very old nunnery that was being re-purposed as a care centre for the elderly, and the saloon got a set of lockers above the seating area made from this reclaimed wood. Some of this timber was also used for the grab rails and the galley and chart table doors. The seating in the saloon was designed with removable backs so the lockers underneath can double as berths for visiting family and friends or can be used as secure and cosy sea berths.

A very rough galley prototype



While the joiner continued to work his magic on the finer points of the interior, I turned my attention to the wiring and other systems on board. Before the insulation was done I had added two runs of electrical conduit through the entire length of the boat, so that cabling

The wiring loom for the nav instruments

could be passed to various junction boxes throughout the interior. This made wiring the boat far easier, as it was just a case of pulling cabling through with a pull-wire and



organising it in the electrical cabinet. So far the interior lighting and the heater work, with other systems being added as the interior comes together. Two of the biggest challenges when wiring a boat can be figuring out what wires do what job and tidying up years of questionable work by previous owners. One of the many advantages of building from scratch was being able to design the electrical systems from the keel up, knowing they were done properly.

The saloon with tongue-and-groove panelling





The chart table with electrical cabinet installed

Another distinct advantage was the freedom to design own my navigation equipment. I am in the process of building a Raspberry Pi-based navigation computer with wireless display, weatherfax, autopilot and chartplotter, to name just a few features. I would highly recommend anyone interested in this sort of thing to look up OpenPlotter*, a quite amazing Linux-based software package. Cockpit navigation systems will comprise my tablet, which can duplicate the chartplotter wirelessly, while paper charts will live in the chart table as our primary source of navigation information.

One of the major missing components, and something we seriously wish we had fitted last summer, is the heads. Work continues on this important part of life on board while ply sheets are cut to shape and fitted in place. The goal with the heads is to have a fully-waterproof room that can be washed down in the event of the accidents that can happen in a heavy swell... Once the ply is fitted, a layer of fibreglass will be added from top to bottom to seal it, and a shower and toilet will follow. To ensure we will be compliant with the regulations in many parts of the world, a holding tank sits on a bracket behind the engine room waiting to be plumbed in. Thanks to both Niamh and me being somewhat vertically challenged we have plenty of standing headroom in the shower, which will drain into a sump and be pumped out. An important consideration was where to put the heads. We decided that it made the most sense to put it directly beside the companionway, to avoid soaked sailors coming off watch traipsing salty water all through the boat.

* An open-source software and hardware combination that can be used as navigational aids in place of a chartplotter on small to medium-sized craft. It works on ARM computers like the Raspberry Pi, is very low-cost and draws little power. My thanks to Rhys, who is knowledgeable about such things...

While working on the boat was our top priority over the past year or so, getting her out on the water for some sailing closely followed in importance. Since sailing a boat presents unique and interesting challenges such as navigating your way around rocks and other solid objects, cooking while effectively being under attack as different parts of the boat come at you from all angles, and making sure she actually goes in the (mostly) intended direction, it would make sense to have a well-organised chart table, a comfortable and secure galley and carefully planned running rigging before taking her out of the marina.

For almost the entire summer of 2019 we had none of the above. While this approach wouldn't work for an extended passage for anyone short of a sadomasochist, it suited us just fine as we sailed around Kinsale harbour, or to the Sovereign Rocks outside Oysterhaven, on the weekends when we decided that we didn't want to work. Zora still had very little interior at this stage, so we used a small butane cooker in the cockpit and slept on a mattress on the very early iteration of the saloon bunks. While this sort of sailing must sound like hell to most (and at times it was), it allowed us to get a very small but important taste of cruising, albeit within 15 miles of home. It also allowed us to test what little layout we had fitted and was a big factor in deciding how we wanted the rest of the boat to come together, especially with the rig and sail plan and how the running rigging was set up. Some of our best days on the water involved paddle boarding or anchoring beside our friends in Sandycove. Particularly memorable was a surprise 30th birthday for a close friend and having twenty people hiding in the boat waiting for him to arrive. I then took twelve of us out for a sail, anchoring nearby for swimming and lunch.

There are countless projects like *Zora* littering the boatyards of the world and, while I sat at my desk at work or in the bilge fitting different parts of the boat on freezing



Rhys at the helm on a sunny day

cold evenings, at times I was of a mind with the people who let their dreams fade away into nothing. But these weekend mini-cruises gave us the motivation and inspiration that we needed to keep pushing forward. While there is still a huge amount of work to do to her interior and onboard systems, we managed to squeeze in quite a few weekends on the water and, being relatively inexperienced, especially with just two of us on board, did the sensible thing and just went for it. We must have been quite a sight sailing around Kinsale and Oysterhaven as we learned how to anchor and pick up a mooring, but it wasn't too long before we got the hang of it.



The only problems we really had were on coming back into the marina, and in our defence the tides there are very tricky even on a good day. I thanked the steel plating of the hull for its strength a few times when coming into our berth...

At anchor in Sandycove, Kinsale



As many will know, the south of Ireland has some of the most beautiful, dramatic and scenic coastline in the world. We count ourselves extremely lucky to be cutting our teeth here and have taken full advantage of it. Oysterhaven became our weekend home as we took friends and family on day trips to go swimming and jumping off the boat. We also spent weekends there alone, sometimes taking our dinghy over to the Kinsale Hotel for dinner after a hike up the hill and through a small woodland, or sitting on deck watching the sunset. It's a hard thing to describe, waking up on your own boat at anchor for the very first time. There's a huge sense of accomplishment that never seems to fade and, whilst only a small taste of what we hope is to come, it has become a guiding light in what can sometimes be a real slog.



Below decks in late December 2019

Our plans over the next few months are mainly centred around the boat being on the hard so we can fit seacocks, repaint the decks and topsides, and finish off the fit-out for cruising. There is still a mountain to climb, but it is a far smaller mountain than two years ago. We are starting to see the end of the heavy work, and now the majority of the work is about finishing jobs, which is always gratifying.

I distinctly remember saying in my last article that we expected the project to take until mid-2020. Well, as I write it's already January, and it would take nothing short of a miracle to be sailing off to sunnier climes this coming summer – boats will be boats, and things are taking longer than expected. I think it's best to say that we plan to sail away in a year ... and just neglect to specify which year that may be...

Follow Zora's further progress on YouTube at sailingyachtzora.