NEWS FROM THE SHED



CF 45 Three Seas in Bowen.

I story PETER BRADY

his has been a momentous year in the industry and in the world in general to say the least with survival being the name of the game and then looking at ways to move forward. We have been able to hold onto our staff which has been our highest priority with the help of Job Keeper, allowing us to lower our hourly rate during the crisis, along with some shorter weeks and being flexible enough to work away off site. Working away from the shed has even extended to going up to Townsville to carry out a large repair job on a 29m FRP ex fast ferry catamaran now working as a restaurant boat in the Whitsundays. It will be relocated to New Zealand to become the corporate viewing boat for Team New Zealand during the America's Cup next year after some further modifications to her in Brisbane. During the time since Covid-19 arrived on our shores we have also launched Three Seas the Bowen based

CF45 ultra fuel efficient fishing boat, have undertaken a tidy up of the Leopard 45 power catamaran *Spot On* that we built 16 years ago, carried out repairs and modifications on a 13.2m FRP monohull fishing boat, built a number of high tech composite parts for the 70m yacht *Adix* and carried out more work on the 50m composite superyacht *Endless Summer*.

Unfortunately the launching of *Three Seas* was a very low key affair because it was right in the middle of the initial Covid-19 lockdown: no one was sure if the fishing or boatbuilding industry would survive and it would have been irresponsible at that time to have a public launching and celebration. This was frustrating for both the owner and ourselves as she was designed and built as a showcase for a new direction for fishing and workboat development and also as a demonstration of

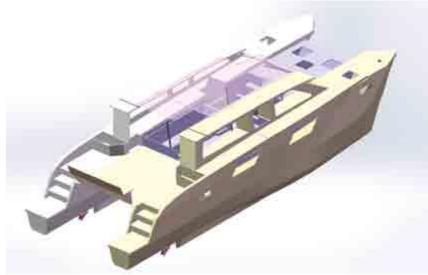


how a new boat can meet all of AMSA's latest regulations. On the positive side, Three Seas performed exactly as intended, making full revs under full load with a top speed of 21.5kts and an economical cruising speed of 16-17kts. She is demonstrating the efficiency of her hull and bulb combination by swinging the largest diameter propeller and pitch combination we have achieved with the Yanmar engine-gearbox package. This powerful drive train along with the vessels low and balanced windage gives her amazing manoeuvrability which is essential when working fishing spots to marks or by using the information from the sounder. This is particularly important for *Three Seas* exploring her intended fishing grounds of seamounts outside of the reef, as it is no good having a sounder of exceptional quality like the Furuno WAASP system if you cannot guide and hold the boat on the grounds or above fish that the sounder has identified.

I am now working on a higher speed version with greater bridgedeck clearance in combination with a new CVD feature that would make it suitable for first responder functions like Search and Rescue.

During this period I have also continued working with Justin Clarke, finalising the details of the Transformer Cat which should be underway by the time this issue hits the shelves. Whilst it has taken a while to pull the complete design together, the Transformer Cat has got better and better as we have worked through the details, with interest now being shown in a smaller version of the concept by another client. The difference between





Transformer Cat.

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Narrow water line of ex AC hulls makes an ideal conversion to a power trimaran

working through these design challenges compared with 30 years ago when I designed the Campacat, is the broad range of experience I have gained in that time along with Justin's engineering expertise to compliment it. Bouncing ideas back and forward with confidence that you both have a depth of practical experience and skills is a pleasure, as has been the case with the many tradesmen and professionals I have worked with in the past. We have both carried on with this project despite the challenging business world we now live in, as we both strongly believe that this is the perfect example of the type of skills and the manufacturing ability that Australia has let go, or handed over to other countries while in the pursuit of a quick profit.

We have witnessed a long and slow decline for decades now of both the 'can do' attitude and the desire to build and innovate which was starkly illustrated when the national borders were closed due to the pandemic. Our geographic isolation has helped to keep us safe, however it has exposed the folly of not being as self-sufficient as we used to be. This vulnerability was exposed in a similar way during WW2 and it was for this reason that local manufacturers like Holden were created. It is ironic that the pandemic has struck at a time when Australia has let so much of their manufacturing base go, but having had the wakeup call

it might also be lucky in that we still have a generation working that could kick start it again if we move quickly.

There are a number of reasons that trades, innovation and manufacturing have withered in Australia and it is not just the lower price of goods from developing countries. The decline has been affected as much as anything by an education system that particularly at secondary level has demonstrated an attitude towards trades that makes them seem like a second rate option compared to going on to university. Statements made by high school teachers like "if you don't do better with your schooling you will end up a tradesman" are not uncommon and this attitude has filtered down to every level. When I started my apprenticeship the older tradesmen were immensely proud of their qualifications as are tradesmen from most other parts of the world. vet in countries like the USA and now Australia the trades are seen as a second class option. Politicians are always talking about the 'tradie' and how we as a country need to train more tradespeople and to a higher level and yet they have no personal experience in the trades and have either shut down or privatised the training systems. Ask yourself how many members of parliament at both Federal and State level have a trade background and I am not talking about a trade union organisational background, I am talking about having

a trade qualification and there are very, very few. Nor are there many or more than likely any public servants running the departments that deal with the trades with a trade background and so unfortunately there is a massive disconnect when trying to improve the system.

On the positive side we have actually taken on two apprentices this year after a number of years where whilst we trialled a few, we did not take them on as they did not have the right attitude or aptitude. The reason we gave these two young men a start is that they came from a private trade college on a school based apprenticeship and at this college, they prepare their pupils for the trades, but also teach them the history and respect for the trades and in our books, this gives them a flying start.

We as a country are not going to be able to just recreate our manufacturing base overnight regardless of what we would like to have happen, but we can however use the redundant base of what we had once before to follow the 3R's – Recycle, Remanufacture and Repurpose. The 3R's play to our strengths of safe isolation rather than try and overcome the weakness it creates in getting our goods to overseas markets. If we don't need to import goods and machinary, then we don't need to export as much for the balance of payments; it just takes a rethink rather than a total rebuild of our industries. It was with this principle in

mind that we have embarked on a new project which may just create a whole new boat type and with it a small niche industry.

THE 3 R'S PROJECT

Challenges like the Covid-19 pandemic can also create opportunities. Albert Einstein said "It is in crisis that invention, discovery and large strategies are born" so when we heard that the Explore Group, owners of the two America's Cup boats being stored in The Yard Brisbane, were going to have them cut up, it seemed such a waste and so we arranged to purchase at least one of them through Guy Obren of Wildcat Marine who had been looking after them in Australia. Designed to the IACC Rule that was used for the America's Cup from 1992-2007, AUS 21 and AUS 40 had been operating on Sydney harbour as day charter vessels and were stored pending transfer to either Hamilton Island or to Auckland for the next America's Cup where the owners already have a charter operation with two other boats.

The Explore Group didn't want to cut the boats up either, but with the world being tipped upside down, further storage and refurbishment of two 82ft monohulls was not a viable option given the uncertainty at this time. They were very happy to see a future for at least one of them and The Yard Brisbane were also



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supportive of the project and were helpful with storing them until we could make a move. The rigs and deck gear were purchased by David Lambourne as he could the see the potential for adapting the equipment to other boats and the high tensile steel keels with their lead bulbs were removed to be scrapped.

I had been admiring the boats for the last couple of years while they were on the hardstand, but at the same time, had also been thinking about a vessel to use as the basis for the 3R's project.

The seeds of the 3R's were planted in 2012 while we were completing the alterations to the 100ft maxi *Wild Thing*. I was chatting away with Grant Warrington about how narrow and easily driven the current maxis were and he said that with the canting keel off and the rig removed, the boat did 17kts under power as it had a fixed three bladed prop that pulled up and in to the bottom of the boat when sailing. Half joking but with ideas running through my head, I then said to him that once the boat was retired from racing, they should take the keel off, pull the rig out and turn it into a power trimaran, or if you don't like to say the word multihull, a stabilised monohull.

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I had mentioned the idea to a number of people since and although they could see the logic, it was just too 'out there' for them to try, however the idea was stuck in my head particularly as virtually every day I drove past the AC boats up on their cradles to get to work and looked at their slim easily driven hulls. But given their size and value I could only dream of how they would make a great power tri/stabilised monohull once their 20 tonne keel was removed along with the 100ft plus mast.

Well dreams do sometimes come true and now I have the chance to make that dream a reality for ourselves or a client who has the same vision as this is a golden opportunity to create something special, innovative and unique.

Constructed from carbon-fibre with a Nomex honeycomb core, these boats were absolute 'state

of the art with no expense spared' in their day. They had to be strong enough to withstand the extreme loads from the deep high tensile steel keels, with around 19 tonnes of lead in a massive bulb hanging off them, which provided pretty much the only thing that countered the huge rig, as they had very little form stability on such a narrow waterline. Both of these boats had been in survey for day charter on Sydney harbour and therefore the mechanical, pumping and electrical systems were all to survey specifications. They both motored up from Sydney before they were mothballed and with their keels and rigs removed did 8-9kts under power, so were perfect for what I was proposing. AUS 40 which was actually built for a French Syndicate was the more suitable boat for conversion as being a later design had less internal bottom framing and therefore more room internally, plus a more suitable deck layout, although we have chopped 5m (15ft) off the stern straight away as this was all above the waterline and was only there to increase the waterline when heeled which we have no intention of doing.

To test the principle on a smaller scale we then decided to carry out the same alterations on our 8m yacht as although the hull is solid glass from a mould, the decks

and cabin are plywood and had been fastened with galvanised nails and screws which after 45 years were showing the effects of coming to a tropical climate from New Zealand where she was built. In keeping with the spirit of the 3R's we will be using the offcuts from AUS 40's aft sections to make the alterations to our boat.

As well as demonstrating and proving the 3R's concept to the public we were keen to do the conversion anyway as we found ourselves at the same stage in our lives as I know a lot of other yacht owners are getting to and that is where age and injuries are catching up with their bodies.

Since Lorma ruptured her achilles tendon a year and a half ago, she has found getting around a small tippy yacht more difficult, even though she has thousands of sea miles under her belt including a Sydney to Hobart race. This meant we had virtually stopped using the boat, so by converting it to a powerboat it would provide us with many more years on the water. Designed by Alan Wright who was my boatbuilding teacher at the Auckland College where I went for three weeks each year during my apprenticeship, it was Alan who encouraged me to be a designer, so the boat has great sentimental value to me and selling it was always going to be a difficult decision.

While researching our own options and the boating market in general we noticed that most yachts only retain around a third of the resale value of powerboats of the same length, even though they often have better accommodation layouts, higher equipment levels and still achieve much the same displacement speed under

power. The main reason I can see for the difference in their resale value is in the inconvenience that deeper draft, rigging and the sailing deck gear creates plus its ongoing maintenance, along with the scare factor of booms and sails whizzing around your ears and the sudden heeling when a gust of wind hits. Our children with their families would be happy to take the boat out as a powerboat, but don't feel as confident to do so on a yacht, especially with small children and I know our situation is no different than many others of our age. It was this change in lifestyle in combination with the need to show the public my idea that has led us to converting, rather than just buying a powerboat,

as the finished product will have something that no other monohull powerboat of this size on the market has and that is multihull stability.

Is this stability that big a deal? In a word 'absolutely' otherwise the ever expanding multihull industry would still just be a niche market and the massive industry investment in stabilising systems would not have occurred. Long-range powerboats and fishing boats used steadying sails for years as well as bilge keels and flopper stoppers to minimise roll. The Pacific Islanders use outriggers and floats and I have

to say they were way ahead of the game, so we are looking to them for inspiration.

The concept of power trimarans is not new, however design work and boats built to date have focused on higher speeds or high fuel efficiency, however they have not exactly been practical with a tendency of designers to concentrate on radical styling to catch the eye of potential buyers, rather than features based on common-sense boating.

With the 3R's concept I am not using radical or futuristic styling, I just want to repurpose yachts that are sitting unused and breathe a new life into them so watch this space or contact me for more details.

Just in case you thought we had been slacking during this time I have also updated the design I did for the outboard power charter boat featured in *Multihull World* issue number 160 the Pathfinder Escape 45 to now be powered by diesel inboards as most people still prefer this mode of power. It took a little bit of wrangling and the availability of a new type of flexible coupling suitable

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for V drives to create the new layout with the engines and V drive gearboxes now in their own engineroom aft of the four bedroom, two bathroom accommodation plan, with even a flybridge option possible. This set up now makes the boat the perfect solution for the bareboat charter market with the ability to perform as a fast cruiser when the owners want to use it between charters and for the client so he take his children and grandchildren cruising.



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