



## Neil Dunstan: *Ebb & Flow*

### What Next?

**O**ver the years that I have been involved with F&B, I have discussed many subjects with the editor, Peter Webster mainly over the phone, but with many emails along the way. A little aside to how much effort that it takes to put this magazine together, I know from experience that if I want to be sure of contacting him, I usually ring around 2200 hours on a Sunday evening.

The other night I was discussing some of the coming features for the magazine and Peter asked me what I was intending to do and possibly write about for the rest of the year.

My reply was that I only had some tentative plans to do something on Townsville by combining a trip to Townsville with a visit to see my daughter who lives there. My old mate Joe who lives in a retirement home in Townsville suggested it and he has been talking to many of his mates in the fishing tackle industry to start the arrangements.

Peter asked me what I was

doing about a boat and I said that I would be taking my Quintrex 4.45 dory as that is all I have these days, so it would have to be used mainly in reasonably close ocean spots plus the estuaries. This brought up a comment from Peter about my thoughts on any new boat projects as he knows that I am not happy unless I am working on some sort of a boat project and the Quintrex has been developed about as far as it can go.

My response was that I was sadly missing my Barcruiser, mainly because I could stay at sea in it and also camp in it on land on the way to my next destination. This was brought home to me on my last trip to do a story on the Bowen district as we had to take two

like me to load and unload on my own.

- It must have a bunk at least 6'6" long and 2'6" wide.

- I must be able to use an old cheap hull as a basis.

- It must be as cheap as possible to run.

- It must be comfortably towed by a family car.

- It will have as much weather protection as possible, especially sun protection.

- A decent galley with sink, stove and plenty of storage is required.

With regard to item 1, I reckon that a boat around 5.0-5.2 metres will do the job as I can load that okay without my long suffering wife having to get out of bed at daylight on a winter's morning and stand in the water up to her knees

to extend it out of the existing cabin so I would move the rear bulkhead out far enough to accommodate it.

This means that the rear bulkhead would be out further than the dash board so an extension of the cabin top would be required for half the cabin. This would make the cabin lockup arrangement a bit complicated, but I would need to have it as a lockup to keep out the mossies, etc.

Because I am a pensioner, the amount of money I could afford to spend would be minimal, plus my wife would become violent (*Dorothy get violent?? Neil, gimme a break! Mate, it will snow in the Simpson Desert before that happens! PW*) if I started to spend too much of our hard

An oldie - but a very goodie. Originally created by renowned Brisbane dealer Ralph Morgan on a Stacer platform (he loved doing that) and further developed by Neil, 'Pedro' has many 'living' features that have not been emulated since - let alone in a 5.5m 'tinny'.



tow vehicles, one to tow the boat and one to tow my caravan for accommodation.

As a result of this and also some previous thoughts I'd had about a design for a boat that I might put together one day, but I suggested that it was a bit way out for most people and I didn't think that anybody would be interested in such a crazy project. Peter's response was to write it down, and explain what I had in mind, and we would see what readers thought about it - so here it is.

### The Main Criteria.

The boat must be small enough for a creaky old bloke

holding the boat while I shift the car.

As far as the long and wide bunk is concerned I can stay on board for long periods as long as I can get a decent night's sleep and this is the minimum size that I can get comfortable in.

If the boat is rolling around a bit it gives me room to dig my elbows into the bunk cushion and hold my position without getting tossed out on the floor.

I also would have a bunk cushion of at least 6 inches thick (150 mm) to maximise my comfort. To accommodate this extra large bunk I would probably have

earned savings.

I have looked around and noticed that there are heaps of old fibreglass hulls in that size with small cabins, such as old Savages, Cruise Crafts and early Haines Hunters that can sometimes be obtained for a few hundred dollars.

Most of them have problems with the transom as they had wooden transoms with glass over and have mostly become rotten over time. This would not be a problem as I would be extending the cabin to allow for the longer bunk and galley so I would be removing the outboard well anyway to make more room in the

cockpit and mounting the engine on an extended swim platform.

As the engine would be very light, as I will explain later, I would not need any fancy sort of pod for buoyancy and a simple swim platform with the engine mounted outboard would suffice.

This would give me more room in the cockpit area for fishing etc. The critical thing in all this is that probably 80% of my time in the boat is spent on my own, so I will be setting it up for predominantly one person with the increased sleeping area and the galley (etc) in the cabin in place of the other bunk. It is pretty common knowledge that most well made fibreglass hulls seem to last forever and the only structural problems seem to be where timber is used in the transom and in the under floor stringers, so providing that the glass does not have any obvious osmosis or other problems it is pretty safe to use a hull even though it may be thirty or forty years old.

The cost of running the boat is something that I have given a lot of thought to.

Over the years when my mate John and I have gone on long trips such as Cooktown to Princess Charlotte Bay which is a four hundred n.mile round trip, carrying enough fuel was quite a problem. It was imperative that we used as little fuel as possible as there was nowhere to refuel in the area and you were pretty much on your own. Even though we calculated that the 300 litres that we carried would be sufficient, we had a lot of very bad weather and we would have not made it back but for one critical factor.

## Far Less Fuel

The boat we were in was an old Stacer 5.25 metre hull fitted with a Tohatsu 70 hp two stroke outboard and this rig had taken us to many far

away places safely. We also carried a Yamaha 9.9 hp four stroke high thrust outboard as a spare which was at least ten years old at the time and ran so smoothly that we used it a lot when we were trolling and we knew just how little fuel it used. When we were faced with the trip back and not enough fuel to make it back to Cooktown we ran for two days on the little Yammy and made it easily.

When we checked our fuel consumption we found that the Tohatsu travelled around 1.2 n. miles per litre, while the



**This is Brian Poole's "Sneeza" - a resurrected Deltacraft 19 diesel launch - now powered by a 15hp 4-stroke outboard.**

Yammy did over six n. miles to the litre. We also found that when travelling at displacement speed the trip was infinitely more comfortable and enjoyable even though the sea conditions were terrible. There was no problem of all the gear stowed in the cabin trying to get to the back of the boat to meet up with all the ice boxes, tackle boxes and other items that had already worked their way down back when we tried travelling at planing boat speeds in the rough.

There was also no problem with all the gear which we stowed on the dashboard area for quick access, falling off and getting in the way.

When I had my Barcrusher I used to travel down to Cape Palmerston which is about fourteen n. miles south of where I live and stay there for a week at a time. On these trips I only travelled at

displacement speeds as I had plenty of time due to being retired and got to enjoy travelling at these speeds so much that when I was in a hurry and had to travel at planing speed I found it quite unpleasant, notwithstanding the fact that the fuel consumption went up about four times as much.

There is one more advantage to this displacement speed business and that is the fact that all the time I am travelling I have lures running out the back and invariably catch good fish on

the way to my fishing spot.

## Performance

The reason for all this preamble is that I have decided to have the boat set up to only travel at displacement speed and therefore would install a 15 hp Yamaha high thrust 4-stroke as the main engine. This would give me terrific fuel economy and a late model engine with forward controls, electric start and trim and tilt would only cost about a couple of thousand dollars.

I know from experience that my current Quintrex hull will travel at just over planing speed with the old Mariner 15 hp two stroke that I originally put on it to find out how it went. I expect that with the extra weight of the fibre glass hull a 15 hp four stroke would manage about ten knots at best. I have also tried my Quintrex at different slow

speeds and found that the hull starts to rise onto the plane at about nine and a half knots at which point the bow begins to rise and the stern begins to squat, an attitude which is very inefficient.

To progress on to the stage where the boat begins to plane takes at least three times as much power as it takes to get to nine knots. I estimate that the glass hull would be running at about six knots at four thousand revs and would be comfortable at nine knots at less than maximum revs.

This sounds slow but on a trip out to Knight Island from my home at Sarina Beach which is a normal run for me, the twenty three n. miles would take me one hour and twenty minutes at my normal cruising speed in the Quintrex with the 50 hp Suzuki 4-stroke running at 4,000 rpm.

In the displacement hull, it would take around twice as long at 5,000 rpm, or two hours and forty minutes, so if you did not want to lose any fishing time you would leave an hour and a half earlier.

Also I would have done the trip using only about four litres of fuel and probably caught a couple of mackerel on the way.

The use of a purpose designed planing hull as a displacement hull was something I had wondered about and I thought that maybe that I could get hold of the design for a small displacement hull and manufacture it myself.

A while back I contacted Brian Poole when he was running Boden's Boat Plans to see if he could supply me with the plans for a true displacement hull but he did not have any in his portfolio. What he told me though was that most planing hulls when run at displacement speed were about 80% as efficient as a full displacement hull and would be a good substitute. This meant that my idea of using a cheap fibreglass

planing hull would work okay.

Just to make sure I was heading down the right path I had a look around for second hand trailerable fibre glass purpose designed displacement cruisers and mostly what I could find were boats such as the Cruisecraft 580D and the Deltacraft 550 which were built many years ago. These were really, really heavy and mostly used small diesel engines with shaft drives and were still as dear as poison.

They also had very deep keels which may have been an advantage if I was going to New Zealand but my requirements were not as specific, so with the added disadvantage of having a specially built trailer and sitting so high on the trailer because of the deep keel, I scrubbed that idea.

I also looked around for something in aluminium but there were not too many alloy hulls built with cabins and what is available holds a high price due to the greater demand for alloy boats than glass boats with a bit of age on them.

Another advantage to using a small 4-stroke engine is that an electric start model has a decent sized alternator and when I had the Stacer I used a twelve volt frig, keeping the battery up to scratch using the Yammy running at fast idle to top up the battery that I had selected via the battery

selector switch. This was usually done in the evening and with the motor ticking over on the transom it was hardly audible and only used about two litres of fuel to run all evening doing away with the need to have a genset or expensive solar cells.

With this outfit on a decent trailer - and bearing in mind, that it would only have a 15 hp engine weighing less than 50 kg - it would be easily towed behind my Commodore and be much cheaper than having to use a four wheel drive as the tow vehicle.

It would also be much easier to load and unload especially if an electric trailer winch was fitted. The other advantage would be that it would sometimes be possible to get it off a sandbar when accidentally grounded with this much less weight.

### Living On Board

With respect to the subject of shelter I would, as previously mentioned, have the cabin taken up with the oversize bunk and the galley, etc.

I would then fit a higher than normal windscreen on the cabin top and install a cantilevered hard top out from the windscreen. This would then have drop curtains attached to the hard top which would then clip to the outside of the hull to send any rain water or spray over the side. All this would extend a fair

way back over the cockpit hence the removal of the outboard well to give a bit more fishing room, remember that this boat is for one person generally and occasionally one more so I reckon that this would be plenty. As I would not be carrying extra people very often I would not have a passenger seat, instead there would be a large ice box or twelve volt frig in that area with a cushion on top for the occasional passenger.

**“.. (most) used small diesel engines with shaft drives and were still as dear as poison. . .”**

This is pretty much where my thoughts have so far taken me but to optimise the single handed operation I would also fit a decent anchor winch to save me the trouble of fighting my way through the cabin and trying to squeeze through the forward hatch each time I wanted to set or retrieve the anchor. I guess that I was spoilt with the Barcrusher which was fitted with one of the very robust Woolf winches which I loved. Another addition that I would consider in the long run if the outfit proved successful, would be the fitting of an auto pilot.

I know that this sounds a bit extravagant but when the boat is only moving at

displacement speeds it takes a fair while to get where you are going and as the motion of the boat is quite benign even in fairly rough conditions, it is possible to do a lot of chores such as tidying up, filleting fish or getting fishing gear ready for arrival.

I also know from experience that when running with lures out the back it is quite difficult to fight a decent fish and control the boat at the same time when you are on your own, so the boat would steer itself after dropping the speed down to a lower setting.

Most auto pilots require hydraulic steering but some years ago I saw an auto pilot system which used the standard mechanical push/pull system. It consisted of an electric geared motor module that was fitted to the standard steering wheel shaft after the wheel was removed. The wheel was then fitted to the extra shaft extending out from the motor module. I am not sure of the cost but this sounds like a likely option.

Well that is what I have in mind and although it is a bit left-field I don't have any doubts that it would work extremely well and using only cheap proven industry components, would not be a difficult project for a backyard experimenter such as me using only the normal tools one has to hand.

*Neil Dunstan.*

*Sarina Beach.*

**F&B**