

The 'Runaway' Project

Part I of 4 parts. Story and Pics by Di Ross and John Batt

As most of the regular F&B readers will be aware, we have been looking for some time to upgrade to a six metre boat which could be configured to meet both our on water needs and provide a platform for overnight camping at caravan parks as we travel to new boating destinations.

We particularly sought a hull which offered excellent off shore capabilities, two forward berths, incorporation of some galley items, good weather protection and safe roadway access.

Following our test ride in the outboard powered demonstrator boat we felt the design of the Vindicator 610 clearly had the right blend of fine entry, broad shoulders and stem height to deliver a boat that is very capable and one which inspires confidence. This is a typical Oceantech design which retains balanced aesthetic lines (evident to us in their family of boats) with a raised sheer line offering a frontal presence on the scale of a 7.0m metre boat. The hull is designed for off shore operation and is built to commercial standards.

After extensive assessment and much deliberation we have finally contracted for a BMT package through Calibre Boats. Our Vindicator 610 will be powered by a YANMAR 4BY180Z stern drive.

Clearly there is no template for the overall process in buying any boat, let alone building one to

order to incorporate your individual needs. Going down the path of a dedicated build for us is a very significant commitment and although we had contemplated some minor tasks that were within our capabilities to keep costs down, we soon realised that it simply was not worth it.

Our Final Boat/Motor/Trailer Specification evolved, and in concise terms is:

- Vindicator 6.1m Hardtop Semi Wheelhouse configuration LOA 6.4m
- Full height toughened glass windscreen and side windows
- 200 litre commercial standard underfloor fuel tank

- Underfloor storage locker between seat modules
- Safe/easy roadway access (transom door- robust ladder)
- Muir HR 600 powered anchor winch
- Furuno GP 7000F series colour Sounder/GPS
- QL 300 electronic trim tabs
- Marine radio 27 MHz
- Forward bunks with location for chemical toilet
- Galley Modules to accommodate owner supplied:
 - 50L WAECO refrigerator
 - SS sink, hand pump and 40L fresh water storage
 - Origo 1500 single burner spirit stove

- Yanmar 4BY 180Z turbo diesel with a Mercruiser Bravo III leg

Calibre Boats heavy duty C section aluminium drive on/off low maintenance trailer complete with Duratorque IRS axles and electronic hydraulic brake control system.

For us the following aspects were quite evident during our consultations and certainly dominant in our decision to go with the Vindicator:

- Product quality with recognised design pedigree-professionalism of operation.
- Visibility of the price structure to a level of detail where we were confident costs were fair and reasonable.
- Both responsive and patient with our enquiries-enthusiasm for "our" boat.
- Observation over a number of Calibre Boats

builds that they are consistent in delivering outstanding boats.

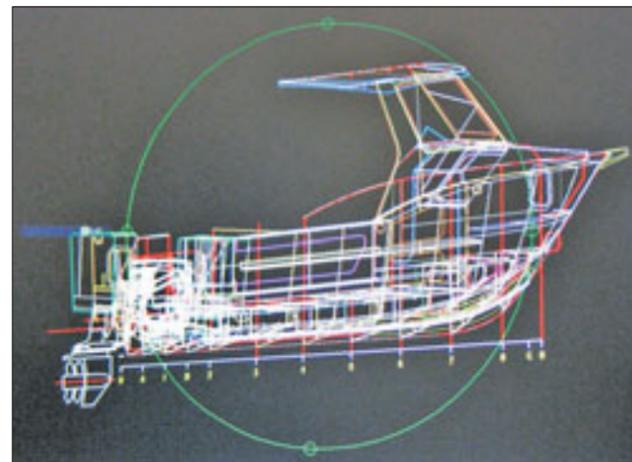
- The Power Equipment folk who are supplying the YANMAR outfit to Calibre Boats have been equally supportive of our project and we look forward to their hands on involvement when the unit is set to work etc

The construction being local (Royal Park, SA) is also advantageous enabling progressive observation, which adds further reassurance to the project and our significant financial outlay.

Tony Pal, Manager for Calibre Boats will manage the



Di Ross looks over Jon Kemp's shoulder with more than usual interest; the process is so different when the boat being analysed is going to be yours, for some time to come . . . **Top Right:** See the big cutting table where the aluminium sheets are cut-out like dressmaker's patterns, and in the **Lower Left** pic, how Oceantech design-in the transom area for the new Yanmar180hp diesel sterndrive.



entire build, outfit and engine installation. We are all aware that if not monitored closely, projects like this can all too easily run away from you – both in time and costs. There is a real need for a focal management point so that the complete project is linked, looped and all parties are aware of all the details at the same time.

Over the next few months, we will be documenting our build and trust F&B readers will enjoy the venture with us.

Design Elements

The hull design is the product of the latest marine architectural computer modelling undertaken by Oceantech located in Adelaide. They hold extensive experience and feed back from a whole range of builds for both the commercial and recreational markets in use both locally and overseas. This design is intended to provide excellent ride and directional stability and retain appropriate steadiness at rest.

We were impressed with the extensive framing matrix, which is to commercial standards. It comprises transverse frames at 600mm intervals with longitudinals at 200mm spacings. These are all of 5mm plate and in combination with the 5mm bottom plating, the 4mm side and 3mm deck and cabin plating the 'heavy duty' design is intended to



withstand demanding conditions without degradation.

Development and Pre-Production

We met with Oceantech designer Jon Kemp on a number of occasions and collectively firmed on the initial boat layout and the selection of the stern drive power unit. The design package that Jon had previously developed for the outboard version was then altered where required and computer based design aids in particular AUTOSHIP and AUTOHYDRO were applied to present and adjust the Hydrostatic aspects.

This highly technical process undertaken by the marine architects is expensive and is normally embedded in the kit price. In reality, it accounts for only a few percent of the total project cost and we determined that the veracity of the design was paramount to us proceeding.

Just as we wouldn't drive a car that was not properly engineered, the same logic applied to a boat. The data is then exported to AUTOCAD where 3D modelling is developed. This takes into account specific detail such as framing structures, waterlines, hull plating etc.

Cutting

All the construction parts are then converted (flattened out) into 2D patterns for nesting in such a way as to minimise wastage. For our six metre boat there are some four plates of 9.0m x 2.2m involved (5083 grade alloy in 3mm, 4mm and 5mm as the design requires). Before cutting, each form (or shape) is automatically catalogued and marked for later identification by the shipwright.