Introducing one of the most interesting projects we've undertaken in recent years - the Do-It-Yourself Phil Curran (pictured) designed 4.85 "baby" plate alloy boat. Now completed and tested, It has exceeded all of our expectations by a considerable margin. In this, the first installment of a Two Part report, we look at Phil Curran's 4.85 as a regular boat test, to assess the craft and its potential. We explore how it came about, and why we chose this particular model. Next month, we examine the prospect of readers building this boat at home with Mum and the kids – and reach some fascinating conclusions. Report & Pics by Peter Webster.

CURRAN's 4.85

Build It Yourself "Kit" RUNABOUT

Curran 485 DIY Runabout . .

For the benefit of readers who may just have only recently discovered F&B, we should point out that this boat is not a regular production model (as such). Until now, it was only available as a pre-cut "kit" for amateur or professional boat builders to make themselves.

The Curran 485 shown here, was in fact partly built by my partner and publisher of F&B, Ruth Cunningham, assisted by the trio from ADM Marine at Hope Harbour (here on the Gold Coast) under the direction of senior naval architect, Phil Curran.

Curran travelled all the way across from Perth, WA as a result of F&B questioning whether a family in today's world, equipped with a reasonable garage and normal electrical tools, could actually build a boat like this themselves.

It seemed like a very tall order.

Curran was insistent that not only was it possible, but pointed out he's helped hundreds of "amateur" boat builders over the years do just that.

The secret of Curran's confidence lay in the fairly recent development of the "plasma" aluminium sheet cutting process. This enables companies such as Tubemakers Aluminium in Perth, to take complex designs from a naval architect on a CD-ROM and use the architect's drawings to drive or guide the plasma cutting process.

The "plasma" process is like a big oxy-acetylene cutting torch moving across a sheet of aluminium guided not by hand, but by a computer tracking all the intricate curves and squiggles that go to make up the complex shapes involved in a plate aluminium boat.

There's no doubt this technique has absolutely revolutionised the prospect of building a plate aluminium boat in your own garage, at your own pace, for your own satisfaction.

Best of all, having the naval architect direct the plasma process has simplified what is traditionally the hardest part of amateur boat building i.e. the beginning!

From the earliest days of amateur plywood (or "bondwood") boat building, a common problem was that most skill was needed at the beginning of the project when the architect's plans were "lofted" onto the big sheets of plywood, and all the loftings or patterns were subsequently cut-out. To do this properly calls for no little skill, and any mistakes or poor workmanship at this point impacts over the whole job.

With this pre-cut or "kit" aluminium strategy, the opposite occurs.

Here, not only do we have the architect designing the boat in the first