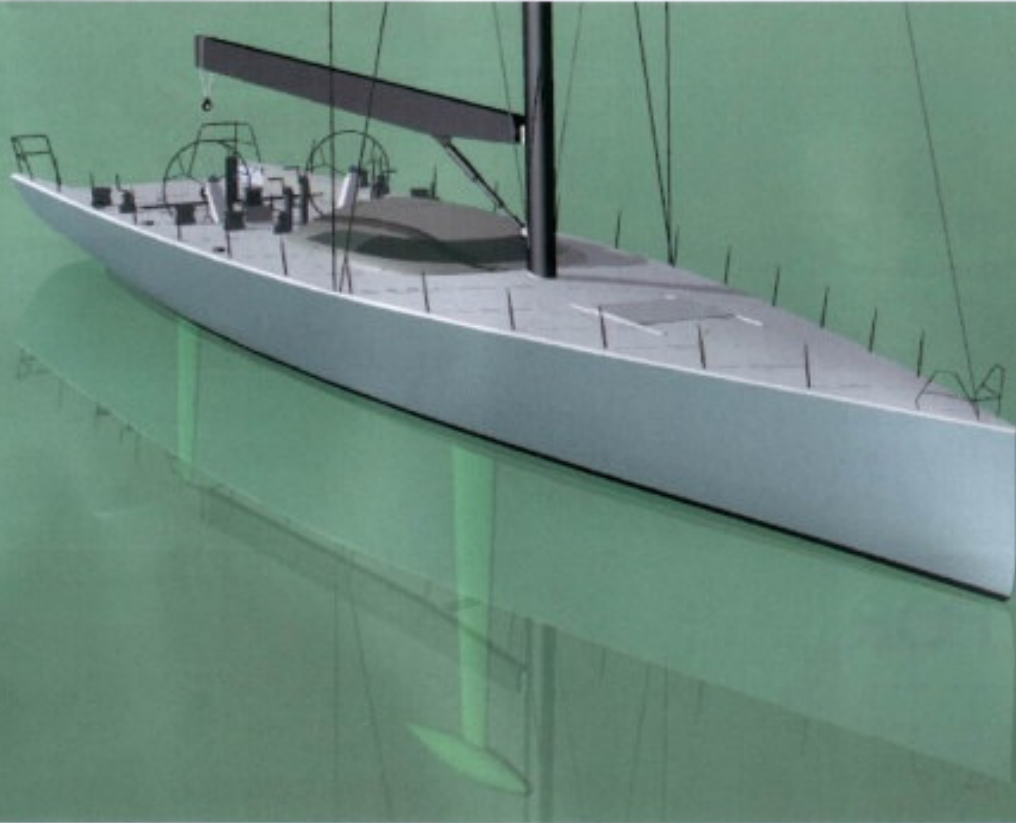


Speed machine to showcase New Zealand talents



By Ivor Wilkins

There's a distinct note of excitement in designer Greg Elliott's voice as he declares, "This one's something pretty special." The one he is referring to is a new 100ft speed machine taking shape at Cookson Boatbuilders.

Elliott has long been known for his general dislike of rating rules, which he generally views as a conspiracy to slow boats down. So when he received a design brief that simply said "create the world's fastest monohull race yacht for its length", that was something right up his street. Forget about ratings, line honours is what we are after, said the brief in terms that light up Elliott's eyes.

Some of Elliott's yachts have competed under rating rules, but the ones he is best known for are out and out machines, built to a size envelope and built for the pure adrenalin rush of getting from A to B as quickly as possible. It was those qualities that attracted the attention of Bob Miller and brought Elliott into the design team for the new and highly successful *Mari Cha IV*. The *Mari Cha IV* brief was to create the fastest monohull in the world.

This new project is similarly succinct, although it has the rider, fastest monohull *for its length* ...

Also contributing to the design effort is Clay Oliver from

Team New Zealand, who was part of the *Mari Cha* team as well.

The new project is simply known as *EBS Yachting* and is the brainchild of two successful Auckland businessmen and yachtsmen, Bill Buckley and Charles St Clair Brown. Buckley owns a company called Buckley Systems, which is involved in precision engineering and nuclear physics, while Brown is a lawyer and entrepreneur with a long history of yacht racing.

He owns a Davidson 65, *Antaeus*, which he has raced extensively in Auckland and the Pacific. He also owned and campaigned a Mumm 36, *Tyrannus*.

The two partners came up with the idea of collaborating on an exciting new venture in the middle of a storm on board *Antaeus* during a passage to Fiji. Admittedly, perceptions can be skewed under such circumstances, but their return to dry land did nothing to diminish their enthusiasm, and the plan grew to reality.

Their objective is to showcase New Zealand design and expertise and win line honours in all the major grand prix sailing events encompassing three continents in 2005.

"Basically, we are all leaving home for a year, starting in February 2005," says George Hendy, who will be sailing master and is currently project manager. "Our wives have all been told

not to expect us back until late 2005 – and then we are going to do the Sydney Hobart Race.”

“We are excited about the programme,” said Charles Brown. “With the growth in popularity of supermaxis we are looking forward to some great racing. We will also be doing the Rolex transatlantic race, which is drawing huge interest, with 24 entries already confirmed.

“We might attempt to break *Mari Cha IV*'s 24-hour record. We have looked at the VPPs and believe that, in the right conditions, that record is assailable. Once we are in Europe, there is the Fastnet Race, then the supermaxi circuit in the Mediterranean, culminating in the maxi world championships.

“After that, the Sydney-Hobart race, which will have at least five and potentially 10 yachts of this size competing.”

On a Friday afternoon in mid-September, the hull was turned over at Cooksons and an invited crowd assembled to watch and join the celebrations. It was a first public glimpse of a project that has been kept somewhat under wraps in its early stages.

What it revealed was a long all-carbon hull, very fine in the bow and very narrow on the waterline, but with distinct flare to the deck amidships. Unlike some of the current slab-sided designs, there is plenty of shape in the hull, which is relatively high sided. From the side, the lines are clean, with no sheer, a plumb bow and a low-profile blister-type coachroof.

The high topsides and the small coachroof are part of an attempt to keep the crew dry. “We didn't want a submarine,” said Hendy.

One of the issues that has arisen with these new generation yachts is how much water rushes down the decks. *Bols*, for example, has had crew swept the full length of the cockpit and left tangled in the smashed remains of carbon fibre steering wheels.

The topside flare is also an effort to deflect water down, although its prime purposes are to create a reasonable shroud base for the rig and to provide a bit of room for opening the genoa leech in reaching conditions.

The decks are quite distinctly cambered as well to shrug off water as fast as possible.

That's about as much protection as the crew of 18 can hope for. The rest is stripped for action.

The cockpit is large and shallow, with the twin wheels situated well forward and the mainsheet traveler behind the helm position. Three winch pedestals will be arranged forward of the wheels.

The carbon fibre rig will be a rotating wing section by Southern Spars with all PBO rigging. There will be a carbon fibre bowsprit, with gennakers in the North, New Zealand wardrobe. “You will never see apparent wind angles aft of 90°,” said Elliott, “or, if you do, there is something going badly wrong.”

There is a single rudder, with a forward daggerboard and a dual ram canting keel, which can swing to 50°. Part of the keel

will also be able to retract, to reduce the draft to about 4m for access to harbours and marinas.

Unlike *Mari Cha IV*, which utilizes a combination of canting keel and fore and aft water ballast, this yacht does not have any water ballast. “That reflects the different nature of the two designs,” said Elliott. “*Mari Cha IV* is intended primarily for ocean record attempts, with lots of reaching and running, while this boat has to be more of an all-rounder. Upwind ability was very much part of the design brief, as this boat will probably spend a lot more time racing round the cans, as well as offshore.”

Hydraulic power for the keel will come from the main engine, which will not be able to drive the propeller at the same time. At sea and during racing, the propeller will retract into the hull.

The only fixed number being released at this stage is the length: 100ft. All other numbers are being kept confidential. “There are a couple of boats this size being built at the moment and we don't want to be giving too much away at this stage,” said Elliott.

But, he confirmed an impression that the waterline beam is probably proportionately narrower than *Pyewacker's*, which is pencil slim.

No displacement figures are being revealed, or sail area, or draft. The project website simply describes it as the “newest, fastest, lightest, most technically advanced ocean racing super maxi”.

To extract maximum performance from a yacht of this nature – with canting keel angles to consider, optimum canard depths and a rotating rig – will require a good deal of optimization and expertise. “There is a lot going on,” concedes Elliott, “but we are starting on the front foot.

“This is not the first rotating rig monohull I have done (indeed, he has produced a number of them, including the equal-masted schooner, *Elliott Marine* and the 50ft sloop *Maverick*). We have been down this track before and we are not too stressed about it. There will be some pretty smart people involved and



Bill Buckley (left) and Charles St Clair Brown on the deck of their new supermaxi at Cookson Boatbuilders. A wide angle view (below) exaggerates the super-slim lines of the speed machine. Pictures this page courtesy of Paul Todd, Outside Images

we will figure it out.”

Elliott said projects of this nature often begin with a conservative set-up and plans to later turbo-charge everything. “We could have gone for a conventional rig and fixed keel, with the idea that we would work up to a full package later.

“But, it seldom happens that way – quite often campaigns that start

conservative never get to the next stage. We decided we didn’t want any mucking around, we would just go for it right from the beginning.”

Indeed, that about sums up the project. It is a full-on pedal-to-the-metal programme, backed by experienced and committed owners, intended to take on the next generation of maxi racers – no mucking around.

