

Uncovering Elliott's 'unknown quantity'



Powering up on a two sail reach, Neutrino sits happily on 7.5 knots.



1024



Elliott has kept the overall beam down, making the 11m look quite small from the stern.

The name Neutrino literally means “a sub-atomic particle of unknown quantity”. With such a translation and the boat’s recent success in the Air New Zealand IMS regatta, *Boating* gallantly accepted the challenge of putting this unknown quantity to the test.

A nice looking boat from every angle.



**BOAT
TEST**

Neutrino, the latest 11m IMS design from the drawing board of Greg Elliott, was completed only days before the start of the Air New Zealand IMS Regatta recently staged on the Hauraki Gulf. Fitting a boat test into a very tight race schedule is not easy, but the ever-active *Boating* test crew manage to book a sunny Friday afternoon to get their hands on the new yacht.

The only unfortunate aspect of our chosen day is that there is very little wind (and we have to go back to work later on). Thinking this race-bred machine will be bristling with crew for the test, we arrive at Westhaven Marina early to get our deck inspection completed in peace.

Hopping aboard, the first thing we notice is the cleanliness of the cockpit layout, which we suspect is also very user-friendly. Elliott is renowned for his use of the K.I.S.S. method (keep it simple, stupid), and this could be part of the reason for some of the boat's early successes.

Starting our little "tour de deck" at the bow, there is a definite lack of anchor roller. In the interests of weight this has been substituted with a light yet sturdy stainless steel fairlead, which is incorporated into the stem-head fitting.

To conform to category requirements there are toe rails running aft from the bow, ensuring sure footing for the for'ard hands, yet allowing for comfort for the rail rats. The rest of the gunwale has no toe rail to make the generally uncomfortable job of stacking out a little more tolerable.

The rest of the foredeck is relatively clear of extraneous hardware, the notable exceptions being the spinnaker downhaul blocks fitted to the base of the front stanchions and a large Lewmar for'ard hatch. This is big enough to accommodate crew, sails and



Two sail reaching with a loose cover on Chris Dickson's Farr-designed Whitbread 60.

clutches, mounted centrally above the sliding hatch.

Alongside is a single Lewmar rope clutch for the spinnaker downhaul with a clam cleat for the boom vang, making it easy for the side deck crew to release the vang in those moments just before a wild broach. The necessary grunt for the cabintop controls comes from a pair of Barient 45 two speed self-tailing winches. The Barient and Lewmar hardware is supplied by local company Kiwi Yachting.

There is a bit of a departure from the normal walk-through companionway in the form of a small bridge deck which forms a very usable seat, and creates both extra interior volume and a central place to install the Autohelm instruments. Mounted below these is a flush-mounted Silva compass, making it easy for the helmsman to see if he is

self-tailers) and secondary winches (Barient 24 two speed self-tailing winches) are mounted on the side decks on the edge of the cockpit. As a concession to parking, mooring cleats are positioned on the gunwale just outside the secondary winches.

Running across the centre of the cockpit is a Ronstan mainsheet track and car system. The mainsheet system is fine and fast: a 4:1 sheet which cleats on a Ronstan floor block has another 4:1 fine trim on its tail. This cleats on the inner edge of the coaming next to the traveller control, again a 4:1 purchase.

Mounted in the inner cockpit sides close to the transom is a pair of inspection ports to provide extra ventilation in the quarterberths. On the port side is the required outdoor-mounted bilge

pump. Just for'ard of this is a pair of small Lewmar hatches to provide further light and ventilation below.

Behind the traveller there's a neat little feature: a small circular hatch which lifts to reveal a well for the 9kg gas bottle. This well vents through to the transom.

As we near the end of the deck tour McCall arrives and hurriedly opens the boat to provide some "light refreshments" for our ever dedicated test team (he hasn't had a good day and is in need of a can of cleansing mineral water). He is quick to inform us that Neutrino (as were all his previous boats) is co-owned with his wife Margaret, although due to other commitments she cannot be with us today. Also mentioned is that Neutrino has been built to contest the Auckland-Fukuoka Yacht race starting on April 24. Making a guest appearance today are builders Pete Geary and Terry Sherson from Geary and Sherson Boats, as well as designer Greg Elliott.

With everyone now on board (why is it that the designer is always last to arrive?) we depart Auckland's Westhaven Marina and head out onto the Waitemata Harbour.

Motoring out onto the near-windless harbour it is unanimously decided that it's a great day for taking photographs, sunbathing and in fact most things you do when there is no wind. It's quickly obvious that we will have to chase the random pockets of "air" if any sailing is to be achieved.

Taking advantage of this absence of wind, we put the Volvo Penta 18hp saildrive through its paces. Neutrino cruises comfortably at 6.5 knots and, when McCall slips down below we push the hammer hard down to produce 7.1 knots. While the motor is not the quietest we've ever heard, we ex-

any combination of the two at any time.

The mast is a keel-stepped twin spreader set-up from Matrix Masts of Auckland and is rigged with discontinuous rod rigging and tensioned with SeaRig rigging screws. This rig is optimised for the IMS rule and is not set up for masthead spinnakers, instead having all extras set from the hounds. The running backstays have a 2:1 purchase lead to the secondary winches at the rear of the cockpit, and the top-mast backstay a 6:1 purchase.

The side decks are quite wide, with the jib tracks mounted snugly alongside the cabin sides, keeping the sheeting angles narrow and allowing for an easy passage to the bow.

All of the sail controls run from the mast to a bank of Lewmar rope

travelling both fast and in the right direction.

On the inner faces of the companionway is a pair of winch handle pockets, to keep the cockpit bulkhead clear for the two large tail bags that keep the "spaghetti syndrome" to a minimum.

The cockpit is best described as huge and, as owner John McCall says "if there wasn't a mast in the way we could paint a big H in the middle and rent the space to Westpac." The area has been carefully designed by Elliott to allow a full race crew to go about whatever it is that race crews actually do without getting in each other's way (an often challenging task on an 11m boat).

With no coamings to speak of, the primary winches (Barient 27 two speed



The cockpit is large enough for the crew to operate the boat without getting in each other's way.

pect that the owners would rather be sailing anyway. Shifting the throttle to reverse, the boat quickly loses its way and we find her a most manoeuvrable vessel while going astern.

Construction

At this stage the crew are all waiting for something to happen so we take the time to examine the construction of Neutrino a little closer.

The hull is built in strip plank cedar with an E glass laminate inside and out, the deck being PVC foam core with an E glass laminate. High density foam is used on all stress points in the deck to cope with concentrated loads and the hull has laminates of various thicknesses around the keel, rudder and mast areas to cope with the sailing loads.

There is a major fore and aft beam with three athwartships ringframes as a backbone. All of the interior structure is plywood, with foam and E glass ring frames for'ard to stiffen the bow panels.

The hull has been built to ABS plan approval and is fully laminated in epoxy resin throughout. The hull, decks and interior were finished by Touch of Gloss with Awlcraft products.

With all on board getting a little impatient, we hoist the main sail and No 1 genoa as we discover a light patch of breeze. The order comes back to "kill" the engine, and with Geary on the helm, we come hard on and produce a credible 3.6 knots of boat speed in a mere 5 knots of true windspeed.

The sail wardrobe, from the loft of Auckland's Rick Royden, also comprises a reacher, 150 per cent high clew genoa, light and heavy number one genoa, number three and four genoas, storm jib and trisail. There is a total of three I point hoist spinnakers — a



The galley may not be huge but it has everything required to keep the hordes from getting hungry.

0.5oz, 1oz and 1.5oz.

The original plan was to head up the Auckland Harbour towards Kauri Point but, after a quick look around the harbour we head out towards a breeze that is slowly filling in outside the harbour. After a bit more quite slow upwind sailing we reach off toward Devonport Wharf and don't pause to take up the opportunity to travel faster, hoisting the 0.5oz spinnaker.

With the breeze just aft of the beam and ever so gently increasing we notice the log now reads between 4.5 and 4.7

knots. Neutrino gives a very stable ride and is easily handled by the crew of six aboard today (normally she will carry a crew of seven or eight people).

As we sail into yet another wind shift, we are forced to harden up and, with the kite pole just off the forestay, we are treated to an impressive but disappointingly short burst of acceleration.

Building our apparent windspeed to 12 knots close reaching, Neutrino's log shows a new top speed record for the day, 7.1 knots.

With the Devonport Naval Base very poorly positioned (directly in front of us and closing fast) we vote McCall as our new for'ard hand and tell him to remove the spinnaker unless he wants his new boat to become a permanent fixture on one of the frigates.

Finally we get our own chance to steer Neutrino while our newly-appointed for'ard hand douses the kite then hoists the blast reaching genoa.

Tight reaching we note that the helm is a tad tight in its bearing. Blame is placed upon the lack of grease. The greasing unit is currently a wind-up type system, shortly to be changed to the more reliable hand pump setup. With our only grizzle out of the way, we settle back and enjoy the immense space in the cockpit and contemplate all those people back in their offices.

Our cameraman indicates he now has enough photographs and mumbles something along the lines of "Why should you guys have all the fun?", making it quite obvious he'd like to come aboard. Trading Elliott and McCall for the cameraman (the latter is keen to see his boat under sail, something most skippers and owners appear to miss out on), the new crew grab the helm, giving us the chance to slip below and check out the interior.

In keeping with the deck inspection we head for the bow (with a brief stop at the chilly bin). We find this area is completely bare, providing a vast area for sail stowage. Moving aft, on the port side we find an enclosed head unit behind a forward swinging door. It is a Raske and Mayde manual pump toilet, with a small stainless basin and hand pump. Above the basin there is a zip-closing fabric bag and below this a medium sized vanity unit for stowage. Flush-fitting stainless steel catches ensure that all internal doors remain closed while underway.

Directly opposite the toilet there is a compact but very practical galley area which has a gimble two burner Rinnai Gas table which also has a grill. Below

the stove is a pot locker with a bottom swung door, and alongside this is a locker for food storage.

Above the cooker is an open shelf for cups, plates etc with a handy cutlery unit mounted on its front face.

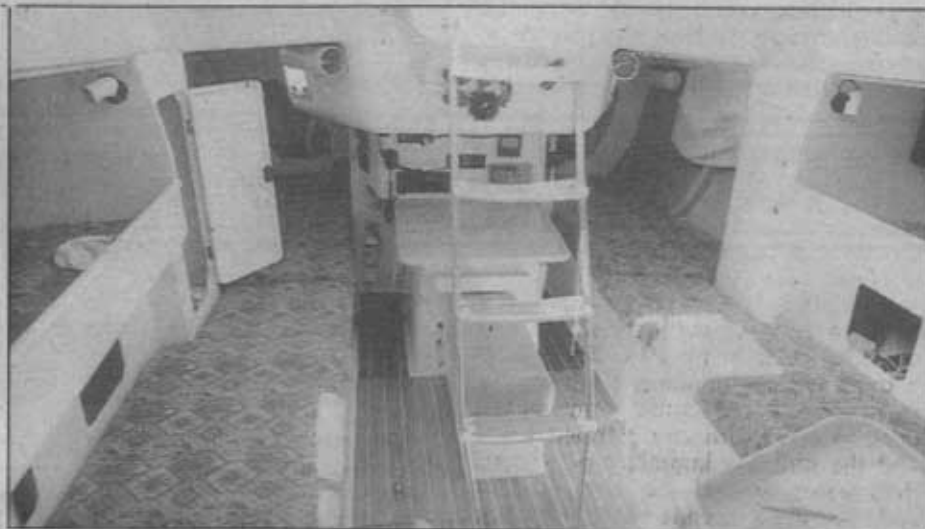
Moving aft into the main saloon, we find comfortable seating for six around the IMS-required table. Above these saloon berths are three open lockers to provide extra stowage, with storage for water underneath. Neutrino does not have built in water tanks but carries jerry cans under the main saloon berths. There are also pilot bunks above the open lockers which are raked slightly so the crew sleeping have a level "bed" and do not have to use lee cloths. To the rear of the bunks are large gear lockers, creating a lot of practical stowage without affecting the usable saloon space.

Under the companionway steps is a fore and aft mounted seat, motorcycle style, that gives the navigator a comfy angle seat no matter what heel the boat is sailing on. This seat also houses the two batteries.

The navigation station has a half-size chart table, with chart stowage taken care of by two 100mm PVC tubes in the roof of the quarterberths — a handy place to keep the charts dry and well preserved.

On the bulkhead facing the chart table are all of the essential ocean racing instruments: an Autohelm GPS, AWA Pilotphone VHF, and Kenwood SSB which is interfaced with a Kodak Diconix 150 plus weatherfax mounted just around the corner on the starboard side.

On the port side is the Roadstar stereo, next to a standard BEP switchboard which includes a voltmeter. Beneath the chart table lives the Volvo power plant, with Wormald 1kg Dry



The chart table is under the cockpit and the navigator has a "Harley" style seat under the ladder.

Powder fire extinguishers fitted either side. Also found on the port side of the engine box is the hopefully-never-required GME EPIRB. Quarterberths run either side with access at each aft end providing even more stowage.

The whole interior is finished in an off-white colour with a textured multi-coloured fleck which neatly complements the Dralon squabs put together by Burns Upholstery on the North Shore, with all stainless work carried out by Reg Laurie Stainless.

McCall ventures below to tell us that we must now head in as Neutrino has another important appointment to keep, namely the annual migration of the Royal New Zealand Yacht Squadron to Kawau Island. As we pull back into the marina we find McCall's faithful crew assembling at the dock.

Neutrino has already made her mark

on the racing circuit, improving steadily as the last IMS series progressed, to win the last three races in the series. Her last win, by 36 minutes on corrected time, gave her second place in her division.

This Elliott 11m is the "offshore" version, differing from the "track" version which has a very sparse interior and a rig/hull development aimed at sailing only windward-leeward tracks.

The 11m is a very attractive boat on the water and as a result of its long cabin and large cockpit looks smaller than its actual length. McCall's unknown quantity is sure to be a strong performer and, with the increasing popularity of the IMS fleets we are likely to see more of this design on the water.

The vitals

LOA	11m (36ft)
LWL	9.8m (32ft 2ins)
Beam	3.48m (11ft 5ins)
Draft	2.2m (7ft 2ins)
Displacement.....	3980kg (8756lbs)
Designer.....	Greg Elliott
Builder	Geary and Sherson Boats
Mast	Matrix Masts
Sails.....	Rick Royden
Engine	Volvo 18hp saildrive
Instruments	Autohelm
Winches	Barient
Deckgear	Ronstan
Paint system	Awlcraft
Upholstery.....	Burns Upholstery