Fast lane TS

For those who like to take their sailing at a fast pace, whether racing or day sailing, the Ross 650 from New Zealand delivers a power-packed performance in a no-nonsense go-for-it hull. James Hill reports. Photos by Greg McBean.

From a sailor's point of view one of the most significent by-products of drawing closer in trade with our friends across the Tasman has been the influx of styles from New Zealand TSs and yachts.

Local boat builders usually prefer to call the Kiwi influx a flood although in real terms the local designs still win out against the imports. Nonetheless, New Zealand designs have made successful inroads into our sailing market and it is certainly important for the local boat manufacturing industry to learn what it is that the Kiwis are doing right.

While there is only one successful range of the New Zealand power cruisers making a mark on the Australian scene, the Kiwis have had more impact in the trailer sailer and yacht markets. It is in this area that, as a strong sailing nation, they have many advantages.

Although New Zealand has only one fifth the population of Australia, there are more people involved in sailing and this situation has led to a thriving market for sailing boats which are both inexpensive and very fast.

Strong winds and the beautiful semi-sheltered waters around New Zealand's biggest city, Auckland, has been particularly responsible for the development of big dinghy hull style yachts which are both as well set up for weekend cruising as they are for racing.

While it might be a bit of a broad generalisation to call all Kiwi designs, lightweight, dinghy-types, it's a pretty true description of many of the more popular designs which have been developed over the last three decades in this 'sail crazy' country. Certainly there are a number of factors which have helped the development of a more adventurous, if not progressive, style of sailing boat. Extensive safe and appealing cruising grounds encourage many young single and married people to get into yachts and trailer sailers before their counterparts in Australia. For instance, it's not unusual to find 20-year-olds in Auckland owning a 30-foot keelboat or building a 40-footer. It is also not unusual to find whole families in New Zealand involved in sailing and owning several yachts between them.

As an old Kiwi sailing friend once put the different approaches to sailing from one side of the Tasman to the other, 'Kiwis usually have bomb cars and great boats, while Aussies will crew for someone else and have a sports car.' It's all a matter of priorities of course.

The strong youth influence in Kiwi yacht design has resulted in a string of designs which while differing in many respects all follow the same true path of light displacement and dinghy inspired rigs. The Farr trailer sailers from Sea Nymph Boats in Auckland were among the first and were followed by the Bonito trailer sailers, the Noelexs, the Ross 780, the Jim Young TS designs for kit builders and a few yachts such as the Lotus 10 and the Young 88s.

Some of New Zealand's best designers such as Bruce Farr and Laurie Davidson have had their designs built by local Australian manufacturers. Boats such as the Sydney-Hobart winning Farr 1104 one tonner design went a long way to popularising the Kiwi approach to sailing.

Some people in the Australian marine industry seem resentful of New Zealand success in our sailing market without Australian boats doing equally well in New Zealand. In fact the virtual free trade situation which now exists between both countries has put a lot of pressure on our local industry.

Hopefully this will stimulate the local sailing industry to improve their game. Afterall we must remember Kiwis helped get the Australian TS market going by creating the Hartley TS. The little Hartleys were the catalyst for a booming trailer sailer industry and they certainly had a big influence on the development of lighter more 'dinghy style' yachts in Australia.

At present with demand for the TS and yachts not being as high as it has been in the past it may seem unfair to have too many Kiwi imports but taking the long-term view it could lead to a new round of local activity sparked by such competition.

One of the Kiwi newcomers which could be just the sort of boat to get local designers and builders thinking is the Ross 650. This compact ultra dinghy style TS is an all out racing machine for the speed enthusiasts. This boat is very similar to the Australian Blazer but with more attention paid to interior cabin space and overnight cruising possibilities.

The Ross 650 is the baby sister of the Ross 780, a maxi speedster which has proven to be one of the best line honours machines around. However, while the Ross 780 was a fairly expensive maxi style of boat the new smaller Ross packs the same sort of performance but at a much more affordable price and a tow weight more suited to the average motor vehicle.

Unknown at this stage is whether the general local market will take to the rather uncompromisingly square ends of the 650, although this design is certain to win over many racing enthusiasts. Like all of the other Ross designs the 650 takes the dinghy-yacht concept all the way. There is no attempt to provide any 'yachtie niceties' in this boat which has a hull which looks like an 18-foot skiff minus the wings but with the addition of a cabin.

The 650 wastes no boat length on cosmetics, the bow is cut square as is the wide rounded stern so no weight is carried in overhangs and waterline length is maximised for speed. The hull is quite wide and powerful for its length and much lighter than most TSs of this size.

To achieve the feather-like weight of 670 kgs the Ross has a foam sandwich

Room under the cockpit lends itself to stowage baskets.

Forepeak is kept bare to keep bow light.

Cabin, above features pipecot berths with storage pockets.

Lightweight makes Ross an easy trailing proposition.

Multiple dacron pockets take sheet and halyard tails.

cored hull as well as deck mould. To further achieve light-weight the design is kept ultra simple with a basic foot-well for a cockpit and no accepted cruising features such as cockpit coamings or backrests in the saloon bunks.

The ballast in the dagger-style lifting centreboard is kept down to a modest 91 kgs while around 132 kgs of lead is fibreglassed into the floor of the hull around the centrecase and the base of the mast. Total ballast approximates the usual accepted minimum of around 33 percent of total weight, although in practice the power of the boat's dinghy-style rig is such that it requires 'human' ballast to get the best out of the boat in fresh to strong wings.

The concept behind the Ross 650 is in fact the current Kiwi approach to racing, that is keep the sail 'horsepower' high and stack more crew on the weather rail to keep the boat on its feet and blasting along. When they are cruising, which the Kiwis insist on doing in all their boats, sail area is reduced or reefed to keep the boat on its feet and a drop in performance is accepted as a reasonable trade-off for having a boat which is still both reasonably roomy inside and inexpensive to build.

The Kiwis are very much into exploiting human ballast in their latest racing designs and boats such as the Jim Young designed Rocket 31 go even further with virtual winged side decks to maximise the leverage effect of six or eight guys sitting on the high side.

Since the Ross 650 is designed like the 780 to fit within the 2500 cm maximum beam restriction on TYA type trailer sailer events there are no wings but the maximum beam is carried almost to the stern of the boat. Trapezes are not allowed in trailer sailer or yachting events so crew weight is added to the gunwale particularly in strong winds.

Test

Recently I had the opportunity to carry out a test on the first 650 to be bought into Australia. Set up by local Sydney agent Ron Smith to race in local TYA events and the Marlay Point race, this first Ross 650 was signwritten to make sure it wasn't going to go unnoticed even in the largest of fleets. Christened *'Flirtatious'* this white hulled boat boldly proclaimed its name in green on the topsides together with a large likeness of Marilyn Monroe.

The rather elaborate topside graphics job was explained I guess by the fact that Ron's partner in the boat happens to be a master signwriter, however, I couldn't help but feel that Ron wanted to stir up the opposition a bit on the race course.

I got the feeling the Ross 650 is not going to go through this year being unnoticed in the race results. Our test of several hours in a fresh white-capped north-easter of 18 to 20 knots revealed the 650 to be very fast particularly reaching and running.

On the day we simply did not have enough crew to set the boat up with its full-sized mainsail and working jib. With *Modern Boating* editor Vanessa Dudley and Ron along for crew we had only a fairly moderate to lightweight combination onboard, well short of what we felt the boat needed.

When we turned the corner to run down with the wind, the 650 not surprisingly lifted up and flew. I would have loved to pop a spinnaker in the conditions we sailed in but with only the large number one light kite onboard we didn't want to risk tearing the sail.

As with the bigger Ross speed is deceptive onboard the 650 because the clean lines of the boat make such little fuss through the water that you feel your not really moving as fast as you really are. In a way the sensation

of sailing downwind or 'uphill' on this boat is not unlike that experienced when sailing on a big racing multi — the only way you know you're moving is by the scenery flying by.

Upwind I think we averaged about five to five and a half knots but downwind we quickly moved out to eight knots and even to 10 knots in one slippery reaching burst.

Downwind the Ross 650 easily makes the transition from displacement to planing hull so it's easy to imagine the boat being capable of planing away like a rocket under spinnaker. In New Zealand they have had the 650 blasting downwind at better than 14 knots under spinnaker, planing like a dinghy.

Under the Yachting Association rules for trailer yachts the centreboard cannot be raised more than 20 percent of its area when the boat is sailing. The 650 is designed to comply with this rule yet also provide a small and nicely shaped foil which will cause a minimum of drag.

On the broad transom the fibreglass rudder blade is housed in a simple but neatly designed alloy-framed rudder stock so weight is kept to a minimum.

The underbody of the boat reveals a much more rounded underbody shape than you would have expected of a real lightweight boat. This is due to the fact that the hull sections pull in at the waterline so displacement is spread deeper and narrow with less waterline beam. The hull features the typical deep and rounded forefoot of the modern racing yacht and has a noticeable amount of fore and aft rocker.

The sections stay rounded back to past the centreboard but then there is a definite flat spot in the bottom of the boat which fades out short of the transom.

The overall hull lines and underbody of the Ross 650 suggest a boat which should be equally fast in light winds and low speeds, as strong winds and high speeds.

On deck the 650 is simply laid out with a super simple fractional sloop rig without runners or backstay or even lower stays. In true dinghy fashion there is just the forestay countered by two side shrouds which run over angled back spreaders. The large mainsail is set on a beautifully tapered Hutchinson NZ spar and a 'jumbo' style big section boom.

There is a large traveller for the mainsheet running almost the width of the boat and with rope 2:1 control lines supplied this plus the boom vang and mainsheet is the key to playing the mainsail and keeping the boat on its feet.

There is very little else on deck to get in the crews way except for a pair of headsail sheet winches and headsail sail tracks. Apart from the wedge-shaped cabin the boat is all deck with heaps of room down the side decks and back to the stern quarters for the crew to sit.

The overall concept of the boat is one of simplicity so there is no such things as pop-tops or coamings, however, there are a few civilised touches such as storage lockers at the aft end of the cockpit, a sliding companionway hatch and an anchor locker on the foredeck. As standard there is a glass-topped Passport hatch just ahead of the mast on the for'ard slope of the cabintop and halyard lines led aft to winches and jammers on the cabintop.

We tested the boat without lifelines which are actually supplied as standard so it didn't feel quite as secure sitting up on the high side as it could have. The rails would certainly allow the crew the chance to get their weight right out on the edge of the boat and in rough conditions such as we sailed in it would give a measure of security which I think most people would appreciate.

The rails would also make the boat much more appealing from a day sailing cruising point of view. There is

Ross achieves fast performance through long underline length and lightweight displacement.

Ross powers upwind but needs more crew weight on gunwale.

quite a bit of room on deck around the back end of the boat and the crew could enjoy sitting out using the rails as backrests. Many of the racing boats these days fit rubber tubing to the wire rails to give a more comfortable backrest, this would be a good idea with the 650.

Accommodation

While this boat is a racer first and foremost it has the capacity to be a reasonable overnight cruiser as well. Going below I found a surprisingly roomy cabin with stoop height headroom and open layout unbroken by the centrecase. The dagger centreboard does not intrude that much into the cabin so there is nice open floor space between the bunks.

An unusual touch is the use of pipe-frame 'pipe-cot' style settee berths and quarter berths. While many people feel pipe-cot berths are a no-no for cruising boats, the truth is they are often a hell of a lot more comfortable than the usual hard built-in style of berth that you find in most production boats. In the 650 these berths are attractively finished with stainless steel frames and dusty pink fabric for the base and the covering cushion. There are no backrests since the inside skin of the hull is used as a natural curved backrest. There is however, storage provided by zipper pockets sewn to the underside of the pipe-cot berths.

The forepeak is divided from the main cabin by a vanished ply bulkhead which is incorporated with the centrecase and the mast step to form the basic structural tie for the whole shell of the boat. The natural nook formed by the centrecase and the bulkhead on the port side is utilised with a small but functional galley unit complete with stove and sink but not much else. On the starboard side there is a hatchway into the forepeak which is left bare for sail storage and the inclusion of a chemical porta-potti style WC.

To save weight the whole interior has no fibreglass moulding liners or furniture moulds but is instead flow-coated. The effect is fairly spartan but then I am sure it could be brightened up with a few more bits and pieces. For starters I think a soft fabric backrest with pockets could be added behind the settee bunks and would work in well with the theme and concept of the boat.

In future boat buyers will in fact be offered the choice of either the pipe-cot berths or a moulded fibreglass berth with some timber trim. It remains to be seen what the market will want but somehow I'll be disappointed if buyers turn their backs on the pipe-cots for I think they are a good idea being both comfortable and weight-saving on moulded fibreglass bunk units.

Summary

The finish on the test boat indicated the high standard which has been set for the production of these boats. The basic shell of the Ross will be made in New Zealand using Divinicell foam in the coring and then shipped to Brisbane where the boats will be fitted out by the national distributor, Greenfield Marine. As in New Zealand the Ross 650 is being marketed from the outset as a strict one-design boat in much the same manner as the J 24. While many productions TSs become a class, often a certain amount of leeway is allowed in the fitting and rigging of each boat. In the case of the 650 buyers will be assured of a strict limit on what each boat can and cannot have.

The class rules as I understand them will limit buyers pretty much to what they get in the current standard boat package — a fully-rigged boat with all basic deck controls, jib, genoa, mainsail and spinnaker and lifelines. An outboard will be allowed and in fact will need to be carried to comply with TYA rules. An outboard bracket is included in the package.

All up price for the boat with the above gear plus a trailer is $22,500 ex-Sydney. The only extra you would be adding to this would be a trailer and a few basic safety and navigational items. All up you could be ready for serious racing for around $23,500

The Ross 650 would be bought mainly by ex-dinghy and cat racing people who want to get into TS racing. The 650 will also allow the occasional overnight cruise and should not be totally discounted as a racer/cruiser. The boat is not really suited to the pure cruising type of sailor but it will suit the above average sailor who likes to be moving fast even when he is cruising.

Ross yachts are also being marketed in America and there is a possibility if the class catches on for trans-Pacific competition in years to come.

The Ross range being marketed by Greenfield includes a slightly drawn-out version of the 650 called the 680 plus the 780, an 830 JOG keel boat as well as a 930, 1050 and 1240 super-fast keel boats.

Specifications

Length	**6.5 m**
LWL	**6.02 m**
Beam	**2.48 m**
Draft	**0.22 — 1.67 m**
Dry Weight	**670 kg**
Ballast	**223 (total)**

Distributed by: Greenfield Marine, Acacia Ridge, Qld. 4110.