



Jim Young 570

# New idea on an old theme



*Cruising for four and racing for the three, the new plywood Young 570 has much of the best of all boating worlds. It's light enough to tow easily, yet feels like a bigger craft. Heading into the outgoing tide, Gimmick slips under the Harbor Bridge.*

Heaving great masses of ballast about the public roads costs money so Jim Young has used easy-to-get and very cheap ballast for his Y570 — water. It works better than you'd think as GRAEME ANDREWS found out on Auckland's harbor.

from Jim Young is the build-it-yourself, plywood, water-ballasted trailer yacht. This ingenious craft is one of a range of sailing boats using the idea of carrying water-ballast to avoid the need to tow a dead-weight along the public roads and to have a dead-weight aboard if damaged in survival conditions.

The principle of water ballast is not new, although like balanced centre-boards, self-tacking jibs and other "new" devices, it is "new" only because Australian boatmen have little sense of nautical history and thus, have little idea of what has happened in the past.

Perhaps Jim Young has a good knowledge of the background to boating or, perhaps, as is more generally conceded, he knows what he is about when it comes to designing and building yachts and power-boats.

FOR THE BEST PART of two decades, New Zealand designer Jim Young has been in the forefront of designers from a country which numbers many front rank designers of maritime vessels among its population.

While names like Farr and Whiting have attracted more attention of late, men like Young, Frank Pelin and Alan Wright have been quietly working away on boats which may be less attention-getting but which have their devotees on both sides of the Tasman and elsewhere.

One of the more interesting boats





Whatever the reason, the water-ballasted TY is a "new" concept and one that will appeal enormously to Australian sailors, faced with an increasing interest in plywood and a decreasing supply of fuel both for outboards and motor vehicles.

The general idea is to provide a family racer-cruiser that is very stable, has as much useful room as is possible in both cabin and cockpit, is fast and effective to windward while providing a craft which is easy to tow on the road while still being a yacht when afloat.

The use of water ballast is the key to the problem and it is here that many people will stop and query the whole idea. It is an ingenious idea with great benefits for a trailerable craft. The great majority of trailer-borne craft have deadweight ballast, either in the form of a swing or drop keel or internal ballast such as lead. The aim of this is to provide a degree of self-righting in the event of a knock-down but it provides a buoyancy problem in bigger boats as it is nearly impossible to carry enough solid buoyancy to allow the boat to be self-righting and unsinkable. Using water and carrying it in the correct place, the boat has the advantages of ballast when sailing but if she's swamped, the water ceases to be a deadweight pulling her down.

The ballast tanks are filled when the boat is launched and are drained when she is retrieved. The rate of fill is controlled by a valve and, as the water cannot surge around, there is no free surface to interfere with trim.

The Y570 has a hard chine hull for maximum stability and for ease of building in ply. Easy lines and a fine entry allow her to plane if pushed

hard, yet she slips along very easily in light conditions. There is no provision to remove the ballast in certain sailing conditions although it's probably possible to do it after modifications much in the same way as some racing skippers run down wind with the board up.

The cabin is carried right to the sides of the hull and this adds to the reserve of stability and buoyancy in a knockdown, it also increases shoulder-headroom inside.

The large hatch can slide well forward or be taken off entirely. It can be angled upward when sailing to give some shelter while a large timber forehatch in the leading edge of the cabin allows spinnaker and foredeck work without the need to be on the foredeck. This hatch hinges on the bottom end and opens forward.

A double bunk is fitted forward with a steel mast brace sprouting from near the centreline. To port, a work bench provides a flat working surface (for a primus stove) and two drawers beneath. On the starboard side a plastic sink and pump share a similar locker with sliding doors. Two quarter bunks make up the balance of the accommodation. Good sitting headroom carried right to the beam, allows easy sitting upright on the quarter bunks.

Rigging consists of a low aspect main with slab reefing while the jib can also be reefed. Three stays are used but no backstay as the shrouds are swept back. The jib is small in relation to the main and the boat sails well on main alone. The use of relatively small jib allows easier foredeck work for the wife or children of the family while the main can easily be reefed from the cockpit.

The Y570 is designed for stitch and tape amateur construction, reducing woodwork to a minimum. The side and bottom panels are tied together with wire or cord, as appropriate, then the fibreglass stippling and epoxy resin are applied. All construction drawings are full sized and the foredeck has only four beams while internal frames are few. ➤

*Family versions of the 570 are not as complicated as was Gimmick but she proved her ability in strong breezes on Waitemata Harbor.*

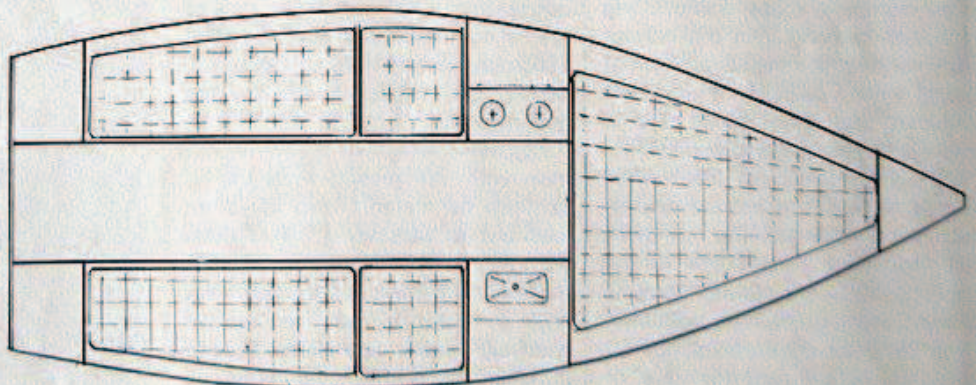
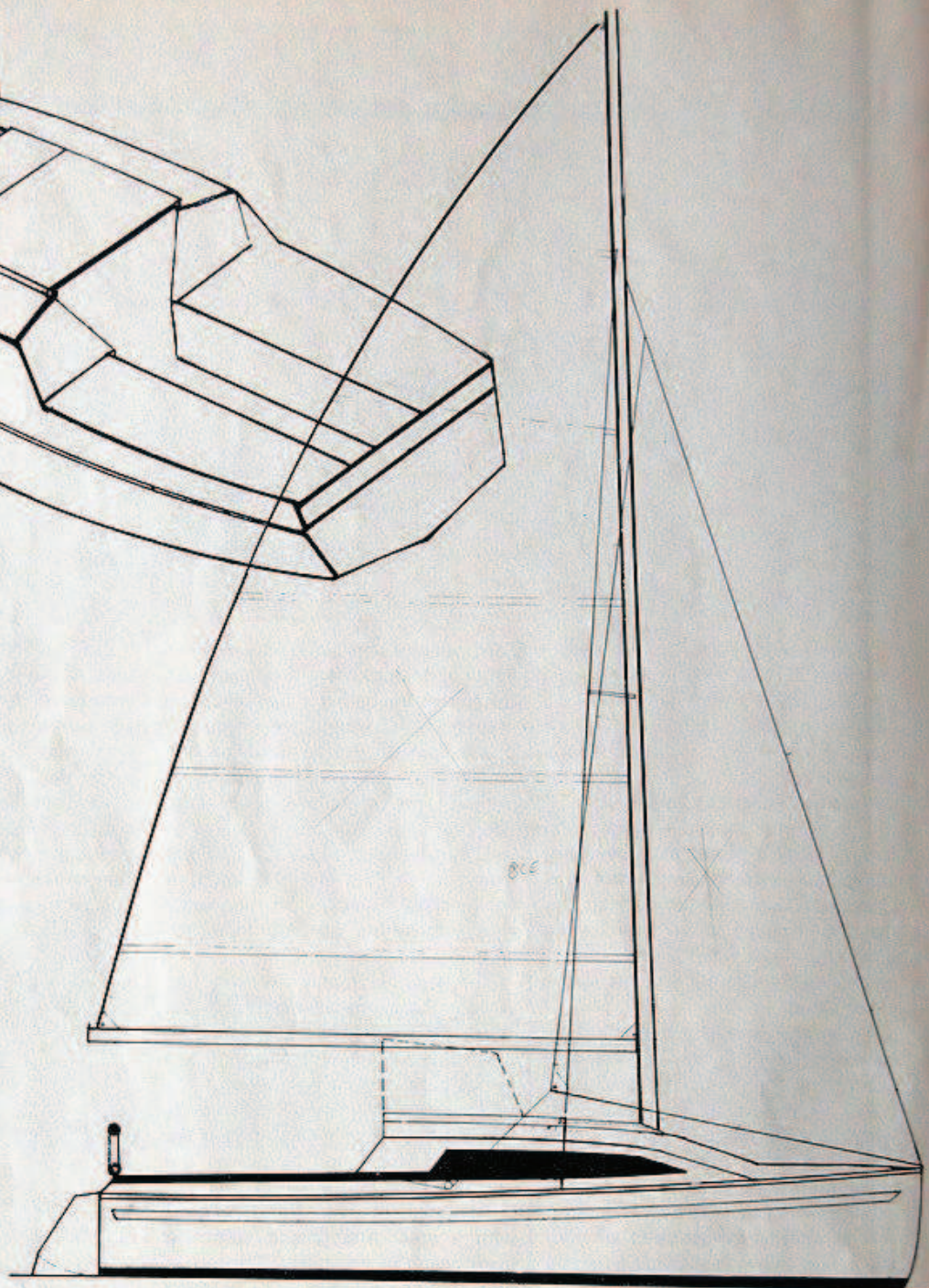


## New idea on an old theme

Jim Young came along on our test of the boat on Auckland's Waitemata Harbor. A westerly of around 20 knots was on tap and the Y570 Gimmick with three aboard was able to make the best of it. Gimmick is set up as a competition boat and has competed through most of a season with excellent results. Her rig was tuned for racing and was somewhat more complicated than would be needed for general family cruising and club racing.

The boat is very stiff under pressure. She heels easily for the first few degrees then the combination of crew weight and ballast stiffens her. On all points of sail we pushed her, easing the main only in the heavier puffs and with all three sitting out on the coamings. The cockpit is laid out with raked sides to the benches and low comings to allow the crew to get well out. The timber boat is worked by a simple lever and small amounts of water sometimes slosh up through the case and run out through the self draining cockpit. The mainsheet traveller is aft of the skipper's usual position and the sheeting is about three quarters along the boom.

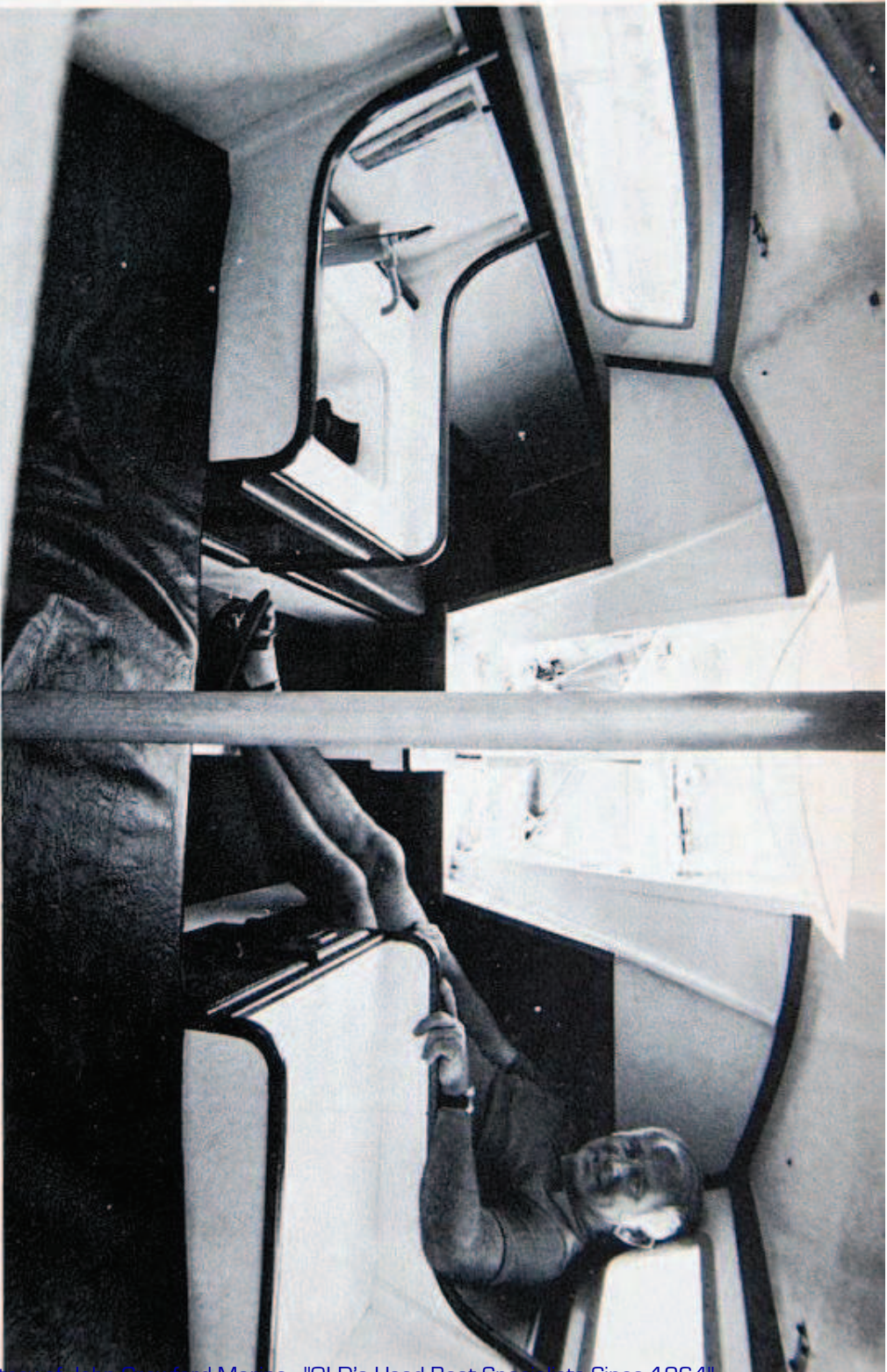
Upwind, the Y570 points well, tracking well and maintaining her heading through swells. Reaching, the Y570 is stiff with the main needing only slight easing in puffs. Downwind she balances well with little pressure on the tiller. Under main alone, the Y570 is controllable and we dropped



our headsail, went about into the abbing tide (which runs rather more quickly then it does on Port Jackson) and beat in through the groynes of Westhaven boat harbor. Several tacks were needed to work through the pens and moorings before ghosting into Gimmick's pen. A Seagull outboard was used to get the boat out onto the harbor but we ignored it on the return run into the berth.

**Summary:** The Y570 and bigger sister Y670 are typical of a new generation of build-it-yourself trailer yachts. Plywood is making a comeback, partly because of the rising price of GRP and partly because many home-builders are again considering building their own boat for the pleasure of accomplishing something and saving money somewhere along the line. The bigger Y670 can sleep six, as an alternative for those with a bigger crew.

More handsome than pretty, the Y570 has only a slight sheerline and tucked up chines to clear her stern of drag. Probably the most important aspect of the craft is the lack of ballast when being towed — this considerably reduces the power required.



*Jim Young shows how sitters don't have to get a ricked neck in the 570. Interior layout is practical and well thought out for three or four people.*

**DATA**

YOUNG 5.7 METRE TS.	
Designer: Jim Young, NZ.	
LOA:	5.64m (18ft 6in)
Beam:	2.21m (7ft 3in)
Weight:	580.6kg (1280 lb)
Freeboard, fwd:	0.86m (2ft 10in)
Freeboard, aft:	0.58m (1ft 11in)
Draft, board up:	0.33m (1ft 1in)
Draft, board down:	1.17m (3ft 10in)
Headroom:	1.24m (4ft 1in)
Sitting:	0.97m (3ft 2in)
Mast:	7.62m (25ft)
Mainsail:	15.8m² (170sq ft)
Jib:	6.7m² (72sq ft)