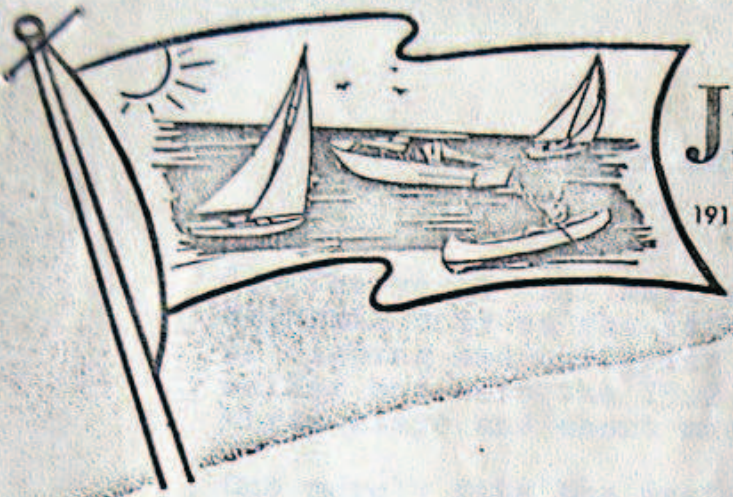

Jim Young Marine Ltd

191 DIANA DRIVE, TAKAPUNA P.O. BOX 30-004, AUCKLAND, 9 N.Z.
PHONE 447-480

FULL SIZE PLANS $103-00
SPECIALLY DESIGNED FOR THE HOME BUILDER

5.2 METER TRAILER SAILER

L.O.A.	17'	1"
Beam:	7'	6½"
Weight:	580	lbs. on trailer
Freeboard fwd.	2'	5½"
aft.	2'	3½"
Draft board up:	1'	0"
" " down:	3'	7"
Headroom:	4'	3" to 5' 6"
Sitting:	3'	1"

Material cost (woodwork): $700-00 approx.

Accommodation: Two large single berths and one double berth, galley, watertite S.D. cockpit draining through stern. Provision for toilet.

Rig: Sloop, mast, boom (mast 24', boom 12')

Mainsail area: 144 sq.ft. Jib: 64 sq.ft.

No permanent or running backstays for ease of rigging in shortest time possible. These are unnecessary and save cost and rigging time. The sail plan, being lower, will heel the yacht less. The area is concentrated less in headsail and more in the main for the following reasons.

a) The larger main is good for down wind sailing without a spinnaker and is easier to handle than a headsail.

b) For cruising a headsail is almost useless dead before the wind and up to 40° either side. One should be beware of the trailer sailer with the tall immitation ocean racer rig because the I.O.R. rule which encourages the large fore triangle with all its faults, does not apply to trailer sailers, where the headsail must not be too large so that it can be handled by a light crew who can often be a girl or child.

c) The smaller headsail does not need to be changed in stronger winds and needs much less strength to handle the sheets, and no winches are needed. Reefing a main is easier and safer than changing headsail and you do not get wet sails in the cabin.

d) The yacht will sail and handle much more easily under mainsail only as she is better balanced. Ease and quickness of rigging and unrigging is most important in a trailer sailer and here the Y5.2 scores with her simple rig with only three stays and short mast which is only 24ft. long.

One merely fits the mast in the pivot on the tabernacle, hooks the shrouds to the chainplates and by pulling forward on the forestay till the mast is upright and the stays tight, the mast is stepped, leaving only the forestay to be tightened. The mainsail can then be hoisted, the boat launched, sailed out to clear water and the headsail set, by which time the water ballast tank is full. The boat will sail even to windward with headsail only. Slab reefing is recommended for quickness and better setting.

The general concept of this trailer yacht is for a family racer cruiser that is stable, has maximum useful room in both cabin and cockpit, is fast and able to windward while giving a maximum size yacht which, by virtue of the water ballast which is only aboard when the yacht is afloat, provides the lightest possible yacht for its size for trailing, enabling it to be towed behind a 4 cylinder car and is easy to build while retaining the professional look for pride of ownership and top resale value.

Water ballast This ingenious innovation is as effective as deadweight ballast for the following reasons. The fact that they are trailer born dictates that the majority of trailer sailers either have their lead or iron ballast immediately under the bottom of the hull externally or they have internal ballast. In either case the function of this weight is firstly to press the hull into the water so that it gains stability from its shape, and secondly to provide positive self righting in the event of a knockdown. Since there is plenty of room in the bottom of the boat to carry as much weight of water as would be required in lead or iron the water can, by being contained so it cannot flow about, perform exactly the same function for the same effect. The ballast tanks fill up when the boat is launched while the sails are being hoisted and drain out when back on the trailer. The rate of filling is controlled by a simple air vent with a valve. Among the many advantages of this unique concept are (i) light for trailing allowing a smaller car, (ii) less cost, (iii) totally unsinkable even if holed, (iv) ease of handling for out of water maintenance.

Hull The hull is hard chine for maximum stability, low cost and ease of construction. Particular attention has been paid to minimising rolling when at anchor for comfort when cooking and sleeping, and although she has maximum beam within the transport regulations for trailing, her easy lines

5.2 METER TRAILER SAILER

and fine entry guarantee a fast and pleasant sailer that will plane if driven hard, but will be quite docile if treated gently by the inexperienced sailor.

Construction The full size frames and stem drawings are self explanatory and the hard chine hull is far easier and less costly, with less potential leaks; it is also stronger, more stable both when sailing and when anchored for the night. Sheet plywood practically dictates chines anyway and why go to all the unnecessary complication of building an immitation round bilbe boat by giving it double chines when hard chine looks much better, easier, cheaper, faster and more importantly is lighter, an essential in any boat, which is taken out of the water such as a trailer sailer. The full size drawings show temporary frames made of cheap mateeial which are taken out when the hull is finished to give more room and save weight. Girders are fitted fore and aft to the temporary frames and form the sides of the cockpit, bunks and galley. Bulkheads are slotted in over these girders and save much work later in the interior, and the frames, and girders are very easily set up. Fibreglass tape is used as much as possible for simplicity. Three beams in the foredeck and the absence of side decks makes building the cabinsides against the outer side of the gunwales simplicity itself while still preserving the line and appearance of having side decks. One vital point about the cabin being built against the gunwales. Besides giving maximum room inside and eliminating the discomfort, common in many yachts, of the inner corner of sidedecks catching people in the back of the neck when sitting down inside, it provides valuable reserve stability so that in the rare event of a hard knock down the boat must right herself.

The water ballast tank which is built in under the floor is built of plywood and glassed and floods when the craft is launched and drains again when she is retrieved, providing stability and helping to trim the boat so that the crew may sit in the cockpit while still maintaining proper sailing trim. The combination of water ballast and the reserve stability gained from the full width cabin not only make the Young trailer sailers practically impossible to capsize, but also they are unsinkable.

The accommodation consists of a large double berth forward and a large quarter berth each side under the cockpit seats which are kept high for extra room underneath, give reserve stability and simplicity of construction. These berths extend well into the cabin to provide comfortable seating with ample headroom. The windows being at eye level give excellent view from inside the cabin. Provision is made for a stove and sink with food lockers in the cabin. The cockpit is self draining and by ingeneous arrangement the centreboard is housed under

5.2 METER TRAILER SAILER

the cockpit where it takes no useful room. The board itself is made of ½" ply glued together and shaped. It is raised and lowered by means of a handle attached to the trailing edge which is so arranged that it locks the plate in any position. The rudder has the tiller through the transom and is permanently shipped. The tiller being used to raise and lower the blade and lock it in position.

This craft embodies many other features not covered here all of which add up to a combination of low cost, easy construction, ease of trailering and rigging etc. with comfort, safety and ease of handling and pleasant sailing. A boat which, without effort, can outsail any trailer sailer her own size and larger and which one can be proud to own..

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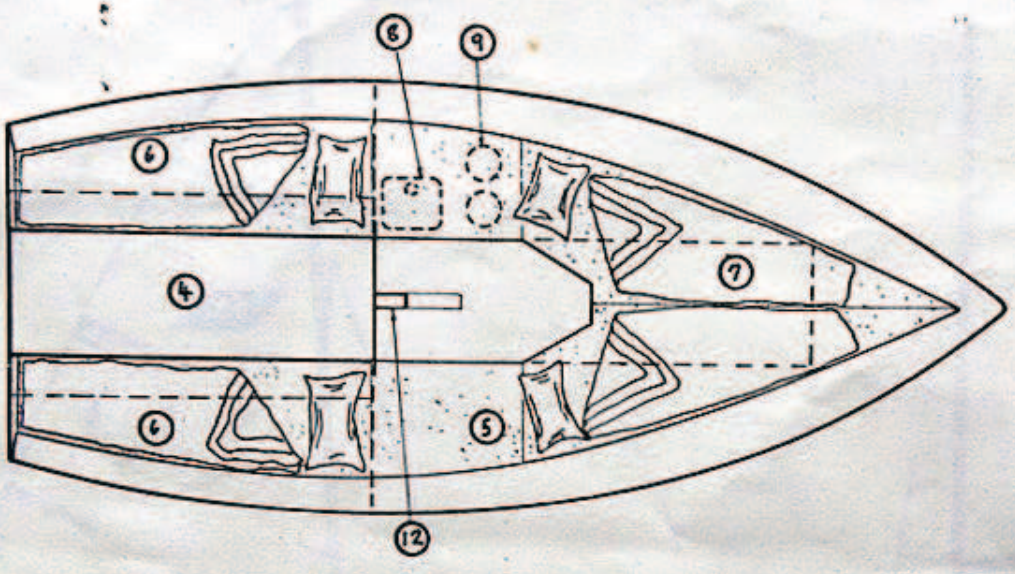


LEDGEND

1 WATER-BALLAST TANK (DRAINS OUT WHEN ON TRAILER)

2 STOWAGE SPACE (DRY)

3 BOUYANCY COMPARTEMENTS

4 COCKPIT - SELF DRAINING.

5 COMFORTABLE SITTING AREAS (BECAUSE OF NO SIDE-DECKS)

6 QUARTER BERTHS. FULL SIZE, - COMFORTABLE SLEEPING

7 LARGE DOUBLE-BERTH FULL LENGTH

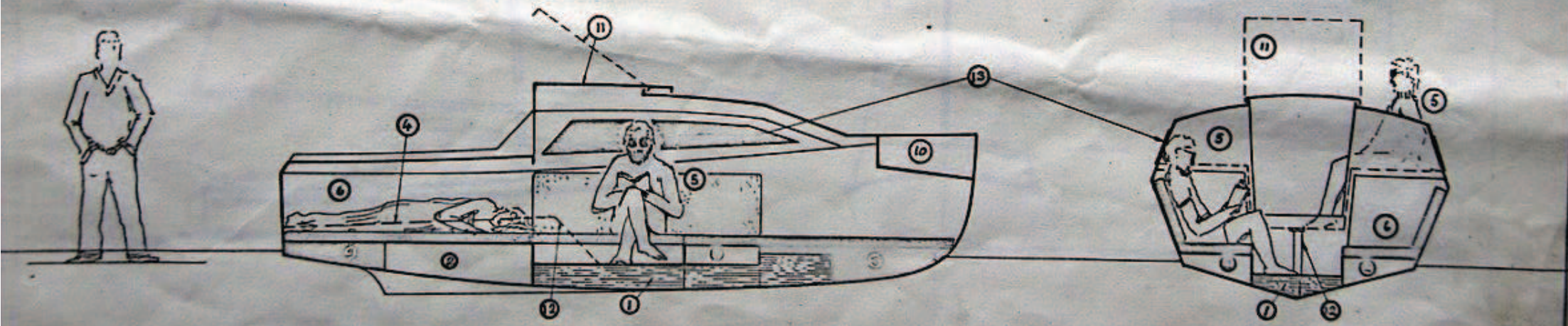
8 + 9 SINK AND STOVE UNDER BUNK. (PUMP-OUT SINK) (OPTIONAL)

10 ANCHOR LOCKER - SELF DRAINING

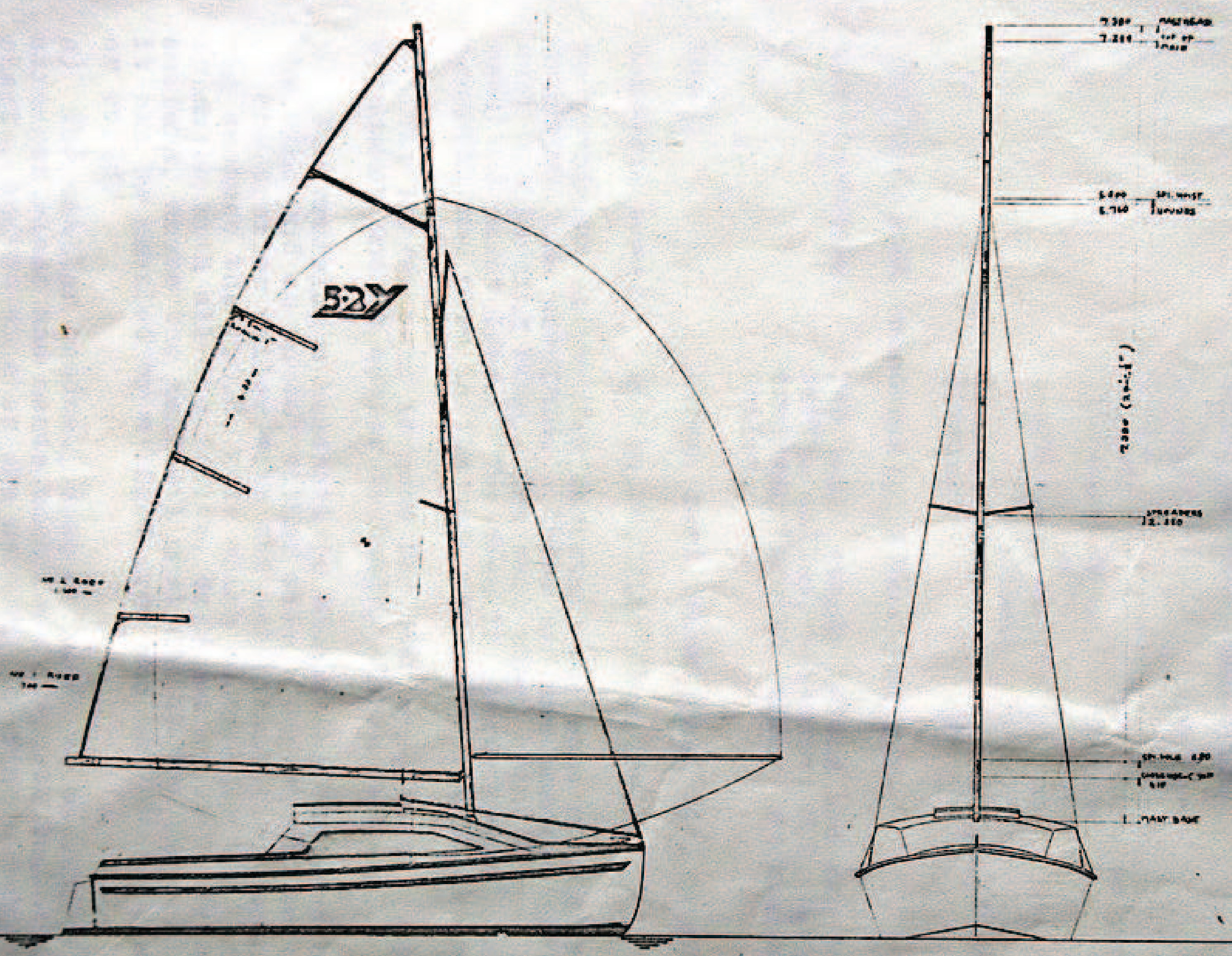
11 SLIDING-LIFTING HATCH. 1.45m (5'-6") HEADROOM UNDER.

12 CENTREBOARD CASE HIDDEN UNDER COCKPIT SOLE GIVES MAXIMUM ROOM IN CABIN AND COCKPIT.

13 EYE-LEVEL WINDOWS



JIM YOUNG MARINE LTD. AUCKLAND, NZ. 5.2 METRE TRAILER SAILER INTERIOR LAYOUT 1:20



SAIL DIMENSIONS

SAIL	[illegible]
MAIN	[illegible]
JIB	[illegible]
SPIN	
TOTAL	[illegible]

SPAR DIMENSIONS

SPAR	[illegible]
MAST	[illegible]
BOOM	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

SPECIFICATIONS

[illegible]	5.200 m
BEAM	2.30 m
WEIGHT	580 lbs TRAILING.
SAIL AREA	19.4 m²
[illegible]	750
[illegible]	700
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
BALLAST	[illegible]
BERTHS	4

JIM YOUNG MARINE LTD AUCKLAND, NZ. 5.2 METRE TRAILER SAILER SAIL PLAN & GENERAL APPEARANCE SCALE 1:20