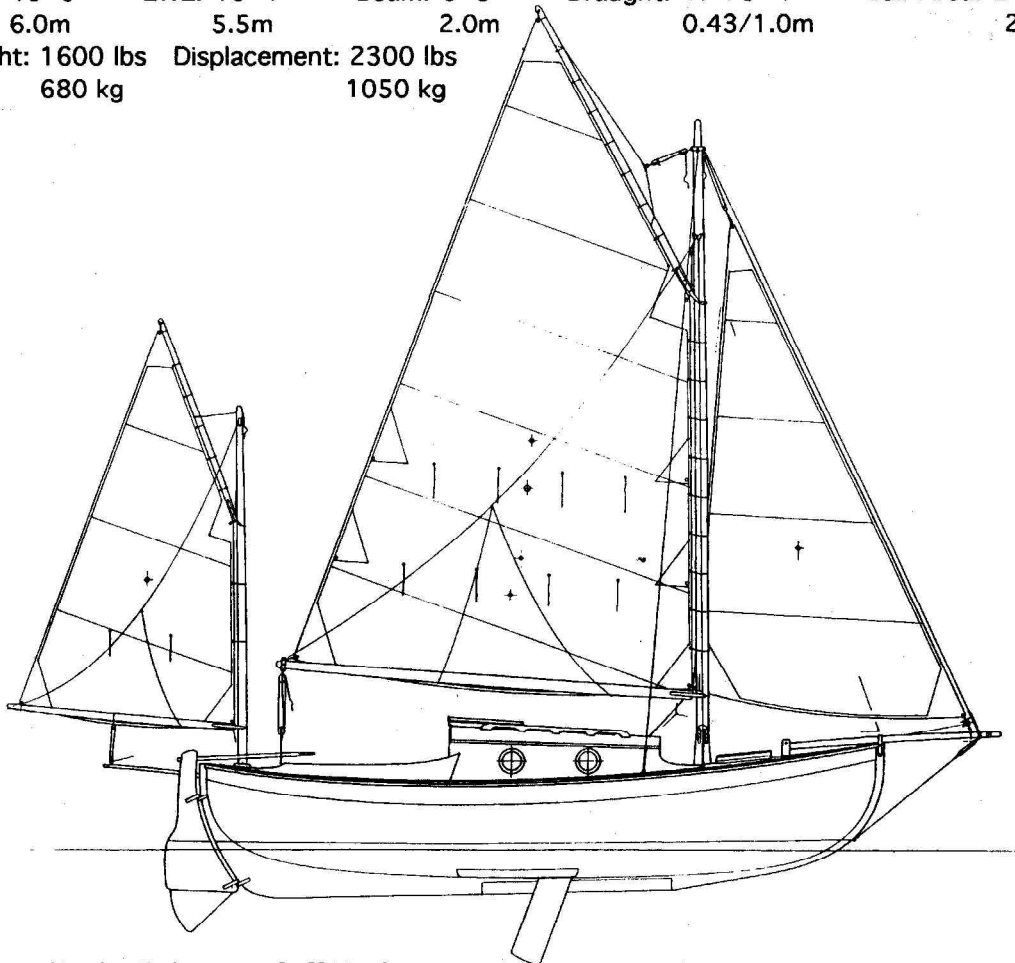


EUN NA MARA

design

no. 69

LOA: 19'-9" LWL: 18'-1" Beam: 6'-8" Draught: 17"/3'-4" Sail Area: 240 sq ft
6.0m 5.5m 2.0m 0.43/1.0m 22.3 s m
Weight: 1600 lbs Displacement: 2300 lbs
680 kg 1050 kg



Type: Canoe Yawl Sailing rig: Gaff Yawl

Accommodation: 2 berths (Daysailing 1-5)

BUILDING INFORMATION

Construction: glued lap clinker plywood
Options: cold-moulded, strip plank

Building time: 1000 hours

Plans: 10 sheets (incl. Watercraft cold-moulded building articles if required)

This is a carefully thought-out attempt at a practical two-berth trailerable cruiser. (The owner actually did most of the thinking; I just had to put his ideas into a nicely-shaped boat. The builder did some useful thinking as well).

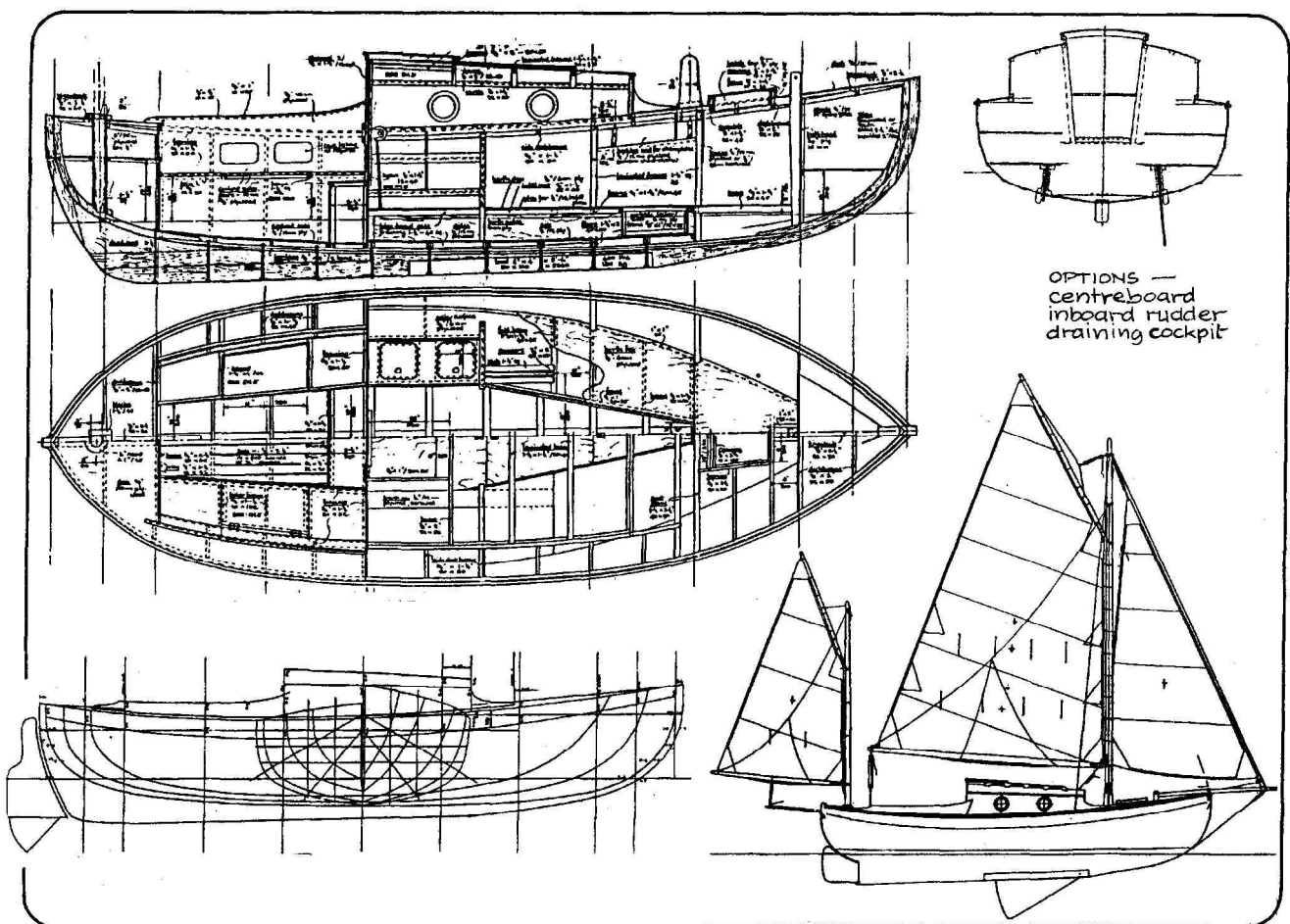
The canoe yawl type was decided on from the beginning. It makes a particularly pleasant cruising boat, with a buoyant and seakindly hull of shallow draught, adequate accommodation, and a very versatile and seamanlike rig, which is easily managed single-handed in any normal conditions.

Always keeping in mind the fundamental requirement for a graceful and well-proportioned ship, the main problem was to fit in a comfortable cabin and useful cockpit. Many faxes flew back and forth between owner and designer, the former demanding more headroom, and the latter steadfastly refusing to compromise the appearance of the boat. Headroom below is minimal, but it's enough. The cockpit holds four comfortably, and six 'cosily'.

The great disadvantage of shallow draught is of course the need for a centreboard. In a boat of this size, the effect of its case right in the middle of the small cabin can be disastrous. One solution is the use of twin bilge boards. I felt dubious about the cost and complication of building two cases instead of one, and the need for two plates and sets of lifting gear. But as long as the owner was aware of these considerations and willing to accept them, and the builder in a weak moment agreed to put it all together, I was free to enjoy planning the accommodations around the consequent benefits. The

cases form the cabin seat/berths and so disappear into, and are braced by, the berth frame. The keel is not weakened by a slot cut through the middle of it. Mud, stones and sand will not jam up the slot. Two smaller plates are much easier to handle than a larger one; they can easily be dropped out and inspected on the trailer.

The canoe yawls, being developed from the smaller sailing canoes, tended to be rather narrow in the beam by modern standards, with sailing rigs of low aspect ratio and a low centre of effort, to reduce heeling moment, while retaining sufficient area for good light-weather performance. The rig is easily and quickly adapted to suit the prevailing conditions. The first reduction is to tuck a reef or two into the mainsail; as the gaff comes down the heeling and pitching effect of a tall bermudan mast is eliminated. In a strong breeze she will balance well and sail capably to windward with only jib and mizzen; the prototype MINNA also has a heavy-weather jib which is tacked to the stemhead to balance a reefed mizzen. The sail area is quite generous, in line with the traditional principle of carrying plenty of canvas for light weather, and reefing early, rather than setting extra light weather sail with its intrinsic complexity of gear and handling. In this way the (regrettably necessary) outboard motor is needed less often and for shorter periods than is often the case. The well is neatly and unobtrusively fitted in behind the aft cockpit bulkhead. The spars are hollow, to save weight and to simplify finding the materials.



To support this gear is a full-ended hull, buoyant in the ends and with a firm bilge, with 500 lbs-225 kg of ballast in the lead keel and the steel bilge boards. The beam is carried well into the ends, and the afterbody is quite full to provide sufficient buoyancy to support the weight of too many people in the cockpit. Canoe sterns have a way of leaving a clean wake in spite of variations of displacement, trim, and sea state. This in a sense makes the hull more adaptable than a transom-sterned boat; in a hull of limited length a designer would have a choice between an small transom which will be more seakindly but reduces the effective WL length and buoyancy aft, or a large transom which will drag when overloaded.

Glued clinker construction was thought to be the most practical method. 10mm plywood is used, on minimal framing. The first boat built to the design at the Lyme Regis college was cold-moulded, and she looks fine. This boat is the subject of the Watercraft building series. Strip-planking may work as well, although I am not sure if it could be more tricky to work the strips around the full stern.

The Minna's owner designed a very effective combination trailer; it certainly facilitates launching and hauling out. Drawings of this will also be available.