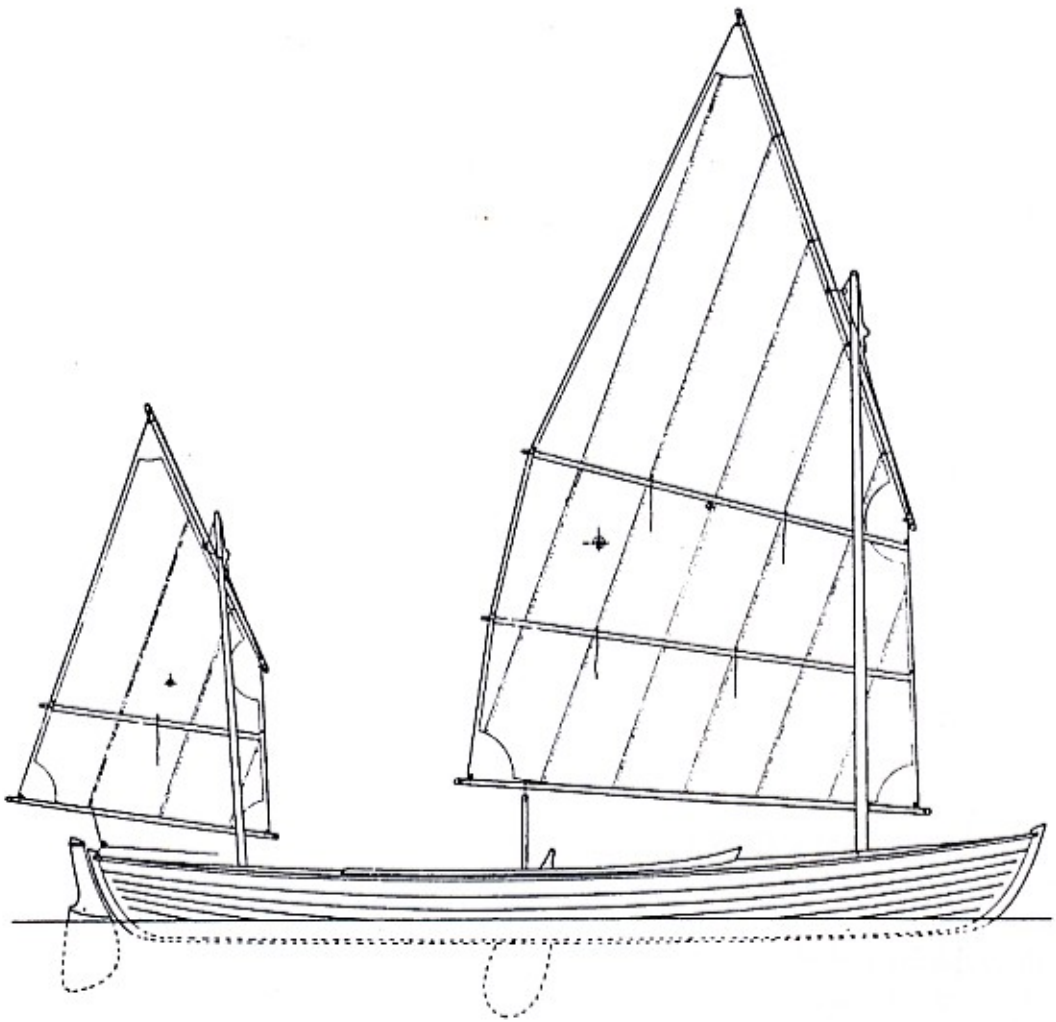
MacGREGOR CANOE

LOA: 13' -8" 4.165m **Beam:** 31" 795mm **Depth:** 11 ½" 290mm **Weight:** hull: 45lbs 20kg rigged: 65lbs 30kg **Sail:** 50/57sq ft 4.65/5.30sqm



Type: sailing/paddling canoe **Sailing rig:** balanced lug (yawl rig or single sail) with leeboard **Capacity:** 1 or 2

BUILDING INFORMATION
Construction: glued lap clinker plywood
Options: traditional plank – strip plank – cold-moulded
Building time: 140 hours Rig + 60

COST
Materials £500 Rig + 400

Plans: 5 sheets with instructions

The early canoe sailors were an inventive lot, and magazine articles of the time show just about every conceivable variation of almost every likely rig - and not a few unlikely ones. But the battened balanced lug was the most popular for cruising, with its combination of low area, controllable driving power, and the ability to adapt quickly to any conditions, without the crew having to tramp up and down the boat. Most reefing systems were however quite complex, with many tiny blocks and lines designed to haul down the batten to the boom at several points, along with the tack and clew, all by hauling on one line. This has here been simplified to a modern single-line reefing system which hauls the tack and clew only, cleating on the boom, with a couple of reef

points which can be tied in whenever it's convenient. Synthetic sailcloth, being stiffer, is less inclined to flap around uncontrollably if not properly tied down, so needs less in the way of restraint between the tack and the clew.

Many and devious also were the contraptions designed to fulfill the function of a centreboard. There simply is nowhere to put a proper board in a canoe without it taking up virtually half of the limited room in the boat. One solution was the fan-type bronze plate, which fitted in under the floorboards, but must have been as inefficient in use as it was expensive.

The single assymetric leeboard, with its flat face outboard and a line cleated amidships, has proved itself to be surprisingly effective and easy to operate on the larger skiffs. In a canoe it is even easier to flip over to the new lee side, as she comes through the wind. Certainly a centreboard does not require even this much attantion, but the complications and inconveniences of a centreboard case in this size of a boat are to be avoided if at all possible.

The feasibility of traditional construction was kept in mind in the process of working out these designs, although it is not likely that many builders will want to go this way. With careful choice and use of materials the weight can be kept almost as low as the plywood hull. Cartop travelling in hot dry weather may be a concern: however, a small boat that is 'dry-sailed', used for only short periods, and kept in a dry room may not take up so much that drying out will be a great problem.

The strakes have been kept quite narrow, so that light cedar or spruce planking can be used; about 1/4" or possibly a little less for a light WEE ROB. The small timbers will take a bit of extra time; clenching seems to work as well as rivetting on this scale, and looks neater. This is almost nearer to modelmaking than boatbuilding, and the light materials require careful work, but at least no heavy steaming will be needed.