The Sail'n'Oar

FLATTIE

A general purpose SKIFF

Looking at the plans and builders manual of an easily and economically built boat.

Designed by John Sheen

Flattie is a traditional design, modified to enable the use of modern materials.

Built from marine plywood and epoxy resin, construction is quick and very easy. No formers or frames needed. Every hour and every penny is in the boat, saving time and money.

LOA 12ft. Beam 5ft 2in.

Dft board down 2ft 9ins.

Sail area 80 sq ft.

EXCITING TO SAIL, EASY TO ROW,

WILL ACCEPT AN OUTBOARD MOTOR.

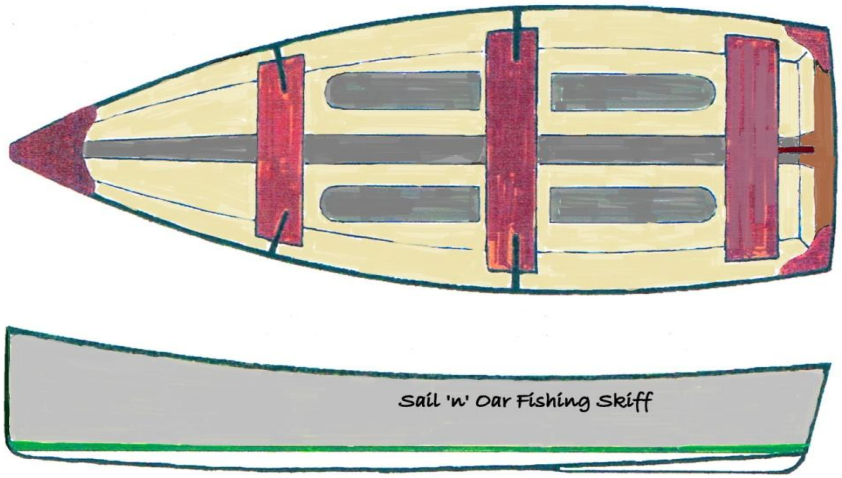
GENEROUS BUILT IN BUOYANCY FOR SAFETY.

FAMILY BOAT, FiISHING BOAT OR CLUB RACER.

The manual also gives details of the Sail'n'Oar FISHING SKIFF.

An easy to build boat for oar or outboard motor.

A roomy boat suitable for family or commercial use.



The FISHING SKIFF can be fitted out to any builders requirements. Above is a suggestion for a simple boat.

60 pages of plans, sketches, photographs and easily read and understood instructions. Every page laminate sealed and wipe clean to protect from workshop dust and spills.

Construction has been made simple and quick.

Four sheets of 6mm Marine Plywood and one 12mm.

All one size construction timber makes ordering easy.

No boatbuilding experience is necessary to build this boat.

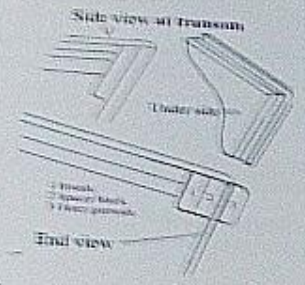
No large workshop, no large tool inventory or machinery, and no large bank balance needed either.

INTERESTED ?

MOVE ON THROUGH THESE PAGES.

Before finally cleaning up and rounding off the gunwales/inwales at the ends, the quarter knees and breast hook should be fitted.

The knees and breasthook are made from 2 x 12mm plywood and 1 x 6mm.

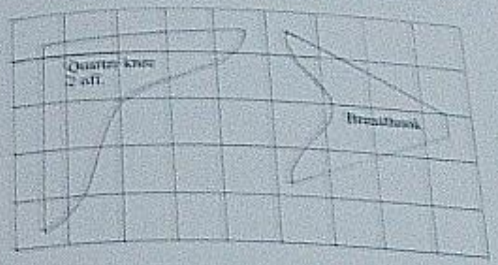


Glue the 12mm pieces together and bevel and fit to the inwale and transom stiffener. Do not glue in at this time. Prepare the top 6mm plywood and glue down to the transom and inwale to the topside plank outer edge with a dab of hot glue or double sided tape. The transom will need to be bevelled and possibly the inwale a little too. Glue and cramp the 24mm under knees to the 6mm top and remove from the boat. When the glue has cured clean up and round over the front edges. Now they can be glued into the boat. Make sure they are well down and fitted on all glued surfaces. A couple of temporary screws will suffice. The breast hook fits tight to the outside of the stem and over the inwales and blocks. Clean up excess glue. Trim off the ends of the outer gunwale and round off. Round off all corners and coat with un-thickened epoxy.

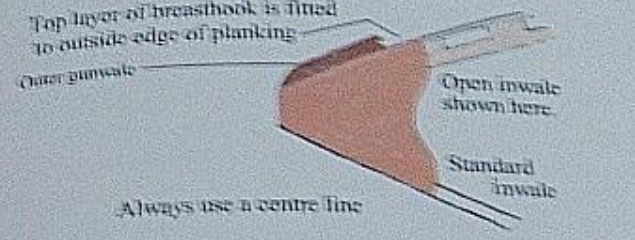
Sail'n'Oar FLATTIE

Breasthook and Quarter knees.

The top lamination is 6mm, the two under laminations are 12mm marine plywood.
Draw onto paper and transfer pattern to plywood. The grid squares are 2inch (50mm)
The outside edges must be shaped to the outside of the planking and transom.

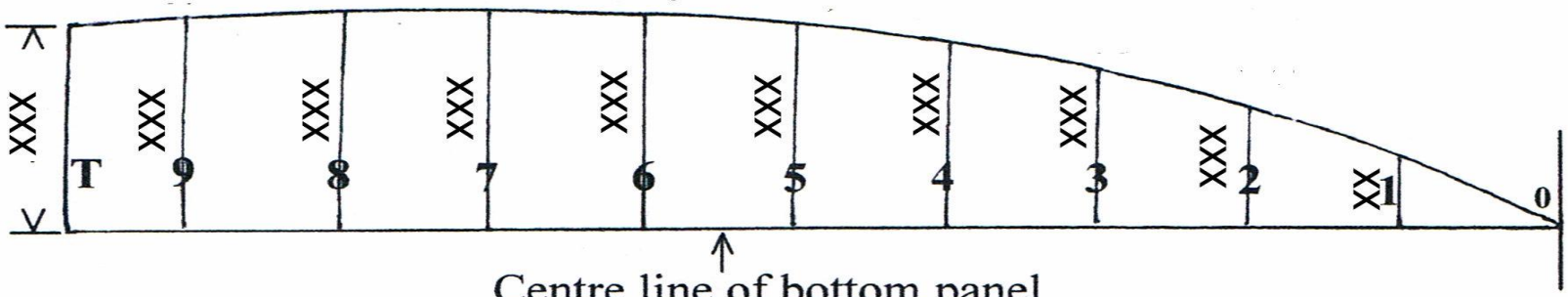


It's a good idea to try the paper pattern on the boat.



Sail'n' Oar "FLATTIE" Bottom panel.

Stations 0 (Fwd) 1 2 3 etc are 364mm apart to station 9.
The transom is 275mm from station 9.
Stations must be squared off the centre line.



Centre line of bottom panel

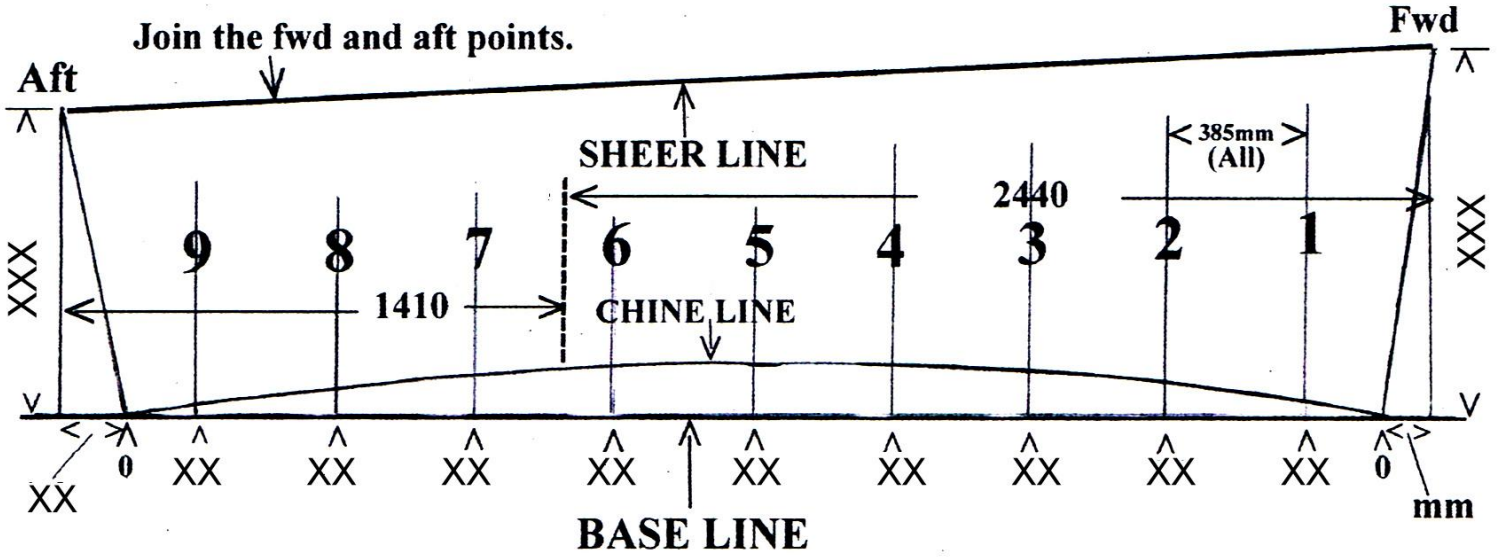
The measurements are half widths of the bottom panel.

The join in the panel if using standard plywood sheets (2440 x 1220) will be just fwd of station 3.
(2440mm from the transom end of the panel)
If using a butt strap (6mm) it should be 100mm wide placed central over the join and square accross.
After the forward bulhhead is fitted fill the space between it and the forward edge of the butt strap with 6mm plywood glued down.
This is a simple measurement sketch and no scale is intended.

Measurements xxx above, not shown, you will have to buy the plans.

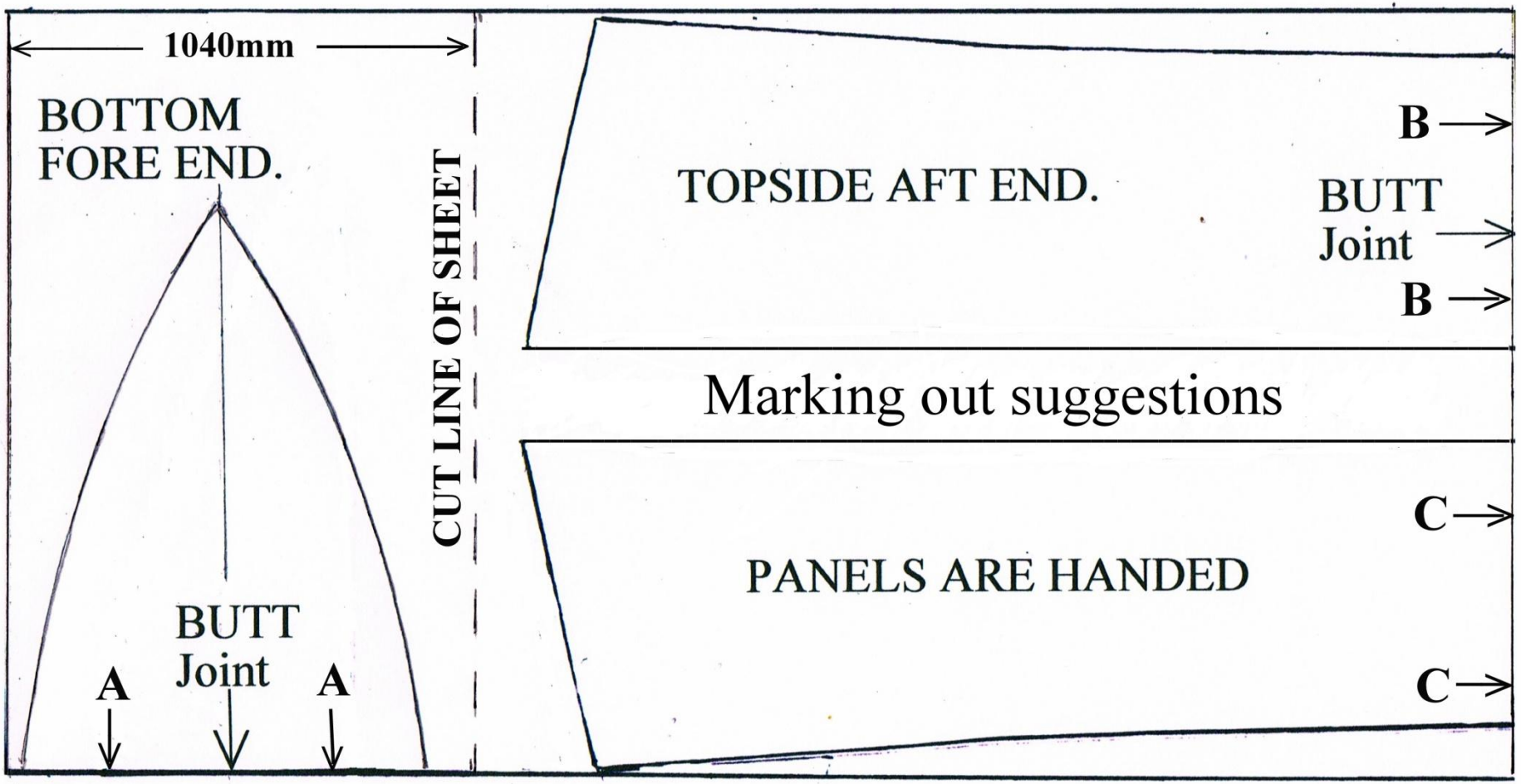
FLATTIE TOPSIDE PANELS

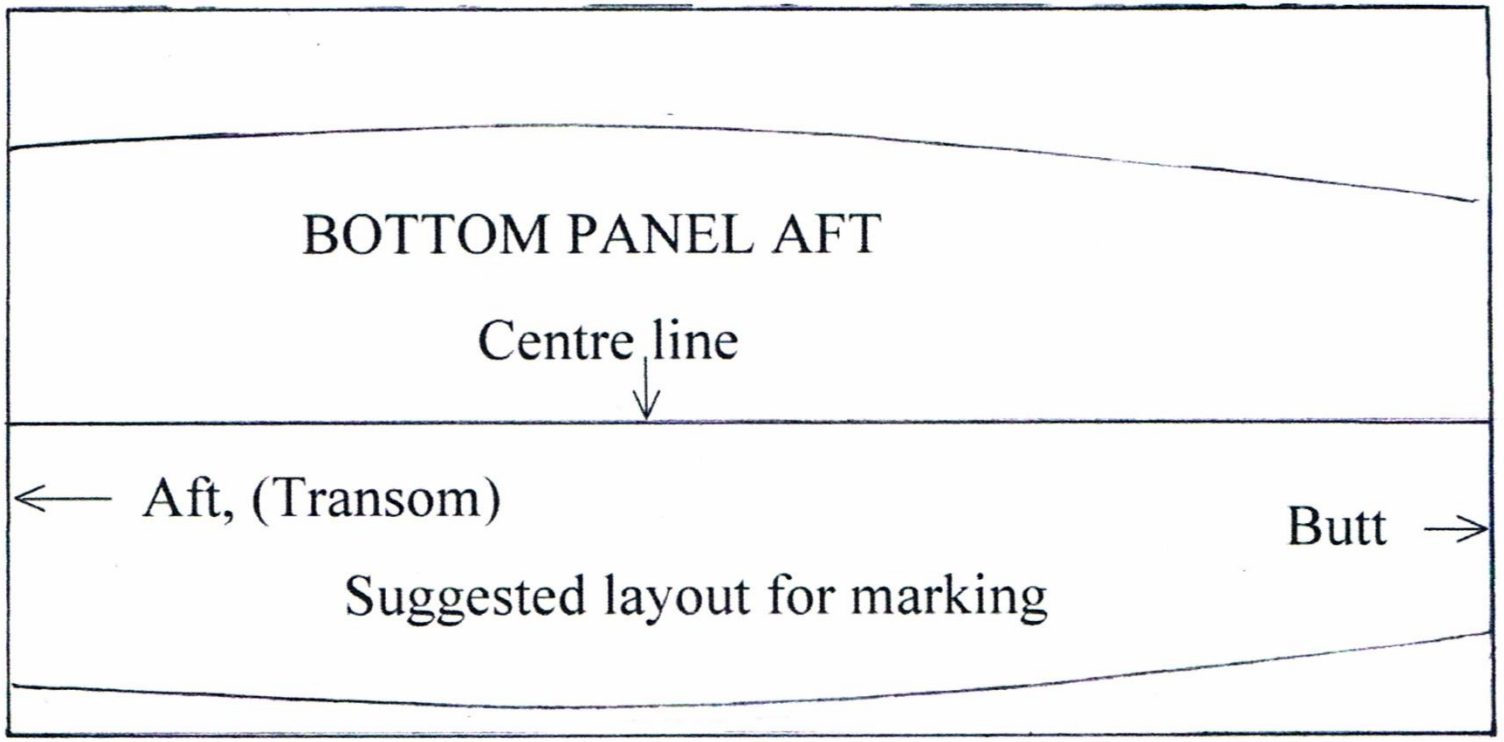
Stations 0 (Fwd) 1 2 3 etc to 10 (Aft) are 385 mm apart.
They must be squared off the base line. (edge of sheet for first side)
The top of the panel is straight. Bottom figures are chine heights.
Always mark with a pencil that can be erased.



The join of the plywood will be aft of station 6. (Dotted) if using standard sheets.
Mark out the plywood to the measurements given and bend a batten to the curve.
This is an exagerated no scale sketch for simple clarity. Measurements correct.

Measurements not shown, you will have to buy the plans.


1040mm
BOTTOM
FORE END.
CUT LINE OF SHEET
TOPSIDE AFT END.
B
BUTT
Joint
B
Marking out suggestions
PANELS ARE HANDED
C
C
BUTT
Joint
A
A

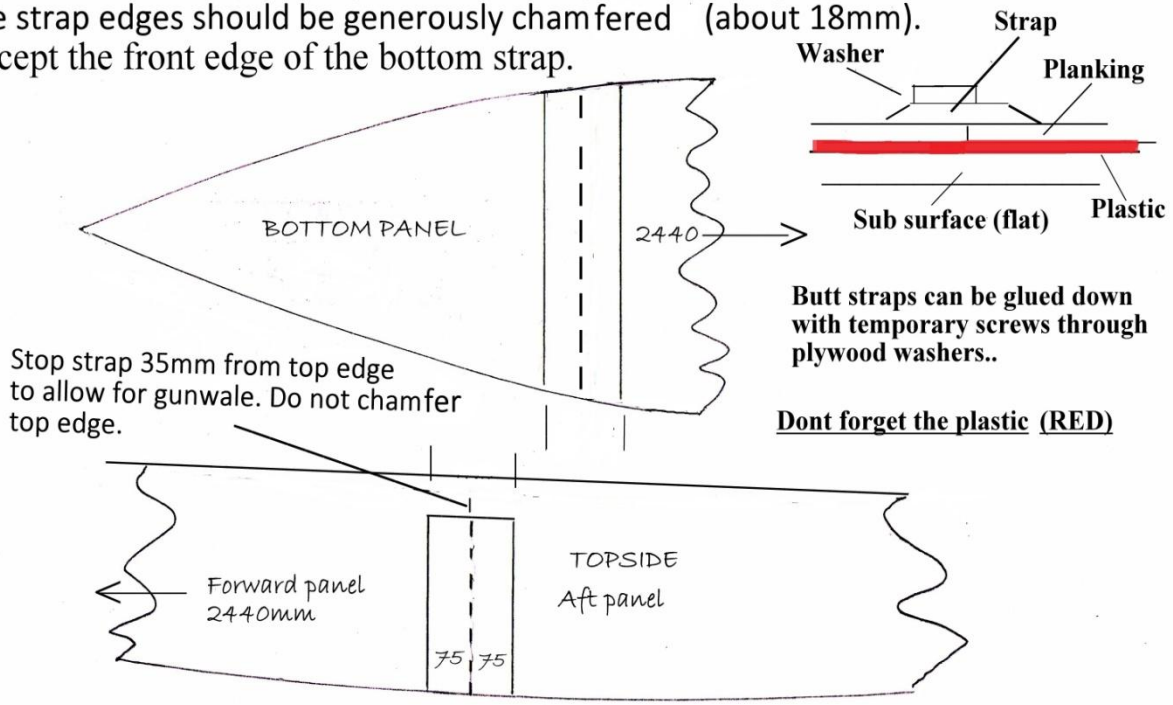


All above shown on full 2440 x 1220 Plywood sheets.

Clever design means there is very little waste material.

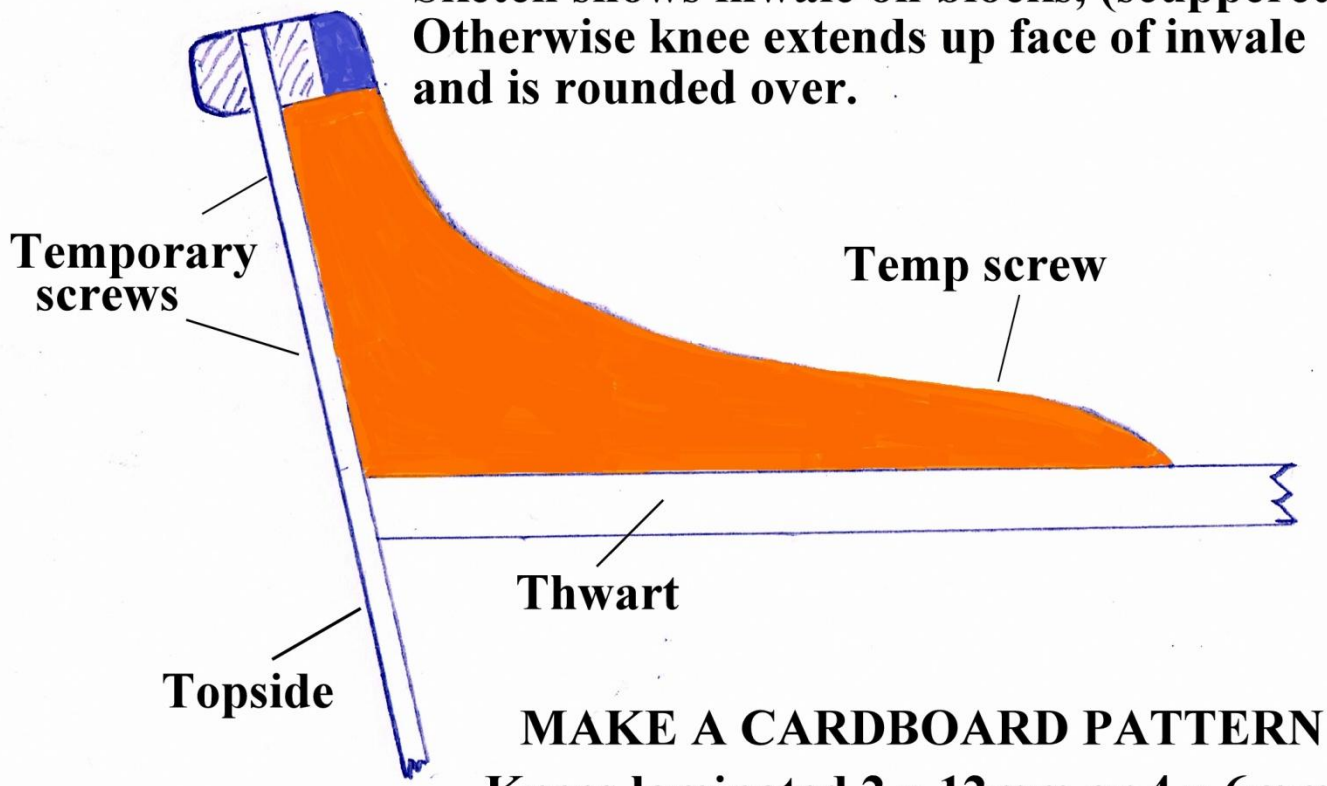
The drawings show in simple terms how easy it is to build the “Flattie” Coupled with the full instructions in the manual it allows anyone with even limited DIY skills to build this boat. Additionally there is always backup available from the designer, who has for over 50 years been designing and building small boats in both traditional and modern materials.

The butt straps are cut from 6mm plywood and positioned as shown in sketch.
THEY SHOULD BE CRAMPED DOWN ON A FIRM, FLAT SURFACE.
Cover the sub-surface with plastic to avoid panels getting attached to it.
The strap edges should be generously chamfered (about 18mm).
Except the front edge of the bottom strap.



Thwart Knees
Port & Starboard.

Sketch shows inwale on blocks, (scuppered)
Otherwise knee extends up face of inwale
and is rounded over.



MAKE A CARDBOARD PATTERN

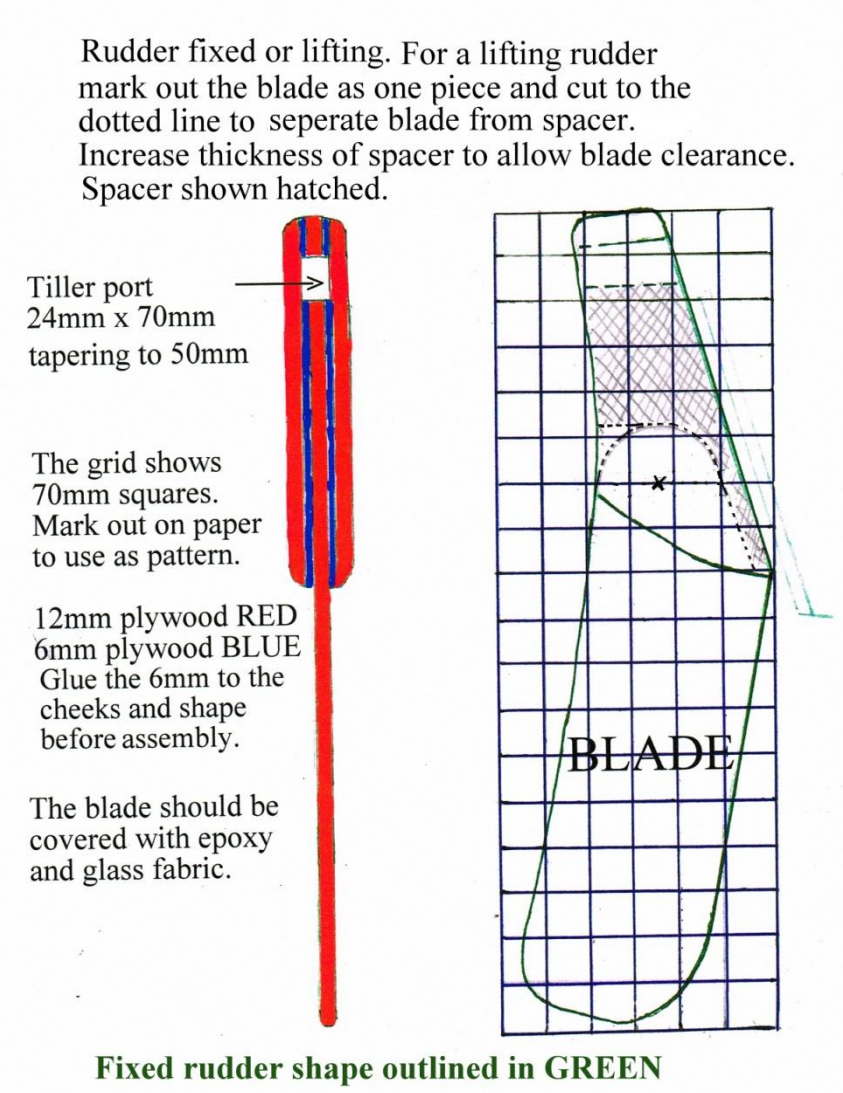
Knees laminated 2 x 12mm or 4 x 6mm

No scale sketch

Because this boat is eminently suited to shallow waters and beaching, a lifting blade rudder is recommended. This is constructed of 12mm marine plywood in four pieces. The fixed rudder is in three pieces.

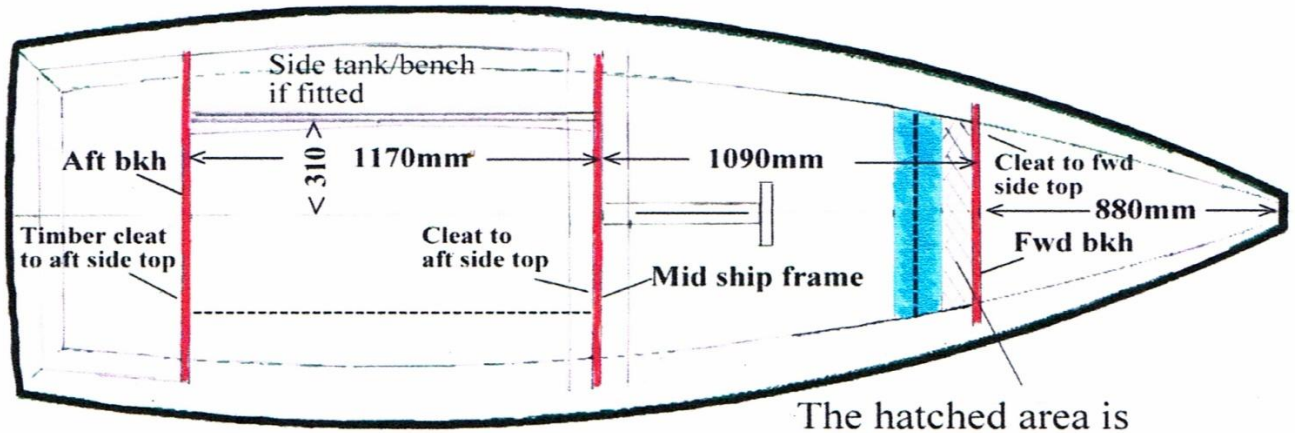
The spacer between the rudder cheeks needs to have a layer of glass cloth on each side to allow clearance for the lifting blade. It is pushed down and held with a turn knob, and retrieved with a lanyard.

At least the leading edge and bottom of the blade should be glass taped to accept chafe.



At least the outside of the bottom should be sheathed with glass cloth and epoxy. This should be done after the chines have been taped. Smooth the cloth by brush or hand, and apply the resin in small batches. Start on the centreline and with a squeegee work towards the chines. Use enough resin, but be careful not to float the cloth.

Bulkhead positions shown red,
measured from inside of stem.
Bottom butt strap shown blue. 150 x 6mm



Bulkheads/Frame should be filleted and glass taped.

The hatched area is an infil of 6mm between the butt strap and bulkhead. To be glued down after the bulkhead is fixed.

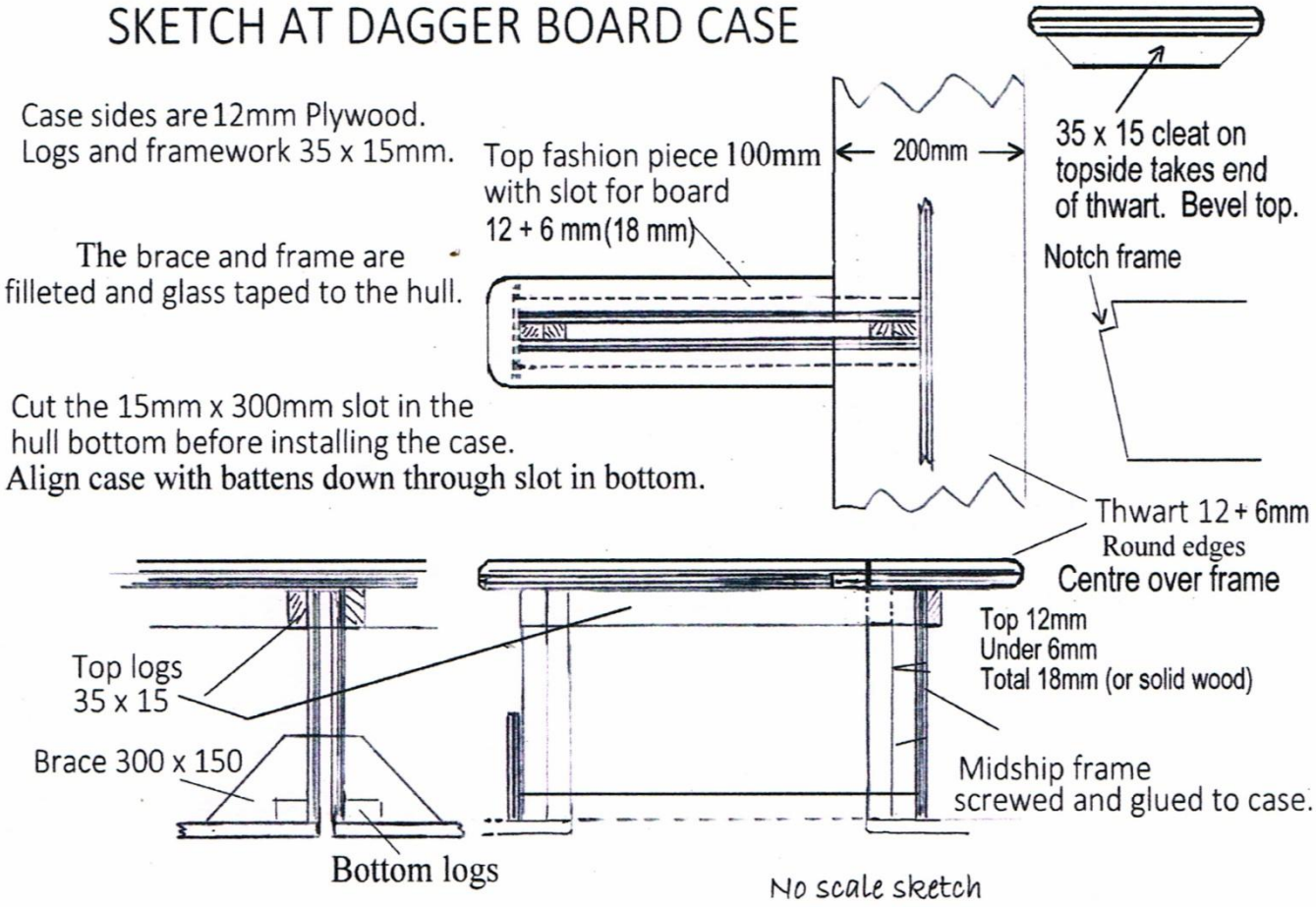
The hatched (blue) area is fitted to ensure there is not a depression in which water can lay, and also it strengthens the bottom in way of the mast step.

SKETCH AT DAGGER BOARD CASE

Case sides are 12mm Plywood.
Logs and framework 35 x 15mm.

The brace and frame are filleted and glass taped to the hull.

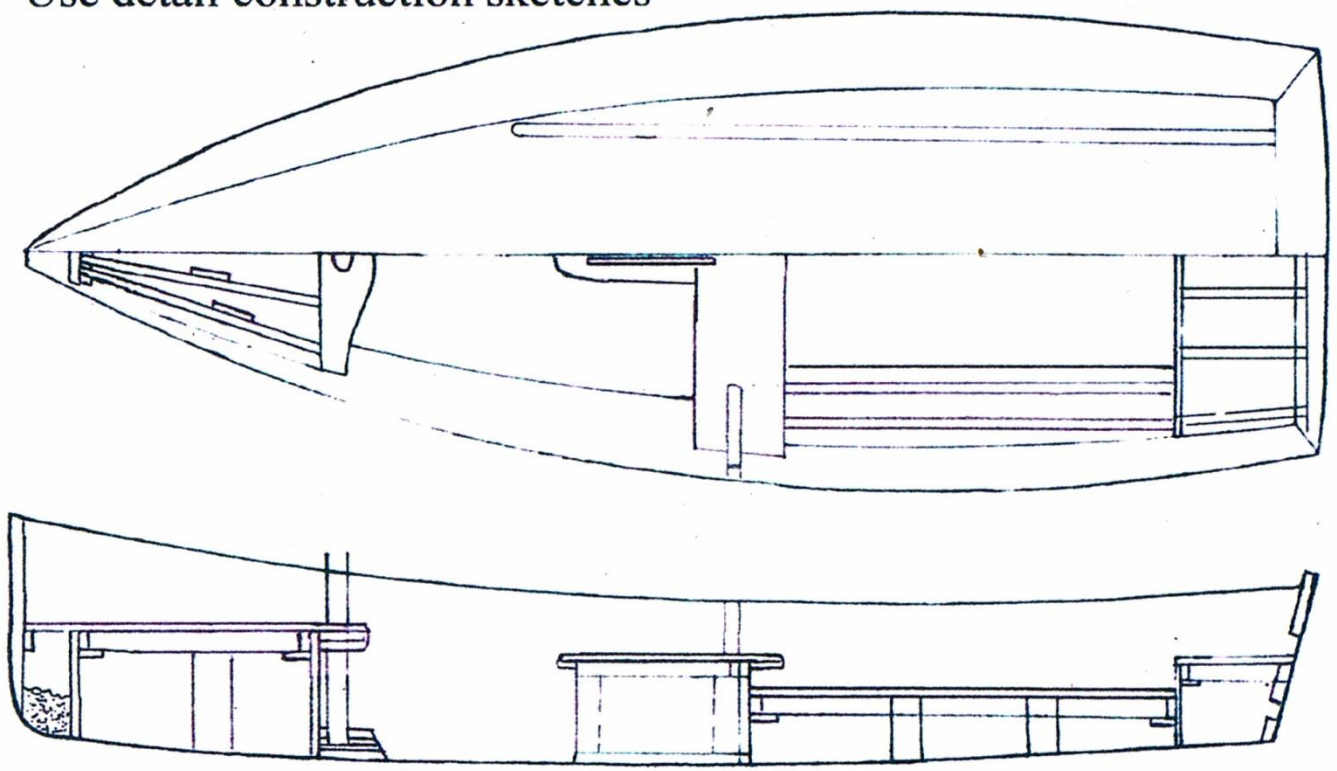
Cut the 15mm x 300mm slot in the hull bottom before installing the case.
Align case with battens down through slot in bottom.



No scale sketch

General arrangement.

Use detail construction sketches



These pages are just samples from the manual. All measurements are given for marking out.

SAMPLE TEXT FROM THE FLATTIE SKIFF MANUAL

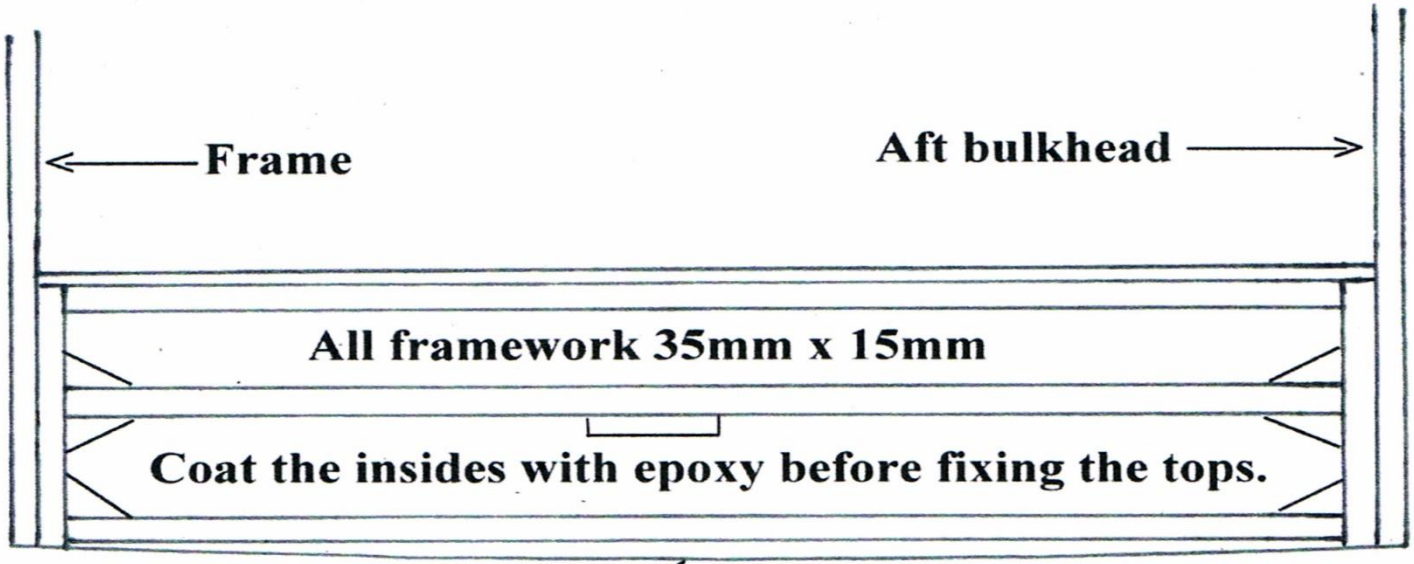
The side tank/benches not only add considerable strength to the hull, they also provide generous sealed buoyancy compartments additional to the forward and aft tanks.

Make sure that the insides of all compartments are adequately coated with epoxy resin before fixing the tops.

The side tank tops should be fitted BEFORE the forward and aft tank tops, and BEFORE the thwart is finally fixed.

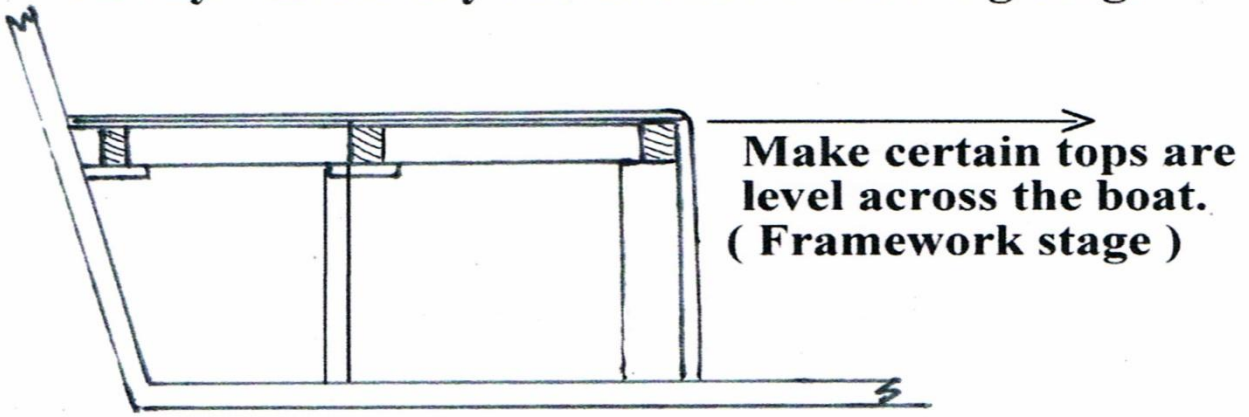
Framework for the side tanks, all 15mm x 35mm.

Gussets from 12mm plywood. Fronts and tops 6mm plywood.



Outer edge shaped to fit topside planking.
It is not necessary to bevel this edge. The fillet will fill any void and will be taped.

Always have a dry run to test fits before gluing.



The interior of the Flattie Skiff is clean and un-cluttered.

Spacious enough for the family or room for camping gear etc.

Buoyancy tanks can be used as lockers with suitable waterproof hatches.

RIGGING

The Flattie has a simple but efficient rig.

The mast is un-stayed and the sail is loose footed and sleeved on the yard. The manual gives full details and includes a sail plan. Expensive fittings are dispensed with where a dowel, cleat or even a knot will do an adequate and safe job. This saves a very considerable expense.

IF YOU WOULD LIKE TO BUILD A FLATTIE SKIFF AND BE AFLOAT AFTER JUST A FEW WEEKENDS OF EASY AND SATISFYING BOATBUILDING ORDER YOUR PLANS MANUAL TODAY.