

PoorBoy Skiff.

A 10-11ft 6in skiff for outboard motoring

By Steven Lewis

PoorBoy is about the simplest small motorboat you will come across. It consists of 2-2 1/4 sheets of plywood (1-1 1/4 sheets x3/8" and 1 sheet x1/4"), 1/2 sheet of 3/4" ply for transom, doubler, knees and breasthook, 1 8 foot 1"x12" for seats 1 1"x4"x12"(or scraps) for the center mould and a 1"x 10"x 12' for inner and outer wales and chine logs and a 2' 2"x4" for the stem. You will need to cut a 1"x2" for cleats and stuff from the 1"x10". You will also need some 5/8" screws and some 3/4" screws. You can use PL Premium for glue or thickened epoxy.

The boat is a hair under 10 ft to 11 1/2 ft long and has a beam of 49" at the sheer and 43" at the chine. The sides and transom are flared 13°. The side panels are simple strips of ply, 16" wide, joined with a butt block at the back of the boat. The length of the panels is 10' 1 3/4" to 11' 8" (12' with glass butts) long. The bottom of the transom is angled in 3 7/16" and the bottom of the stem is angled in 6 9/16". The stem piece is cut to a 36° half angle (36° per side) and the bottom beveled by 22.5°. The angles don't have to be 100%, but fairly close. Leave the stem long so you can trim it later. The chines and transom corners should be taped with glass and epoxy for durability and leak protection and the bottom can be glassed for additional abrasion protection.

To start building, cut your side panels and butt them together using 3" wide butt blocks or fiberglass butts. Cut the panels out of the 1/4" ply, ripping it into 3 even strips of just a hair under 16" wide. Use 2 full-length panels for the front of the boat and cut the third in half to finish the back parts minus a 3" strip each, used for the butt blocks. If using glass butts you can omit cutting the strip off. Line up each end part with its side and glue and screw the buttblocks on or glass the joint. Flip them over and glass the outside of the seam for either method. Cut out your transom to 17" high, beveling the bottom to 13°, beveling from the inside of the panel to the outside, in other words the outside of the panel will be shorter height wise than the inside (until you bevel the top...later). Next we make the mould. The inside of the bottom is 35 1/2" across, so you need to cut your 1"x4" piece to this dimension, angling the ends outward by 13°. Cut sidepieces and attach to the bottom at this angle, then cut a top piece to create a trapezoid shape (see picture). The top crosspiece should fall at the top of the sheer and the mould width should be 42 1/2" across. Cut large plywood triangles to brace the corners of the mold to keep it square when you bend the panels around it. Bevel cut 2 strips 1 1/2" wide (from the 1"x10") to 13° to make chine logs to attach the bottom and glue and screw them on the bottom outside edges of the side panels(see picture as to how to cut and attach them angle wise).

Putting it together:

Take your side panels and attach them to the mould 4-5 1/2 feet (use the amount added) forward of the bottom corner of the transom edge. Cut, glue and screw pieces of 1"x2" to the inside edge of the transom then install the transom, gluing and screwing from the outside into the plywood and 1x. Get someone to help you or use a Spanish Windlass and bend the side panels inwards and upwards to the bow, glue and screw the panels and stem piece together. Be sure the bottom of the stem piece is even with the bottom of the panels. Flip the boat over and square it up. You do this by measuring from the bow back along each edge 2' then mark a point. Measure from the opposite corner of the transom to each point. They should be even. Measure from the opposite corners of the transom to the corners of the mould, this should be even. Measure from the opposite corner of the mould to the points marked off, these should be even too. When everything is square, lay the bottom sheet of ply onto the boat (with the edge at the transom and one side even with a side panel) and trace around the outside of the boat. Leave the hole at the front, as you will fill this with cut off from the main panel. Cut outside of the line you traced so you can sand to fit. Re-square the boat (in case you moved it) then glue and screw the panel onto the bottom. Take a piece of cut off with a factory edge and butt it up to the edge of the hole, trace the outline and cut out. Using another piece of cut off, make a butt block to fit inside the bow area, glue and screw everything together. If you plan to 'glass the bottom, you won't need to tape this joint but if you don't...put some tape on it to seal and strengthen things properly. Bevel cut to 13° and 30° your inner and outer wales (see drawing) and glue and screw the outside one (from the inside). Lay a piece of 3/4" cut off on the bow of the boat and trace the inside of the bow onto it. Cut it out and bevel it so it fits flush with the top of the bow panels. It should extend 12" back from the stem. Glue it in. While you are there, I recommend you cut the stem off 4-6" above the tip of the bow to use as a tie off point. Round off the edges and drill a hole for a rope. At the back of the boat, cut and bevel some knees (corner braces...see my web site for suggested shape) to help brace the back of the boat. Cut a doubler for the center of the transom (motor mount) and glue and screw it on. Bevel the top of the transom and doubler so that it is level with the sides. The transom is designed to take a short shaft OB without modification. You will not need a center brace as the boat should not have more than a 10 hp motor on it and the transom is plenty strong for this. With this sized motor you can use full throttle going straight, but please throttle back to turn as you may trip on the chine and capsize. Fit, glue and clamp your inwale after the rest is in for a professional finish. Notch the wale to fit under the breasthook and knees.

Furniture and Finishing:

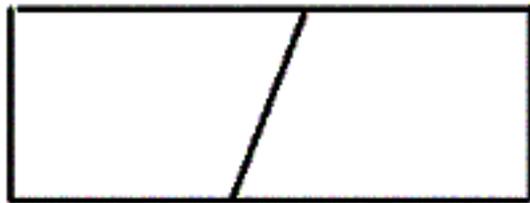
The seats can be simple planks on cleats attached to the sides or fully enclosed chambers or anywhere in between. I will detail the simple ones. The front of the rear seat should be 30" from the rear transom to comfortably use a tiller motor. Measure up from the floor 12" and mark on each side the correct distance from the transom. This will be the top of the seat so measure down 3/4" for your plank and mark this. This is where the top of the cleats go. The cleats should be 1 1/2" deep and 3/4" wide, but doubled to 1 1/2". Another strip will run under the center of the seat athwartship to support the middle of the plank. Glue your cleats together and screw them to the sides, level with the bottom. Drill, glue

and screw the support to the bottom of the seat (look at the end grain of the seat plank. The growth lines should cup down otherwise the plank will cup upwards and hold water). Put the seat on the cleats and drill angled holes through the plank and into the cleats. Glue and screw the plank to the seats then fill the holes. The front seat should land forward of where the mould is, so you will have to cut the top of the front seat to fit the side curve. The cleats should be beveled a bit to fit the sides. Alternately you can just use a large cooler as a seat. Simply glue and screw crosswise cleats on the floor to keep the cooler from sliding around. Drinks and ice are good ballast to keep the front end down, or you can use it as a live well.

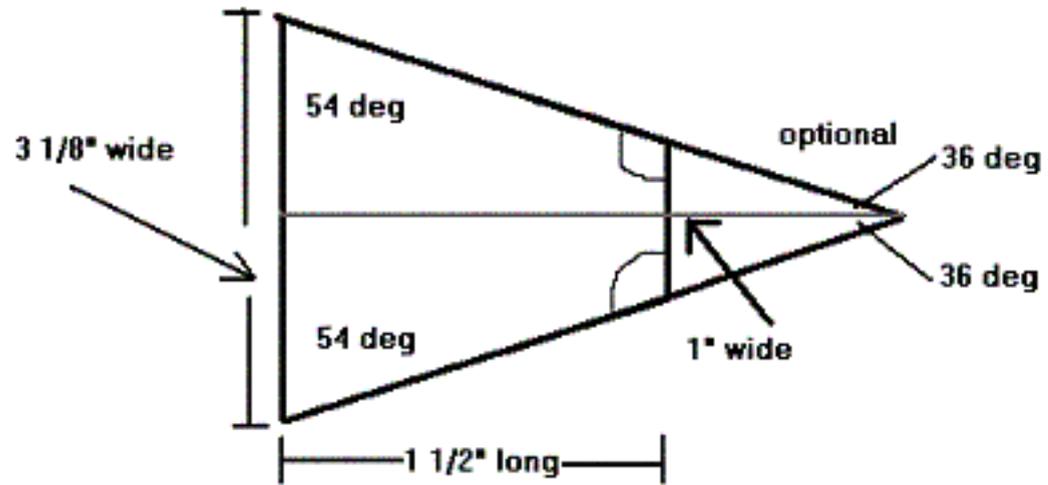
Finishing is nothing more sanding the rough spots and painting. Use a couple coats of primer and a couple coats of exterior oil or latex paint. If you use latex you will need to let it cure properly (3-4 weeks) but if you use oil, it should be cured well in about a week. Let the paint cure out of the sun, but somewhere where there is air circulation.

Enjoy...Steve



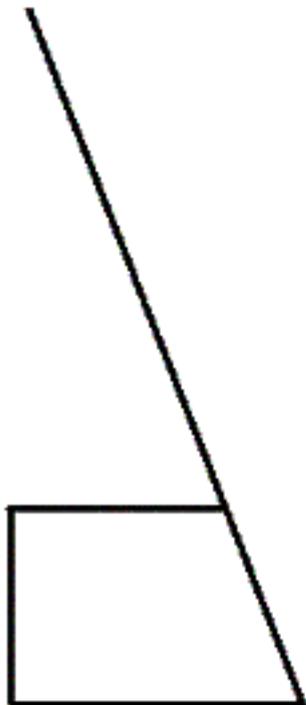


Furring strip for
China log cut
lengthwise at this
13 degree angle.

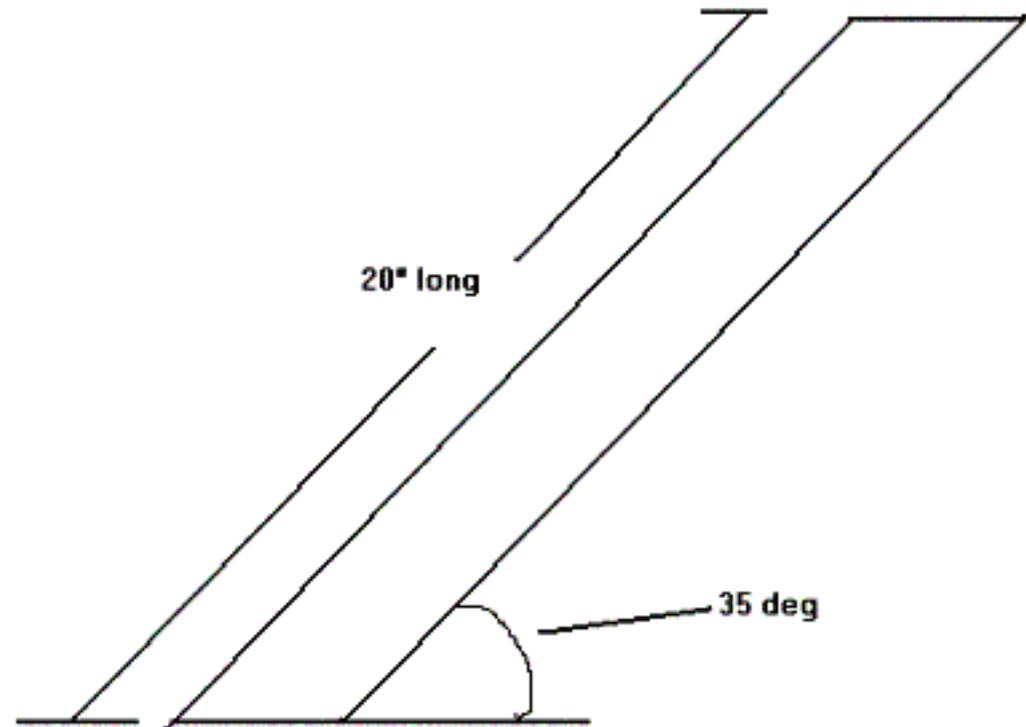


Drawings are not to scale so use the
measurement numbers do not use to trace
from.

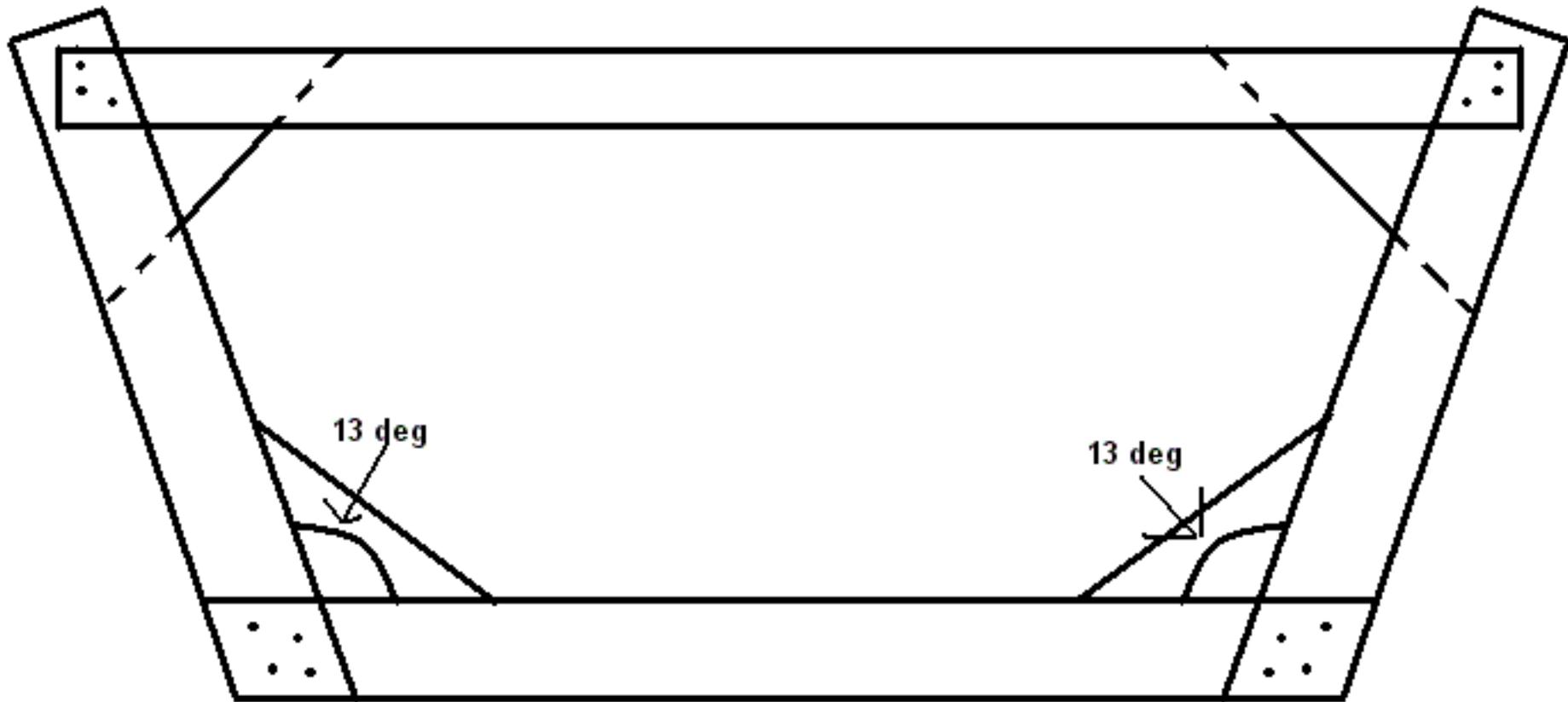
Wrong



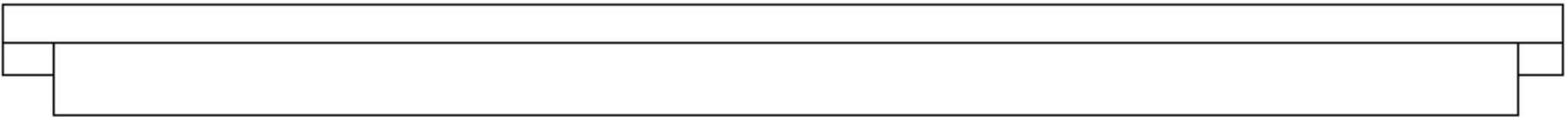
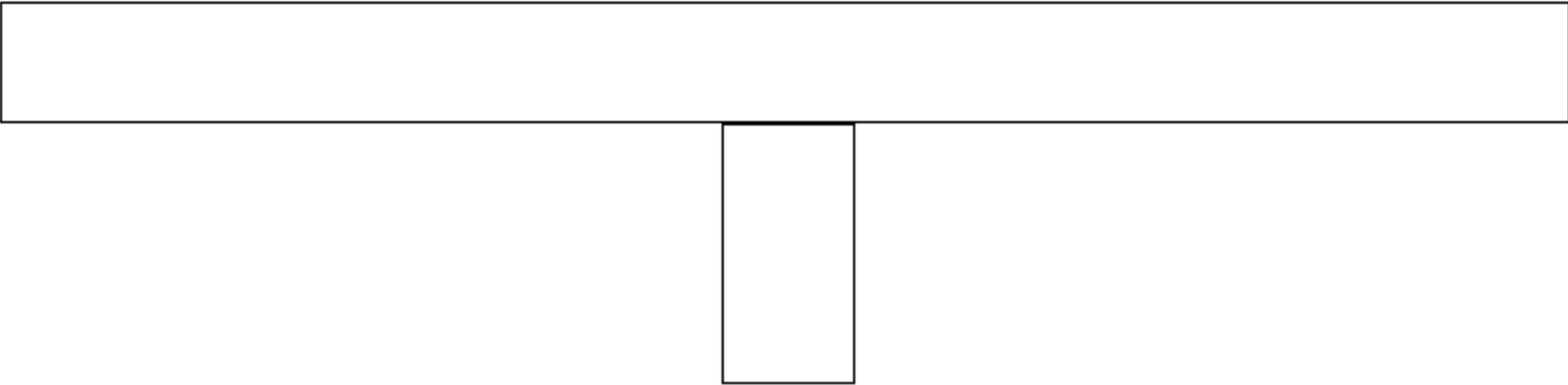
Right

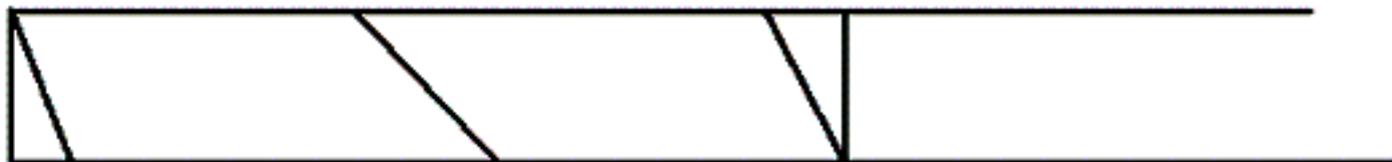


Center mould



**10-12 " wide, 3/4" ply or regular
plank. Cleats at edges and center
brace along middle.**





Outer wale or rub strip detail. Top cut is 15 deg, bottom is 30 deg. Allows water to run off when boat is upside down helping to prevent rot.

