

14-Foot Utility Skiff

For use as an all-purpose rowboat, kicker boat, and practical knockabout, this boat is especially good because she'll build easily and her cross-planked bottom will hold up well on sandy beach use

By EDSON I. SCHOCK

THIS skiff was designed especially for SPORTS AFIELD to meet the demand for a husky skiff that could be built easily and would stand hard work. She should give a good account of herself as a fisherman, tug, or general cargo and work boat, or a picnic boat.

The construction, with plywood sides and cedar bottom, was selected to simplify getting the hull into shape. You have to fit only one plank per side, and you avoid the springy effect of a plywood bottom.

The actual length is less than 14 feet, so that a 14-foot plywood panel could be used for the sides. To make her exactly 14 feet you'd need to buy a 16-foot panel.

The transom is supported with two knees instead of the usual one. They carry the thrust of the motor to keelsons—running almost the full length of the boat. For power, a 7½ hp motor should be plenty. A smaller motor would push her along all right, but would not leave reserve power for towing.

For safety, she should carry a life preserver for each passenger, a fire extinguisher, and if you're out at night, proper lights.

One of the first parts to make is the stem. On the drawing, two types are shown. The two-piece stem is the easier to make. For this a piece of oak 1¼"x3½", 2' 3" long will make the inner part, and another bit 1½"x

2⅝", 2'4" long the outer. All you have to do is plane the bevels on the sides.

The one-piece stem is a better job, and more shipshape. For this one, a piece of oak 2½"x2¼", 2'4" long is needed. Mark the face of the stem on the 2¼" side of the piece, ½" wide. Plane the bevels to 35° as shown. The cuts for the rabbet may be made on a circular saw, or by hand. But in either case they should be smooth and square to receive the ends of the side planks. Notch the bottom end for the bottom planks. This is shown on the inboard elevation drawing.

Some boatbuilders give oak a coat of shellac as soon as the piece is finished, to retard checking. If left in dry air, oak seems to check badly in a short time.

The *chines*, or nailing strips, should be made ready. These are simply two pieces of oak, ⅞"x1½", 14' long, planed on three sides. The bottom need not be planed now. It will be bevelled later.

The transom can be made next. To take an outboard motor, this should be a strong wood like hard pine or oak 1⅝" thick or more. The individual boards should be splined or doweled together, and glued with waterproof glue. Clamp or wedge the boards together, and let the glue set overnight.

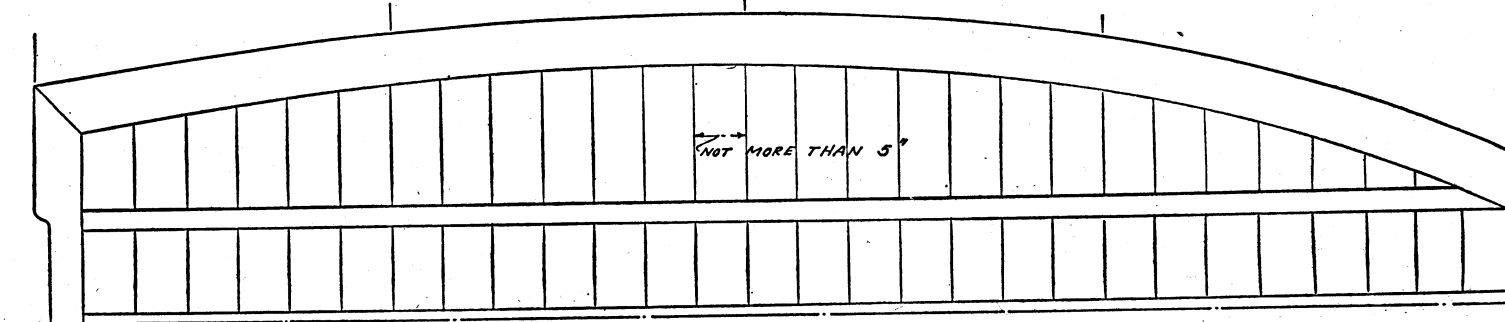
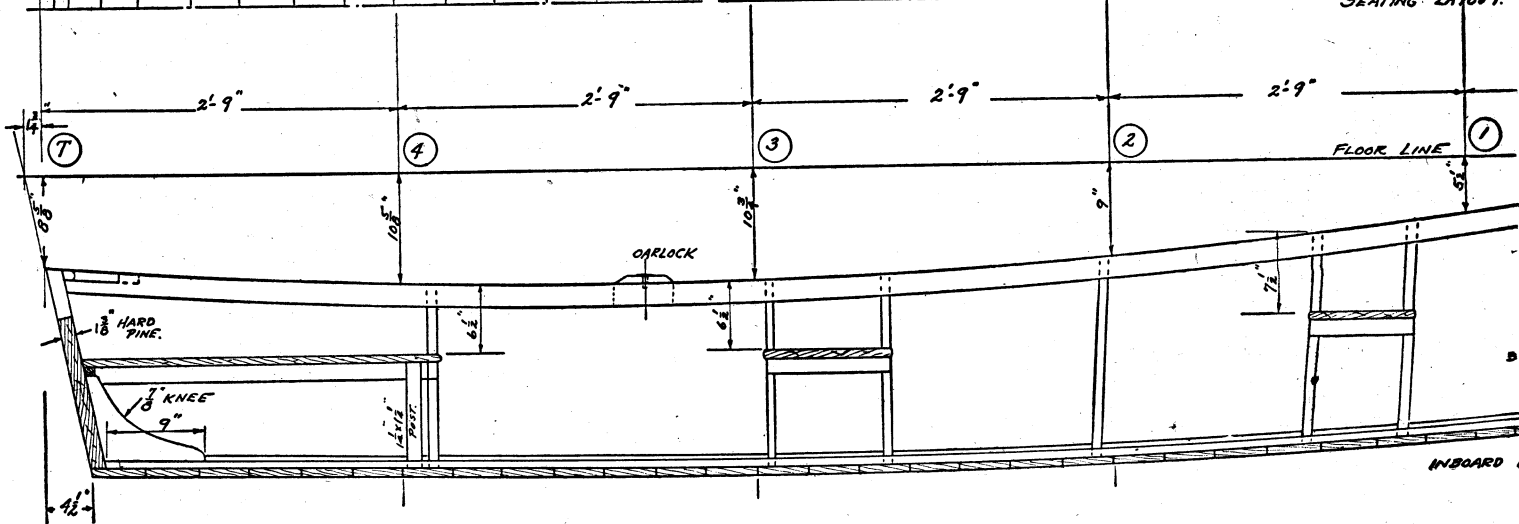
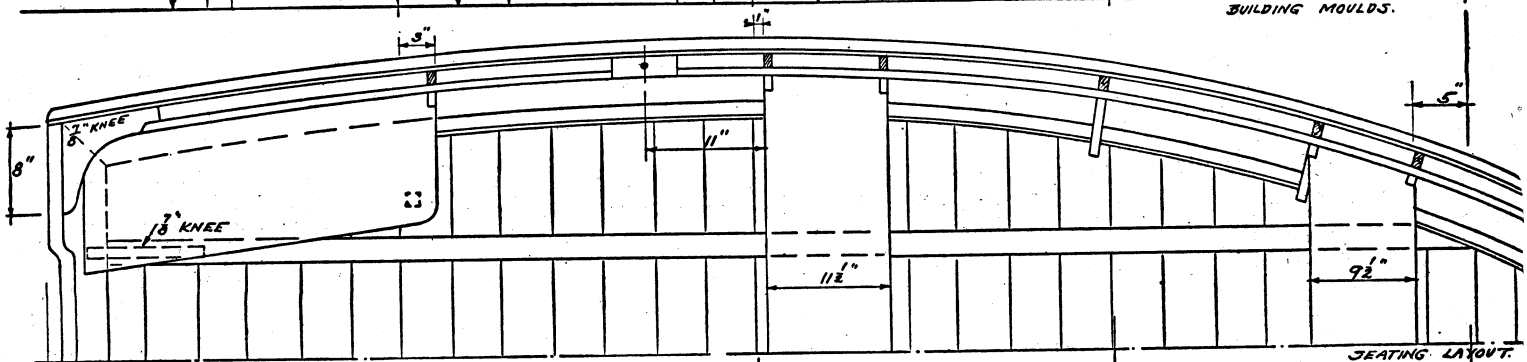
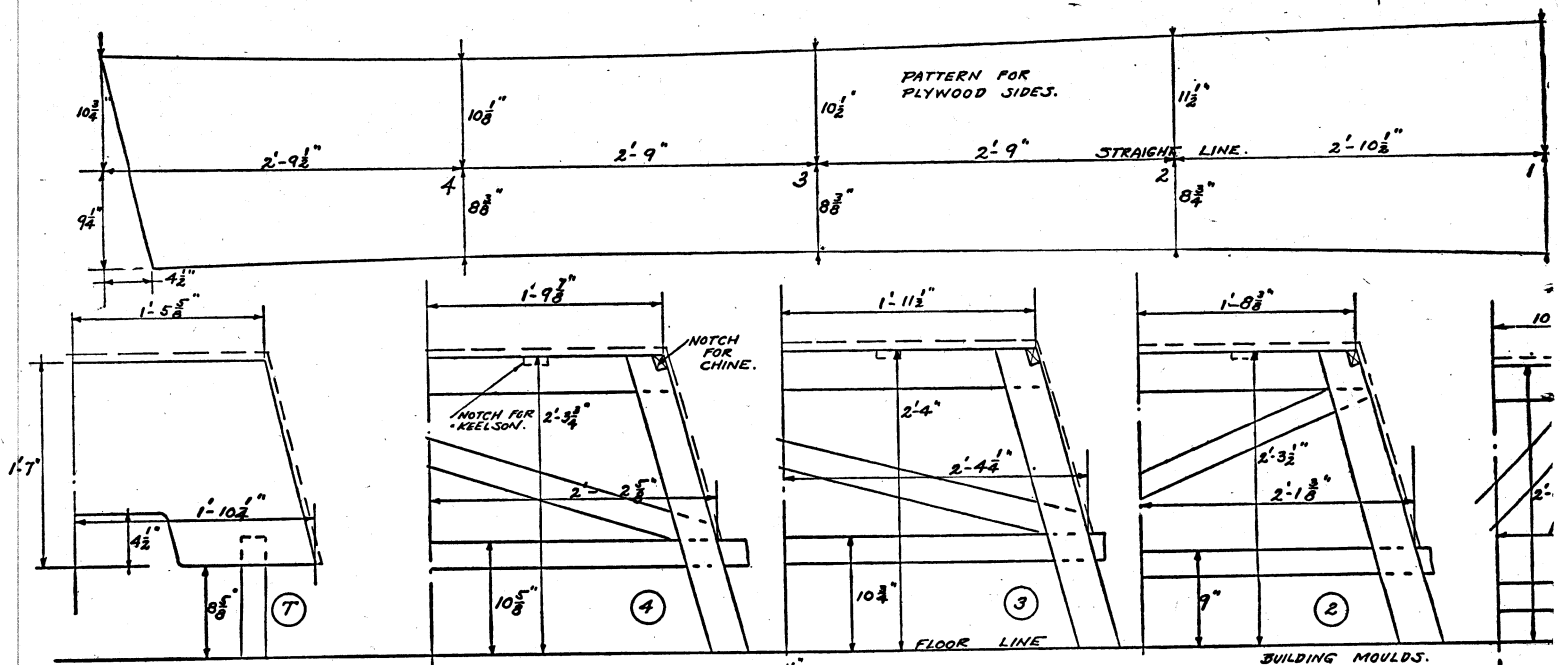
In making the transom, allow ¼"

on the bottom and sides for bevel. The transom drawing shows the shape measured to the inside of the planking, so you do not have to allow for planking thickness. For a heavy, powerful motor, a reinforcing piece up the middle of the transom on the inside may be desirable. A piece of ½"x12" oak would be about right.

The side planks are cut from ⅝", 4'x14' plywood. Use the best marine grade of waterproof plywood. Your lumber dealer may have to order it for you. The layout of these planks is marked "pattern for plywood sides." To draw this on your plywood, draw the centerline first, then the cross lines at right angles, spaced as shown. Mark off on each line the distance shown. Mark the end bevels. With a wood strip, or batten, draw the edges of the pieces. Saw just outside the line to allow for planing smooth.

If one side of the plywood is better than the other, arrange to have the good side on the outside of the boat, making the side planks right-hand and left-hand.

On any plywood pieces, paint the edges with plywood sealer as soon as they are planed. This keeps the water away from the glue on the inside of the panel. While this glue is waterproof, a good many boatbuilders do not tempt it, but protect it from water as far as possible.



tened at the transom, because they take most of the thrust of the engine.

The side planks come next. Hold the side plank in place against the molds. Fit the joint at the stem. (If a two-piece stem is used, this need not be fitted.) The joint between the planking and the stem should be carefully fitted. Good work here makes a nice looking hull.

A professional boatbuilder looking over your work will always look at the fit between the planks and the stem. Mark the position for the screws. *Do not put screws in line* along the grain of the stem, but *stagger* them a little to prevent splitting. Everdur bronze screws are good for this job, the 1" No. 8 size, spaced about 2½". Drill the oak using a No. 40 drill, and soap the screw threads. Do not fasten the plywood in place just now, but put in three or four screws driven only half way to hold it temporarily.

WITH the plywood clamped to each mold, mark the screws for the transom end, and all along the chine. Mark where the bottom of the chine comes on the plywood. (The bottom is the top since the boat is upside down.) Remove the side plank, drill for the screws, but *do not countersink* for the screw heads in plywood.

Paint the stem rabbet, the edge of the transom, and the chine, with seam compound. Do the same for the plywood edges where it comes in contact with the stem, transom and chine. Put the side back in place and screw it to the stem, chine and transom. Seam compound is made by several of the marine paint companies. Your local boatbuilder probably has some to sell that he has found works well.

At the bow and stern use 1" No. 8 Everdur screws; along the chine ¾" No. 7 spaced 3".

If you fastened the chine pieces to the molds, remove these fastenings before you put on the planking. If the chines are fastened to the molds you can't get the molds out of the boat when the time comes.

Some time before the bottom is put on, the edges of the side planks will have to be planed square across and the bottom edge of the chine bevelled. For this operation make a straightedge of white pine or spruce, a little longer than the bottom beam of the boat, say about 4½' long. Resting this on the edge of the plank,

plane the bottom straight across to receive the bottom planks. Keep both sides going at once by planing a little on one side then a little on the other, and make the fit a good one. Poor work here will make a leaky boat. One little misfit and the water will find it and rush happily in. When the plywood edge is planed, paint it with plywood sealer.

Next put on the bottom. The planks are ¾" white cedar, *not over 5" wide*. Wide planks warp and swell and make trouble. Fit the inside edges tight, and leave the outside edges open a little, say 1/16", for caulking. The caulking bevel should be about half the plank thickness, so that the cotton does not go through to the inside. Cut the ends to the bevel and angle of the side of the boat with the bottom board resting on the chines and plank edges. Leave very little for planing fair and smooth.

While you are sawing off the ends, the plank can be clamped to the side keelsons, and it should be fastened to them as soon as it is fastened to the chines. Screws for the bottom planks can be 1½" No. 10 Everdur. Use a No. 33 drill and soap the screw threads. A bit brace screwdriver will be good for this job.

The joint between the plank and chine should have seam compound. Many builders lay a small thread of caulking cotton on this seam before setting it up. Do not put in too much cotton, and make a lump.

Screw the planks to the side keelsons, *one screw at each side of each plank*. When the bottom is all on, plane the ends of the planks fair with the sides of the boat, and paint the end grain all around.

For caulking the bottom a caulking wheel is the best tool to use. Roll a strand or two of cotton wicking into each seam, starting at one end of the seam and working along to the end opposite. Roll the cotton in about half way to the inside of the boat. Do not push so hard as to drive it all the way through. Paint the seam with thick paint.

When the paint is dry, plane the outside smooth, and paint the bottom one coat. Then fill the seams with seam composition, and paint another coat. If the boat is to be kept in salt water, use copper bottom paint on the bottom, all coats. Put the copper paint on the bare wood, no undercoat.

The bottom rubbing strips, of ¾"x

2" oak can now be painted on the side coming in contact with the bottom, and can be screwed on. Bevel the bottom edges, and paint.

Now take the boat off the molds. Brace the boat temporarily across the top until the thwarts are in.

Make and fit the frames. Fasten them to the planking with ¾" screws, put in from the outside. Fit the risings while the boat is level. Then you can use a level to get the seats level. Fit the thwarts, making them good and strong. *Someone* may jump on them some day. Not good practice, but some folks are not careful with boats.

The rubbing strips are screwed on from the inside, using ¾" screws, and should be at least ⅞"x⅞" as shown, because they support the upper edge of the plywood.

The inwales go in next, with knees at the transom, and breasthook at the bow. Use one 1¾" or 2" No. 12 screw per frame. Drill to prevent splitting the frame. Inwales must be strong enough to be used for lifting the boat.

Fit the rowlock socket blocks, the mooring eyebolt, lifting rings, cleat for towing another boat, and whatever hardware suits your fancy.

Paint the inside and outside of the boat, enough to cover well. The inside of the bottom might have non-skid paint to prevent slipping. This paint is made by several marine paint companies, and works well. *Do not* put it on the thwarts or seats, as it will wear out the seat of your pants or bathing suit.

Foot rests, shown on the midship section drawing, may be added if you want them. They keep your feet dry if a little bilge water is sloshing around.

A little varnish work will dress up the boat and add much to her appearance. It is some work to keep it looking fresh and good, but not too much. And it gives her a finished appearance. Even if you do not want any varnish work to take care of, you should varnish the rubbing strips so that your boat will not mark other boats if she rubs against them. Rubbing strips painted bright colors leave marks on the hulls of other boats. This shows that the owner does not think of the other fellow.

After launching, let the bottom swell up a couple of days before using the boat. She is much stronger when everything is tight.