

BUILDING BUZZ

By W. D. JACKSON, N.A.

Craft Print Project No. 32

USES: A lightweight, easily handled outboard hydroplane, adapted to car top carrying, and designed for use with 5 to 10 hp outboard motors.

LENGTH: 11 ft., 1 in.

BEAM: 55 in.

DEPTH: 22 in. (Foreward).

WEIGHT COMPLETE: 135 lbs.

SEATING CAPACITY: 4 persons in smooth water or 2 in rough water.

CONSTRUCTION: Plywood (1/4 in.) over a longitudinally stressed frame, with ribs to reinforce bottom for speed. Convex bottom, offering the utmost speed with power available. Bottom surfaces are made to permit use of plywood planking without compound curves.

BUZZ is a versatile, planing outboard runabout measuring 11 ft. in length with a beam of almost 56 in. It is lightweight with strong and sturdy constructional features, seats four passengers and uses such outboard motors as the Evinrude 9.7 hp, Johnson 9.9 hp, and the Mercury 10 hp. Buzz will plane a remarkable load at high speeds, equaling other boats with twice the hp. It also maneuvers well in rough or smooth water, making turns easily at wide open speeds. As a lightweight, portable boat Buzz may be loaded atop any auto for sport trips.

The same building forms you make for Buzz may be used repeatedly to construct one or one hundred replicas of Buzz so that an individual in one community can furnish the form for any number of these boats or an individual builder may construct as many boats as he can take orders for and make.

Before you begin construction of this boat look over the materials list and secure the materials you will need. Then draw fullsize paper patterns

MATERIALS LIST—BUZZ

PLYWOOD (fir or mahogany)

Sides and Bottom	2 Pcs. 1/4"x4"x12'
(1 sheet cuts one pc. for sides and one pc. for bottom. Waste makes seat benches)	
Decking	1 Pc. 1/4"x4"x6' (amidships and foredecking)
Transom	1 Pc. 3/8"x20"x48"

OTHER WOOD (oak or pine)

Transom frame	1 Pc. 3/4"x5 1/2"x4'
	1 Pc. 3/4"x3"x6'
Chines	2 Pcs. 3/4"x1 5/8"x12'
Clamps	2 Pcs. 3/4"x1 5/8"x12'
Moldings	2 Pcs. 3/4"x1 1/4"x12'
Seat Risers	2 Pcs. 3/4"x1 3/8"x10'
Keel	1 Pc. 3/4"x4"x10'
Outside keel	1 Pc. 3/4"x1"x10'
Outside stem	1 Pc. 1/2"x1"x3'
Stem	1 Pc. 1 5/8"x8"x3'
Ribs	12 Pcs. 3/4"x1 1/8"x24"
Seats	2 Pcs. 3/4"x7 1/2"x10'
Floor boards	5 Pcs. 3/4"x3 3/4"x8'
Deck beams	1 Pc. 3/4"x5 3/4"x14'
Transom knees	1 Pc. 1 1/8"x8"x3'

ANY COMMON LUMBER

Mold frames	1 Pc. 2"x4"x12'
	1 Pc. 2"x6"x6'
	1 Pc. 2"x8"x4'
	1 Pc. 3/4"x5 3/4"x14'
Form	1 Pc. 2"x12"x10'

FASTENINGS

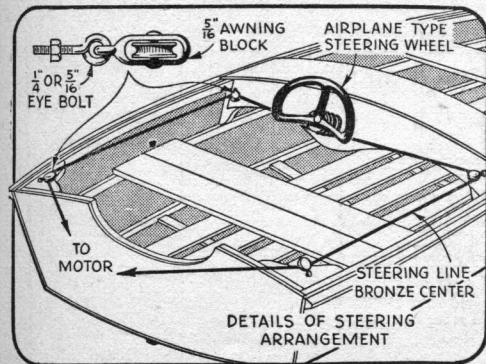
- 1 Qt. Resin Glue
- 5 Gross 3/4" #8 Flat Head screws
- 6 Doz. 1 3/4" #8 Flat Head screws
- 3 Doz. 1 1/2" #8 Flat Head screws
- 2 Carriage bolts 1/4"x4 1/2"
- 2 Lb. 1" galvanized shingle nails (optional)

PAINT

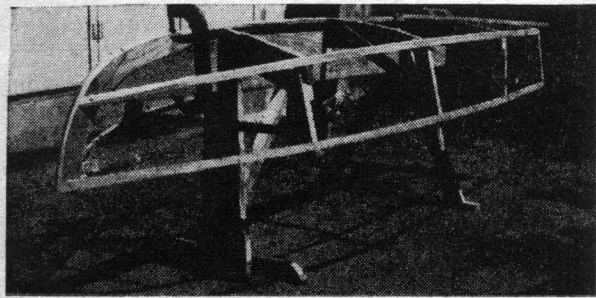
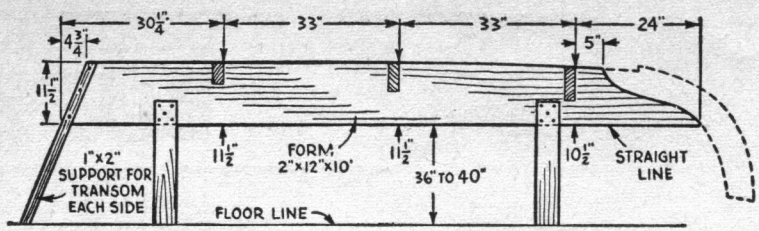
- 1 Gal. Firzite (clear)
- 1/2 Gal. Firzite (white)
- 1 Qt. green enamel (bottom)
- 1 Qt. varnish

FITTINGS

- 1 Airplane wheel for steering
- 2 Aluminum lifting handles
- 1 Aluminum bow handle
- 4 Pulleys 1/4" size
- 4 Eyebolts 1/4"x2"
- 16 Ft. Steering cable



of No. 1, 2, and 3 mold frames, and No. 4, transom, and the stem. Mark pattern outline of form directly on a 2x12 in. x 10 ft. plank (a transferred paper pattern might result in an inaccurate form). Paper patterns drawn for the molds are for assembling component parts only. To prevent inaccuracies due to paper wrinkling, mark



Framework ready for planking.

Begin the assembly proper by attaching the inner keel in place, screw fastening it to transom and stem with two 1 3/4 in. No. 8 fh screws to each joint. Fasten chines in place with 1 3/4 in. No. 8 fh screws, beveling ends to fit stem and continue by fastening clamps similarly. Prepare to fair entire framework so that plywood planking lies evenly.

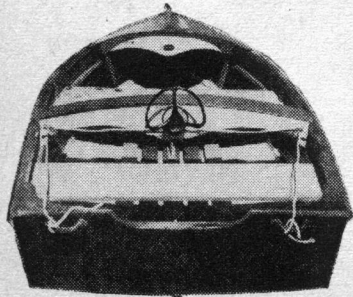
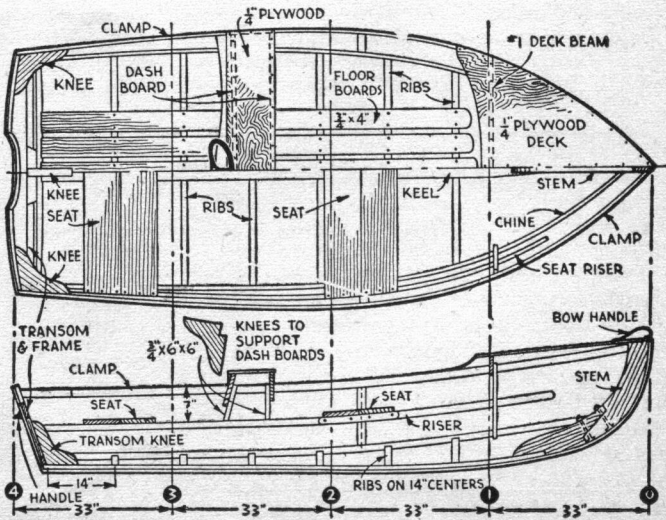
Beginning with the bottom, lay a piece of plywood in position and butt two bottom pieces of plywood together with a joint down the center of the keel. This

mold frame dimensions directly on the lumber (common pine). With various members of each mold sawed to shape, lay members on fullsize pattern outlines and fasten mold joints with screws or nails. If a more permanent mold is desired, coat contact surfaces with resin glue and screw fasten. Transom and frame are now assembled in similar fashion. Outside of transom is a piece of 3/8 in. waterproof plywood to which frame is glued and screw-fastened with 1 in. No. 8 fh screws. Next saw stem to shape, coat joints with resin glue and fit two pieces of stem together closely, bolting them together with two 1/4x4 1/2 in. carriage bolts. Then notch lower end of stem for keel as shown.

joint is later covered with an outer keel. Before plywood is applied, coat all contact surfaces such as keel, chines and stem with resin glue, lay plywood in position and either screw-fasten with 3/4 in. No. 8 fh screws or nail in position with 1 in. galvanized shingle nails (which will hold well if joints are bonded with resin glues). Soften fore ends of planking at the stem with hot water; they will then bend easily in place. Next cover the sides, first trimming edges of plywood evenly along chines and stem. Coat contact surfaces as before with resin glue and fasten planking in place when the glue is dry. Remove hull from form and glue and screw fasten outer keel and outer stem piece in place with 1 3/4 in. No. 8 fh screws spaced 8 in. apart.

The next step is to notch transom frame and all mold frames for the keel, chines, and clamps. Then notch out form to receive the molds. Now assemble all frames (including transom and stem) on the form, clamping transom and stem in place with wood strips, and temporarily nail wood strips to transom and form to hold them in alignment until other members are attached.

Before placing ribs in position, cut them longer than will be necessary to fit position. Pour hot water on them and pre-bend them over a sawed



Above, the finished Buzz with flooring, decking and steering wheel installed.

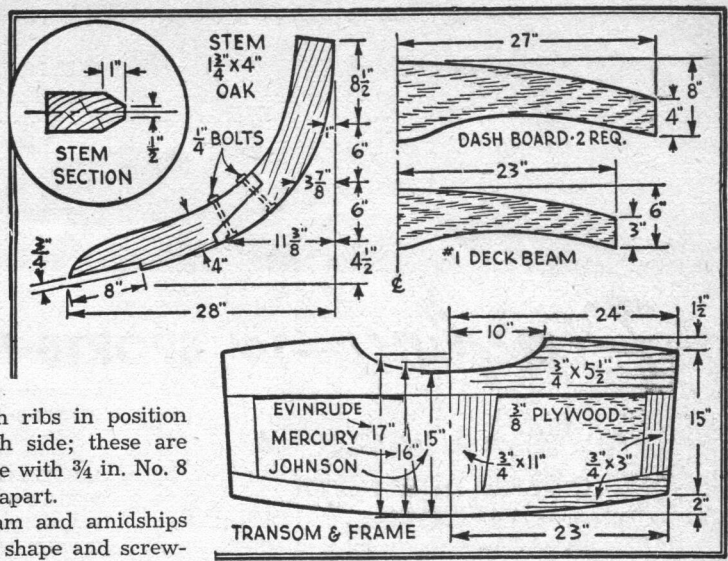
form, putting just a bit more bend in them than will be necessary to fit position. When dry these ribs will then go in place much more easily. They are installed 14 in. apart beginning from lower inside edges of transom. After coating contact areas with resin glue, fasten ribs from outside boat with $\frac{3}{4}$ in. No. 8 fh screws spaced about 3 in. apart. First drill a lead hole for screws, soap threads of screws, and then insert. With ribs in position install the seat risers on each side; these are screw fastened from the outside with $\frac{3}{4}$ in. No. 8 fh screws spaced about 6 in. apart.

Now saw the fore deck beam and amidships deck beams and dashboard to shape and screw-fasten them in place with the aid of uprights and knees shaped to the sides as shown, using $1\frac{3}{4}$ in. No. 8 fh screws for fastening.

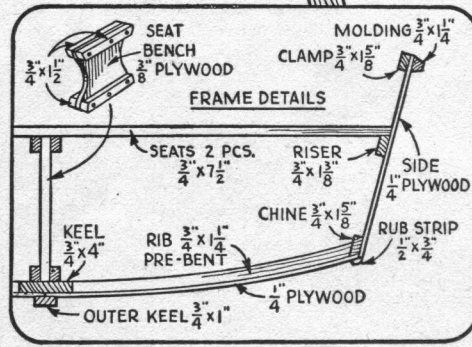
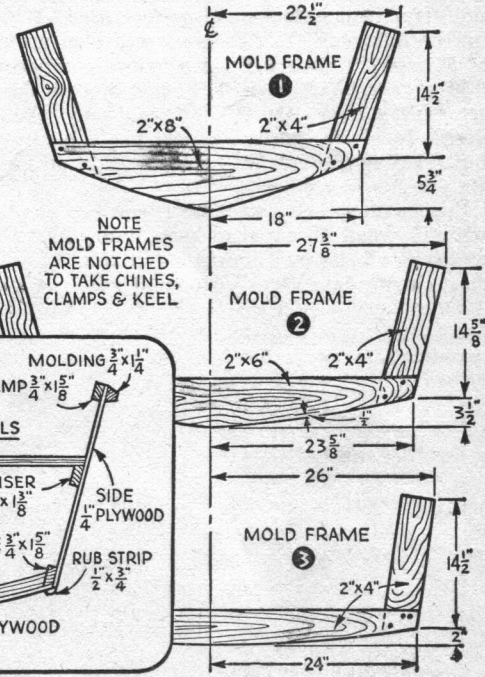
Next saw the short $\frac{1}{4}$ in. plywood fore deck and the amidships decking to shape, notch the $\frac{3}{4} \times 2$ in. center joint butt strips in position, and screw-fasten the decking in place with $\frac{3}{4}$ in. No. 8 fh screws spaced about 3 in. apart. The seats consist of two $7\frac{1}{2}$ in. wide boards, which make a seat 15 in. wide.

Fasten seats to seat risers with twelve $1\frac{3}{4}$ in. No. 8 fh screws to each seat.

Now saw the sheer moldings to shape as indicated and screw-fasten them in place with $1\frac{3}{4}$ in. No. 8 fh screws spaced about 8 in. apart. Provide benches as indicated for the after seat. Paint or varnish inside of hull; then fasten floor boards in place with $1\frac{1}{2}$ in. No. 8 fh screws. Floor boards should be $\frac{3}{4} \times 4$ in. boards. For a really good finish, first sand hull smoothly, apply two coats of Firzite, inside and out, and follow on the bottom with two coats of white Firzite which has been tinted to match the final enamel coat. Finish with a coat of enamel of the desired color (green being appropriate for a small boat), paint the bottom up to the chines with white Firzite tinted buff and varnish above chines with two coats of spar varnish. Outside may be either painted or varnished. Fittings for this boat consist of a bow plate, two stern lifting handles, and an airplane half steering wheel.



Transom and No. 3 mold frame bottoms are true arcs of a circle.



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