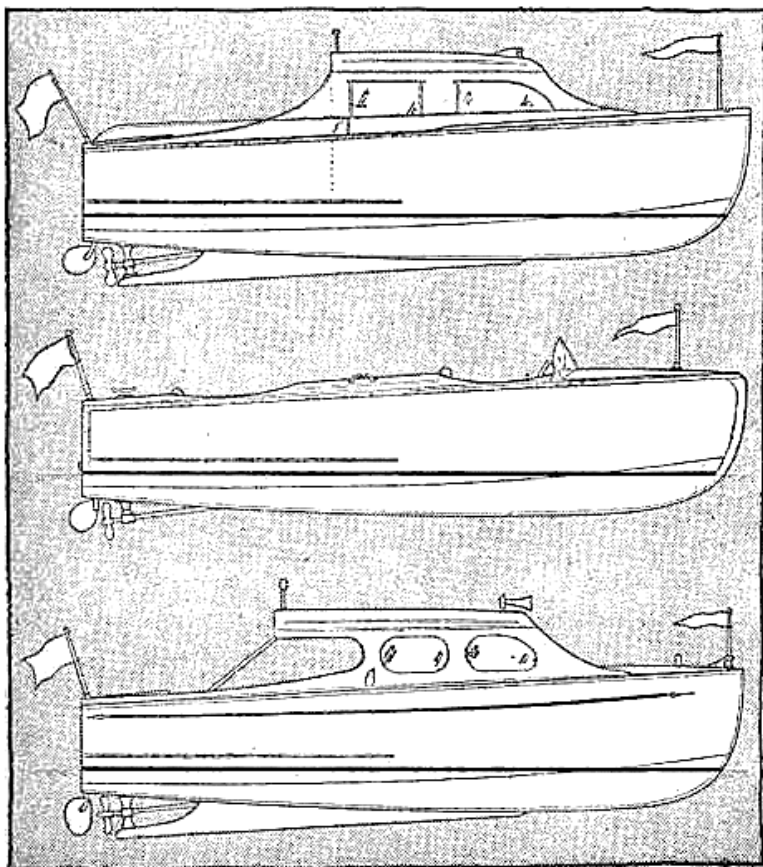


Nancy Jane as shown above was built by Charles Sears of Buffalo, New York, using hand tools exclusively and without outside help. He powered it with a 90 hp Dodge conversion which could turn a 12x13 prop at 3200.

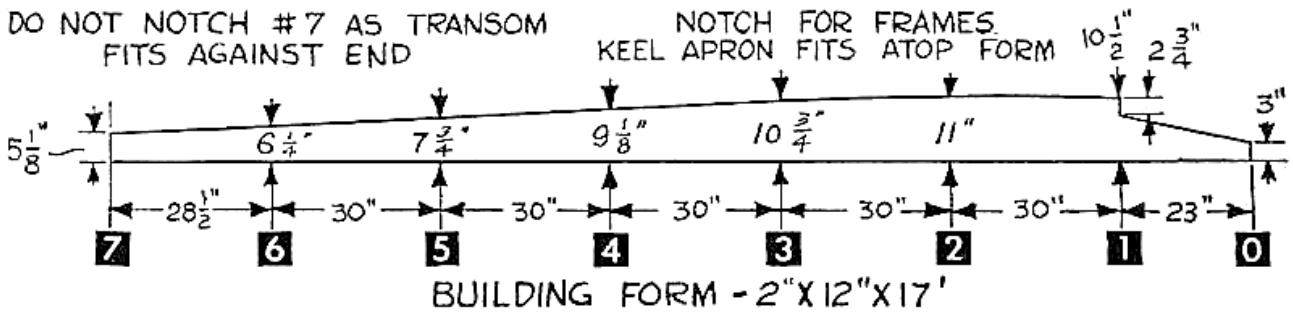
## "NANCY JANE" 19-ft. Inboard Runabout

By WILLIAM JACKSON

Craft Print Project No. 150



THE Nancy Jane is an all purpose craft designed to fulfill a great variety of uses in one boat. With a length, beam, and depth generous enough to be usable anywhere, this seaworthy design provides a craft that may be equipped with a marine or converted auto engine from 15 to 100 hp. for speedy, stable riding service on open or sheltered waters. For those to whom cruising is the ultimate relaxation Jane may be equipped with one of the trim cabin designs shown or utilized as a double cockpit runabout. However the basic design as indicated upon the plans is that of an open cockpit utility runabout which is not only easy to build, requiring the minimum of labor and materials, but for all around use such as fishing, hunting, surf board riding, and short pleasure trips this model would be difficult to surpass. If desirable it may be constructed first as an



MATERIALS LIST—NANCY JANE

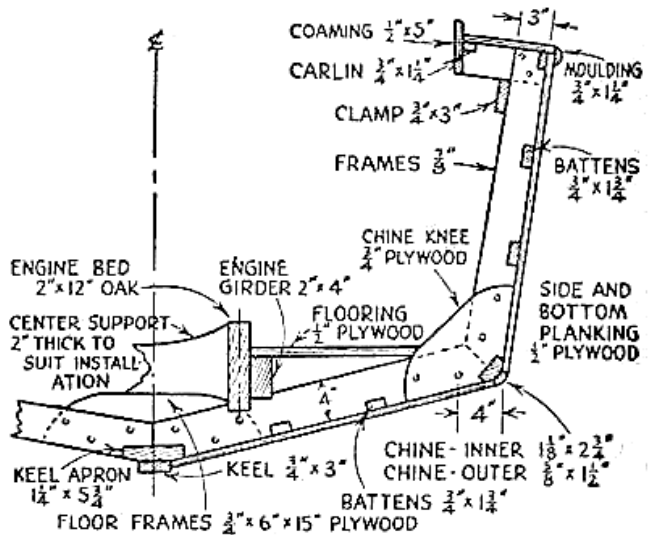
Keel Apron	1 Pc.	1 1/4" x 5 3/4" x 16'
Keel	1 Pc.	3/4" x 3" x 16'
Chines	2 Pcs.	1 1/8" x 2 3/4" x 19'
Chine Fillers	2 Pcs.	5/8" x 1 1/2" x 19'
Skeg Keel	1 Pc.	1 3/4" x 10" x 12'
Clamps	2 Pcs.	3/4" x 3" x 18'
Inwales	2 Pcs.	3/4" x 1 1/4" x 20'
Carlins	2 Pcs.	3/4" x 1 1/4" x 14'
Deck Battens	2 Pcs.	3/4" x 1 1/2" x 12'
Floor Cross Pcs.	8 Pcs.	3/4" x 2" x 6'
Deck Beams	2 Pcs.	3/4" x 8" x 12'
Bottom & Side Battens	4 Pcs.	3/4" x 1 3/4" x 16'
Bottom & Side Battens	4 Pcs.	3/4" x 1 3/4" x 20'
Frames Bottoms	2 Pcs.	7/8" x 3 3/4" x 18'
Frames Sides	2 Pcs.	7/8" x 3 3/4" x 14'
Frames Sides	1 Pc.	7/8" x 5 3/4" x 10'
Stem	1 Pc.	2 1/2" x 8" x 8'
Form	1 Pc.	2" x 12" x 17'
Engine Beds	2 Pcs.	2" x 12" x 4'
Engine Girders	2 Pcs.	1 3/4" x 3 3/4" x 15'

PLYWOOD REQUIRED

Planking Sides	6 Pcs.	1/2" x 36" x 7'
Planking Bottom	6 Pcs.	1/2" x 48" x 7'
Planking Decking	2 Pcs.	1/2" x 48" x 8'
Transom	1 Pc.	3/4" x 30" x 6'
Floor Frames & Chine frame gussets	1 Pc.	3/4" x 24" x 48"

FASTENINGS

10 Gross	1 1/4"	#8 Flat Head Screws.
1 Gross	1 1/2"	#10 Flat Head Screws.
1 Gross	1 3/4"	#8 Flat Head Screws.
1 Gross	2 1/2"	#10 Flat Head Screws.
4	5/16" x 8"	Carriage Bolts.
1 Quart.		"C" Quality Marine Glue.



shape and later returning to patterns for assembly. Bolt stem together with 5/16" carriage bolts, while the frame joints should be secured with 1 1/2" No. 10 F. H. screws, six to each joint. Plywood 3/4" floor frames and chine gussets secure keel and chine joints respectively and are coated with casein glue or plastic glue before assembly. The transom is cut from a 3/4" plywood sheet and a 3/4" x 4" frame secured around the outer edges, fastening with 1 1/2" No. 10 F. H. screws. When all frames are assembled, notch out members for keel chines, and inwales and also notch form to receive frames.

All frames and the stem are now assembled upon the form. Align all frames squarely, retaining the transom and stem square with the form by nailing wood strips from these parts to form. Also secure strips across tops of all frames to prevent compression strains when planking—and prop frames even and level with wood strips from floor to frames.

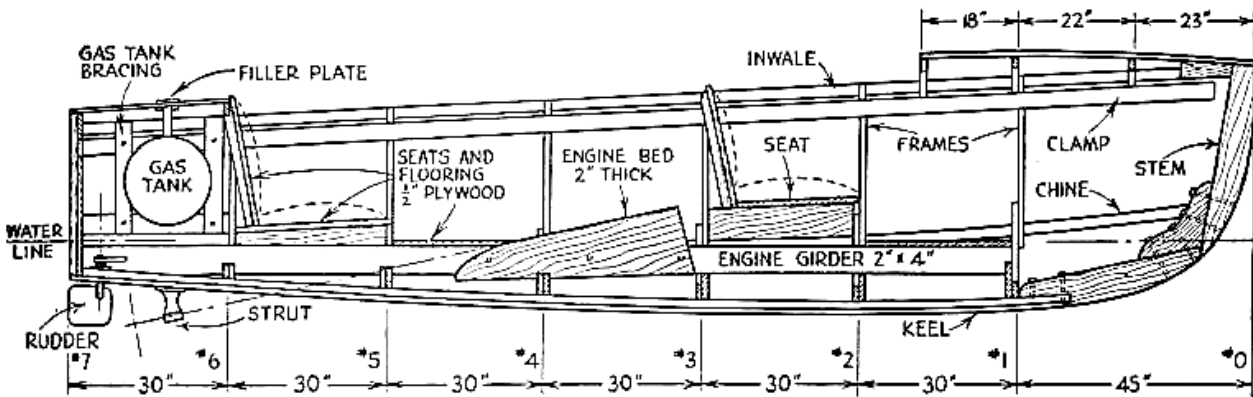
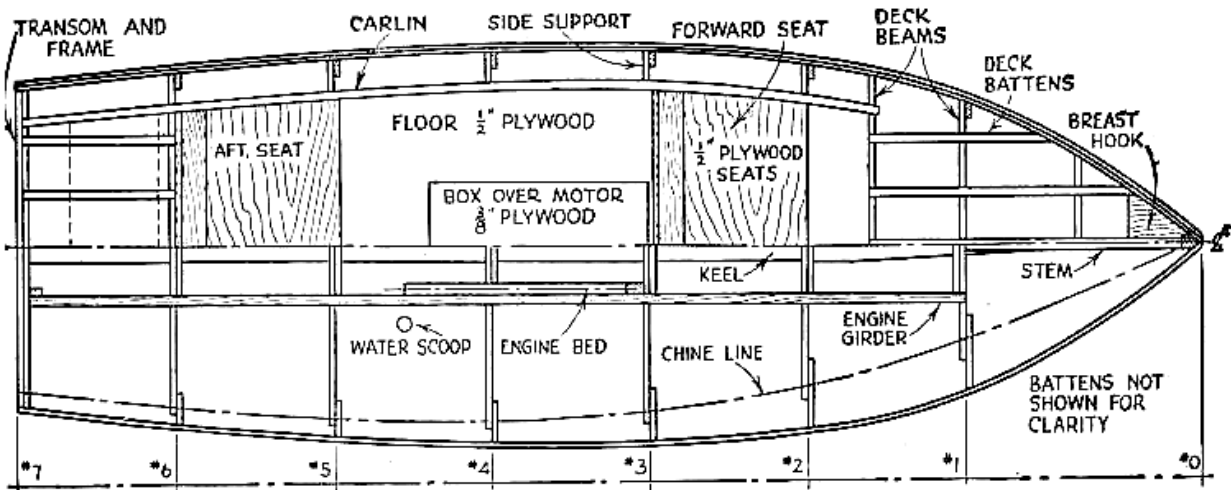
First member to be attached to the frame is the 3/4" x 5 3/4" keel apron which is screw fastened to each frame notch and stem with two 2 1/2" No. 8 F. H. screws. The outer keel 3/4" x 3" is now attached to keel apron, first coating adjoining surfaces with "C" quality marine glue, and fastening with 1 3/4" No. 8 F. H. screws spaced about 6" apart.

Clamp chines in place, trimming rear ends to fit transom notches and spring both chines together towards the stem, aligning frames and beveling frame notches to conform with chine angle. Fasten chines to frames with 2 1/2" No. 10 F. H. screws, bevel ends of chines to fit stem, and

open cockpit utility, and a cabin added later.

With the exception of the framework, waterproof marine plywood is used almost exclusively in the construction as it provides a hull capable of withstanding extreme service, is easily and more quickly fabricated, and represents a minimum outlay for materials. The first step in the construction of "Jane" should be to lay the lines down full size upon large sheets of building paper. This process will eliminate possible errors and provide full size patterns of parts necessary, not to mention affording a better understanding of the boat as a whole. The hull is most easily built when placed upside down and for this purpose cut the form to shape as indicated, mount upon legs similar to a saw horse, and raise to a height convenient for working upon the sides and bottom of the hull.

Prepare full size patterns of all frames, transom and stem and proceed to transfer the shapes to materials designated for the purpose, sawing to

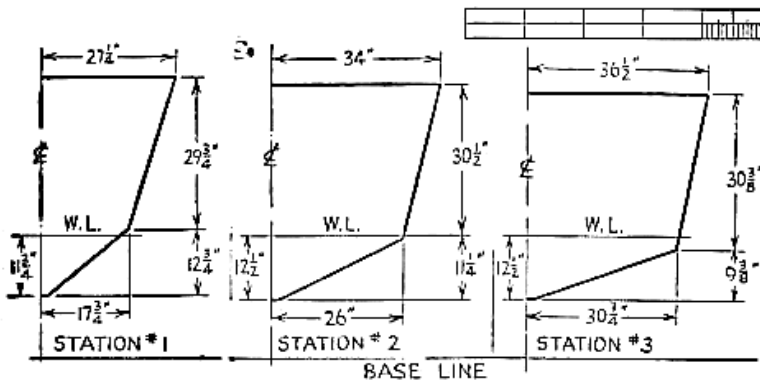


fasten with  $1\frac{3}{4}$ " No. 8 F. H. screws. Spring both inwales in place and fasten to each notch with one  $1\frac{1}{2}$ " No. 8 F. H. screw. If the frames have been aligned as construction progresses, the framework should now present a uniform and rigid structure for planking. If any member is not fairly aligned, do so now. The  $\frac{3}{4}$ " x  $1\frac{3}{4}$ " bottom and side battens are now notched into place and secured with  $1\frac{3}{4}$ " No. 8 F. H. screws.

slightly below surface to be later puttied. Coat all adjoining surfaces, especially keel joints, chine, and transom edges, with "C" quality marine glue, before placing planks in position for final fastening, and lay cloth strips upon glued area and recoat. At points where plywood is butted provide a  $\frac{3}{4}$ " x 6" oak butt block and screw fasten plywood in place to butts, chines, keel, frames and stem with  $1\frac{1}{4}$ " No. 8 F. H. screws spaced about 2" apart. The forward bottom pieces of plywood adjacent to the stem should be softened with hot water to bend readily.

HALF BREADTHS AND STATIONS ABOVE BASE VISUAL TABLE OF OFFSETS

ALL DIMENSIONS TO OUTSIDE OF FRAMES. NO DEDUCTIONS NECESSARY FOR PLANKING

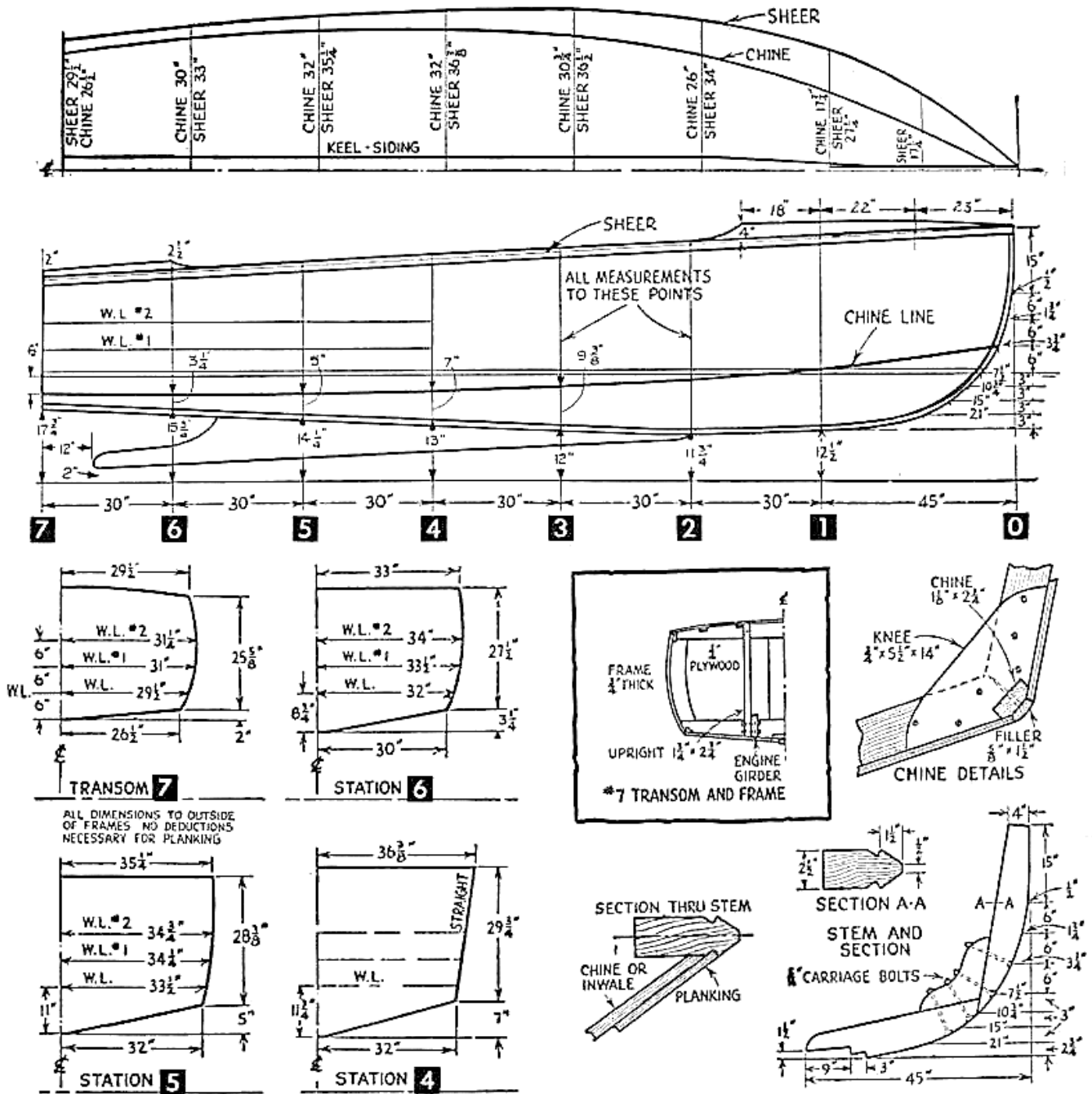


Trim and fair all joints so plywood to be applied lies evenly and smoothly at all points. The chine filler piece is now attached to chine with  $1\frac{1}{4}$ " No. 8 F.H. screws spaced about 6" apart.

With the planking trimmed evenly along all edges, turn the hull right side up and remove the form. Begin the interior assembly by sawing to shape the deck beams fore and aft and attach in place with  $1\frac{3}{4}$ " No. 8 F. H. screws. The side deck supports are now screw fastened to top of frames, followed by placing in position the  $\frac{3}{4}$ " x 3" clamps which add stiffness to the boat and help in supporting both beams and side deck supports, and are fastened to frames with  $1\frac{3}{4}$ " No. 8 F. H. screws. The carlin is now notched into rear beams, side supports and forward deck beam, fastening with  $1\frac{3}{4}$ " No. 8 F. H. screws. Finish deck assembly by notching the deck battens into beams and fastening with  $1\frac{3}{4}$ " No. 8 F. H. screws.

Covering the frame work with plywood is quite simple but before this work is begun certain fundamentals should be observed. Drill lead holes for all fastenings, sinking screws

The  $\frac{3}{8}$ " or  $\frac{1}{2}$ " plywood decking is now applied and fastened in place, at all points with



1 1/4" No. 8 F. H. screws spaced about 3" apart. Trim evenly along cockpit edges and cover with a 1/2" x 5" plywood coaming, screw fastened in place. Cover forward and aft cockpit beam with a shaped covering board—the forward cockpit beam covering piece sawed to an attractive curve and used as a dash board. The sheer moulding is now fastened in place with 1 3/4" No. 8 F. H. screws spaced about 8" apart.

Installing the engine girders and engine beds will depend upon the power used as the varying characteristics of different engines require separate attention. However, in general, notch girders partially into frames to prevent shifting and fasten securely to frames with metal brackets. The engine beds are bolted to the girders and are located to suit the engine installed. Two inch thick separators should be secured between girders and beds to further increase rigidity. The flooring is made from waste plywood and attached to cross pieces laid across girders.

Such things as rudders, stuffing boxes for the shaft, steering wheels and other fittings are standard equipment and are obtainable from any marine supply establishment. The engine used will depend upon the builder's finances—while marine engines are first choice, an auto engine such as the Model A or V-8 Ford properly converted is entirely satisfactory.

The skeg shown upon the plans is shaped from a piece of oak and is recommended as a protection to propeller and rudder.

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