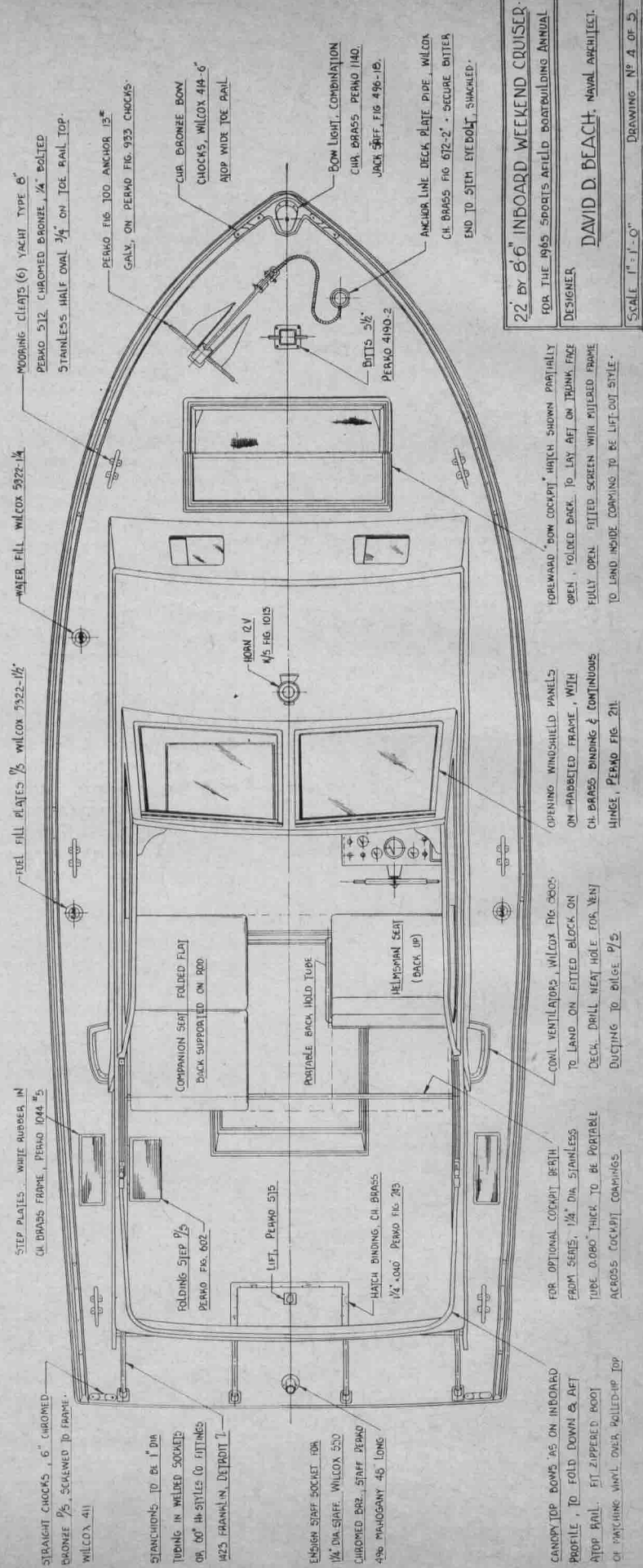
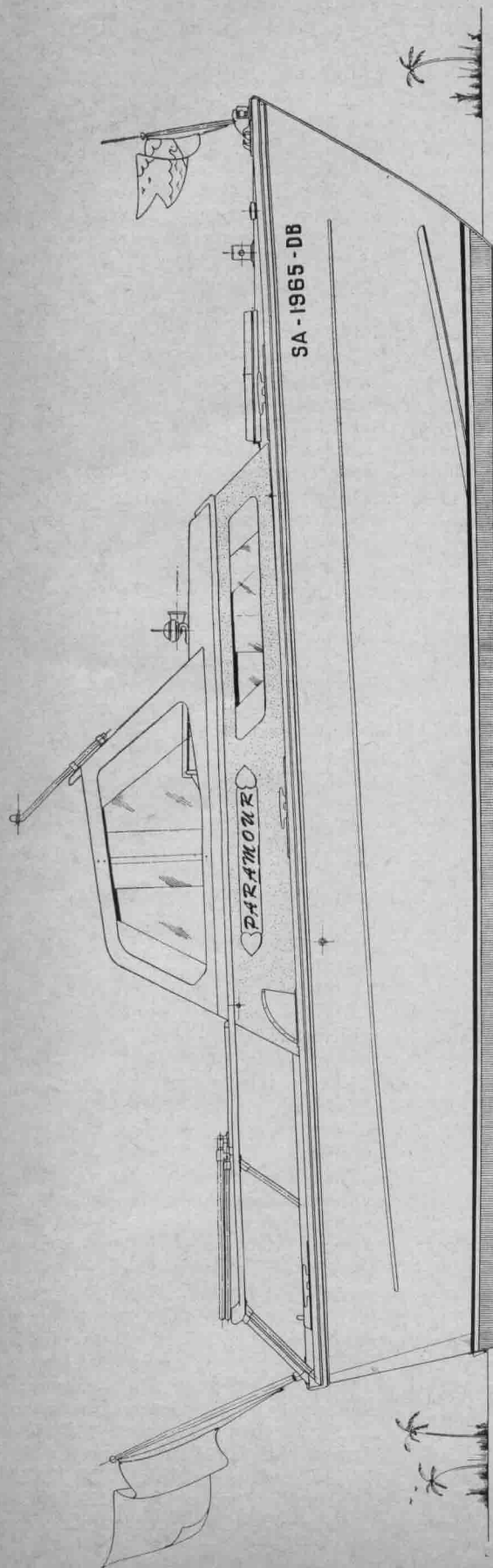




HOW TO BUILD PARAMOUR

BY DAVID D. BEACH

Got a couple of seagoing kids and a wife who likes creature comforts on those weekend jaunts? Here's a 22' inboard cruiser that has a lot to recommend it in the way of creative design and unusual features

THE DESIGN SHOWN in the accompanying drawings had its beginnings several years ago when, in the 1962 edition of this Annual, there was a 16-footer called *Sea-Deuce*. That was a little cruiser either for outboard power or for one of the smaller inboard-outboard engines. The boat was extremely popular, as evidenced by the amount of correspondence it provoked, and many builders enlarged it a frame space to provide a bit more cockpit room.

When this designer proposes new boats for forthcoming issues of the Boatbuilding Annual, several items are always considered. These include the necessity for a good design, the obvious need for it to be a practical one and the inclusion of some novel features that will make it an interesting one to the readers. So it was, then, that the present design was conceived. Practicability and good basic design had been proved in *Sea-Deuce*; the need for a some-

what larger version had been indicated by the correspondence with builders who wanted more length and the novel features were already in the designer's mind.

The design, as it seemed to develop, had several main features. First, if the boat were longer, it would probably be used with more people aboard. This would require space to seat them and space for them to move about in. If the extra passengers were children, it would require a special area for them in which they could be seen and watched. A small family would probably want to cruise; or the owner and his wife might invite another couple as cruising companions. These extra people would need sleeping facilities. Of course, an enclosed head, or water-closet, space would be a must, and if a little galley could be fitted—well, fine.

How about power? The designer considered this at some length and

then decided on a true inboard installation. However, because of the weight and center-of-gravity considerations, as well as the desire for a flat shaft angle, the decision was made to incorporate a V-drive marine engine of about 100 hp. It was felt that the prospective builder who would be attracted to this project would be interested in good performance, but would not demand an extreme speed. It takes quite a bit of power to produce high speeds in a 22-footer—and power has both initial high cost and high operating (fuel) cost. Of course, there are exceptions; but the designer may have something for them in 1966.

The basic profile of *Sea-Deuce* shows a high-freeboard, straight-sheer hull with a modestly raked stem. The cabin trunk is low and rather short, and amidship there is a fitted windshield with long side wings for wind and weather protection. The cockpit is enclosed with a

high railing that continues into the cabin trunk. The whole profile has an integrated look that is generally pleasant. The interior of the craft, shown on the arrangement drawing, fully explains the reason for the profile. Aft of a large line-stowage area are a double-berth offset to starboard and a dresser counter to port. Behind a bulkhead, at the head of the berth, is a manually operated marine water closet, completely enclosed.

The cockpit was provided with a helmsman seat and a companion seat opposite—each wide enough to seat two people. These seats, adapted to have reclining backs, convert into a second berth. The space aft of the low engine box in the cockpit floor is ample for a couple of standard folding yacht chairs and a small table. This is a fairly solid and completely practical arrangement and, even without the little attempts at novelty, would satisfy many prospective builders.

The novelties, however, should be mentioned. First, the large double folding hatch forward provides a forward cockpit. A portable bench-type seat can be fitted beneath the opened hatch, and two children can enjoy the ride therein—with an unobstructed view and with the wind in their faces. Also, they are forward where they can always be seen. Of course, a big hatch like that, appropriately screened, provides a lot of ventilation, which is sorely needed in a small cabin.

The cabin can be fitted with shelves and counter area for most weekend needs, stowage and the like. The designer has provided windows in the cabin-trunk face and sides as well as in the companion-way door. Air is a big necessity, and you should be able to get some into the cabin regardless of weather.

The cockpit-seat structure is a bit unusual, too. Conventional folding seats can be rehinged to fold back, not forward. A portable rod, set in a pair of clothes-rod sockets on the coaming, will hold the seat backs flat. An add-in cushion will complete the berth, which is the size of a shoreside twin bed.

The designer became rather engrossed in this boat during its several design stages. She seemed to acquire a personality of her own and continued to invade his thinking even when he was not working at his board. A rather strong feeling for the boat developed—and that explains her name. *Paramour* is a design you could become very much attached to; almost devoted. It is fully expected that those who undertake to build her will, in many

cases, find her a second love. Because of this, she is *Paramour*—a pretty-hulled thing that will distract men's thoughts.

Shall we first discuss that hull? The Lines and Offsets Drawing Number 1 defines her form, and a careful study thereof reveals a moderate-dead-rise bottom with long straight buttock lines in her afterbody. Her forefoot is gently curved, and the soft rise in her chine, coupled with a full sheer above, produces gracefully flared topsides forward. So much for her appealing appearance. Now a few words as to her sea-kindliness. The dead rise is moderate aft and amidship, but forward it is just sufficient to provide a proper compromise between soft-riding and spray-deflecting characteristics. She should not, and will not, plow in a following sea, nor will she run bow up as her throttle is backed off. The curves of sectional areas shown on the Lines Plan indicate that she can take a lot of load in the cockpit without excessive trim. These curves show, to the hull designer, that she will also perform quite well with modest planing power.

The designer has indicated a raked transom, inclined aft at 12°. For the Universal 110-hp engine shown, the shaft angle is also 12°. That angle will permit the use of standard shaft logs and struts and is just proper to minimize trim changes at low speeds.

Now, regard carefully the notes on the Lines Plan. These lines should be laid down full size and cross-faired. The designer has used care in his pencil designing and has scaled the offsets from his original lines, but inadvertencies can happen. So fair out the lines in standard practice, and your work, as the boat construction progresses, will be made easier because of the initial efforts. The builder is strongly advised to read and study one of the standard texts on these matters. Howard I. Chappelle's *Boatbuilding* (W. W. Norton & Co., New York, N.Y.) and Robert Steward's *Small Boat Construction* (The Rudder Publishing Co., New York, N.Y.) are well recommended.

Paramour is not to be undertaken by the inexperienced builder. Although there is absolutely nothing in her construction that is unusual or complicated, she will require a substantial amount of work. It seems appropriate, therefore, to address further comments to the more experienced boatbuilder—or to the craftsman who is not in excessive haste to start making sawdust and shavings. Approach her problems with careful deliberation and study,

with the idea that everything fabricated shall be right the first time. *Paramour* almost demands this, and the designer feels that this is entirely proper.

The construction details are shown on Drawings 2 and 3, and these require careful study. The prospective builder will note that a considerable number of explanatory notes are provided to call attention to details of shaping or assembly. A fundamental assumption has been made by the designer (and this is reflected in the professional nature of the drawings) that the builder has know-how, and that detailed piece-part drawings are not required.

What is special, or what deserves further explanation or comment? Well, perhaps the stem construction is first. Note that this item is a laminated piece, of seven selected plies of 5/8"x3" rift-sawn mahogany. The loft lines will provide the shape of the template block against which these thin planks may be clamped and glued together. The bevels can be cut after fabrication or on the erected frame assembly. Of course, the builder can fabricate a stem and forefoot of solid stock and bolt these together with a knee in the old, well-understood manner.

A word about glue. The glue to be used in the fabrication of this design shall be a resorcinol or phenolic-resin adhesive. The watertightness and structural soundness of all wooden boats is no better than the attention that is paid to the glued joints. This applies to the finished wood parts, the moisture content and the type of wood, as well as to the pressures from the clamping and mechanical fastenings such as screws or bolts. This designer has built plywood-planked boats with all glued joints—using no flexible sealants—and these boats are now nearly two decades old. So it can be done if the builder exercises his craftsmanship at all stages of construction.

The next item to be called to the attention of the builder is the half-lapped or half-gained framing on the bulkhead amidship and on the transom. Both these subassemblies have plywood diaphragms glued and screw-fastened to the transverse and transom frames. The plywood must land full on all side, bottom and deck frames, so this requires that the several elements be lapped one into the other. The plywood panels on the bulkhead should be templated from the lines drawing, leaving room for the cutting of the batten notches. The bulkhead itself can be fabricated from two standard panels, appropriately cut. Battens should be fitted on the forward face of the

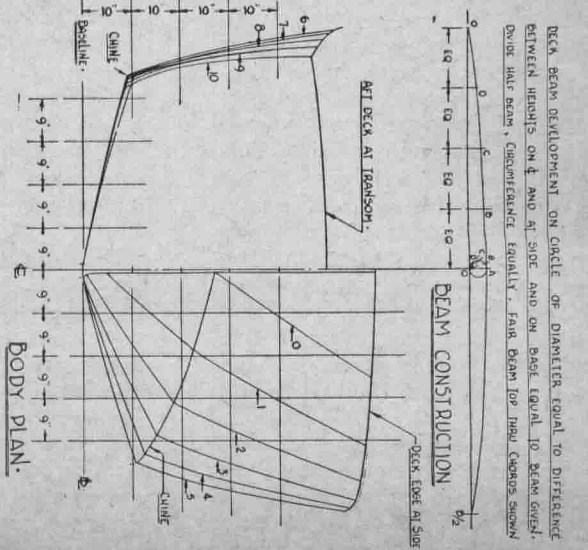
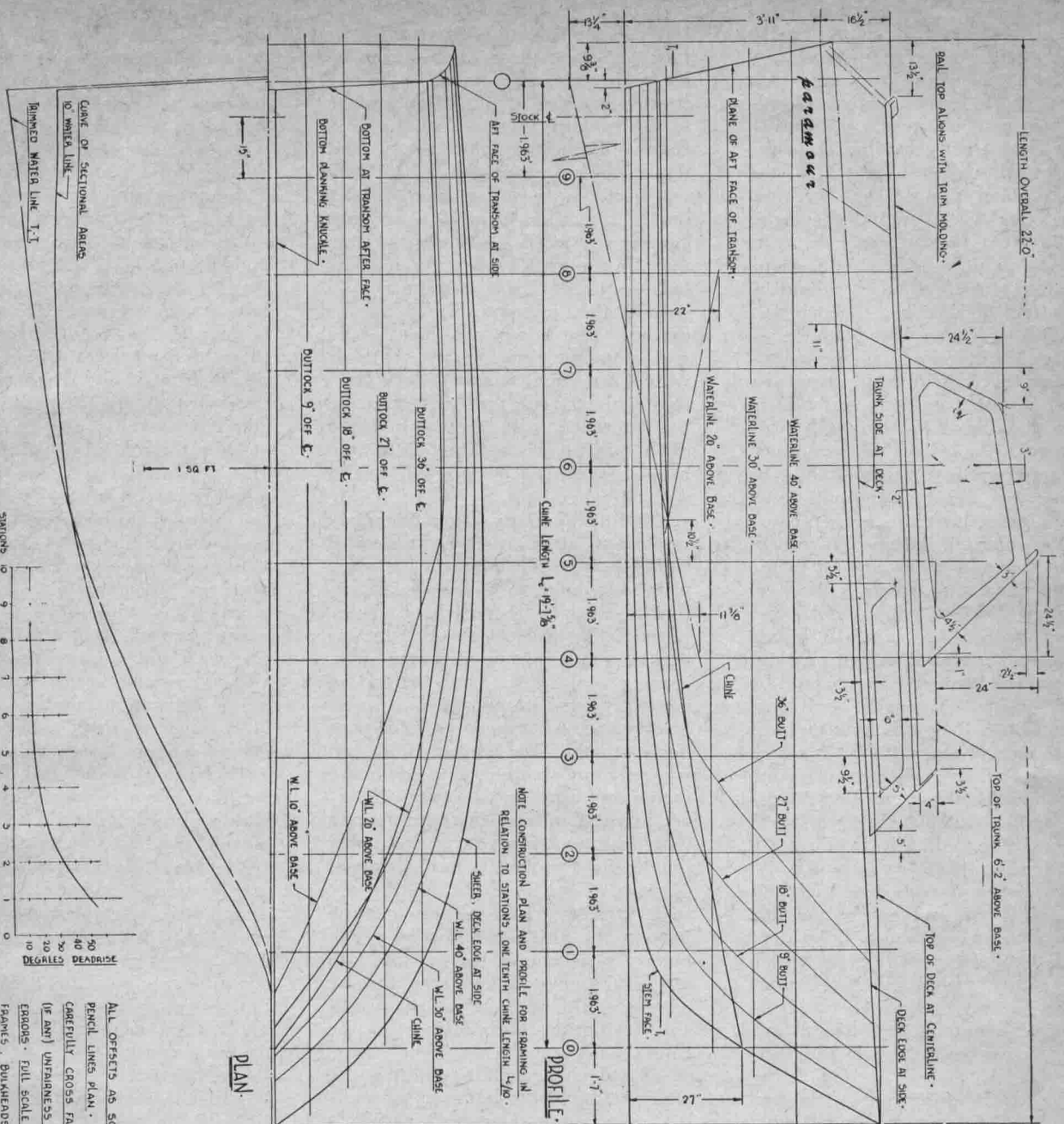


TABLE OF OFFSETS

OFFSETS, GUN IN INCHES, AND EIGHTHS TO OUTSIDE OF PLANKING AND TOP OF DECKING ABOVE BASELINE AND OUTBOARD OF CENTERLINE ON LINES SHOWN:													
LINE	STATION	0	1	2	3	4	5	6	7	8	9	10	
HEIGHT KEEL/STERN RACE	27-0	4-7	0-6	0-0	STRAIGHT								0-0
9" BUTTLOCK	34-0	1-7	5-6	3-0	2-1	-1-6	1-4	1-4	1-4	1-4	1-4	1-4	
16 BUTTLOCK	35-0	24-4	11-6	7-0	4-17	4-0	3-5	3-6	3-6	3-6	3-6	3-6	
27 BUTTLOCK	-	3-67	11-2	8-10	6-4	5-7	5-4	5-4	5-4	5-4	5-4	5-4	
3-6 BUTTLOCK	-	5-51	3-4-1	27-1	11-2	9-2	6-1	7-6	7-6	7-6	7-6	7-6	
CINQUE	27-0	27-5	16-3	14-6	12-7	10-3	9-2	8-0	6-5	6-4	6-3	5-12	
DECK EDGE AT SIDE	56-4	STRAIGHT											
DECK ON CENTERLINE	60-0	60-0	59-4	58-3	57-2	56-3	55-4	54-4	53-2	52-1	51-0	50-2	
HAFT BUSHING KNUCKLE FROM L.	0-4	0-4	0-5	1-2	1-4	STRAIGHT							1-4
10" WATER LINE	-	4-5	15-3	24-2	32-5	37-0	41-0	45-1	48-0	50-5	53-7	57-2	
CINQUE	0-4	16-3	31-4	38-6	45-0	50-4	54-5	58-4	62-3	65-3	68-6	71-7	
20" WATERLINE	-	14-3	38-6	57-2	41-6	44-0	46-5	44-4	43-1	43-0	42-3	42-3	
30" WATERLINE	2-3	31-5	53-5	41-0	44-7	46-5	46-6	46-6	46-2	46-2	46-0	45-3	
40" WATERLINE	9-1	21-4	38-7	44-1	47-2	48-6	48-6	48-6	48-2	48-2	48-0	48-7	
DECK EDGE AT SIDE	27-5	37-2	44-7	48-1	50-5	56-7	59-3	64-1	68-3	70-7	74-0	77-3	

ALL OFFSETS AS SCALED FROM DESIGNER'S ORIGINAL PENCIL LINES PLAN. LINES SHOULD BE LAID DOWN AND CAREFULLY CROSS FAIRED FULL SIZE TO REMOVE ALL (IF ANY) UNFAIRNESS DUE TO INADVERTENT SCALING ERRORS. FULL SCALE LINES MUST BE USED TO DEVELOP FRAMES, BULKHEADS, STRUCTURAL SHAPES & DETAILS.

22 BY 8-6 INBOARD WEEKEND CRUISER
FOR THE 1960 SPORTS ARTIST BOATBUILDING ANNUAL
DESIGNED BY
DAVID D. BEACH, NAAI ARCHITECT
DRAWING NO. 1 OF 5

bulkhead over each seam, as required.

The engine beds are deserving of comment, too. These are nearly full length, of 2½" stock, and are laminated forward where the frames lift. These engine beds may be the prime structural members on which the subassembled frames are erected. The frames are through-bolted with ⅜"-diameter bronze carriage bolts prior to planking. It would seem, then, that the erection jig should be to position the stem and the stringers so that the frames can be fastened thereto. No discussion seems necessary for this fundamental structure, as know-how and the previously mentioned texts will adequately provide it. The notes on the structural drawings require that the frames be notched for the longitudinals such as the keel, the chines and sheers and the planking battens. Of course, the keel should be fitted first to the erected frames, and before the keel is bolted to the frame floors, the frames should be carefully made square and plumb. The scarf joint between the stem and keel should be neatly fitted for the glue and bolts shown. Note that the longitudinals do not extend through the transom planking, but are notched only into the frames. Fit the chines next, starting from aft and putting them on at the same time so that the bending will not warp the frame assembly. These major members are fastened in their cutouts by two screws into the side grain of the side frames. Locate the screws to allow for the bevels, which will be developed later. Of course, the bevels can be worked out from the loft and rough-cut before fitting, but they are best shaped after installation.

Beveling the frames, transom, keel, chine and sheer is a straightforward operation. It is best accomplished with a combination of power tools and handwork. We want smooth and full contact between the surfaces of all structures and the inner surface of the planking. Accordingly, an 8"-wide strip of planking plywood perhaps six feet long is needed. This is placed across the frames; across the keel edge, frames and chine; across the chine, frames and sheer or across the frames to the stem. The several members are sanded, filed, planed or otherwise shaped so that regardless of how that plywood strip is applied to the structure, all the structural members land full and fair against that strip. One caution: Work slowly—because you can always bevel off a bit more but it is awkward to have to glue a thin sliver back on.

There have been shown three bat-

tens in each side and three battens in each panel of the V-bottom. It is best to locate these on the boat so as to provide easy lines. While the topside battens divide the topsides fairly equally between chine and sheer, the bottom battens will not do this. The warp of the hull forward will cause battens that equally divide the after frames to run out against the keel. Some edge setting may be required to best fit the battens forward. These battens should be laid, then nailed, to the frames as desired. The edges can be marked and notches cut for the battens, which are then removed. The battens can be replaced, with glue, in the notches and screw-fastened down. Some rechecking with the bevel stick may be needed, but it will only be slight.

The hull planking is a particularly important item in the successful completion of *Paramour*. The wide plywood planks are especially appropriate for the experienced home builder. Instead of many narrow planks, requiring much tedious patterning and fitting, and instead of very large and unmanageable panels of plywood, a happy compromise has been adopted. The home builder can properly cut, fit, drill, glue down and fasten one of these panels in a modest amount of time without having to work rapidly or having to manhandle an awkwardly large slab of plywood. Note that butt blocks are to be fitted neat and full between the battens to tie the plywood-plank ends. These should be set in with glue and appropriate screws, and the edges should be beveled to prevent the formation of puddles in the bilges.

A final chore will be drilling the shaft hole and the hole for the rudder-port fitting. The shaft angle, as mentioned, sets 12° with the keel, and the drill-aligning fixture can be fabricated from the dimensions on the Lines Plan. The holes should be drilled prior to the glassing of the hull. There should be not more than ¼" of clearance for the shaft, so a 1⅜" hole should be drilled. For the rudder port, drill the hole neat, allowing only ⅛" for the fiber-glass cloth.

The drawings indicate that the designer feels the bottom should be fiber-glass-covered. Some builders may want to glass the hull completely from sheer to sheer. This is optional. However, the builder, unless he has successfully applied fiber glass to a plywood boat, should religiously adhere to the instructions provided by the supplier of the resin used. A completely clean, smooth and dry surface is essential, and this is

obtained by sanding and wiping with alcohol. The cloth should be of 10-oz. weight, and the resin can be a polyester or epoxy, with such doublers as desired along the keel forward. Apply the fiber-glass cloth with clear resin, so that the wetting of the cloth can best be observed. The final brush coats of resin should be wet-sanded before application of the prime coats for the topside color and bottom antifouling paint. The Profile view shows the antifouling bottom paint about 13" above the bottom of the keel. This is higher than the floating waterline; and note, please, that there is some sheer to the boat topping. This will make trim changes less obvious.

As to the matter of painting fiber-glass-surfaced boats, the builder is advised to consult the literature of the paint manufacturers. There are a number of fiber-glass primers and paints that have special peculiarities and are incompatible with other paints. Stay with those of the same manufacturer, such as Baltimore Copper Paint Co. or Woolsey. Both these manufacturers have proper paint instruction manuals for fiber-glass-covered boats and have large color selections from which to choose.

The inside of the hull, when it is right side up and in a suitably padded cradle, should be carefully cleaned out. Brush on rather heavily two coats of a good antifungus wood preservative. Cuprinol is highly recommended. Use the clear type, and really slop it on. If it puddles in the bilge, don't worry—just spread it around and let it dry. Some boatbuilders pour it in up to the gunwales and let the boat soak it up before draining it out for the next one!

The next step is the engine installation. The engine should be conventionally aligned to the shaft and lagged down to the engine beds atop the stringers. The exhaust piping can be fitted, as can the rudder. The two fuel tanks can be fabricated and installed, although it seems proper to suggest that these be fitted so that they can be moved a bit aft, if that is thought necessary. The flexible Tygon piping will permit that.

The cockpit decking is straightforward, as is the topside decking. These can be fitted as shown. The deck longitudinals are located to provide for an unwarped cabin side, and you can develop this on the lines layout to check the dimensions provided. The foredeck hatch is large, but the reasons for that may not be appropriate in all cases. The hatch can be smaller, but at the expense of ventilation and easy access. The cabin trunk is also rather conventional, being fitted to the

FIT "STRIPS" TRACK IN SIDE WINDSHIELD WINGS AS FOR TRUNK SLIDING WINDOWS. ROUND EDGES OF UPRIGHT STIFFENER STRUT.

1/2" HALF ROUND TRIM CAP ON CABIN TRUNK TO ALIGN WITH AFTER RAIL CAP.

FUEL FILL PLATE SET FLUSH WITH DECK UNDER 21" WIDE BELTDRUM SET TO FOLD DOWN OR LAY BACK TO SUIT.

21" WIDE BELTDRUM SET TO FOLD DOWN OR LAY BACK TO SUIT.

21" WIDE BELTDRUM SET TO FOLD DOWN OR LAY BACK TO SUIT.

21" WIDE BELTDRUM SET TO FOLD DOWN OR LAY BACK TO SUIT.

21" WIDE BELTDRUM SET TO FOLD DOWN OR LAY BACK TO SUIT.

21" WIDE BELTDRUM SET TO FOLD DOWN OR LAY BACK TO SUIT.

21" WIDE BELTDRUM SET TO FOLD DOWN OR LAY BACK TO SUIT.

21" WIDE BELTDRUM SET TO FOLD DOWN OR LAY BACK TO SUIT.

21" WIDE BELTDRUM SET TO FOLD DOWN OR LAY BACK TO SUIT.

21" WIDE BELTDRUM SET TO FOLD DOWN OR LAY BACK TO SUIT.

21" WIDE BELTDRUM SET TO FOLD DOWN OR LAY BACK TO SUIT.

21" WIDE BELTDRUM SET TO FOLD DOWN OR LAY BACK TO SUIT.

21" WIDE BELTDRUM SET TO FOLD DOWN OR LAY BACK TO SUIT.

21" WIDE BELTDRUM SET TO FOLD DOWN OR LAY BACK TO SUIT.

21" WIDE BELTDRUM SET TO FOLD DOWN OR LAY BACK TO SUIT.

21" WIDE BELTDRUM SET TO FOLD DOWN OR LAY BACK TO SUIT.

21" WIDE BELTDRUM SET TO FOLD DOWN OR LAY BACK TO SUIT.

21" WIDE BELTDRUM SET TO FOLD DOWN OR LAY BACK TO SUIT.

CABIN SLIDING WINDOWS TO BE FABRICATED WITH DOUBLE TRACK, STAINLESS STEEL, FOR 1/4" OR 3/8" GLASS, BY STANDARD PRODUCTS CO. (2150 W. 10TH ST. CLEVELAND 2, OHIO). SET IN 1/2" RABBIT IN 3/4" TRUNK SIDES, COVER WITH INNER TRIM PIECE AS ON DWG. 2. DRILL & PAINT INSIDE DRAIN HOLES AT AFT ENDS 1/2".

FRAMES TO BE MADE UP WITH GLUE, 1/2" W.S. FOR TOP PLYWOOD BEAMS.

CUT 4" DIA. HOLE IN BERTH TOP FOR FRESH WATER TANK FILL. FIT LOOSE 6" DIA. FLAT COVER PLATE.

3" DIA. HOLE IN BERTH TOP FOR FRESH WATER TANK FILL. FIT LOOSE 6" DIA. FLAT COVER PLATE.

3" DIA. HOLE IN BERTH TOP FOR FRESH WATER TANK FILL. FIT LOOSE 6" DIA. FLAT COVER PLATE.

3" DIA. HOLE IN BERTH TOP FOR FRESH WATER TANK FILL. FIT LOOSE 6" DIA. FLAT COVER PLATE.

3" DIA. HOLE IN BERTH TOP FOR FRESH WATER TANK FILL. FIT LOOSE 6" DIA. FLAT COVER PLATE.

3" DIA. HOLE IN BERTH TOP FOR FRESH WATER TANK FILL. FIT LOOSE 6" DIA. FLAT COVER PLATE.

3" DIA. HOLE IN BERTH TOP FOR FRESH WATER TANK FILL. FIT LOOSE 6" DIA. FLAT COVER PLATE.

3" DIA. HOLE IN BERTH TOP FOR FRESH WATER TANK FILL. FIT LOOSE 6" DIA. FLAT COVER PLATE.

3" DIA. HOLE IN BERTH TOP FOR FRESH WATER TANK FILL. FIT LOOSE 6" DIA. FLAT COVER PLATE.

3" DIA. HOLE IN BERTH TOP FOR FRESH WATER TANK FILL. FIT LOOSE 6" DIA. FLAT COVER PLATE.

3" DIA. HOLE IN BERTH TOP FOR FRESH WATER TANK FILL. FIT LOOSE 6" DIA. FLAT COVER PLATE.

3" DIA. HOLE IN BERTH TOP FOR FRESH WATER TANK FILL. FIT LOOSE 6" DIA. FLAT COVER PLATE.

3" DIA. HOLE IN BERTH TOP FOR FRESH WATER TANK FILL. FIT LOOSE 6" DIA. FLAT COVER PLATE.

3" DIA. HOLE IN BERTH TOP FOR FRESH WATER TANK FILL. FIT LOOSE 6" DIA. FLAT COVER PLATE.

3" DIA. HOLE IN BERTH TOP FOR FRESH WATER TANK FILL. FIT LOOSE 6" DIA. FLAT COVER PLATE.

3" DIA. HOLE IN BERTH TOP FOR FRESH WATER TANK FILL. FIT LOOSE 6" DIA. FLAT COVER PLATE.

3" DIA. HOLE IN BERTH TOP FOR FRESH WATER TANK FILL. FIT LOOSE 6" DIA. FLAT COVER PLATE.

3" DIA. HOLE IN BERTH TOP FOR FRESH WATER TANK FILL. FIT LOOSE 6" DIA. FLAT COVER PLATE.

HARDWARE OF QUALITY APPROPRIATE FOR SALT WATER USE MAY BE OBTAINED FROM "WILCOX," THE WILCOX CATTENDEN DIV., NORTH & JUDD MFG. COMPANY, MIDDLETOWN, CONNECTICUT OR "PERMA," PERKINS MARINE LAMP & HARDWARE CO., 16490 N.W. 15TH AVE., MIAMI BEACH 33164.

THESE COMPANIES HAVE LOCAL AREA DEALERS. ENGINE IS A UNIVERSAL "BLUEFIN," V-DRIVE OF 110 H.P. BY UNIVERSAL MARINE ENGINE CO., OMAHA, NEBRASKA. CONTROLS FOR ENGINE THROTTLE & REVERSE ARE AVAILABLE FROM MORSE INSTRUMENT CO., HUDSON, OHIO. STEERING UNIT AND CABLE IS "STEERMASTER" BY AMERICAN CHAIN & CABLE COMPANY, 601 STEPHENSON BUILDING, DETROIT 2, MICHIGAN.

RABBIT 3/4" BY 1 1/4" MAX. FOR 1/4" GLASS. BINDING STRIPS, LINGERS, ADJUSTERS PERNO PG 211, B2.

RABBIT 3/4" BY 1 1/4" MAX. FOR 1/4" GLASS. BINDING STRIPS, LINGERS, ADJUSTERS PERNO PG 211, B2.

RABBIT 3/4" BY 1 1/4" MAX. FOR 1/4" GLASS. BINDING STRIPS, LINGERS, ADJUSTERS PERNO PG 211, B2.

RABBIT 3/4" BY 1 1/4" MAX. FOR 1/4" GLASS. BINDING STRIPS, LINGERS, ADJUSTERS PERNO PG 211, B2.

RABBIT 3/4" BY 1 1/4" MAX. FOR 1/4" GLASS. BINDING STRIPS, LINGERS, ADJUSTERS PERNO PG 211, B2.

RABBIT 3/4" BY 1 1/4" MAX. FOR 1/4" GLASS. BINDING STRIPS, LINGERS, ADJUSTERS PERNO PG 211, B2.

RABBIT 3/4" BY 1 1/4" MAX. FOR 1/4" GLASS. BINDING STRIPS, LINGERS, ADJUSTERS PERNO PG 211, B2.

RABBIT 3/4" BY 1 1/4" MAX. FOR 1/4" GLASS. BINDING STRIPS, LINGERS, ADJUSTERS PERNO PG 211, B2.

RABBIT 3/4" BY 1 1/4" MAX. FOR 1/4" GLASS. BINDING STRIPS, LINGERS, ADJUSTERS PERNO PG 211, B2.

RABBIT 3/4" BY 1 1/4" MAX. FOR 1/4" GLASS. BINDING STRIPS, LINGERS, ADJUSTERS PERNO PG 211, B2.

RABBIT 3/4" BY 1 1/4" MAX. FOR 1/4" GLASS. BINDING STRIPS, LINGERS, ADJUSTERS PERNO PG 211, B2.

RABBIT 3/4" BY 1 1/4" MAX. FOR 1/4" GLASS. BINDING STRIPS, LINGERS, ADJUSTERS PERNO PG 211, B2.

RABBIT 3/4" BY 1 1/4" MAX. FOR 1/4" GLASS. BINDING STRIPS, LINGERS, ADJUSTERS PERNO PG 211, B2.

RABBIT 3/4" BY 1 1/4" MAX. FOR 1/4" GLASS. BINDING STRIPS, LINGERS, ADJUSTERS PERNO PG 211, B2.

RABBIT 3/4" BY 1 1/4" MAX. FOR 1/4" GLASS. BINDING STRIPS, LINGERS, ADJUSTERS PERNO PG 211, B2.

RABBIT 3/4" BY 1 1/4" MAX. FOR 1/4" GLASS. BINDING STRIPS, LINGERS, ADJUSTERS PERNO PG 211, B2.

RABBIT 3/4" BY 1 1/4" MAX. FOR 1/4" GLASS. BINDING STRIPS, LINGERS, ADJUSTERS PERNO PG 211, B2.

RABBIT 3/4" BY 1 1/4" MAX. FOR 1/4" GLASS. BINDING STRIPS, LINGERS, ADJUSTERS PERNO PG 211, B2.

AT OPTION OF BUILDER, ROUT TWO 9" BY 12" WINDOW OPENINGS IN 3/4" TRUNK FACE. SET SINGLE TRACK IN COVERING PANEL FOR SLIDING AND BOLTS. BOATS IN FRESH WATER CADMIUM STEEL.

1/4" THICK GLASS TO SLIDE INBOARD. WILCOX FIG. 5710 1/2, OPTIONAL.

CABIN FACE 3/4" MANOCANY. FIT 1/4" DRAIN IN SIDE FOR MARINE LEAKS RUN OFF.

1/4" THICK FIR PLYWOOD. CABIN COUNTER WITH FORMICA TOP TO SUIT.

CHART TABLE TOP EDGE TRIM TO BE SPECIALLY SHAPED TO SUIT.

3/4" CABIN SOLE TO LIND. BERTH PORT (INDO) EDGE TO BE STATIONED 1/4" BY 1/2".

1/4" THICK FIR PLYWOOD. CABIN COUNTER WITH FORMICA TOP TO SUIT.

CHART TABLE TOP EDGE TRIM TO BE SPECIALLY SHAPED TO SUIT.

3/4" CABIN SOLE TO LIND. BERTH PORT (INDO) EDGE TO BE STATIONED 1/4" BY 1/2".

1/4" THICK FIR PLYWOOD. CABIN COUNTER WITH FORMICA TOP TO SUIT.

CHART TABLE TOP EDGE TRIM TO BE SPECIALLY SHAPED TO SUIT.

3/4" CABIN SOLE TO LIND. BERTH PORT (INDO) EDGE TO BE STATIONED 1/4" BY 1/2".

1/4" THICK FIR PLYWOOD. CABIN COUNTER WITH FORMICA TOP TO SUIT.

CHART TABLE TOP EDGE TRIM TO BE SPECIALLY SHAPED TO SUIT.

3/4" CABIN SOLE TO LIND. BERTH PORT (INDO) EDGE TO BE STATIONED 1/4" BY 1/2".

1/4" THICK FIR PLYWOOD. CABIN COUNTER WITH FORMICA TOP TO SUIT.

CHART TABLE TOP EDGE TRIM TO BE SPECIALLY SHAPED TO SUIT.

3/4" CABIN SOLE TO LIND. BERTH PORT (INDO) EDGE TO BE STATIONED 1/4" BY 1/2".

1/4" THICK FIR PLYWOOD. CABIN COUNTER WITH FORMICA TOP TO SUIT.

CHART TABLE TOP EDGE TRIM TO BE SPECIALLY SHAPED TO SUIT.

ALL CONSTRUCTION FASTENINGS SHALL BE OF BRASS WHEN INTERIOR JOINERWORK: FRAMING AND PLANKING FASTENINGS SHALL BE BRONZE SCREWS AND BOLTS. BOATS IN FRESH WATER CADMIUM STEEL.

1/4" THICK GLASS TO SLIDE INBOARD. WILCOX FIG. 5710 1/2, OPTIONAL.

CABIN FACE 3/4" MANOCANY. FIT 1/4" DRAIN IN SIDE FOR MARINE LEAKS RUN OFF.

1/4" THICK FIR PLYWOOD. CABIN COUNTER WITH FORMICA TOP TO SUIT.

CHART TABLE TOP EDGE TRIM TO BE SPECIALLY SHAPED TO SUIT.

3/4" CABIN SOLE TO LIND. BERTH PORT (INDO) EDGE TO BE STATIONED 1/4" BY 1/2".

1/4" THICK FIR PLYWOOD. CABIN COUNTER WITH FORMICA TOP TO SUIT.

CHART TABLE TOP EDGE TRIM TO BE SPECIALLY SHAPED TO SUIT.

3/4" CABIN SOLE TO LIND. BERTH PORT (INDO) EDGE TO BE STATIONED 1/4" BY 1/2".

1/4" THICK FIR PLYWOOD. CABIN COUNTER WITH FORMICA TOP TO SUIT.

CHART TABLE TOP EDGE TRIM TO BE SPECIALLY SHAPED TO SUIT.

3/4" CABIN SOLE TO LIND. BERTH PORT (INDO) EDGE TO BE STATIONED 1/4" BY 1/2".

1/4" THICK FIR PLYWOOD. CABIN COUNTER WITH FORMICA TOP TO SUIT.

CHART TABLE TOP EDGE TRIM TO BE SPECIALLY SHAPED TO SUIT.

3/4" CABIN SOLE TO LIND. BERTH PORT (INDO) EDGE TO BE STATIONED 1/4" BY 1/2".

1/4" THICK FIR PLYWOOD. CABIN COUNTER WITH FORMICA TOP TO SUIT.

CHART TABLE TOP EDGE TRIM TO BE SPECIALLY SHAPED TO SUIT.

3/4" CABIN SOLE TO LIND. BERTH PORT (INDO) EDGE TO BE STATIONED 1/4" BY 1/2".

1/4" THICK FIR PLYWOOD. CABIN COUNTER WITH FORMICA TOP TO SUIT.

CHART TABLE TOP EDGE TRIM TO BE SPECIALLY SHAPED TO SUIT.

SECTION FR 2 LOOKING FORWARD

SECTION FR 4 LOOKING FORWARD

SECTION FR N° 6 LOOKING FORWARD

SECTION FR N° 5 LOOKING FORWARD

SECTION FR N° 8 LOOKING AFT

SECTIONS FWD TRANSOM LOOKING AFT

22" BY 8" INBOARD WEEKEND CRUISER - FOR THE 1965 SPORTS AFIELD BOATBUILDING ANNUAL - DESIGNER

DAVID D. BEACH, NAVAL ARCHITECT

DRAWING N° 3 OF 5

LARGE SCALE BLUEPRINTS TO CONVENIENT WORKING SCALE OF 1"=1'-0" FROM DESIGNERS ORIGINAL DRAWINGS ARE AVAILABLE FROM DESIGNER, IN CARE OF THE "ANNUAL". SEND CHECK, POSTAL OR INTERNATIONAL MONEY ORDER (U.S. OR CANADIAN) FOR \$9.75 IN U.S. FUNDS TO DAVID BEACH, 5% SPORTS AFIELD BOATBUILDING ANNUAL, 959 EIGHTH AVENUE, NEW YORK 19, N.Y.

SPORT TOPPING, AUTOMOTIVE TYPE, TO BE "DOT" FASTENED TO WINDSHIELD

CANOPY TOP HARDWARE PIVOTS AND SLIDE TO BE WILCOX FIGURES 5203 FOR 5/8" O.D. BRASS TURNING. BRASS FITTINGS TO TUBING AFTER BENDING, TUBING AND ERECTING. BUFF, POLISH AND CHROME PLATE. ALL MATERIAL HARDWARE, PAINT, ETC. SUPPLIERS LISTED IN BOAT OWNERS BUYERS GUIDE, 205 E. 42ND ST., N.Y.C. 17, NEW YORK.

CANOPY TOP TO STOW ATOP RAIL IN TAILORED & ZIPPERED BOOT.

SAIL TRACK OR N.A. TAYLOR CO. GLOVERSVILLE, N.Y.

SOCKETS 5/8" FOR SEAT SUPPORT

ENGINE BOX, HEAT VENTS 1/2" WILCOX 6192

PAINT/MARNISH SLEIGHTING

"STEERMASTER" STEERING CONTROL TO SECURE TO CRAFT & TO TILLER IN ACCORDANCE WITH MEIGAS DIRECTIONS.

12 VOLT 75 AMP/HOUR BATTERY IN HOLD-DOWN CASE.

LOCHE FOOT REST AS REQ'D.

FRESH WATER FILL PIPE TO BE PLASTIC "TYGON" 3/4" I.D. TO SUIT TANK & DECK FITTINGS. U.S. STONEWARE CO. AMONG 9, OHIO.

AS INDICATED ON SECTIONS, CABIN INTERIOR SHEATHING TO BE ON INKRA FRAME DEVELS, OF PLANKING, PLYWOOD OR PRESSED BOARD VINYL COVER OR PAINT TO SUIT

AT OPTION, AND TO SUIT BUILDER FIT & INSTALL HIGH SHELVES 7/8" UNDER SIDE DECKS, MAINTAINING BERTH OVERHEAD CLEARANCES.

FOREPEAK LINE STOWAGE TO BE 1/2" MARINE PLYWOOD, DRILL 1" DIA. VENTILATION HOLES. PAINT TOP AND BOTTOM WITH FUNGICIDE PRIOR TO INSTALLING ATOP CHINE.

CONSTRUCTION OPTIONAL WITH BUILDER IN WAY OF FOOT OF BERTH FORWARD OF PORT COUNTERS. FIT STEP OR FLATS FORWARD OF SLOPED CAIN SCALE PANELS TO SUIT.

COUNTER TOP TO BE CARRIED TO HULL, NOTCHED OVER FRAMES FOR MAXIMUM SHELF AREA. LOCATE WILCOX PUMP FIG. 6529 TO SUIT. TYGON TUBE TO TANK.

12 3/4" OUTSIDE DIA. WHITE FIBERGLASS LAMINATE IN COUNTER PERIOD FIG. 740 WITH 1/8" DIA. FRAME, 5/8" DIA.

CABIN DOUBLE FOLDING DOORS WITH HOOK-TYPE HOLD BACK.

COCKPIT DECK OF 3/4" THICK MARINE PLYWOOD - AT THE DISCRETION OF OWNER, BUILDER SMALL FIT SCARRED VINYL DECKING, "NAUTOLEX", GENL. TIRE CO. TOLEDO, OHIO.

IN ABSENCE OF REQUIRED DIMENSIONS OMITTED FROM THIS ARRANGEMENT DRAWING, SCALING WILL BE ACCURATE FOR SIZE & LOCATION. DO NOT USE ON OTHER ARTICLE VIEWS.

22' BY 8'-6" INBOARD WEEKEND CRUISER.
FOR THE 1965 SPORTS AFIELD BOATBUILDING ANNUAL
DESIGNER: DAVID D. BEACH, NAVAL ARCHITECT
DRAWING NO. 5 OF 5

bulkhead with cleats as shown. The inner coaming should be beveled to permit the trunk sides to land full on it so that they can be glued and fastened to it.

The sliding windows in the cabin face are optional and can be replaced with conventional portlights if desired. The windows in the cabin sides are standard in that the two pieces of glass slide in double window tracks. Because of the manufacturing variations among suppliers, the rabbets for these tracks must be made to suit, as must the covering board. Do not forget to drill suitable drain holes at the ends of the rabbeted openings to permit rain to flow to the deck outside.

There seems little unusual about the interior, and in this area the individual builder may take liberties with the arrangement details. The size and location of the counter, the shelves and the stowage racks shown on the drawings may be modified to suit. The bulkhead at the head of the berth will require a little fitting. The designer contemplates that it is best fitted after the starboard sheathing is in place. The bulkhead can be fitted to a shaped chock that is cut and fitted inside the sheathing. Cleats on the cabin sole and in the overhead will position the bulkhead, which is not fastened to the cabin trunk in the way of the window. The bulkhead is certainly not soundproof, so once this is admitted, the problem of joiner-work openings is simplified. The door, a double folding one, need not fit tightly at top and bottom. A little ventilation is a fine thing in a boat.

The designer has a strong feeling for ventilation—in fact, it approaches an obsession. Moving air in a small place removes much of the feeling of closeness, and in a small cruiser, this is important. Anybody who has tried to sleep in a tiny cabin on a windless rainy night will fully understand this view. The louvers in the companionway door are a further indication of this, and the extra ventilation they provide well justifies the effort required to build them.

Let us look at that windshield. The forward panel is of mahogany, fabricated with half-lapped and mitered corners in good joiner practice. Suitable rabbets are to be provided for a weathertight set of opening windows. The sides are set to land atop the plywood cabin top inside the curve of the top edge of the trunk sides. This is well indicated on the sections. The sides should be sub-assembled off the boat, then fitted with the windshield face to the cabin top. The structure is fastened down with counterbored and plugged fas-

tenings through the rabbeted sides. Those side windows slide (more ventilation) in inclined double tracks. Note the drilled hole for drainage, which is a very important detail. Locate this freeing hole with care to ensure that no water pockets between the frame and the inside covering board.

The builder will have to exercise a bit of ingenuity with that helmsman-seat-berth construction. The problem arises out of the fact that most helmsman and companion seats fold forward. These must fold back, in a reclining manner. The hinging is no problem, but there must be means provided to hold up the back. For this purpose, the designer has shown diagonal tubular supports like an armrest, set in sockets. These supports can be withdrawn from their sockets, and the backs are free to recline. A portable rod or tube that can rest in a pair of saddle sockets on the coaming will support the reclined backs. When a suitable cushion insert is positioned and secured between the two laid-down seats, a berth is ready for occupancy. The drawings show that the seat is stanchioned to the engine-box sides, but this plan need not be followed, as the catalogs show available hardware for other support means.

This berth feature is novel; and besides providing proper sleeping facilities for a second couple on board, it is a fine sunning area. It does not interfere with the operation of the boat—although a bikini- or monokini-clad companion sunning thereon might distract the helmsman.

The sun is not always desired, and the convertible top shown on the Inboard Profile will meet that problem. The designer has shown a folding top fabricated of standard Wilcox hardware that slides aft on Taylor track. The addresses of these suppliers are noted on the drawings. The fabric top is best fabricated by a professional boat-top supplier, who can also make the side and aft curtains or cockpit cover. Use a good vinyl-fabric automotive sport topping, sewn with Dacron thread and fitted with Dot fastenings. To keep the top clean and the boat shipshape, have the top maker fabricate a zippered boot, or sleeve, to enclose the rolled top when it is down and aft atop the railing. It is important to have the top professionally made for the sake of your *Paramour's* appearance. Nothing looks worse than a wrinkled or poorly cut canopy.

The control console is shown on the sections and should be mentioned. The steering system is that manufactured by American Chain & Cable

Co. and is a cable type. The cable runs beneath the cockpit deck to the tiller, and it should be installed strictly as per directions. The clutch and throttle controls are by Morse, and these shall be selected to suit the engine details. The instruments may be by Stewart-Warner. In all cases, the builder should obtain the catalogs of these suppliers before ordering the hardware and equipment.

Miscellaneous details required to complete *Paramour* could be discussed in detail for many more paragraphs. The builder, however, will find the information already supplied in the notes on the drawings. These are considered quite ample in all cases.

A comment seems appropriate regarding the installation of the water closet. This boat should have proper facilities for the people aboard regardless of where it is used. Some states have regulations concerning overboard discharge of sewage. The designer has allowed room in *Paramour* for the fitting of a chlorinator type of water closet, if desired. There is ample room in the toilet compartment for one of the several holding-tank systems that are perfectly legal in all waters. The Saniware Div. of the Mission West Mfg. Co. (3238 W. 131st St., Hawthorne, Calif.) makes one such unit. You should check with the local yacht club for the regulations in effect in your area.

The remainder of the features of *Paramour* should present no construction problems. Final touches like toe rails, sheer guards, deck hardware, lights and all the other goodies required to make your boat a perfect little lady (and your pride and joy) will be taken in stride. Be careful with the finishing touches. As for all ladies, a good paint job is a big asset and should be meticulously done. Pay attention to the color selection for paint, stain, upholstery and curtains. The interior and the exterior are both important to her status, and neither should be slighted.

Large-scale blueprints of the designer's drawings are available for the use of prospective builders. These are to the scale of 1" to 1' and facilitate the compiling of materials lists and other construction tasks. The drawings can be scaled for all major dimensions not provided or readable in the small-scale reproductions in these pages. Address David D. Beach, c/o SPORTS AFIELD Boatbuilding Annual, 959 Eighth Avenue, New York, N.Y. 10019, enclosing a check or postal money order (U.S. or Canadian) in the amount of \$9.75, and the prints will be promptly mailed.