

# building WETBACK

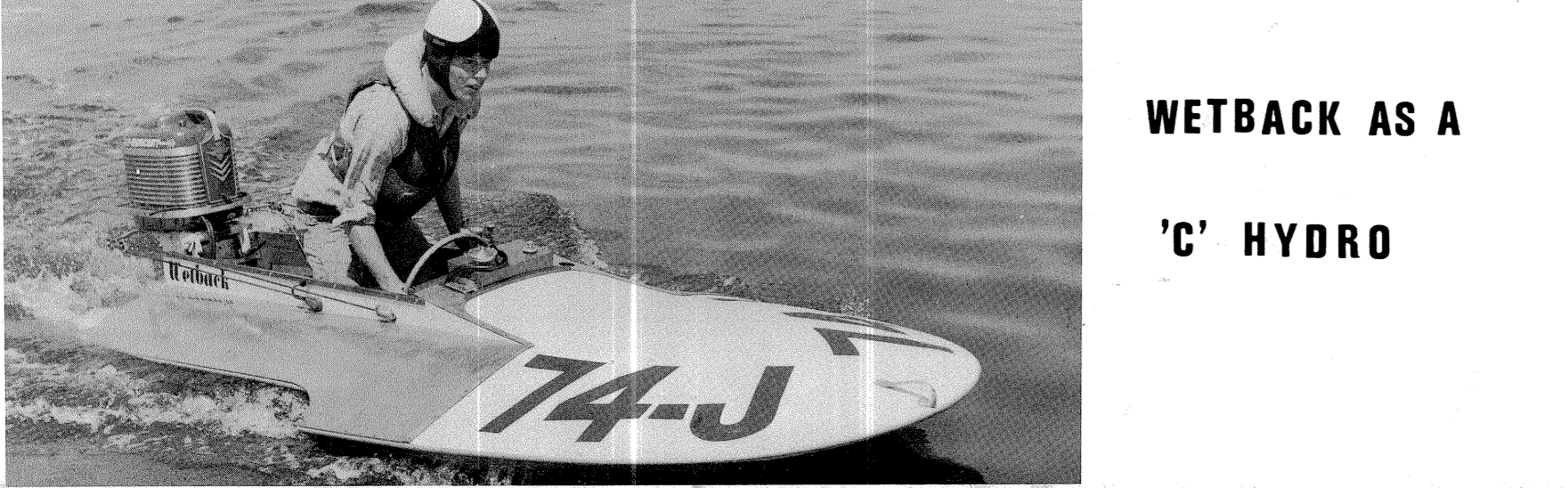
## 9' 10" Class B & C Hydro

### by Hal Kelly

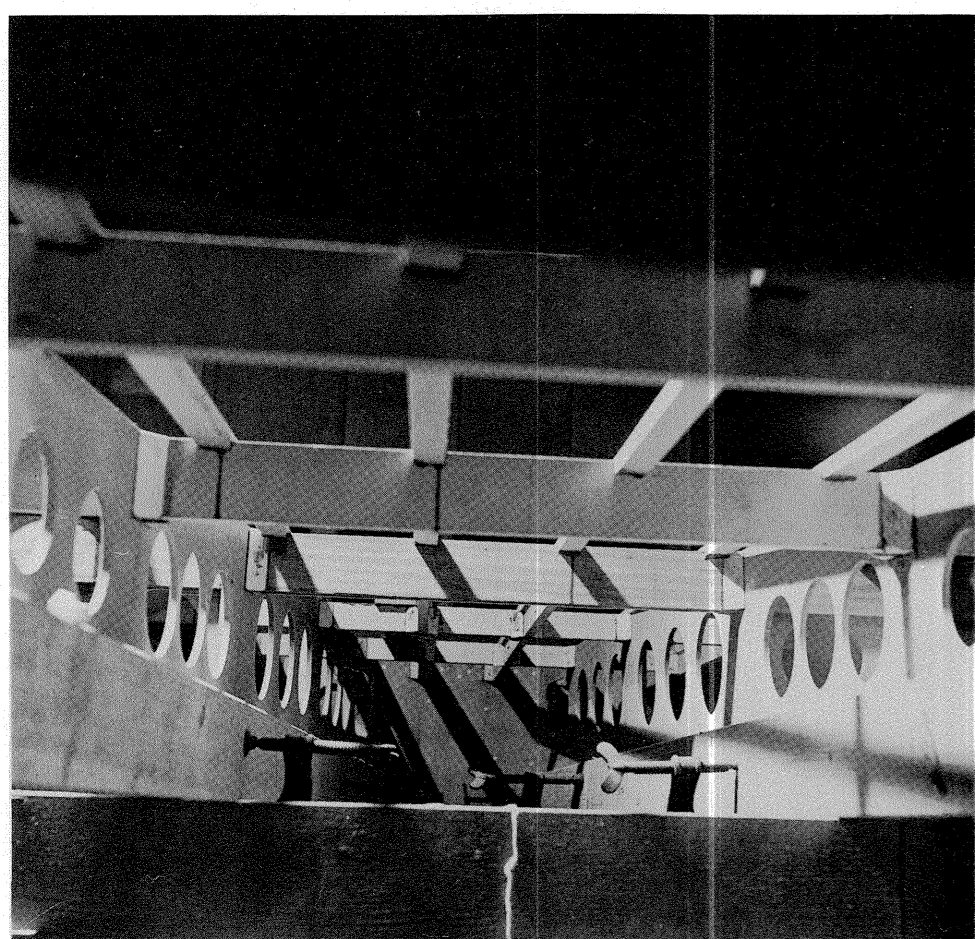
WETBACK leading the pack

#### BILL OF MATERIALS \* IDEAL FOR THE 25 SS CLASS

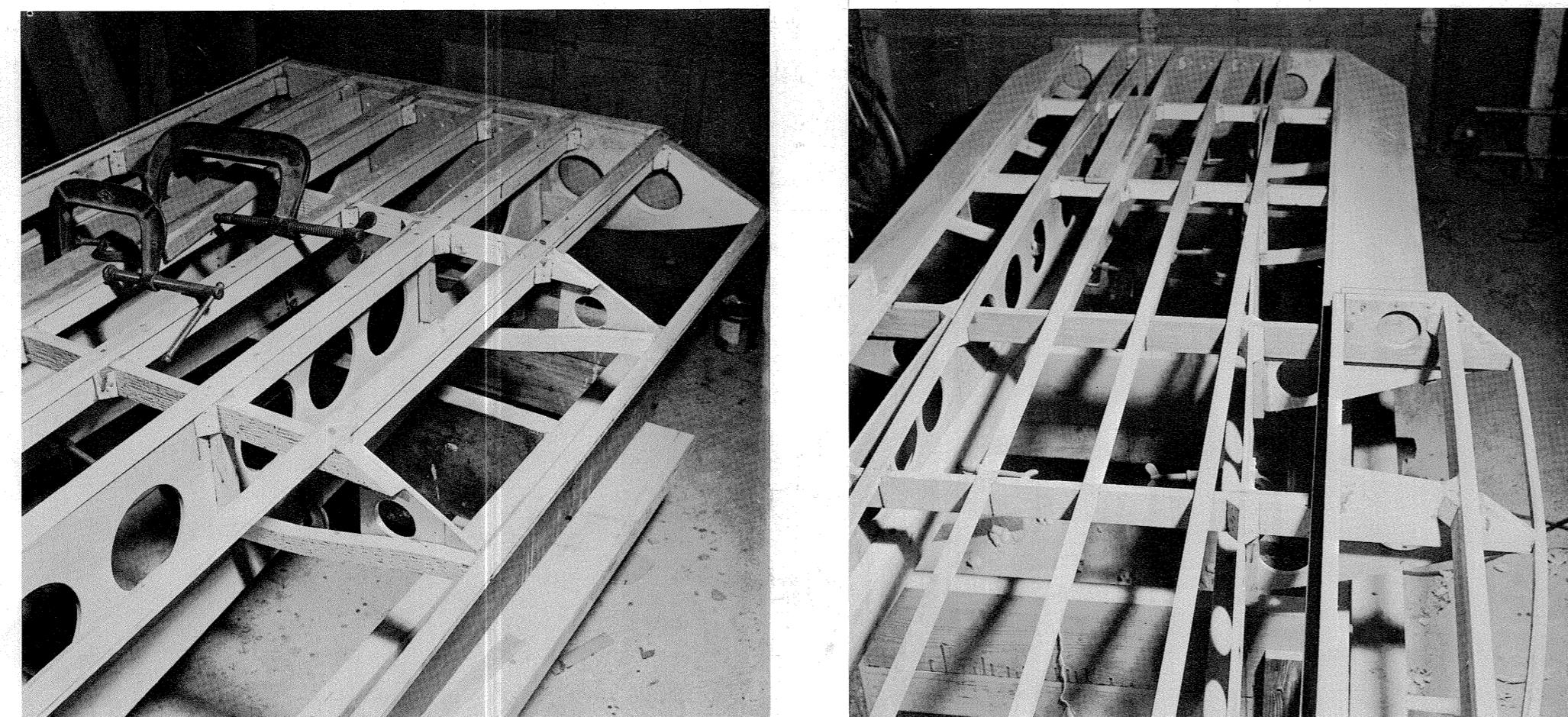
BRONZE, MONEL, or EVERDURE FASTENINGS	PLYWOOD
1 gross of 1/4" no. 8 flathead wood screws	Decking 1 sheet of 3 ply waterproof plywood 3/4" x 4' x 7'
1 gross of 1/4" no. 8 flathead wood screws	Bottom, non-trip chines, sponsons, girders, gussets rib No. 1
4 dozen of 1/2" no. 8 flathead wood screws	Transom and flooring 3 sheets of 5 ply waterproof plywood 3/4" x 4' x 8', or 2 sheets 3/4" x 4' x 12" Transom 5 ply waterproof 3/4" x 14" x 14"
2 lbs. of 3/4" no. 16 Anchorfast nails 950 to lb.	
For all racing hardware, sponson fin, safety throttle etc. Write, WILLIAMS MANUFACTURING CO., 6450 Olympic Bremerton, Wa zip 98510	
<b>PAINT PRODUCTS</b>	
5 lbs. of Weldwood glue	
1 lb. of Wood Dough or similar surface filler	
1 gal. of Spar varnish	
1/2 gal. of clear Nitrate Dope	
1/2 pint of boat Enamel (color to suit)	
50" by 60" Muslin or Aircraft wing fabric	
<b>HARDWARE</b>	
1 Steering wheel	
1 Piece of steering rope 24' long	
1 Safety throttle	
1 Bowden throttle cable 5' long	
1 Bowden fin for class B	
2 Rear snap pulleys, with snap swivel	
2 Steering rope anchor straps	
2 Forward steering coaming pulleys	
2 Cable clamps	
1 Aluminum bow handle	
2 Aluminum stern handles	
2 1/2 lengths of 1/2" half round aluminum	
<b>SITKA SPRUCE</b>	
Sheers	1 piece 3/4" x 1" x 10'
Bow piece	3 pieces 3/4" x 3/4" x 12'
Chine	2 pieces 3/4" x 1" x 10'
Battens	4 pieces 3/4" x 1" x 10'
Bottom stringers	2 pieces 1/2" x 1 1/2" x 5'
Bottom stringers	2 pieces 1/2" x 1 1/2" x 3'
Deck battens	4 pieces 3/4" x 3/4" x 10'
Deck battens	7 pieces 3/4" x 3/4" x 4'
Deck braces	1 piece 3/4" x 3/4" x 4'
Deck coaming battens	2 pieces 3/4" x 3/4" x 10'
Deck beams glue blocks, etc.	1 piece 3/4" x 6" x 6"
Frame No. 2	1 piece 3/4" x 2" x 4'
Frame No. 3	1 piece 3/4" x 4 1/2" x 5'
Frame No. 5 and No. 6	1 piece 3/4" x 1 1/2" x 5'
Transom	1 piece 3/4" x 3" x 4'
Sponson main beam	2 pieces 3/4" x 3" x 5'
Sponson chine	2 pieces 3/4" x 1" x 4'
<b>HONDURAS MAHOAGANY</b>	
Frame No. 4	1 piece 3/4" x 7" x 60"
Sponson afterplane	1 piece 3/4" x 8" x 12"
Fin brace-dash and dash beam	1 piece 3/4" x 3" x 5'
Coaming strip	1/2" x 3/4" x 6"
All Sitka Spruce and Mahogany may be obtained from J. H. Montath Co., 2500-08 Park Ave., New York, N. Y.	



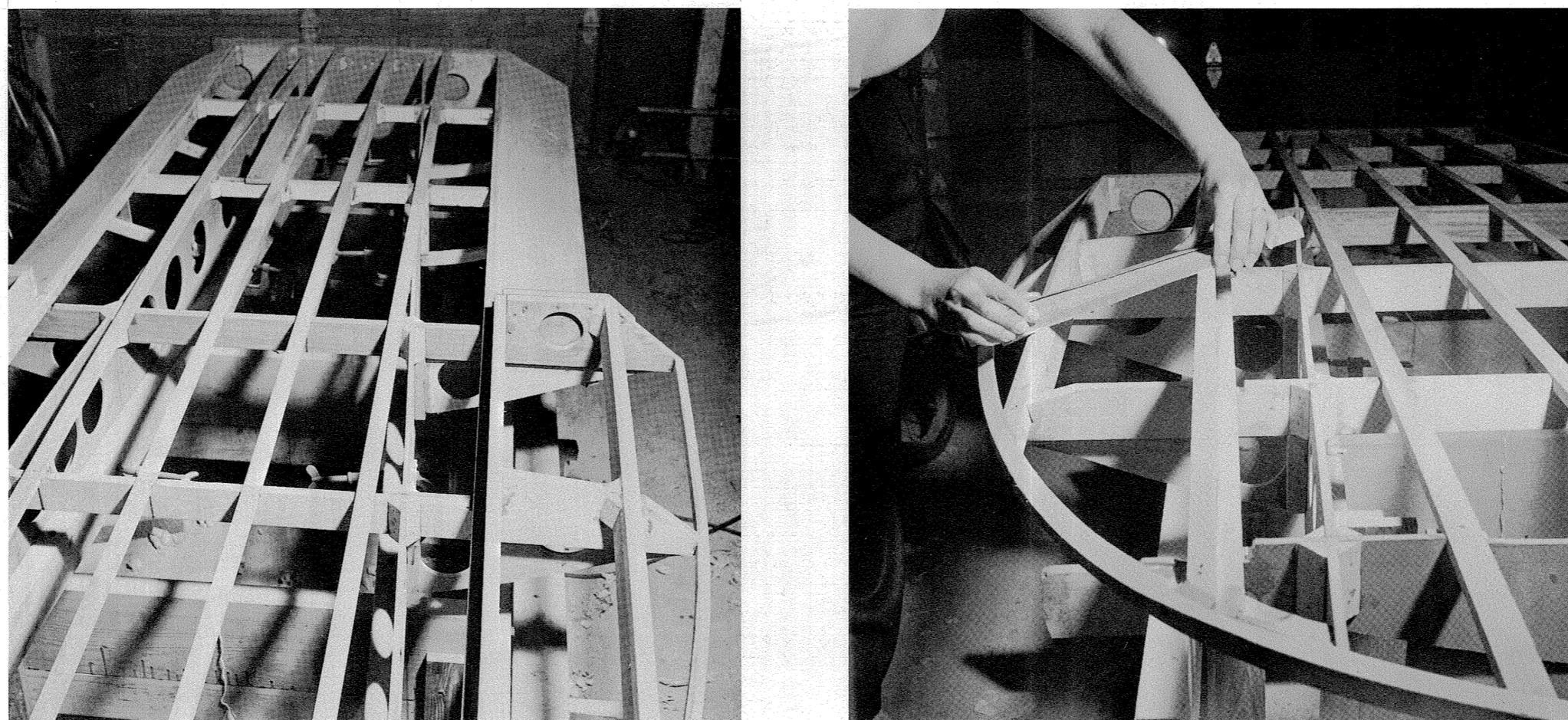
#### WETBACK AS A 'C' HYDRO



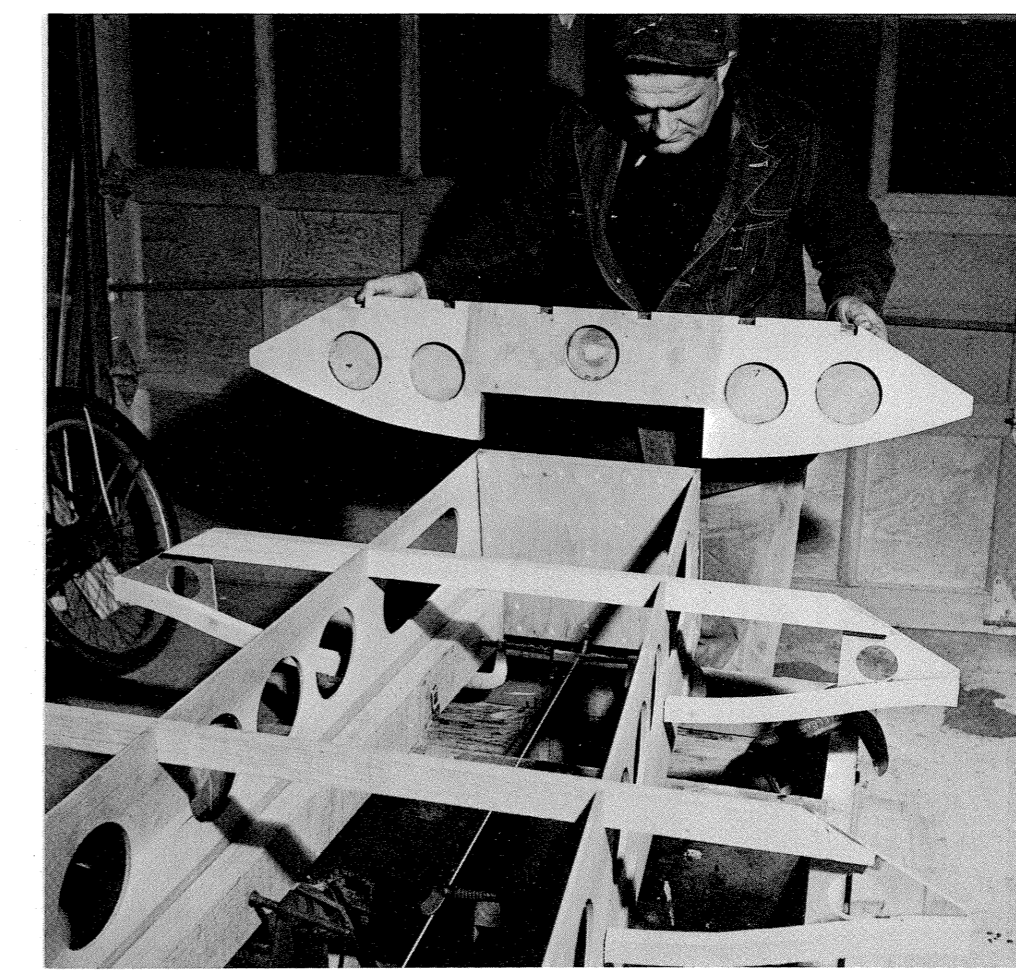
5. Worms eye view of WETBACK set up on the jig. Battens and stringers are in place. Note the glue blocks used to hold the ribs and stringers in position.



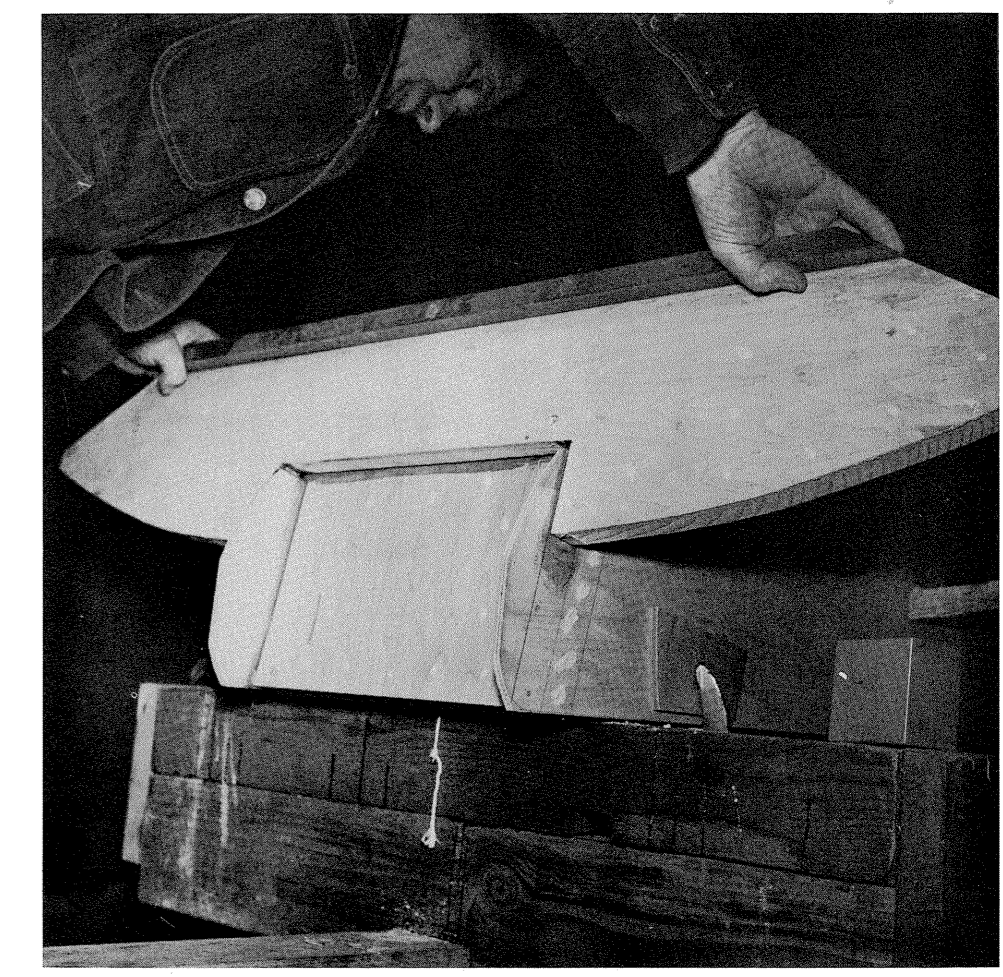
6. A close up of the construction after section of WETBACK. Clamps are holding the fin brace in place until glue is dry. Fin brace is also screwed to rib #5 and #6.



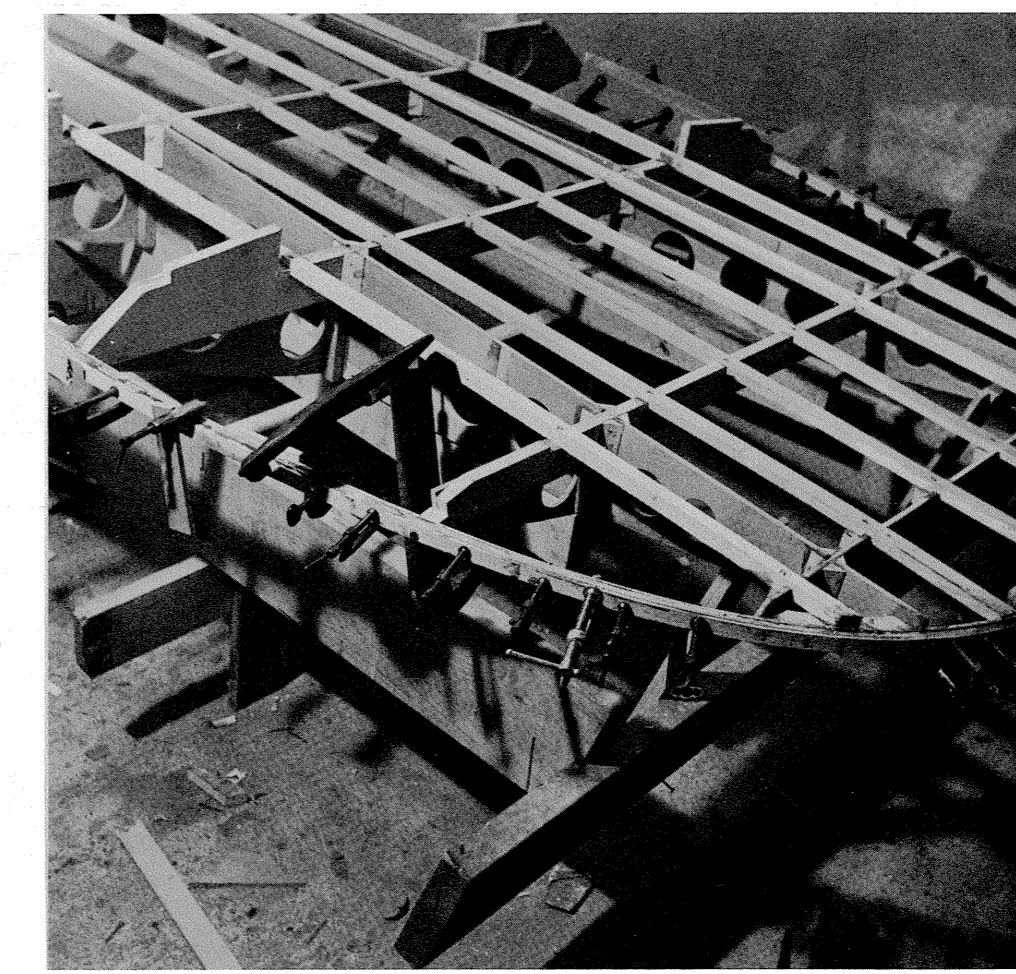
7. Another over all picture of the construction of the bottom. The non-trip chines are in place and are put on before the afterplane of the sponsons are attached.



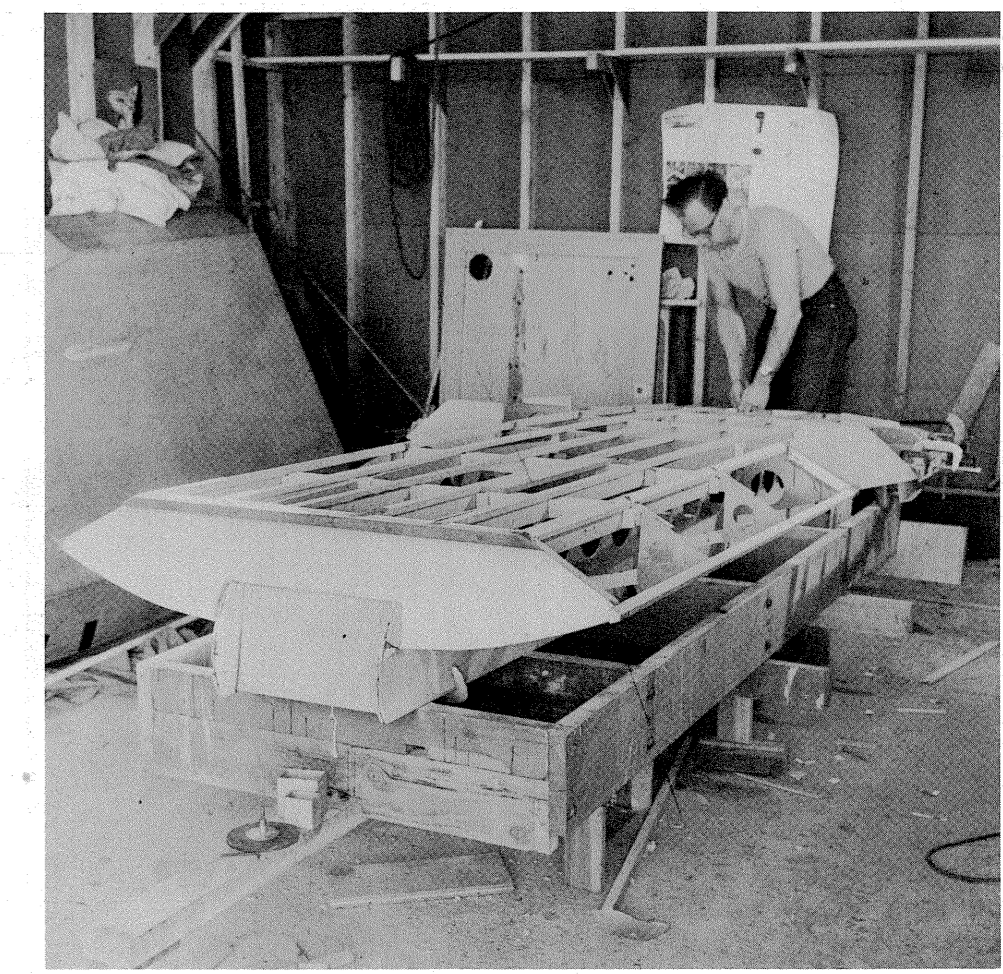
1. The girder beams are all set up on the jig, with ribs temporarily in place. Motor mount is glued and nailed in place, and the transom is about to be glued and screwed to it.



2. Note how the transom fits over the girders, while the motor mount is fastened between them. The afterplane on the transom was not found necessary and was later completely removed.



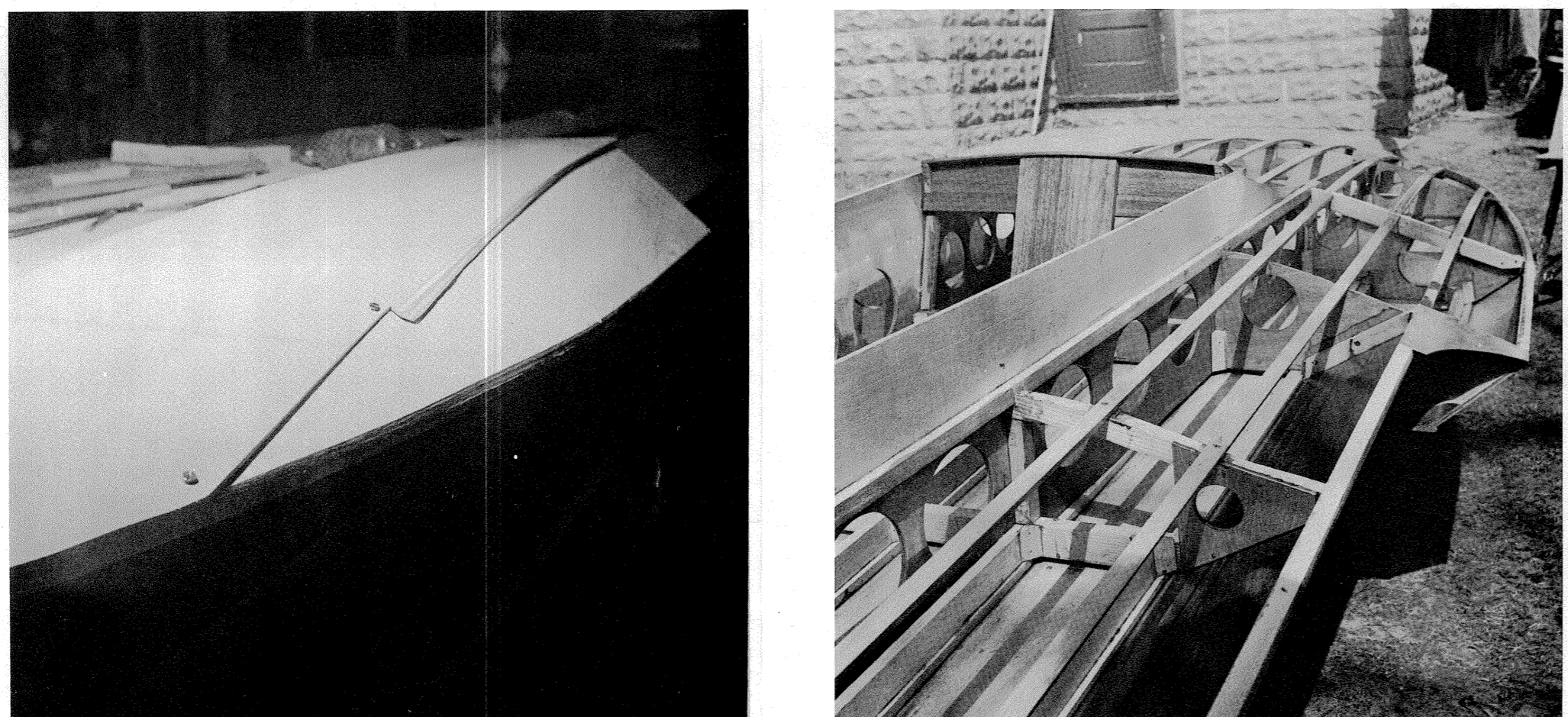
3. The glued up bow piece all clamped in place. Note that these ribs were notched for the battens to form the tunnel in the bottom. The ribs in the plans have the tunnel shape already designed in them and will need no tuning.



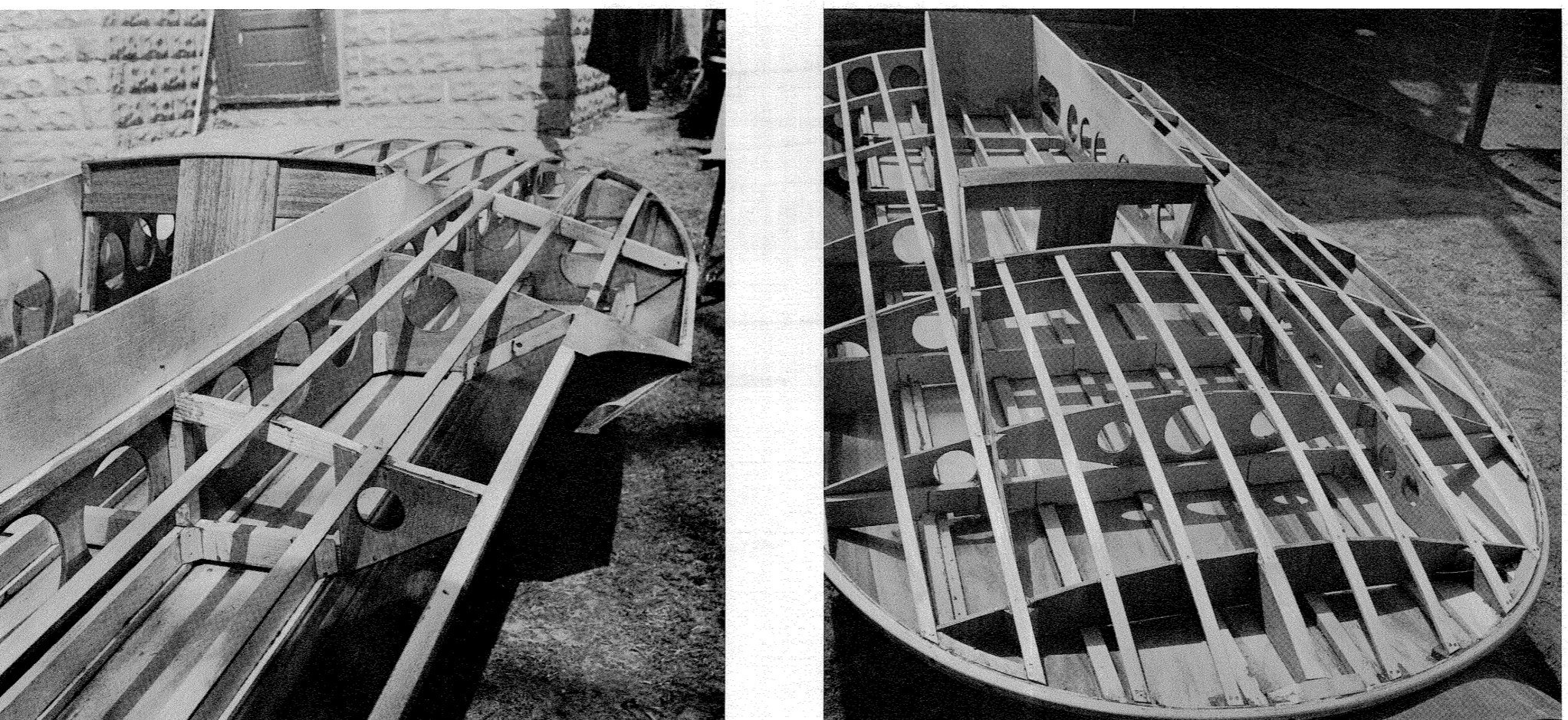
4. All the ribs, battens and stringers are in place. The sponson battens will come next. The base for my jig is my runabout jig turned up-side-down, to bring WETBACK to a suitable working height.



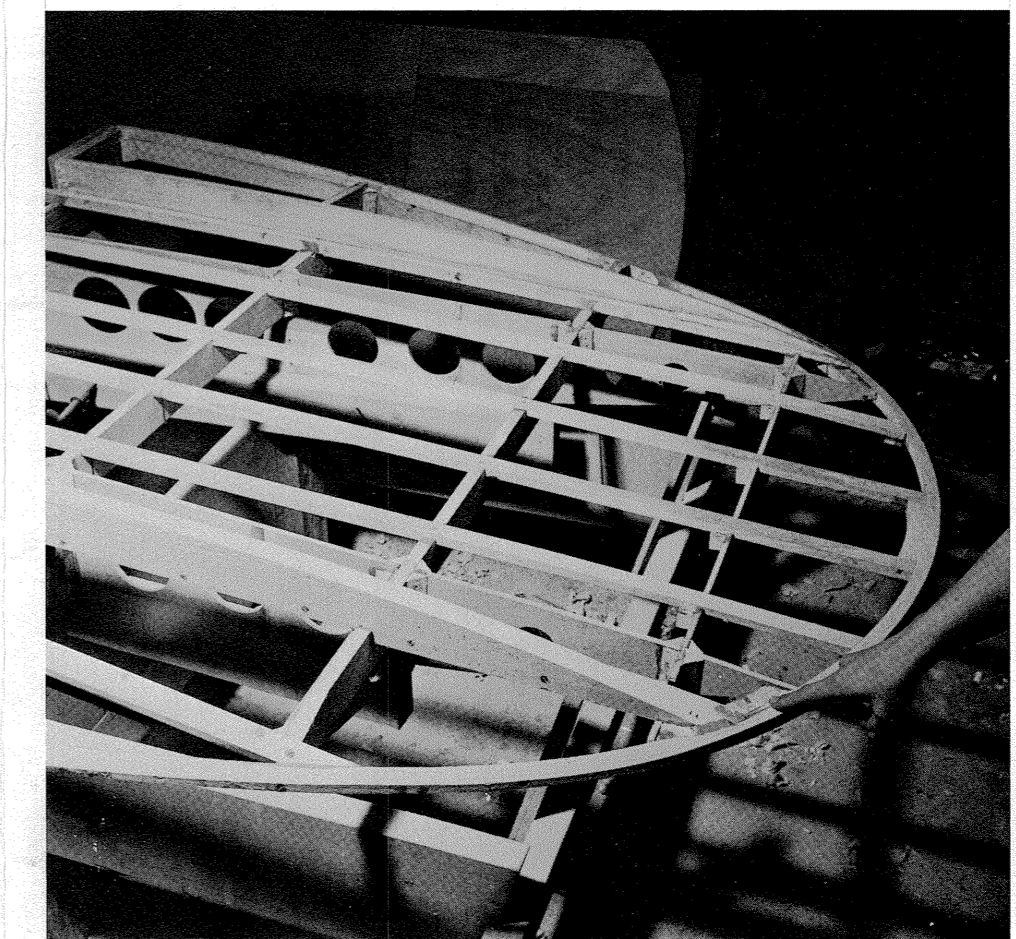
11. Planking on the side of sponson is in place and bottom has been carefully fitted. Most of the bottom planking lies over the side, but up front it butts.



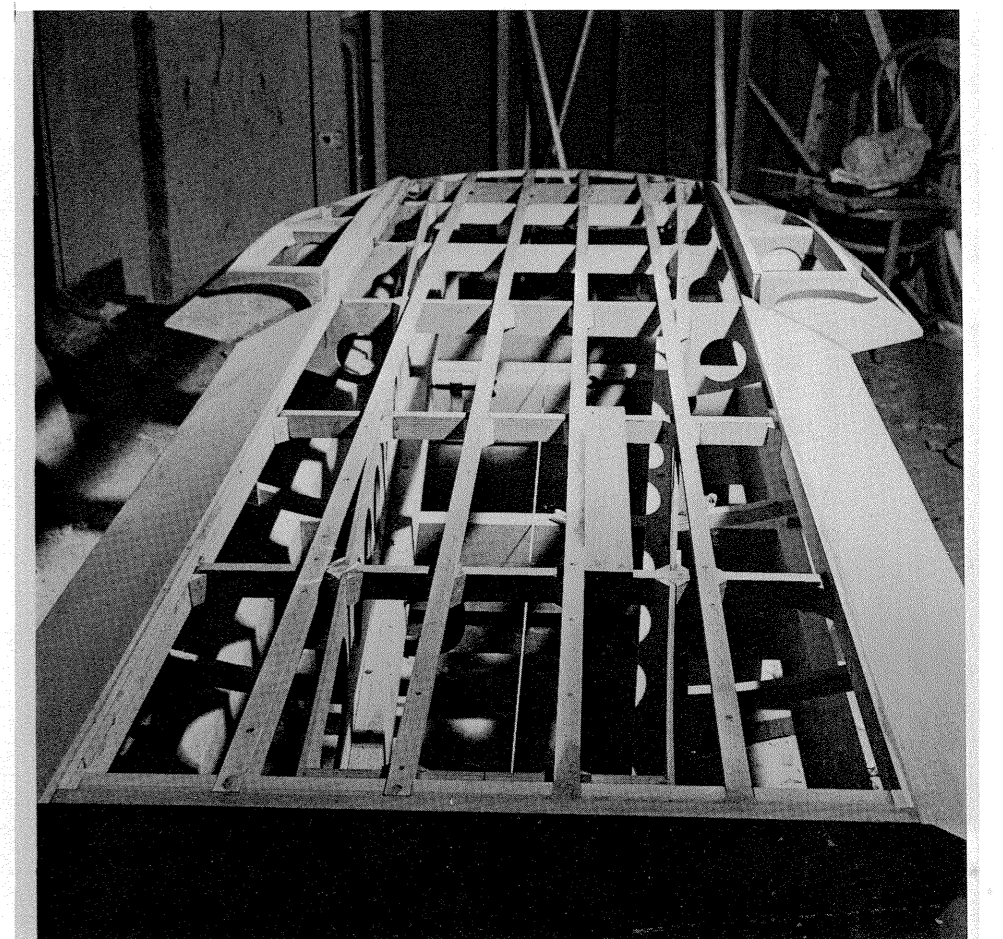
12. Bottom of sponson temporarily in place, purposely not screwed in all the way so you might easily see just how they fit together. There's no lip on the sponson up front where the side meets the bottom.



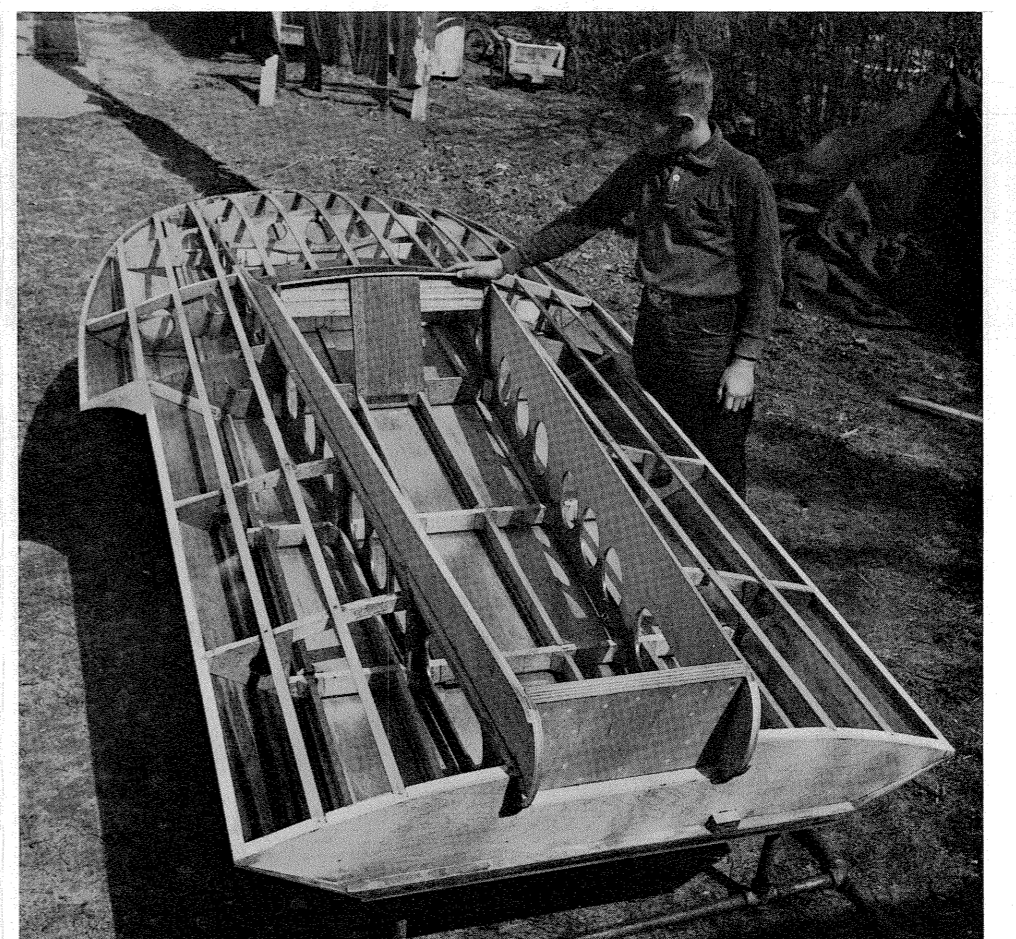
13. Close up of the construction around the cockpit. The deck battens are notched and fitted at rib #3. This is where the plywood decking ends, and the fabric decking begins.



9. Front part of the bottom is all faired to receive the plywood planking. Finger is pointing to small block of spruce used to attach front of girder to stem piece.



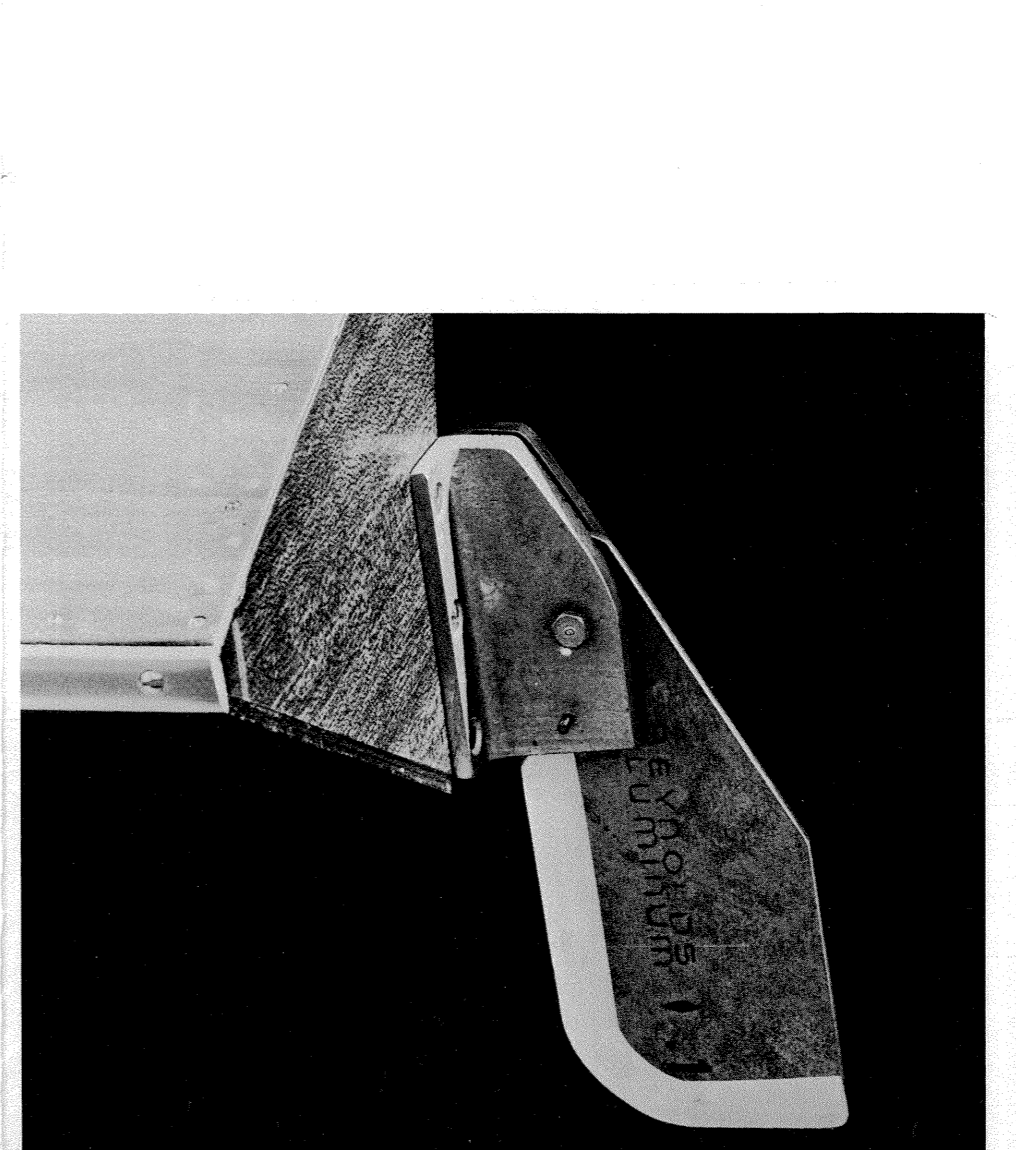
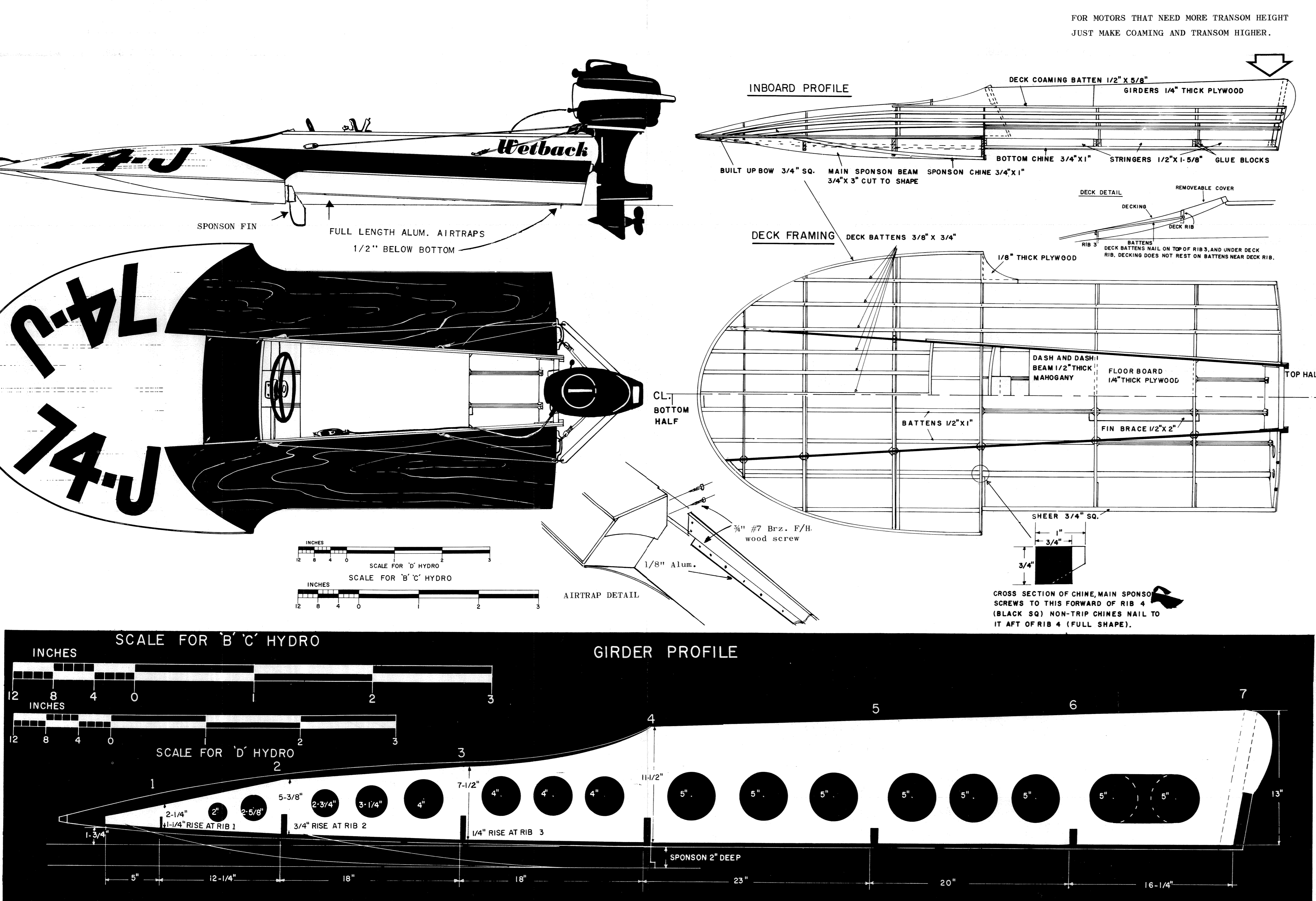
10. Entire bottom faired ready for planking. Note sponson afterplane is set 1/2" from inside of sponson so small airtraps may be attached. These airtraps are removable.



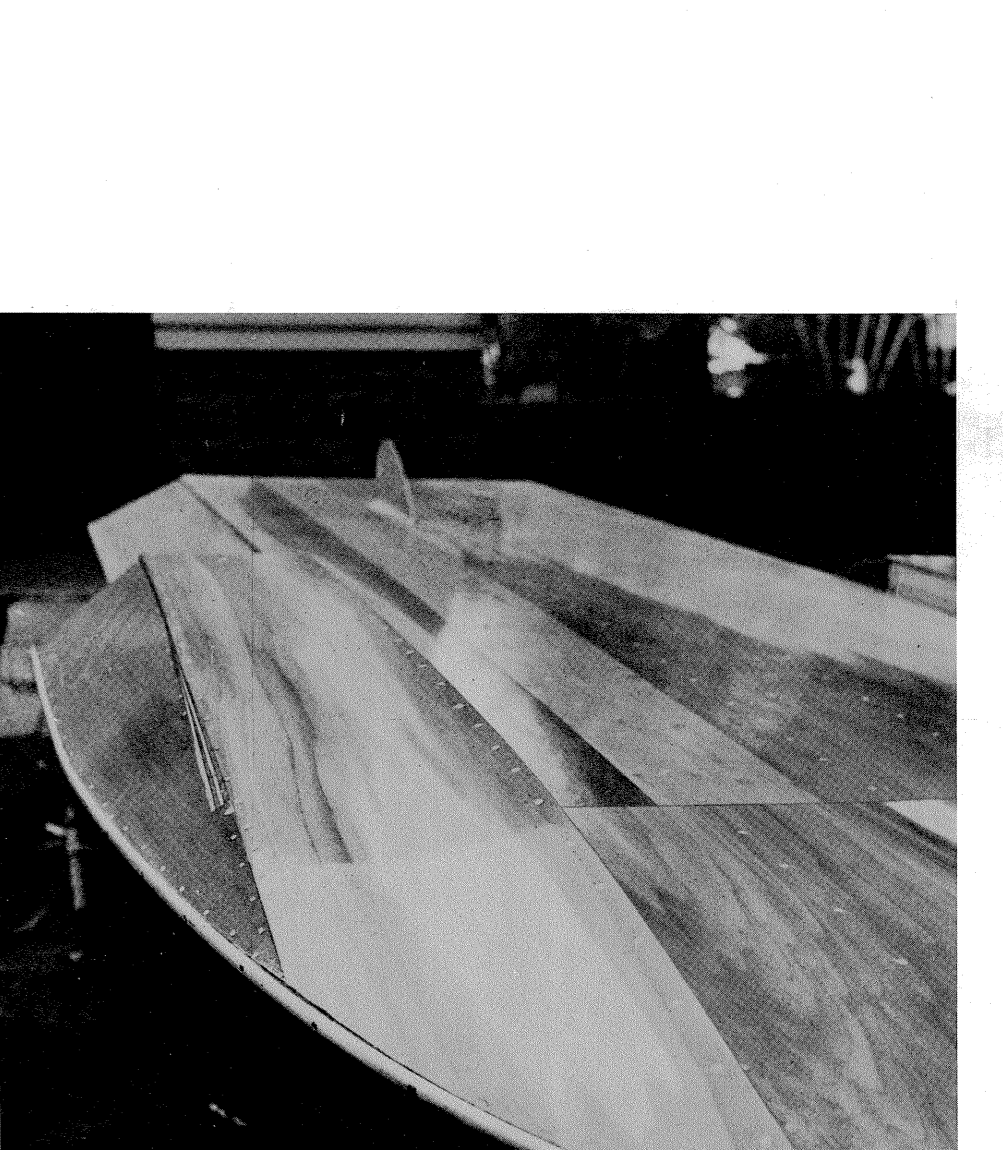
15. Stern view of the topside construction. Study the transom height, depending on prop, is around 14". The transom height on WETBACK is 13 1/2" high. You use shim sticks to jack the motor up or down. A name speedometer is handy to have while making these adjustments. At present I find the stainless steel Kamine prop is the best. Your best speed is only determined through methodical testing. In order to tell what results you obtain from your changes, make only one alteration at a time. I always run my motor with a full battery. In case of a flip it's much safer for you and the other drivers, and will save you from a blown motor. See you at the races.



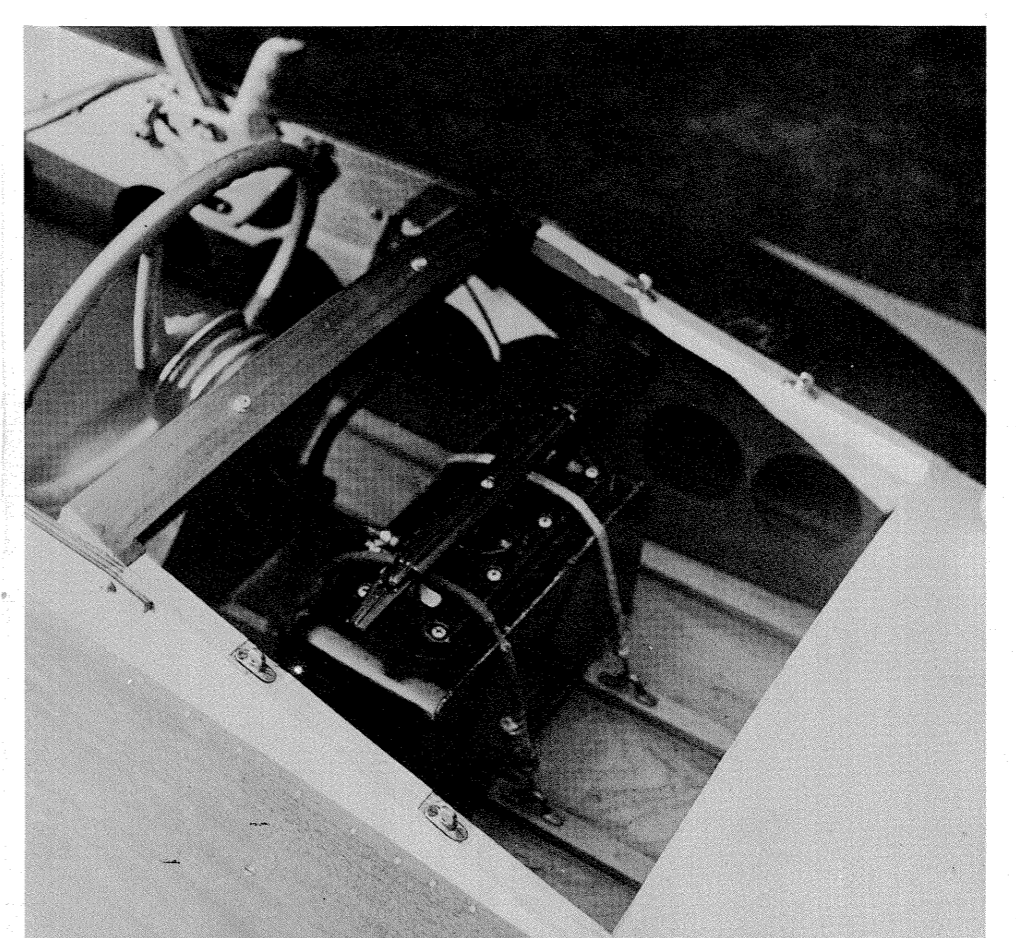
16. Fabric decking almost all tacked in position. Excess is later cut off. Remember to give this at least 6 good coats of dope, prior to painting.



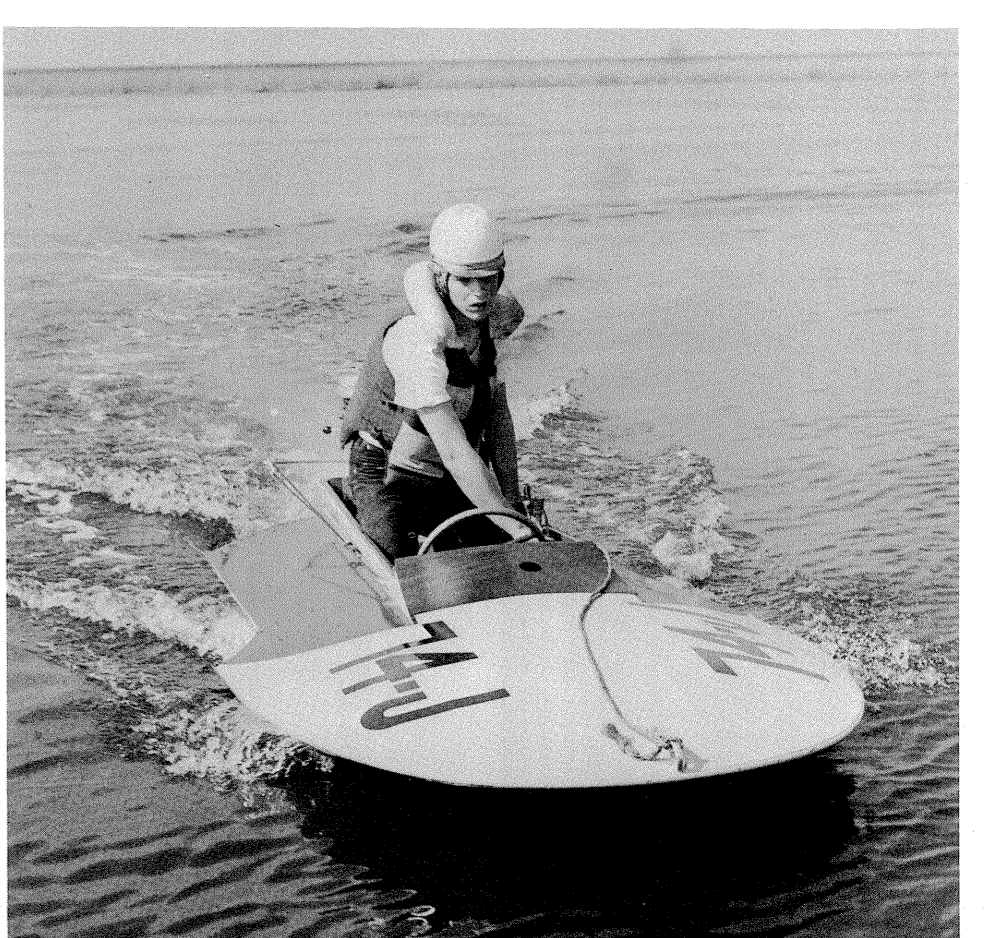
17. Sponson fin on back of left sponson, for racing



18. Front view of the finished sponson; the correct angle of the sponsons and workmanship at this point will mean a lot in the handling of WETBACK.



19. Small gas tank held in position with shock cord. 3/4" thick plywood is used as a hatch cover and is held in place simply with twist catches.



20. WETBACK all set up to go, being idled out for her first test run. My racing numbers although large enough are not in their correct position. The numbers on the deck of the drawing are correct.