

Popular Mechanics

AUG. 1974 60 CENTS

BUILD THIS HOT
TUNNEL HULL FOR
UNDER \$200 Page 69



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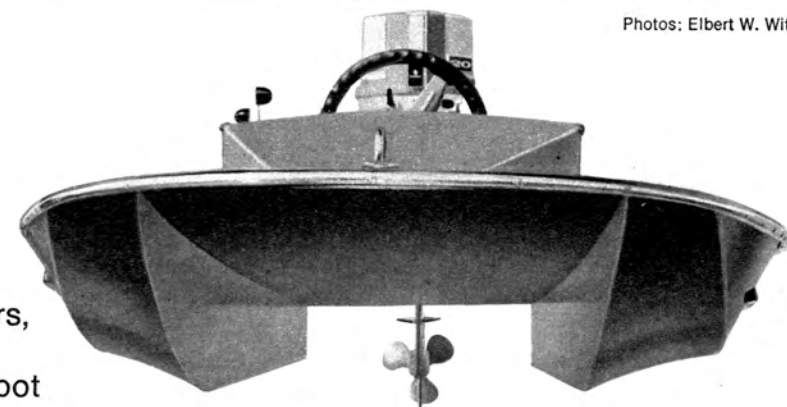


Photos: Elbert W. Witt

Tunnel hull

A hot one for builders, this newest project from Glen-L is a 10-foot flashy performer for under \$200, ready for power.

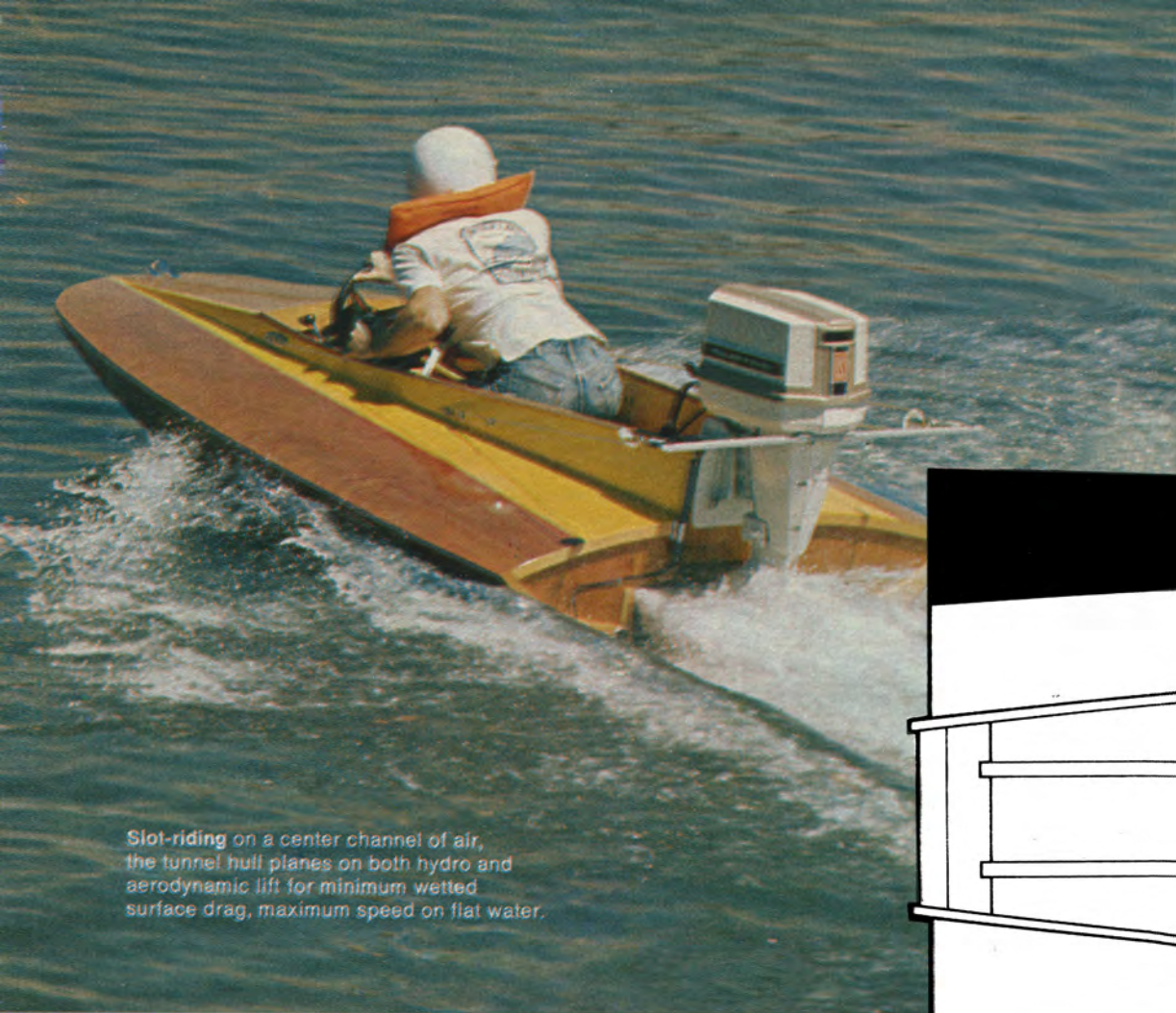
by Bill McKeown
BOATING EDITOR



To make boats go faster, marine designers have been borrowing aircraft techniques. Latest to click with the racing crowd is a twin hull with airfoil between that reduces wetted surface friction and makes new top speeds possible.

Big unlimited-power outboard and inboard hulls have already proved the principle, and now a miniature is available for homebuilders. For under \$200 you can construct your own Tunnel-Mite from \$12 Glen-L plans.

This little speedster is 10 feet overall, has a beam



Slot-riding on a center channel of air, the tunnel hull planes on both hydro and aerodynamic lift for minimum wetted surface drag, maximum speed on flat water.

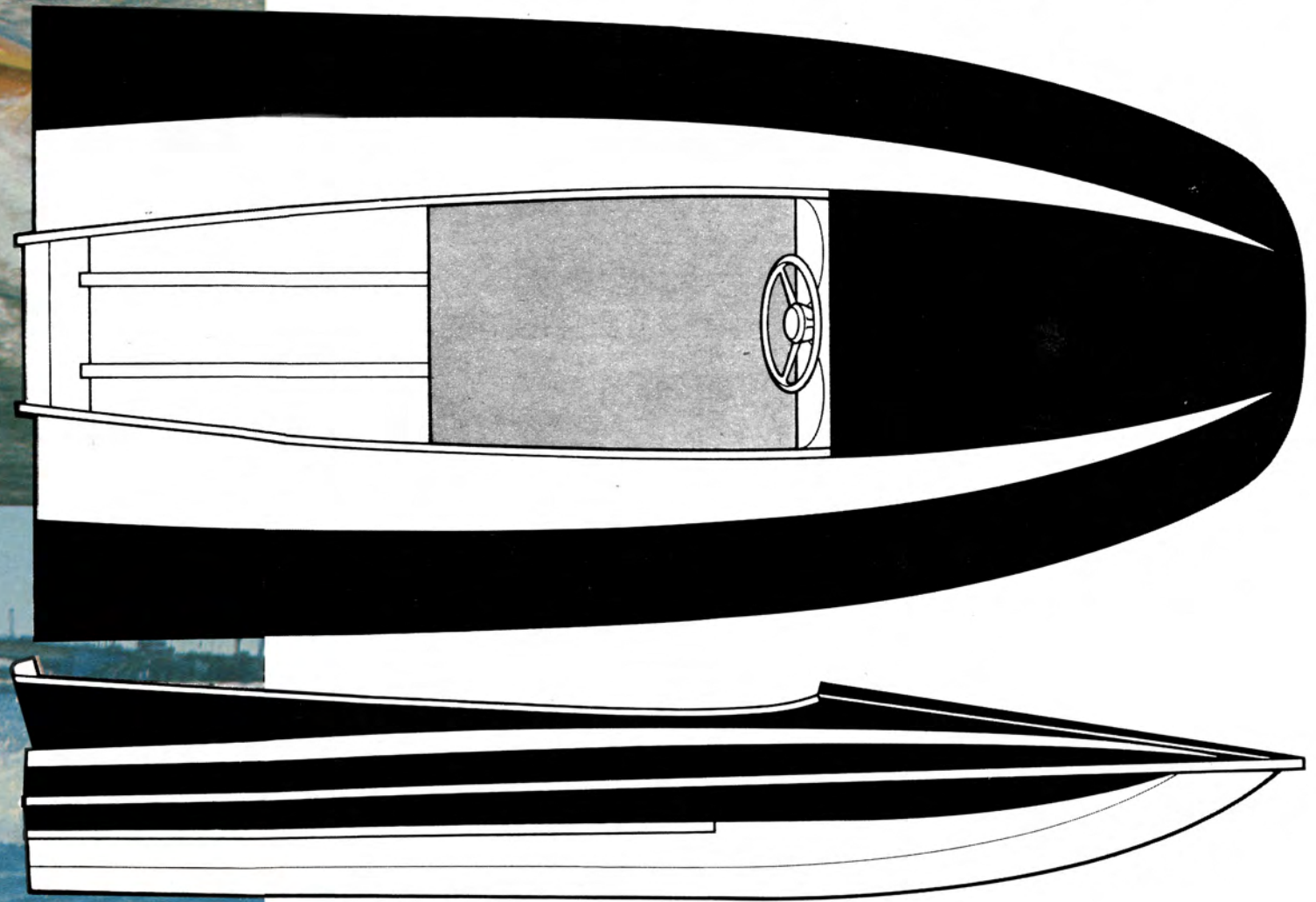


Skipping a wake or topping the chop of Long Beach, Calif., harbor where retired *Queen Mary* is berthed, the Tunnel-10 tests successfully. Turns proved smooth, flat.

of four feet ten inches, and is designed to carry outboards of up to 100 pounds on twin full-length sponsons. Hull weight is only 120 pounds, light enough to be carried by two men. The craft is easy to cartop and will fit in some station wagons. With a 150-pound test driver at the helm, she's already clocked a sporty 34 mph with a 20-horse Chrysler outboard. Recommended horsepower is 20 to 25, and a racing propeller

plus careful adjustment of motor mount height and tilt are required, of course, for best results. Trying to put another passenger aboard would ruin performance, and hanging too much power on Tunnel-Mite could prove dangerous.

Set up as designed, however, the prototype showed the tunnel hull characteristics of smooth flat runs as if on rails, flat turns, and good handling response. Skimming



How to purchase plans

Plans and full-size patterns for Tunnel-Mite, plus step-by-step pictorial and written instructions, bill of materials and fastening schedule are available from the designer. All frames, transom, motor board, bowpiece, runner, side planking, dash beam and coaming are shown full

size. Price is \$12 for complete plans and patterns package for Tunnel-Mite from Glen-L, Dept. PM, 9152 Rosecrans, Bellflower, Calif. 90706. Frame kits, fastening kits, steering system, fiberglass covering kits and accessory kits for Tunnel-Mite can also be ordered from Glen-L.

Tunnel-Mite weighs under 125 pounds

dishes of this type should be run only on inland, protected calm waters where no waves or a sudden gust of wind through the tunnel could cause the hull to go airborne and kite. With proper conditions and kneeling low for best balance, the driver bombs



Framing members are cut out from full-size patterns, assembled and the assembly set on two sawhorses. No building jig is required. Battens reinforce tunnel.



Tunnel planking is next fitted into position. Tunnel sides are parallel and panel fit is easy. Apply glue and drive fastenings into the bowpiece and transom.



Turn hull over and notch bevels for chine and sheer members so they will mate flat when sprung around hull. Temporary forward spreader reinforces bowpiece.



Sheer clamp is secured to bowpiece and worked aft with end left long for final trimming to fit transom notch. With sheer, chine in place, remove bow spreader.



For chine-log installation, hull is reinverted. Then longitudinal members are all faired so the planking will mate flat. Chine log, sheer clamp join at bow.

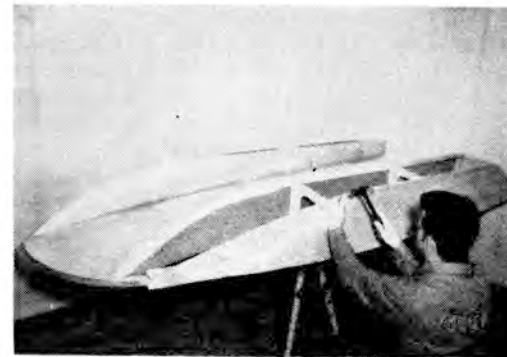


Lean side panel against hull and mark to shape. Cut plywood slightly oversize. Panel can be template for opposite side. Fitting is done with panel in place.

along at water level with a real sensation of speed.

Tunnel-Mite needs no jig for building, no lofting or layouts. To keep weight down, Sitka spruce is recommended and planking of 4-mm and 6-mm (about 1/8-in. and 3/16-in.)

plywood available in 10-foot lengths from Harbor Sales, Baltimore, Md.; M.L. Condon, White Plains, N.Y., and Spar Lumber, Long Beach, Calif. For the boatman-builder who likes high performance at a low price, here's the latest answer. ★★★



Side planking panel is fastened in place after mating surfaces are coated with glue. Nails are set as shown and overhanging edges can now be faired with plane.



Bottom runner planking is installed in same manner as side planking. Panels will be found to bend easily into place. Fastenings are used along longitudinals.



Deck framing members are installed after hull is planked and righted. Carling is positioned in notches in frames, transom. Note notches, blocking for battens.



Spray rail, a beveled member along side of hull, deflects water away from hull and adds side planking rigidity. Fasten from inside hull before decking.



Cockpit coaming, dashboard and transom are now installed. Before decking goes on, foam flotation material can be fitted into void areas for strength, safety.



Final decking panels are fitted in same manner as hull panels. Inner contour which butts cockpit coaming is marked to fit along carling before coaming goes on.