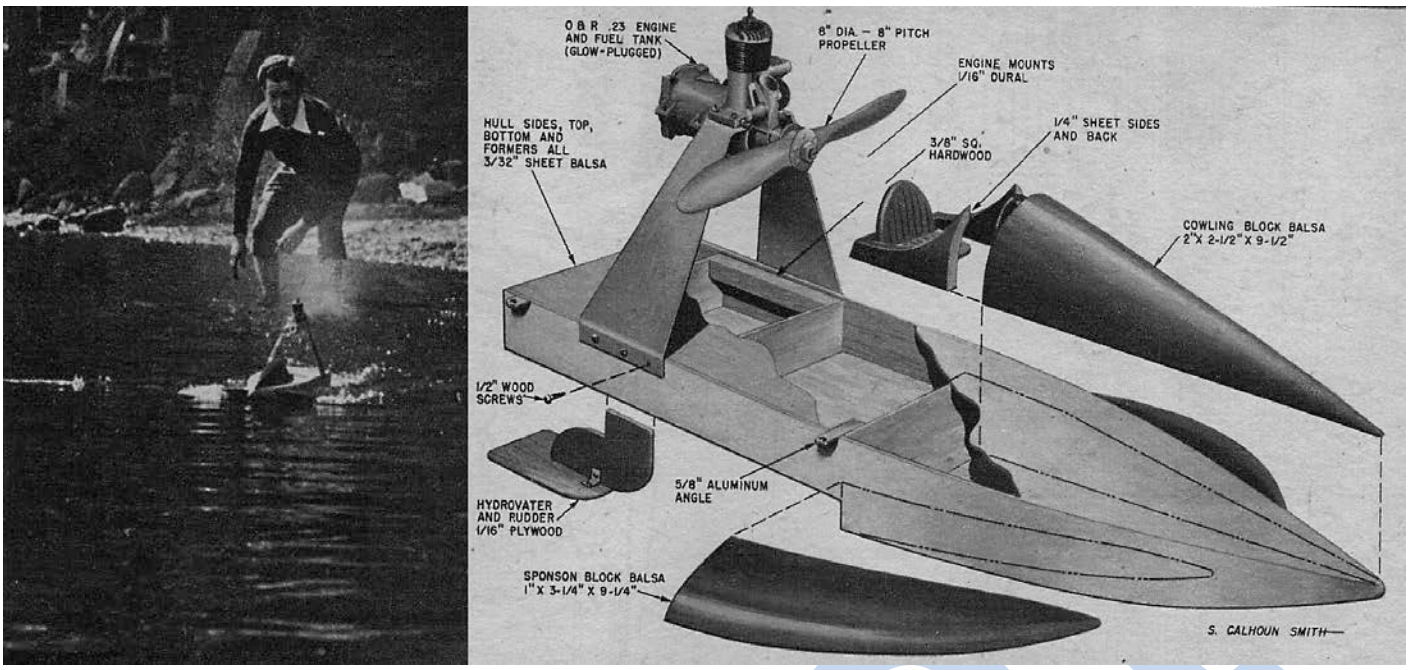
Air Boat

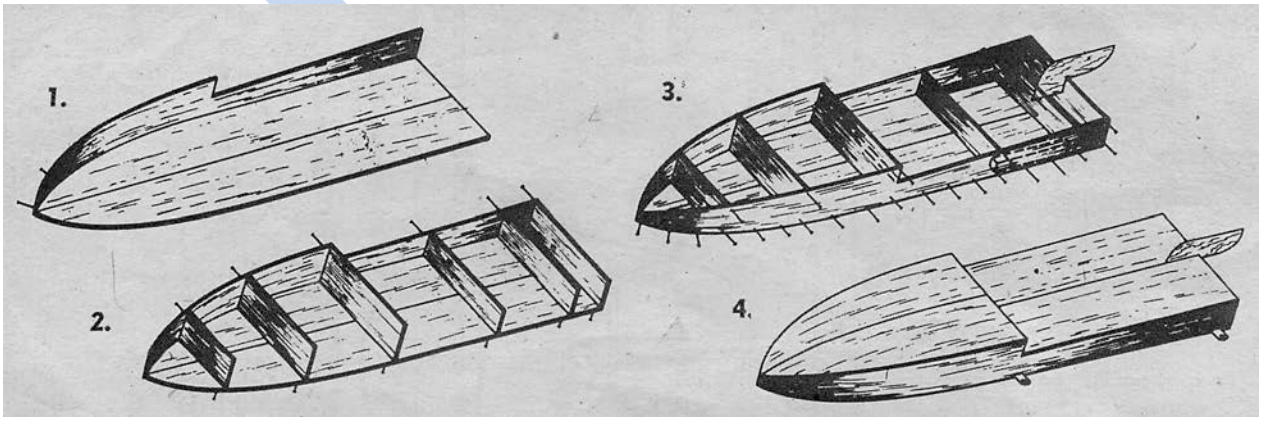


Is the wind too strong for Sunday flying? Build this fast water speedster for fun and frolic by Cristo Russo.

How many times have you planned on a solid week- end of flying only to get out to the field and sit around most of the day waiting for the wind to die down? On such occasions about all that most of us can do is drag that dream ship out of the car and satisfy ourselves by running up the engine. What has this to do with building a boat, you say? Well, if you live anywhere near a lake and care to investigate on one of these windy days, you'll discover that the water isn't rough at all. This revelation led me to look into the power boat picture in my neighborhood.

The New York City power boat boys were running their models every Sunday morning at Kissena Park in Flushing, L. I., so I figured I'd take a look. I found a good turn-out there, with engines screaming and I mean screaming, since most of them were either hopped up McCoys or Hornets or homemade monsters of 15 to 30 c.c. displacement.

Talking with these fellows made me realize that the big standard power boat models are not for the average builder. The cost of outfitting a boat for competitive racing is quite high unless, of course, you have a complete machine shop and are capable of making ball bearing struts, stainless steel props, special fly wheels, universals, and the like. Well, I don't have the machines or the know-how to make these parts. Okay, I said, so I won't race in competition, but I can still have a whale of a lot of fun running a boat when it's too windy to do any flying.



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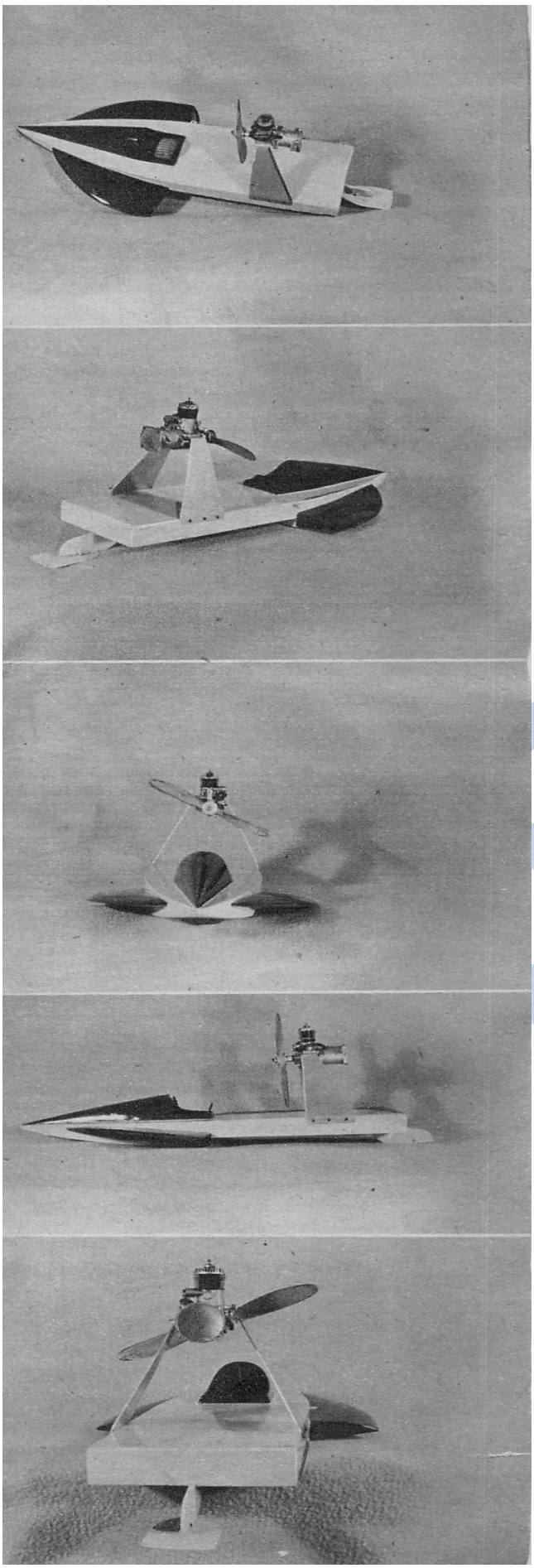

With the help of these power boat boys who, incidentally, are a swell bunch I finally worked out a design for a boat that would eliminate expense and yet do more than just putt around. As it worked out, this final design proved faster than even the experts figured. With the boat properly adjusted by means of the “hydrovator,” and using an Ohlsson 23 glow plug engine, it has done up to 30 mph, which isn’t exactly slow when you’re traveling through water. Incidentally, when adjusting with the hydravator, take it easy, as it is quite effective and therefore sensitive. Too much positive angle will cause the nose to dig in, while too much negative angle will cause the model to literally take off.

The plans are pretty much self- explanatory and the construction is the simplest possible. Bear in mind that the hull should be absolutely water tight, so don’t spare the cement. Shellac the inside before final assembly.

Begin construction by cutting out the top view from 3/32" sheet balsa. The top sheet should be cut 3/16" narrower than the full 6" width shown on the top view. Next cut out the two sides, also from 3/32" sheet. The hull-is built upside down so pin the top down to your board (sketch #1). Cement one side to the top, using plenty of pins to keep the side from springing. Glue the formers in their proper location and then the other side (sketches #2 and #3).

Add the hardwood engine mount pieces, the aluminum guides and the plywood rudder to which the hydrovator will be later attached. Remove this much from the board and give the inside a good heavy coat of shellac. Add the bottom sheeting and sand all the surfaces. Be careful not to round the comers of the bottom edges.

The sponsons, or stabilizers, must be carved identically and cemented to the hull as indicated on the plan side view. The sponsons and top cowling should be carved from fairly hard balsa in order to add some weight to the nose. The motor mount , is cut and formed from 1/16" sheet aluminum and held to the hull with three 1/2" wood screws. The cockpit, seat and steering wheel will add a touch of realism.

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Give the hull a few coats of wood filler. Sand smooth and 'then apply your favorite color. Whether you use dope or enamel, make sure you hot- fuel-proof the entire hull with any of the proofers available at your favorite- hobby shop, or use a coat of Duco “clear.” The latter can be applied very smoothly with a lint-free cloth. Simply wipe the Duco on in even strokes.

To rig the bridle correctly, attach it to the guides, hold the hull by the bridle and balance it with the nose slightly down. If when running the boat, the nose pulls out too much, readjust the bridle by again balancing the boat and raising the nose slightly. The reverse is true if it keeps running into the circle.

Make your first run with the engine running at about half speed. Watch the attitude of the model, making adjustments with the hydrovator and bridle until it is riding true and level. When you are satisfied with the way it is riding, rev up the engine a little more and then make the necessary adjustments as before until the engine is wide open. Then watch her fly—er—I mean, go.

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