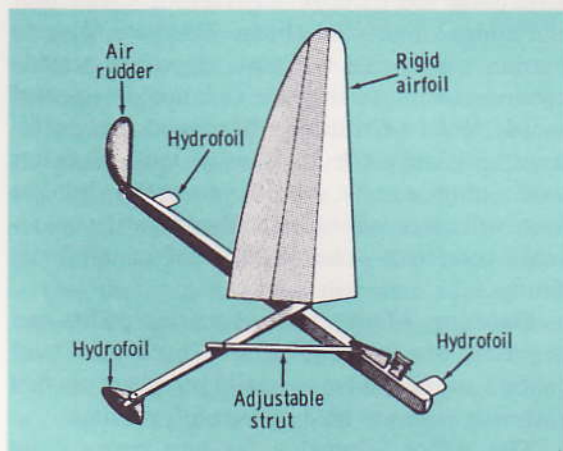




## Model sailboat without a sail

BY ROY CLOUGH, JR.



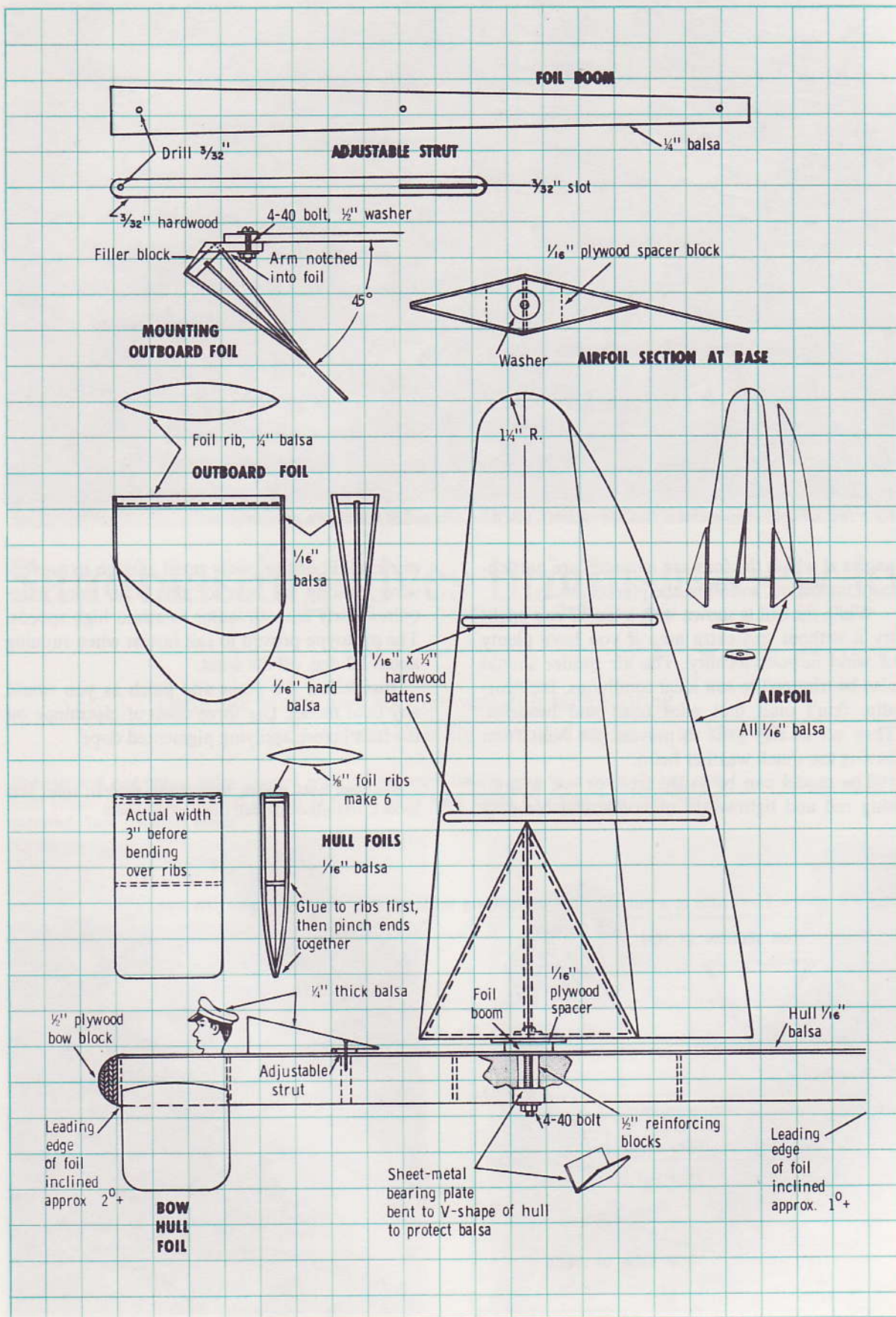
■ HERE'S A NEW kind of sailboat. It doesn't have a sail and it doesn't look much like a boat. This strange vessel is called an "aerohydrofoil." Instead of sailing on a hull, the aerohydrofoil skims over the water on little foil legs. And instead of using a sail, it catches the wind with a tall dorsal fin made out of balsa.

When first placed in a pond, the vessel squats quietly on the water. But once a breeze catches the airfoil, the hull lifts clear of the water and the boat flies across the pond leaving thin vee wakes behind.

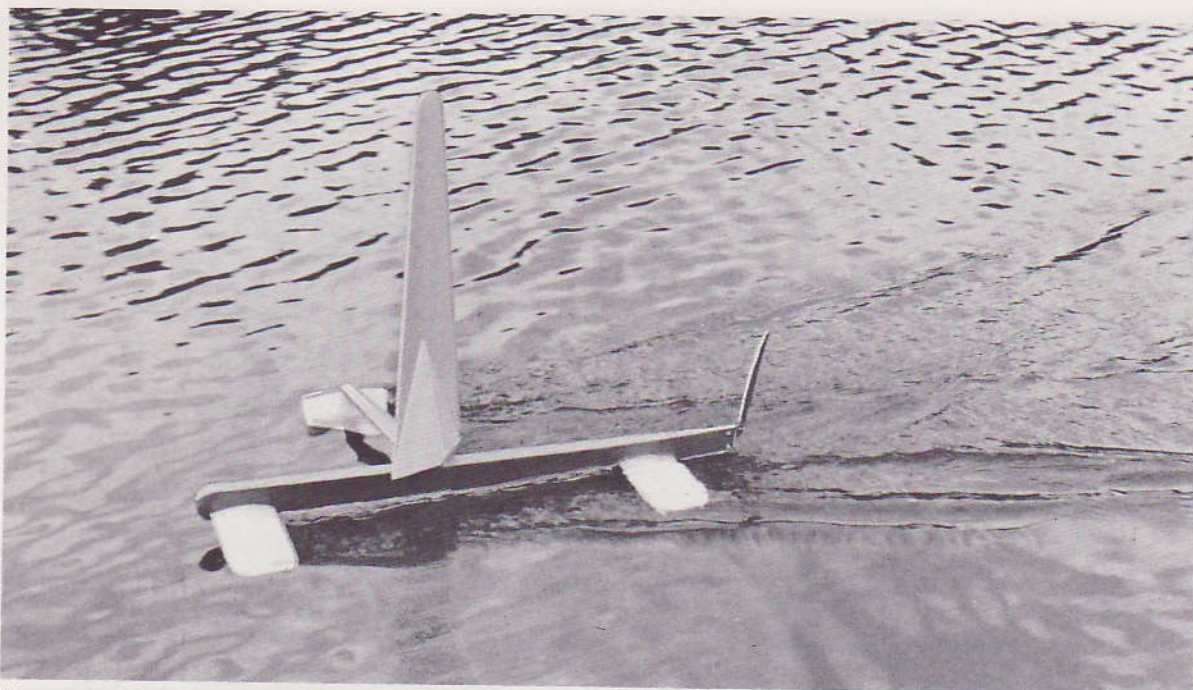
The design was inspired by Bernard Smith's "Little Merrimac" described in his book, *The Forty-Knot Sailboat*. While it took a lot of experimenting to arrive at this configuration, construction offers no difficulty to the average model builder.

However, there are a few special wrinkles—the hull foils, for instance. Cement the sides to the ribs first. Then, after the cement dries, pinch the outboard ends together with a spring-type paper clip to generate the required form. The









It's a real UFO (unconventional floating object); you'll be amazed at the boat's performance

angles at which the foils are mounted are particularly important, so follow the plan carefully.

While the sail is shown with a leech, you might try it without this extra area if you have plenty of wind in your locality. The air rudder should also be trimmed to suit local conditions. Incidentally, don't omit that pilot head and headrest. They act as tiny sails to prevent the boat from having too much weather helm.

The model can be sailed free, or use a spinning rod and lightweight monofilament for easy

retrieval. Ponds or pools small enough to prevent wave buildup are best for this boat, since it requires fairly smooth water to attain high speeds. The prototype proved to sail fastest when running about 30 deg. off the wind.

Just follow the plans and finish as you would any boat model. Use three coats of clear dope on the foils before applying pigmented dope.

See also: boat model; hydroplane models; rotor ship model; steamboat model; submarine model.

The line on the stern runs to a spinning rod, simplifying retrieval. The model can also run free

