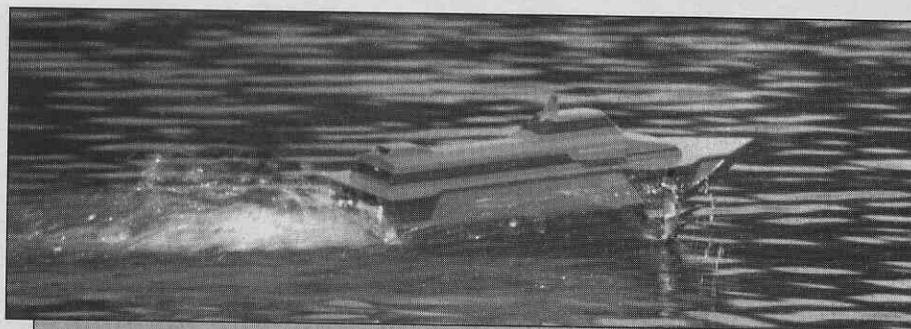


Photo right, the model in a banked turn to port. ideas (for example, a military style superstructure, or perhaps a purely functional racing top).

The foil system is fully removable and can be easily



adapted by those in search of optimum performance. As in the earlier craft, the model is designed around only the basic "off the shelf" materials available at most model or DIY shops, with no specialist equipment. The design also has high emphasis on ruggedness, simplicity of construction and damage resistance, to make it as much as possible a "kitchen table" model.

With an overall length of 37ins. Rapier is designed for engines of 19-40cu. If anything, the prototype model is a little over engineered. At 7lbs all up, she came out a little on the heavy side, mainly due to the

particularly applies to the propeller shaft, as it may be necessary to modify the boat's rudder skeg to give support to the rear of the tube (recommended for engines over 19cu, or if a flexible shaft is used). I have indicated possible alterations to the skeg with dotted lines on the plan.

So, the first thing to do is gather together the engine, coupling, shaft, rudder, sample of foil blade, etc. and lay them over the plan to see if any modifications are required to the design before building commences.

### To Begin: The Hull

Begin by marking and cutting out the deck, hull sides, bulkheads and keel. Dry assemble the parts over the deck to check their fit. When satisfied, re-assemble with glue and strap assembly to a flat surface while glue dries, all the time checking that the joints are well clamped and true.

When dry, reinforce both sides of the bow/keel with scrap plywood to allow plenty of gluing area for the bottom skins.

Reinforce the inside edge of the hull sides with 3/16" sq. wood strip, setting the strip slightly proud so that it can be trimmed to give a good



materials I used, but still gives excellent performance with a 19cu engine. There seems no reason why with careful choice of thinner materials a substantially lighter model could not be made.

### Construction

Before building the model it is best to be clear about the materials and hardware to be used as these may dictate modification to the basic plan. This

Photo right, the earlier boat on the left, with fixed rear foils, now used as a reserve model.

