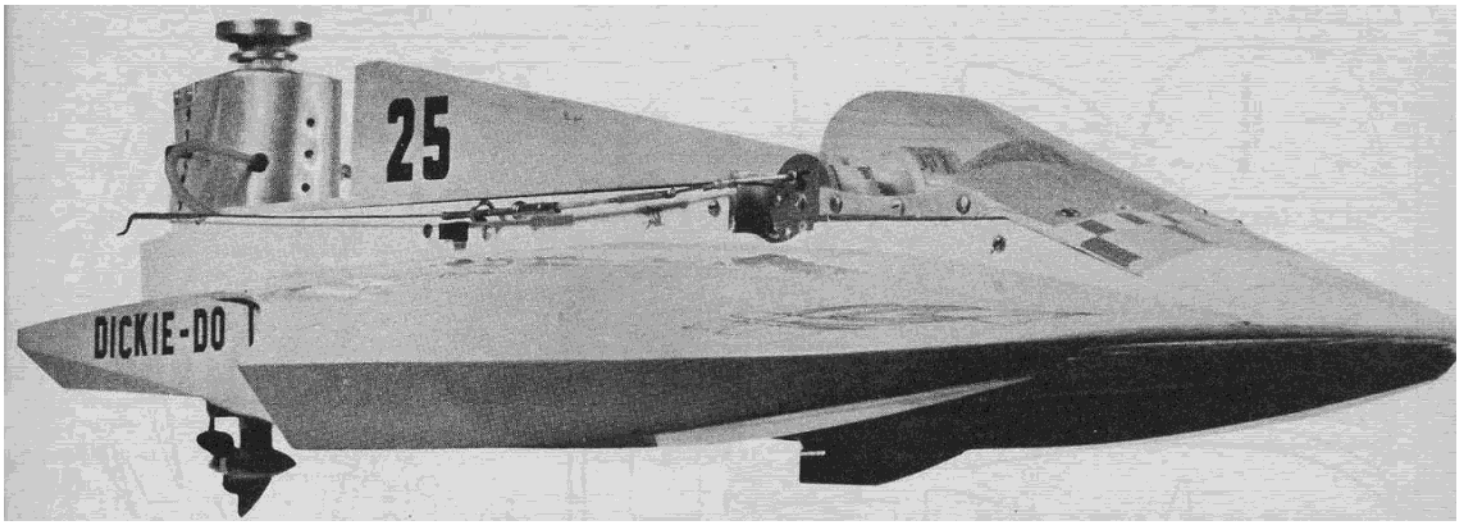


DICKIE-DO

.15 powered outboard hydro by

DICK HANSON

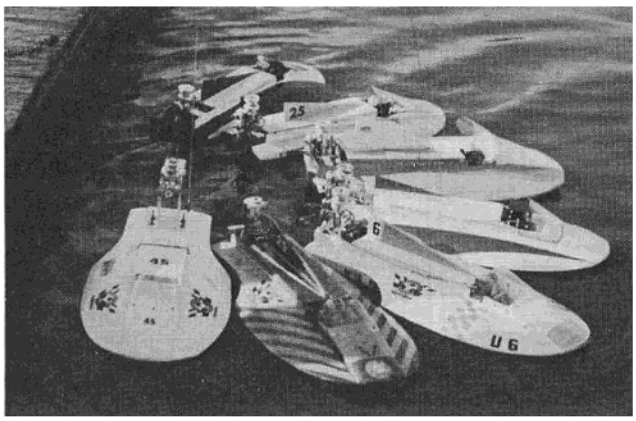
THIS particular outboard hydroplane was designed in 1958, following the purchase of a very unusual engine — a K&B Allyn Sea Fury Twin. Inasmuch as I had always enjoyed watching the full size hydros race, I decided to build a smaller version for use with this outboard glow engine.

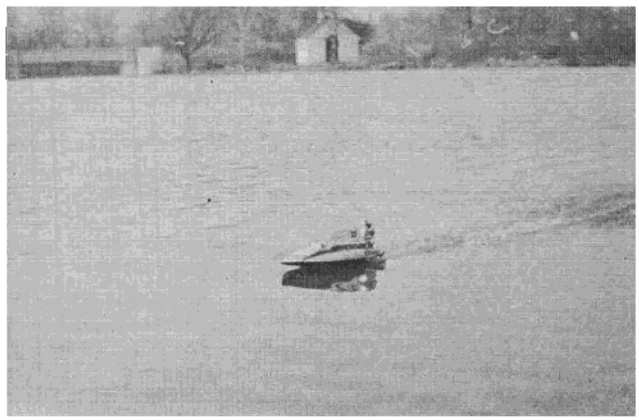
The completed boat proved to be quite successful right from the start, and it was in operation at the local pond each Sunday. The following year, I read in one of the model magazines that there was going to be an R/C boat race in Milwaukee. I attended the meet simply to find out what the other R/C boaters were using, and was quite surprised to find a majority of "V" hulls and air screw boats. In those days there really was one class of competition, with the result that the .049's ran against the .60's. The contestants who bothered to come over to see the little outboard thought it was cute, but too small and underpowered to produce much in the way of speed. They suggested that I enter in the Scale event, and that I might possibly win something in that category.

I didn't take their advice, however, and as it turned out, the Dickie Doo took second place for speed (the first time I ever went around a marked course), and I think the trend to hydroplanes began.

At the next sanctioned meet, it became the fastest racing boat in the I.M.P.B.A. The old record was something like 1:30.0, and on September 27, 1959, in Chicago, the outboard did the two lap quarter mile oval in 1:17.8. Back in those days, when one contestant had a good run, everyone would applaud. In this case, however, there was silence — broken only by occasional muttering! The following year, on May 22, 1960, to be exact, it set a new record of 1:13.0. This was topped by a young man who built an identical hull and captured the mark at 1:08.0. There are a few old timers who still say it was one of the finest running hulls to this day. Then the roof fell in — K&B stopped making the outboard engine! As a consequence, I stopped racing until a couple of years ago when I put an inboard in the hull and won a few trophies, but no new speed records.

At this point, I heard that Fuji of Japan had an outboard engine. Finally, last autumn, I located one in a hobby shop, put it on the old Dickie-Doo, and went out to the pond with boat and camera. I ran the rejuvenated hydro without breaking in the engine and also without the engine fairings shown in the photos. Nevertheless, it showed good speed even in its stock condition. It started quite easily, and by cutting open the exhaust hole and eliminating some excess metal, it has the potential of a





From RCModeler June 1967

good running engine.

One of the advantages of an outboard engine as compared to an inboard is the simplicity of the installation. It also leaves the interior free of oil as well as allowing more space for R/C installations. The engine, itself, has everything on it — cooling head, flywheel, throttle, and is fully adjustable. So, once the hull is finished, you can screw the engine onto the transom and you are ready to go.

I hope you'll like the Dickie-Doo. Fuji still makes a line of outboard glow engines, and I understand there is another line of various displacement outboards available in England.

Construction

Cement ribs 9 to 1 in that order, pin to side rails (parts 11). Cement rib 10 in place. Lay the assembly, from rib 10 to 7, on a flat surface with a weight across the side rails, and align very carefully. Parts 11 must be straight and perpendicular to rib 10. Glue parts 12 into place.

Glue parts 11A to the outside of parts 34 (see detail F). On a flat surface over wax paper join parts 14 together. It's optional as to joining the two pairs of 20A and 20B, 21A and 21B, or you can glue them separately on the hull.

Glue parts 6A on to rib 6.

Glue parts 13 into place.

Glue part 14 into place, and pin securely. The notches of parts 13 and part 14 should line up.

Glue parts 15 into place. They rest on top of part 14 at ribs 6A and 7, and flush up against rib 6.

Cockpit assembly can be started for a fill in, while the assemblies are drying. Pin the two cockpit assemblies (see detail E) to the side rails. Glue formers 35 and 36 into place. Glue part 37 into place. Glue parts 38 into place. Bevel both pieces where they join part 37. Do not get glue on the side rails, so that you cannot lift this assembly out. With cockpit in place glue nose block 39 in place. When dry shape and sand even with the hatch. Remove cockpit, take the celluloid windshield and assemble to cockpit with 2-56 screws.

Take a flat block of wood with a piece of sandpaper wrapped around it, and sand parts 15 and 14 flush to the ribs 10 to 7. Glue parts 16 into place.

Glue parts 17 into place. The front of 17 should be even with the notch on part 14.

Glue parts 18 into place (see detail C).

Two pieces of one-half inch wide aluminum strips (one with a tab) should be contact cemented to parts 18 later on (see drawing).

Wet the outside of parts 19 before cementing in place. Use tape and pins to hold front end down. Trim and sand flush when dry (see detail D).

Glue the two one-eighth square stringers into the rib notches along the side rails. Cut the stringers on an angle at the front, also bevel parts 13 from the side rails to rib 1.

Glue the pairs of 20A and 21A into place. Use the center line of rib 3 as a joining place. Glue the pairs of 20B and 21B into place.

Cut out the section of rib 10 between the side rails. Glue transom parts 23 into place. Glue parts 24A, 24B and 25 into place. Cut the bracing out from rib 2, and cement a piece of one-eighth plywood to part 14. This will be used to hold the battery case down. Glue two hardwood squares by part 24A, to receive screws to hold fairing down.

Assemble fairing on the hull. Pin part 27 up against part 25, and on top of the side rails. Glue 29 at the same angle as part 25. Glue parts 30, 28 and 31 into place as indicated by the dotted lines on pattern 27. Glue one-eighth square balsa strips into notches of formers (see detail G). Remove when dry and glue part 26 to the bottom of 27. Part 26 will be between the side rails when fairing is locked on to the hull. Cut a hole through 26 and 27 for a fuel tank. Cover outside of fairing with silkspan and silk or balsa sheeting.

Sand hull smooth and cover with silk and if possible contact cement thin pieces of plywood around parts 19.

Use the engine fairing screw to hold the aluminum control arm and hook directly to servo. Do not use more than a three-sixteenths movement to right and left on the engine. Do not over-control the hydroplane, especially with single-channel R/C.

A starting stand, as shown, is very important, since it takes the strain off the servo when the cord is pulled.