Dope or wood filler may also be added if any, are filled. A coat or two of thin cement all joints, being sure all pinholes, are well filled. A semi-scale three-point suspension hydroplane hull is unorthodox in hull design, "Scatwood" is an exceptionally fast model hydroplane. Though a little unorthodox in hull design, "Scatwood" is a semi-scale three-point suspension hydroplane which, with an air-cooled or water-cooled outboard engine on its transom, will hit speeds of 25 to 35 m.p.h.—scale speed far exceeding that of its big brothers. Construction of the "Scat" is simple—that is, you start by studying the plans, then get to work cutting out the parts. Though we used plywood throughout, 1/28" mahogany veneer may be substituted very successfully for all plywood sheeting. Don't spare the cement, for, though we purposely made "Scat" plenty beefy, the final weight ready to run was only eleven ounces, and it really moves out.

**Cockpit:** Build the cockpit first by cementing the sides of it to bulkheads No. 2 (1/8" plywood transom) and No. 5. This box is then ready to be cemented to the hull bottom. Make sure you leave room for bulkhead No. 1 before cementing it in position.

**Hull:** Now add the remaining bulkheads to the 16-1/4" hull bottom sheet and fit cement the sides in place. At this point, in order to assure waterproof compartments throughout the boat, cement all joints, being sure all pinholes, if any, are filled. A coat or two of thin dope or wood filler may also be added without fear of warping the plywood structure.

**Top Covering:** The top covering is probably the most difficult part of the construction, since it is advisable to hold the sheeting in place without pinning through the structure. Here mahogany veneer makes an excellent substitute for plywood. Apply the covering in three sections: One for the front of the hull (from bulkhead No. 6 forward), and one for each side of the cockpit from bulkhead No. 6 aft.

**Sponsons:** After completing all the hull structure, cement the upper and lower sponson blocks together and cement them in place on the sides and bottom. Wait until they are thoroughly dry before starting to carve. Cut the sponsons to shape using the template given on the full-size parts page. A very sharp penknife is excellent for finishing the carving. Do the final shaping with fine sandpaper—then add the fillets (No. 8).

**Finish:** After sanding the model thoroughly, apply a couple of coats of your favorite wood filler to the exposed portions of the boat (we prefer ordinary automobile primer) and allow to dry well, being sure all cracks, etc., are well filled. Now sand until smooth, using wet sandpaper or emery paper, and you're ready to color-dope the model. Two or three coats brushed or sprayed on, and sanded between, should suffice. If a real glossy finish is wanted, apply two or three thin coats of clear dope over this, and compound it with Simonize. Unless you're messy at filling gas tanks, there is no real need for fuel proofing.

**Engine and Running:** At the time this article was written, there were only three model outboard engines on the market: The Atwood air-cooled, the Atwood water-cooled, and the Allyn "Sea Fury" (also air-cooled). Our choice of power for the "Scat" was an Atwood air-cooled, since the boat is fast enough to afford sufficient air-cooling and also because the cylinder head faces forward into the airstream. The water-cooled version is shown on the plan.

When you've finished the model, head for the nearest lake or wading-pool and try it out. There are two methods of running the boat, each of which has certain advantages. Tethering the model will (in our opinion) be probably the most popular since it affords a method by which the boat may be timed for speed runs (ordinary controline speed charts should suffice for m.p.h.). Running the model free (turn may be controlled by adjusting: the engine's mounting angle) in circles will also be popular—we've seen OUTS in a nine-foot-diameter plastic wading pool without any colliding with the sides of the pool.

**Bill of Materials**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulkheads, fillets</td>
<td>2</td>
<td>1-1/16&quot; x 8&quot;</td>
</tr>
<tr>
<td>Bulkheads, fillets</td>
<td>2</td>
<td>1-1/2&quot; x 8&quot;</td>
</tr>
<tr>
<td>Sandpaper</td>
<td>1</td>
<td>Medium</td>
</tr>
<tr>
<td>Emery Paper</td>
<td>1</td>
<td>Medium</td>
</tr>
<tr>
<td>Clear Dope</td>
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<td>Medium</td>
</tr>
<tr>
<td>Wood Sealer</td>
<td>1</td>
<td>Medium</td>
</tr>
<tr>
<td>Cement</td>
<td>1</td>
<td>Medium</td>
</tr>
<tr>
<td>Colored Dope</td>
<td>1</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Left: The "Scatwood" jumped right out of the water at the prop took hold. It corrected itself and tore off across the lake at high speed. Below: Note how the air-cooled Atwood motor mounts on the transom.

"SCATWOOD"

by Harry H. English

Another FM first! A speedy model hydro, specially designed for those new outboard "gassies"
FOR CLARITY, THE ANGULAR SLOPE OF THE HULL SIDES IS NOT SHOWN IN THE TOP VIEW.

HULL BOTTOM: 1/16" PLYWOOD.

COCKPIT SIDES ARE MADE FROM SHEETS OF 1/32" PLYWOOD.

FRONT OF COCKPIT IS MADE FROM A SCRAP PIECE OF 1/8" PLYWOOD.

DECK IS MADE FROM A SHEET OF 1/32" PLYWOOD OR 1/28" TEMECO, MAHOGANY VENEER.

1, 3, 4, 5, 6, 7 & 8 ARE MADE FROM 1/16" PLYWOOD.

2 IS 1/8" PLYWOOD.

SPONSORS: THESE ARE CARVED FROM MEDIUM-BALSA AND ARE CEMENTED IN PLACE AS SHOWN UNDER "HULL ASSEMBLY."

ALLYN "SEA FURY" OR ATWOOD OUTBOARD ENGINE.

DECK OMITTED TO SHOW DETAIL.

SPONSOR IS CEMENTED IN PLACE AFTER THE DECK HAS BEEN ADDED.

HULL ASSEMBLY (NOT TO SCALE)

8 IS ADDED LAST

CROSS-SECTION A-A

LOOKING AFT — TOWARD THE TRANSOM (NOT TO SCALE).

SOME HULL SIDES MADE FROM SHEETS OF 1/16" PLYWOOD OR MAHOGANY VENEER.

BOTTOM OF SPONSOR

1/4" SQUARES

11/4" x 11/4" x 6"

3/8" x 3/8" x 6"

EACH SPONSOR IS MADE OF TWO BLOCKS AS SHOWN.

ALL PARTS HALF-SIZE UNLESS NOTED OTHERWISE

DESIGN AND DRAWING BY: HARRY H. ENGLISH
TRACED BY: BOB BURAGAS
HULL BOTTOM:
1/16" PLYWOOD OR
MAHOGANY VENEER

FULL-SIZE PARTS CUT FROM 1/16" PLYWOOD UNLESS INDICATED OTHERWISE.

DESIGN & DRAWING BY: HARRY H. ENGLISH