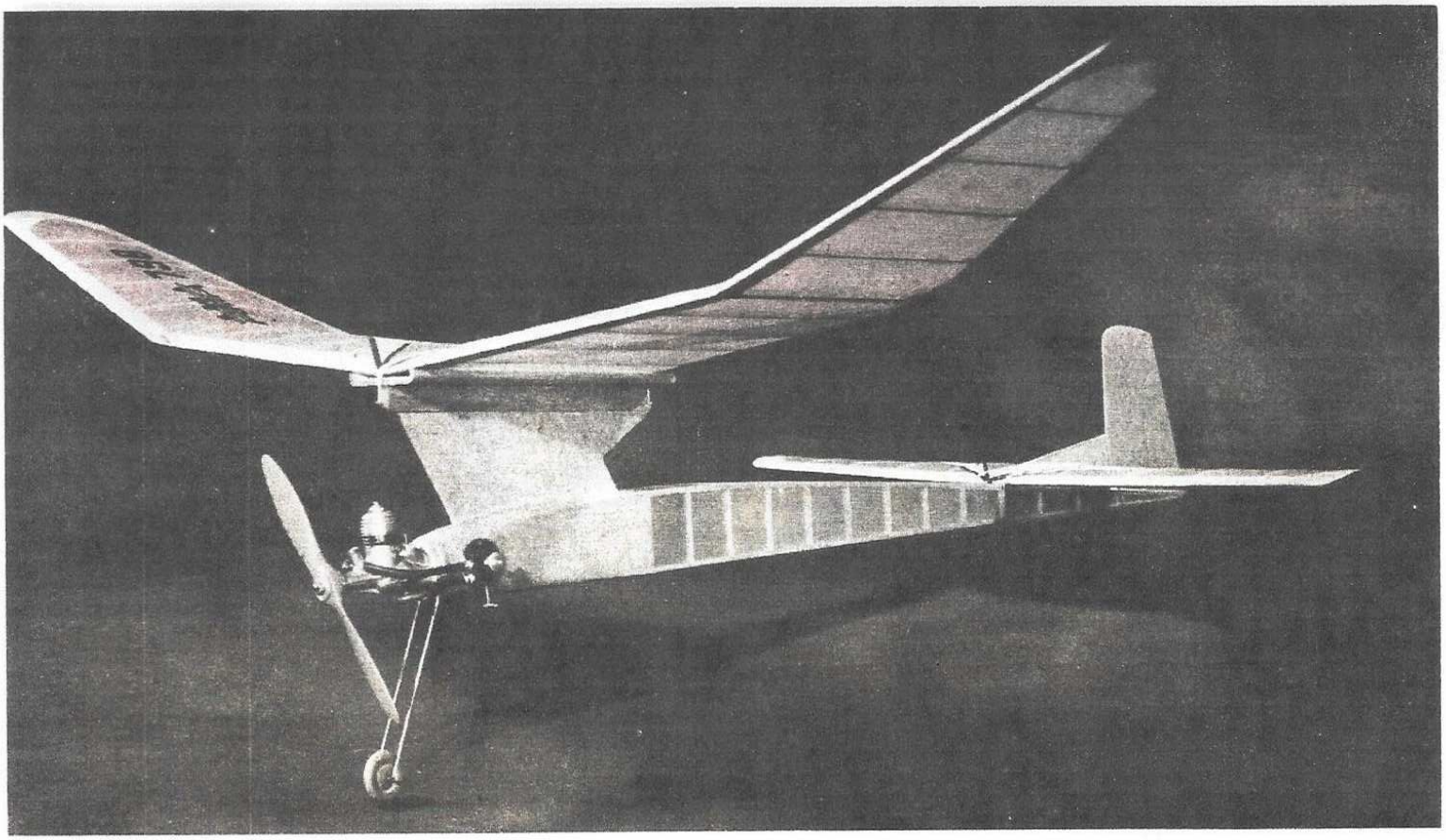
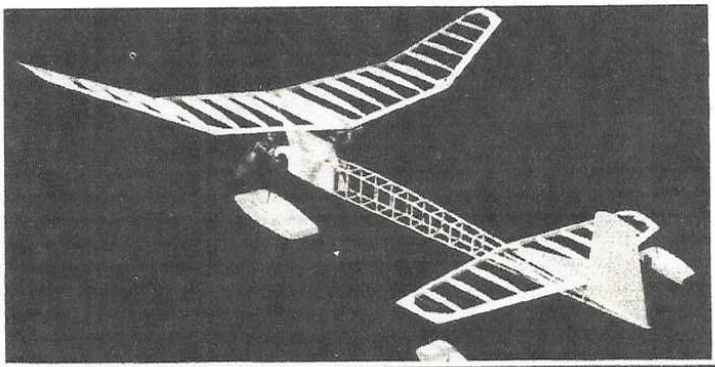


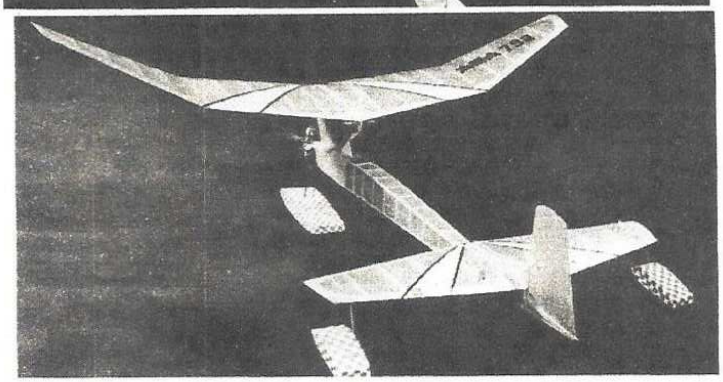
Aquasprite

Tipping the scales at five ounces, this high performing ship may quickly be changed from R.O.W. to R.O.G. operation

Simplicity is the keynote yet it's tops as a contest job. Note the split dorsal fin and the permanently mounted rudder to the extreme rear. The stab pops up for dethermalizing.

by Frank Ehling





● The Aquasprite was designed not as a shot in the dark, but as the logical successor to a series of other models—planes that were changed here and there until we had a stable, dependable contest job. It is capable of climbing either to the right or to the left and then falling into a soaring glide, with just the right amount of turn for good thermal hunting. As a result, the Aquasprite is easy to fly and may be put in flying trim in short order.

With the floats shown, it is a natural for R.O.W. flights. When the engine is turning up and the model is placed on the water, it takes off like a scared loon.

FUSELAGE: After scaling up the plans to full size, or having photostats made, the fuselage sides are laid out and constructed in the usual manner, one over the other. When the sides have dried, remove them from the plan and sand smooth. Recement the joints that are sanded. Separate the nose section up to about the midway point, then cut and cement the cross pieces in place, *(Turn to Page 36)*

NEXT ISSUE!

Don McGovern peers into his crystal ball and tells you "What's New for '52"—based on his personal observations at the recent Dallas Nationals. If you want to keep up to date with model aviation, don't miss this feature!

AQUASPRITE

(Continued from Page 17)

working to the rear to help align the sides. As you approach the rear, spread that section apart and then continue cementing in the pieces, which are cut to size from the plan.

The firewall consists of three pieces: two of plywood, and one of balsa. The balsa sheet is cut out to receive the tubing which holds the front gear in place. After the three pieces have been cut to shape, they are cemented together with the balsa sheet in the center, and the firewall is laid aside to dry.

When this has dried, carefully cement it in place so there is no offset in the engine. Then add the bulkheads in their proper positions. Since they will hold the pylon, be sure they are cemented securely. Now, take the softest 1/8" balsa sheet available and cut and cement it to the sides and bottom of the fuselage. The top is put on in two pieces, separated by the pylon. The timer is then cemented in place.

PYLON: Next, cut out and cement the balsa sheets to make up the pylon and the platform. Cement them securely, so that they will be able to take the shock if your model hits a tree or fence. When dry, slip the pylon into position. Be sure it touches the bottom longerons or you will change the incidence.

RUDDER: Now add the 1/16" sheet balsa sub-fin, the one the rudder rests on. Cement this securely in place. The rudder also is cut out of 1/16" sheet. Sand the corners round and cement into position. Make sure the rudder is straight and that there is no offset—this model is *not* adjusted with the rudder to get the turn.

WING: The wing of the Aquasprite is not hard to make—there are no spars and the ribs are smooth curves, making the cutting of them simple. Carve the leading edges roughly—they can be sanded before the panels are assembled. Lay out the panels one at a time on the plan. We made the opposite panel on the other side of the first, to save time and make sure they came out alike. Sand both at the same time.

The dihedral is obtained the same as on a hand-launched glider wing, by raising one end with a block and sanding along the table edge with a sanding block. Then assemble the wing panels, adding the gussets and being generous with the cement. As there are no spars, the leading and trailing edges have to do all the work, so cement all joints securely.

Now, cement the wing tips in place. These are beveled up to the top camber as shown on the dihedral sketch, since the covering is applied more easily when there are no compound curves to contend with. The wing should be gone over again with sandpaper to eliminate any rough spots, which may blemish an otherwise perfect covering job.

STABILIZER: The stabilizer is made in much the same manner as the wing, with the exception of no dihedral and the two center ribs bracketing the dorsal fin.

A piece of tubing is cemented in along rib 6s, as shown on the plan, as a mounting point for the pontoons.

PONTOONS: The pontoons are easy to make, so don't skip this part. The fun you'll have in the old water hole will be worth every extra minute it takes! Start with the front float, cutting the sides as shown. Then cement in the bulkhead, which is laminated with the gear sandwiched in place. Next, add the 1/8" square leading edge and the rear sheeting, which is cemented on oversize. Cover the rest of the float and then trim.

The rear floats are made in the same manner except that the wire is cemented flat on the bulkhead. Be sure to cement it securely in place. Cover these the same as you did the front float. Slip the wires in the tubes and see that they hold the floats true. A little bending will help get them to line up correctly. Rubber bands hold the floats in place.

The floats are now doped and sanded. Several coats of dope will be necessary as a soaked float that happens to land on the gravel is soon worthless.

COVERING: Cover the model with Jap tissue, trying to keep the weight down to five ounces, ready to fly. If the covering is too heavy or strong, it may warp your model out of shape after doping. The original was trimmed with Trim Film, as shown in the photos.

As a closing note, don't forget to light the dethermalizer fuse before each flight, for with a good engine and a tight circle, all the Aquasprite needs is just the whisper of an updraft and, Brother, you've hooked a thermal!

BILL OF MATERIALS

(Balsa unless otherwise specified)

1—1/16" x 3" x 36" (hard) .....Wing ribs, stab ribs
1—1/8" x 2" x 36" (hard)..Pylon, fuselage bulkheads
1—1/8" x 2" x 36" (soft).....Nose planking
1—1/16" x 2" x 12" (hard).....Floats
1—1/32" x 2" x 36" (medium-hard).....Floats
10—3/32" x 3/32" x 36" (hard).....Longerons
1—5/16" x 1/2" x 36" (hard) ....Wing leading edge
1—5/16" x 1/2" x 36" (soft)...Stabilizer leading edge
2—1/8" x 1/2" x 36" (hard)....Tapered trailing edges
1—3/8" x 1/2" x 6" (soft) .....Stab tips
1—3/8" x 3/4" x 8" (soft) .....Wing tips

1/16" plywood for firewall; 12" length of .035" wire; 12" length of 1/16" wire for gear; 3" length of 3/32" O.D. aluminum tubing; 2" length of 1/16" O.D. tubing for floats; 1" wheel; Fuel shut-off timer; 3 sheets colored tissue; Nuts, bolts, pins, washers; Large tube of cement; 1/2 pint dope; 3 oz. fuel-proofer; Sandpaper; Decals, etc.; 1/2A engine.