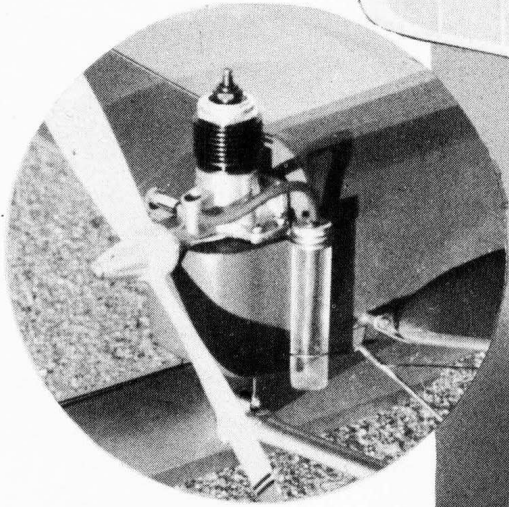
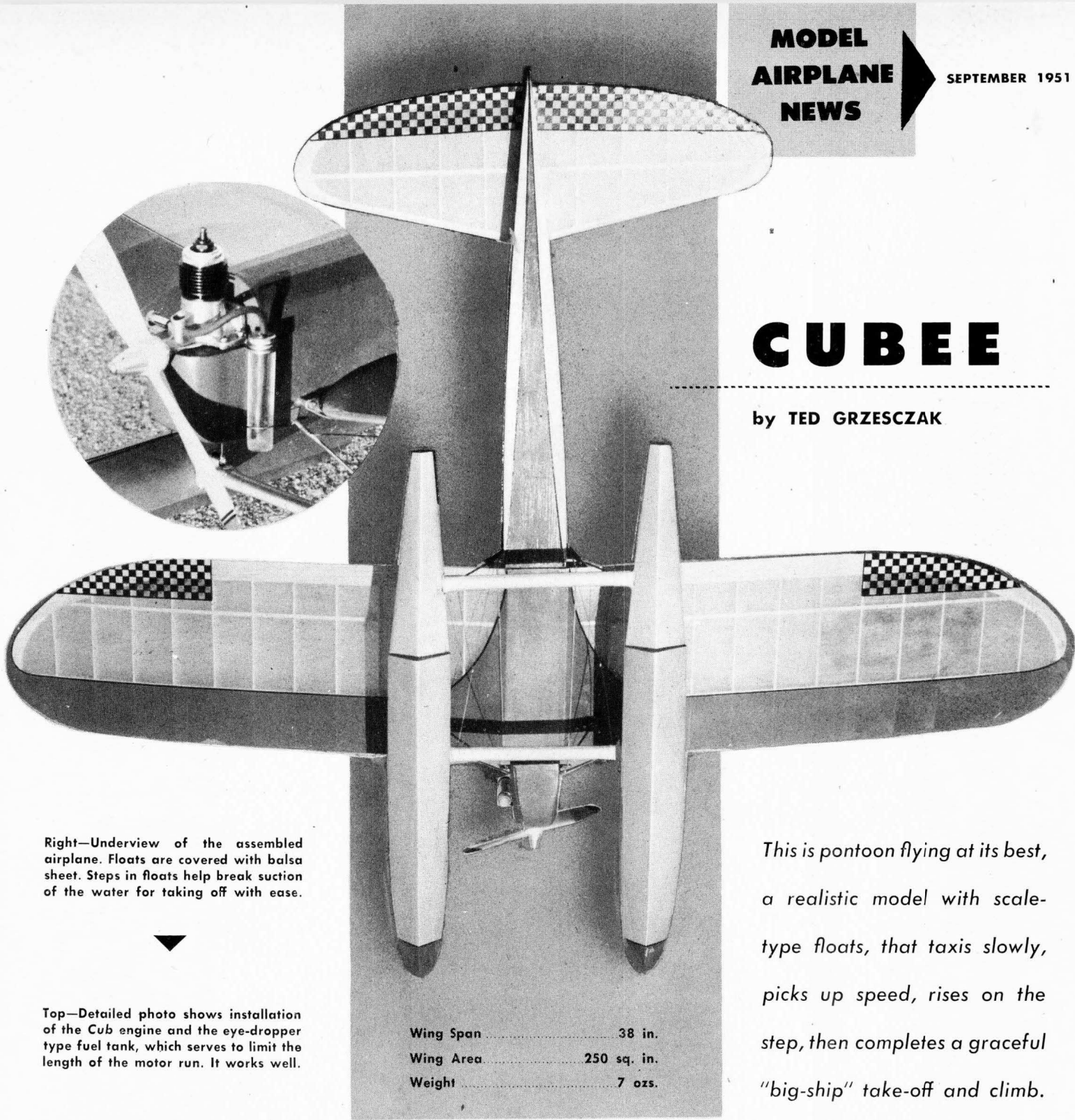


CUBEE

by TED GRZESZAK



Right—Underview of the assembled airplane. Floats are covered with balsa sheet. Steps in floats help break suction of the water for taking off with ease.



Top—Detailed photo shows installation of the Cub engine and the eye-dropper type fuel tank, which serves to limit the length of the motor run. It works well.

Wing Span 38 in.
Wing Area 250 sq. in.
Weight 7 ozs.

This is pontoon flying at its best, a realistic model with scale-type floats, that taxis slowly, picks up speed, rises on the step, then completes a graceful "big-ship" take-off and climb.

► Until you have seen a sport-type seaplane with its slim realistic floats skim along a glassy surface, then swoop gracefully into the air, you haven't seen anything. There is no greater thrill than to start that engine, set the plane on the water and watch the prop move the model slowly at first, but then faster and faster until it is planing along on the steps, finally to make a true rise-off-water (ROW) take-off.

Cubee is no contest model with ugly squat floats to get the machine quickly into the air. It is meant to look a little like a real airplane and to act exactly like the real thing. Take our word for it, the extra work in making those two genuine pontoons will be amply repaid.

But if you should want to convert *Cubee* into a land model (oh, no!), be sure to use only .035-.039 engines as the ship will be too fast to fly on larger motors without floats, certainly so if an .074 is used.

To build the fuselage, cut the sides from 1/16" sheet balsa and cement the rear together. Cut out the balsa

bulkheads and cement them in place, checking both alignment and the joints. The plywood firewall must be cemented well because it has to take a great deal of punishment. Put the fuselage stringers in place, starting with the top one and working down. The cowl now can be carved to shape and cemented in place. The bottom is covered with 1/16" sheet balsa, the grain running the long way on the bottom, except where the wing passes through; here the grain is run crosswise. The dowls for holding the wing in place now are added.

The wire gear now is made and soldered together. This should be done carefully so that the gear is the same as the plan; this is important if the model is to take off: Bind and solder all joints well. Fine copper wire is good for binding. All joints should be clean, then soldering is a pleasure and not a nightmare.

The floats are easy to make by using a keel and sheet covering. Cut out the bulkheads and keels. Cement in place. When these frames are finished, sheet the bottoms.

Straight dihedral, the curved tips, and a bubble canopy, make Cubee—the plane on the cover—an unusually pretty project.

The cross bars now are added along with the tubing that holds them to the gear. The top is covered. Add the nose blocks and shape as shown on the plan. Sand smooth and cover floats with tissue. Dope and sand with fine sandpaper (6-0). Dope the floats five to eight times to assure water tightness.

The original model used an .074 *Cub* and a Maco clear tank, as this could serve as a timing device if the model was flown in a restricted area. The 7" plastic prop worked out well. The entire model is fuel proofed and trimmed to individual taste. Trim-film was used as it is easy to apply and saves weight and time.

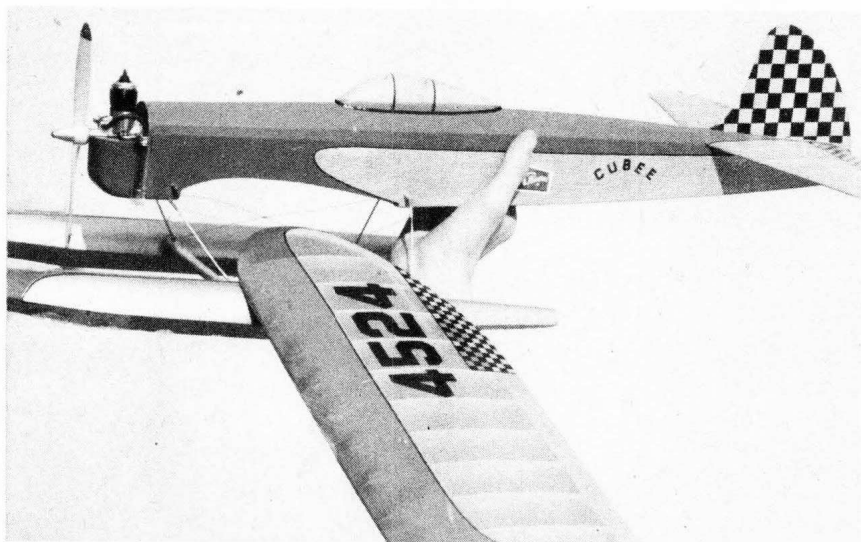
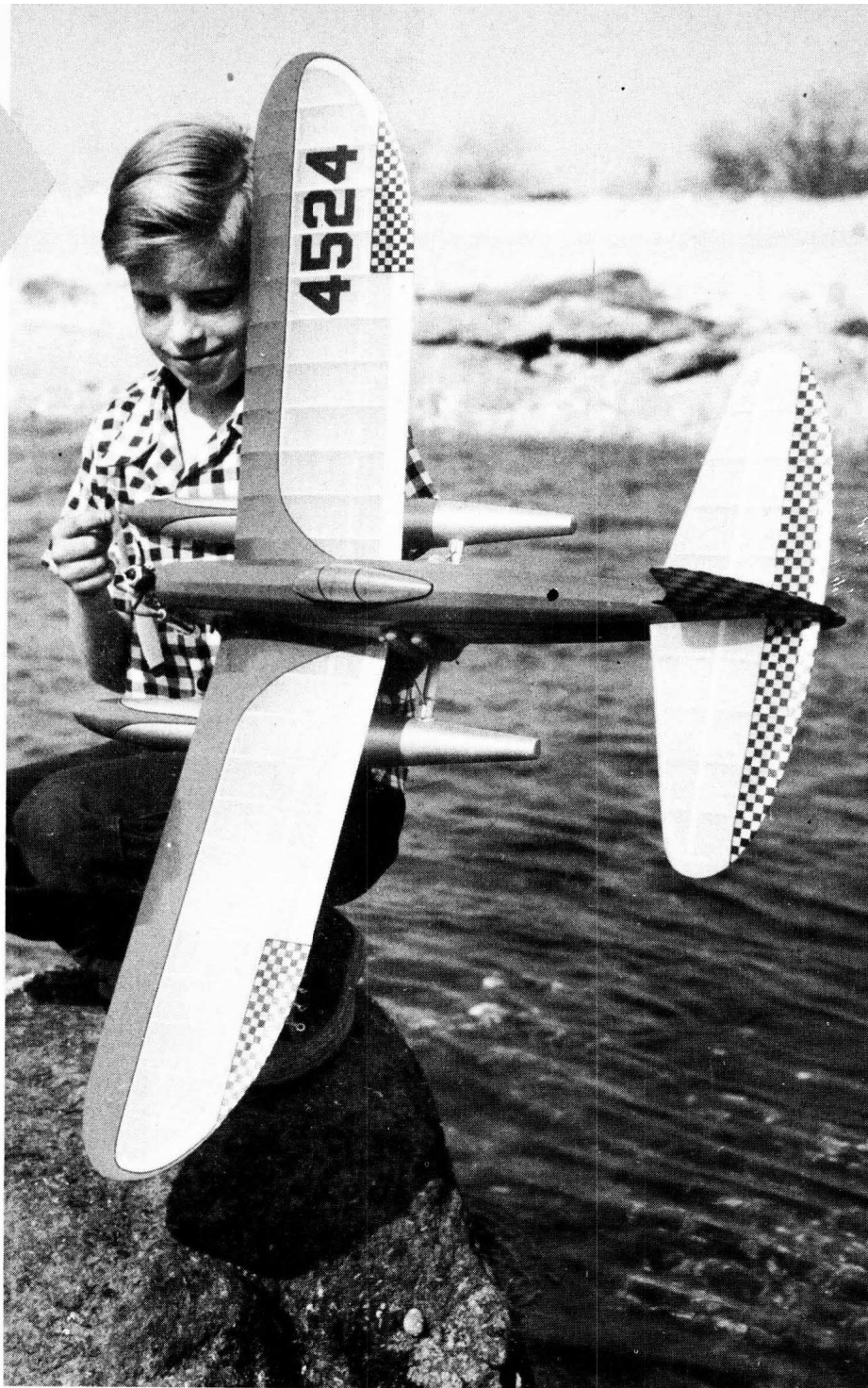
The rudder is cut from 1/16" sheet balsa and sanded to shape. To start the stabilizer, cut the ribs and outline from balsa. Assemble over the plan. Be sure here that all the joints are well sanded as this will prevent warping later. Cover the stabilizer and cement in place. The rudder now can be cemented in place, checking to see that it is straight. Add the tail fairing blocks. These can be cut from soft balsa. The rest of the fuselage then can be covered. It is wise to cover the balsa parts as this will keep the dope from penetrating into the balsa and keep it on the surface where it will do the most good.

Cut wing ribs, wing tip outline, then assemble the wing panel over the plan. When the panel is dry, remove it, then the other panel can be built directly over the first panel; that is, the panel is turned over and built back to back. When these are dry, separate and join with the dihedral gussets; this gives the wing panels the necessary span to complete the wing and center section, which is flat where it will rest below the fuselage. Sheet cover this section when the wing halves are jointed.

We used tissue to cover the wing as well doped tissue is strong and will not pull the wing out of shape. Check to see that the wing is not warped as this will make the model hard to fly. These warps can be steamed out by holding the wing in the position wanted; place it in the path of the steam and when the paper is pliable, remove, holding until dry.

Glide the model over tall grass; the original model balanced perfectly. However, differences in wood may need some weight added here or there. When flying, make sure that the wing is on tight as this is one way to let the model crash if the wing should move about. It will crash a model faster than a warped wing or a rudder that isn't cemented on straight.

Set the model on the water. It should rest in a nose down position. Start the engine and give her a short run at slow speed. This will show if the floats are true. If the model turns to the right, lower the front of the left. This will straighten out this condition. When the model taxis straight, start the engine and launch. Watch how she flies after the take-off. If the model refuses to take-off but the floats tend to submerge, check the angle of the floats to the plan and bend the wire rear strut to raise the tail end of the plane higher and this will cure your trouble.



The one-piece wing slides under fuselage, is held in place by rubber bands over dowls. Structure thoroughly sealed and the plane consequently is fully waterproof.