

SIMPLE CUB

The Simple Cub is the second in the Simple Series designs by Fred Reese featuring minimum construction and maximum performance schoolyard scale.

Next to P-51s, more models of Piper Cubs have been built than any other single aircraft. In fact, this is my sixth R/C Cub. There is just something special about a Cub. The Simple Cub is the

second in a series of simple designs that I built last year. The Simple Citabria, RCM Nov. 1984, was the first. The Simple Series airplanes are designed to be the easiest possible construction that will produce an attractive, inexpensive, high performance schoolyard flier. Basic construction can be completed in an evening. The wing is the popular Ace constant chord mini foam wing, and power can be anything from .049 to .10 cu. in. but a TD .049 is recommended.

The larger engines actually fly the airplane slower, but give better vertical performance. The Simple Cub is quite fast and is very aerobatic, not a beginner's airplane, just simple. The Simple Cub has generous dihedral and a large rudder for good roll response. Ailerons are not needed to do consecutive rolls or even fly inverted. The Simple Cub will take off from a hard surface easily if you give it a little shove to get it moving in a straight line. Once there is air moving

The finished model ready to fly. The wing is held in place with six #62 rubber bands. Paint the Ace wheels yellow to match the covering.

around the rudder, the Cub will track straight with little or no correction required. The glide is fast when the engine quits and I usually don't try to slow it down until the Cub is on final approach and low, then just hold it off until it settles in on its own.

CONSTRUCTION

Cut out and use the fuselage side template to make two fuselage sides. Glue on the vertical grain balsa doublers over the shaded areas leaving slots for the firewall and bulkhead B. Glue on the balsa servo rail supports as this saves a lot of time later. Drill two 5/32" holes in the firewall for the fuel lines and drill the four 1/8" holes for the 2-56 blind nuts

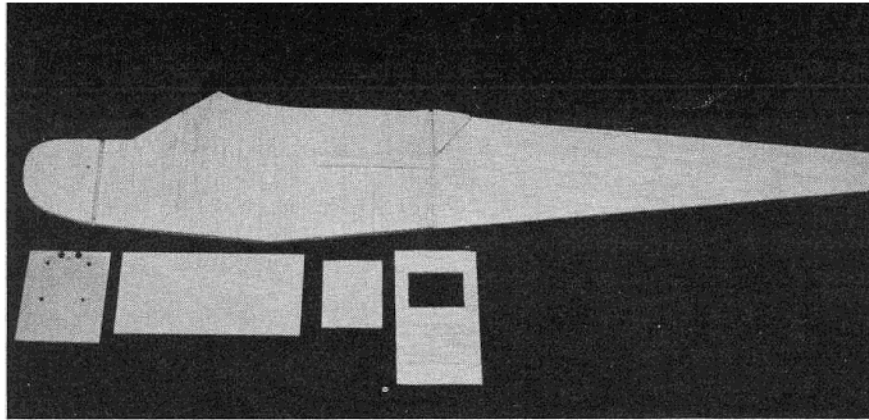
for the motor mount. Glue the blind nuts into the firewall and then glue the firewall and balsa bulkhead B to one of the fuselage sides. Glue on the other fuselage side and add the plywood bottom, C. Glue in the plywood landing gear doubler, D. Drill through C and D with a 5/32" drill for the landing gear and install the two 4-40 blind nuts as you can easily get your fingers in there now. Pull the tail together and glue. Glue on the remaining top and bottom 3/32" balsa sheeting with the grain crosswise. Sand the fuselage and apply a coat of Balsarite, inside and out.

Cut out the rudder and stabilizer from 3/32" balsa. Join the elevator

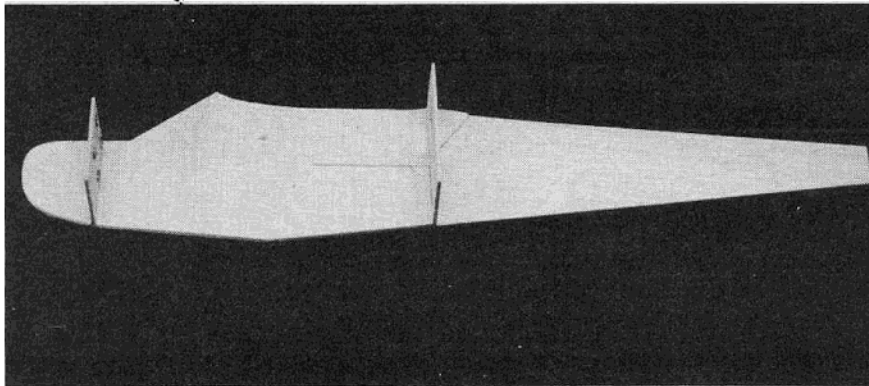
By Fred Reese

halves with 1/8" dowel. Sand with #220 sandpaper and apply a coat of Balsarite.

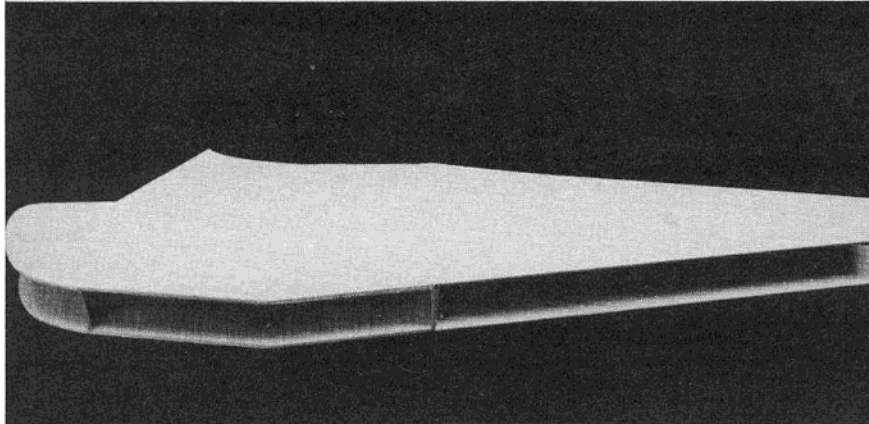
Cut out the wing tip template from the plan and mark the foam wings. Be sure to make a right and left side. Shape the wing tips with coarse sandpaper and taper the bottom until the tip is about 1/2" thick, then round off. Sand the dihedral angle and epoxy the two wing halves together, blocking up one wing tip 4" at the tip. Notch the trailing edge and epoxy in a 2" length of 1/8" dowel on each side of the dihedral joint. The dowel will



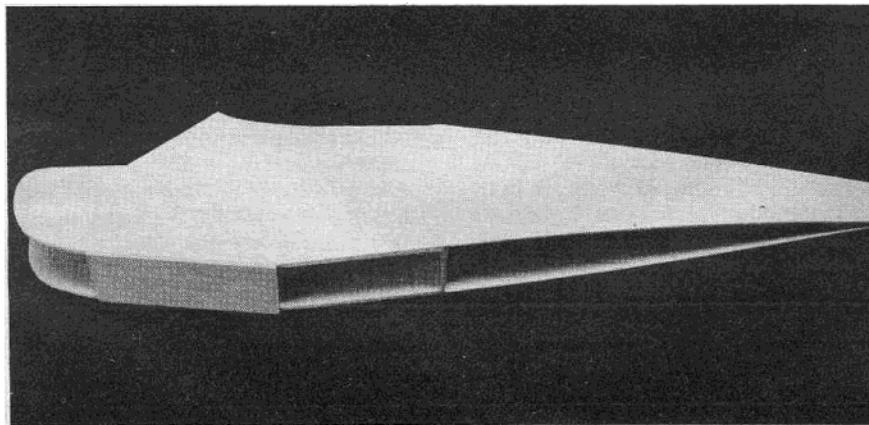
Make the fuselage sides from 3/32" balsa with 3/32" vertical grain balsa doublers using the template cut from the plan as a guide. Drill the firewall for the fuel lines and install the blind nuts for the motor mount. Cut out C and D from 3/32" plywood.



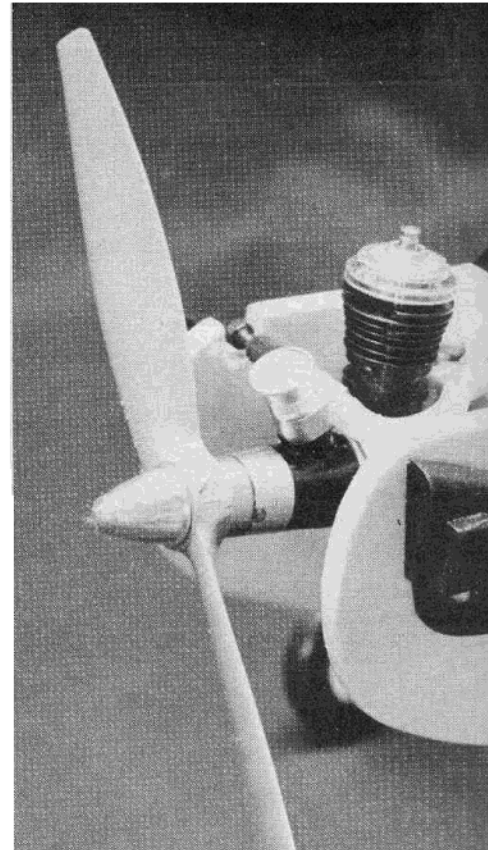
Glue the firewall and bulkhead B to one of the fuselage sides.



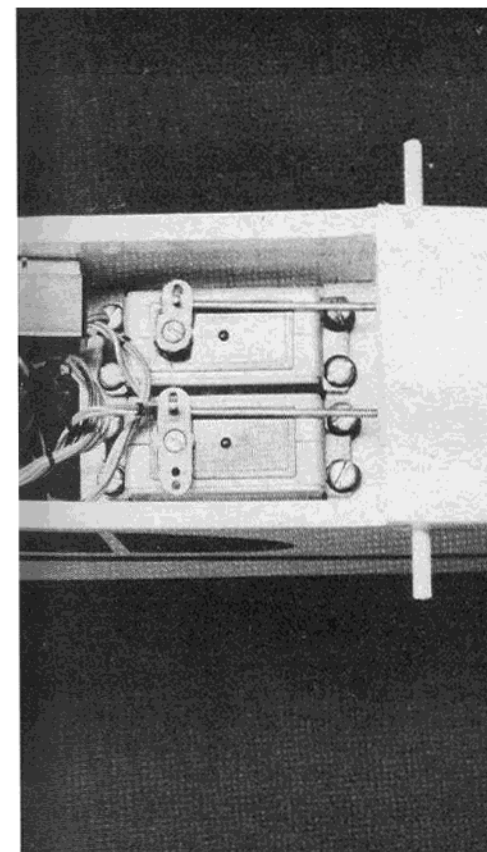
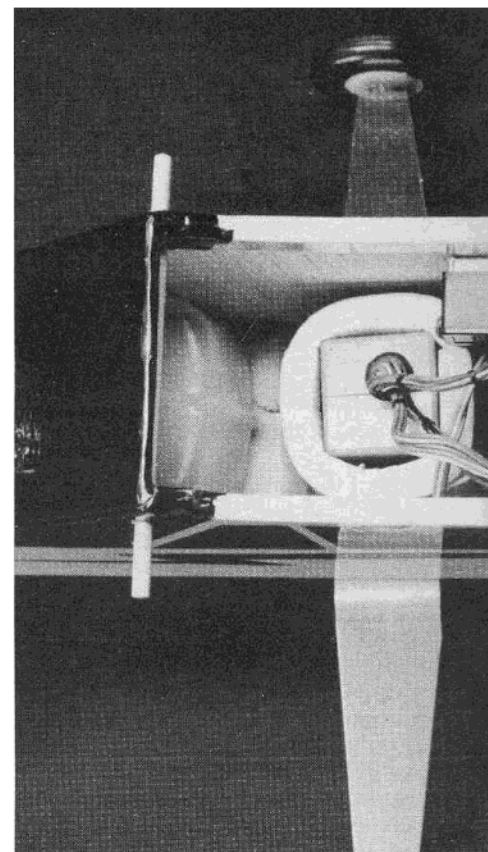
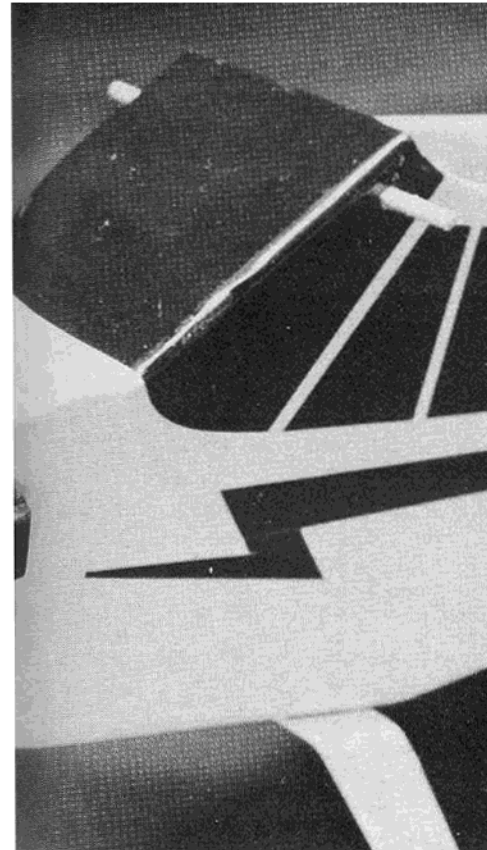
Glue on second fuselage side.



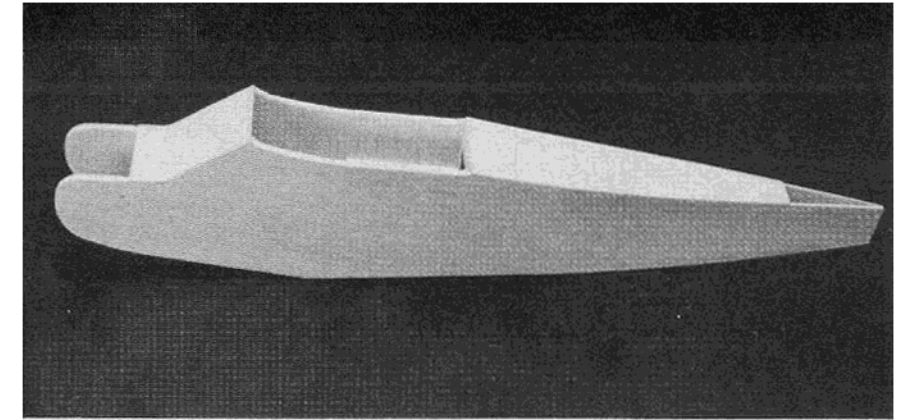
Glue on plywood bottom C, and the landing gear doubler D, and install the two 4-40 landing gear blind nuts. Pull the tail together and glue.



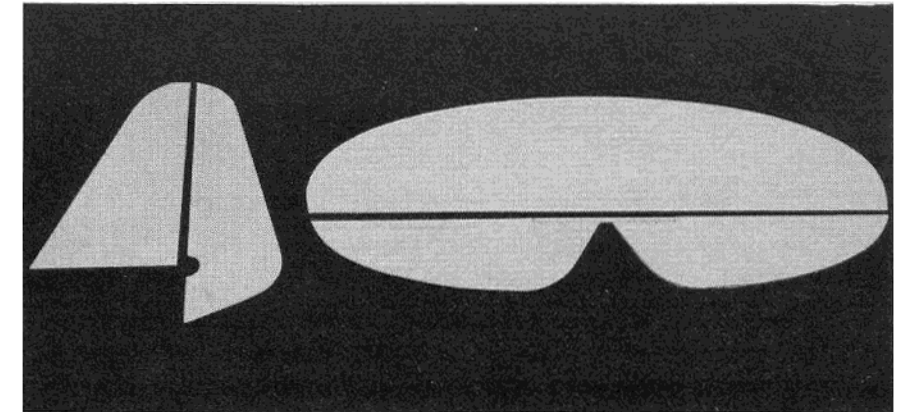
Cox TD .049 engine on Ace motor mount shown.



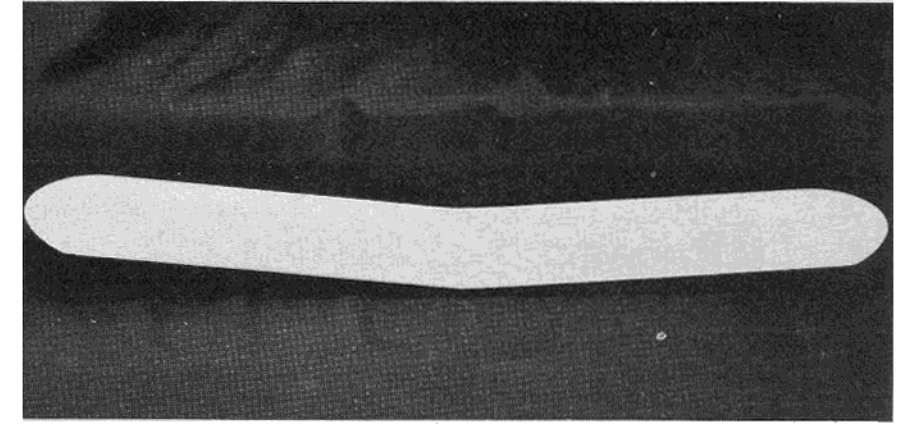
Fuel tank and radio installation.



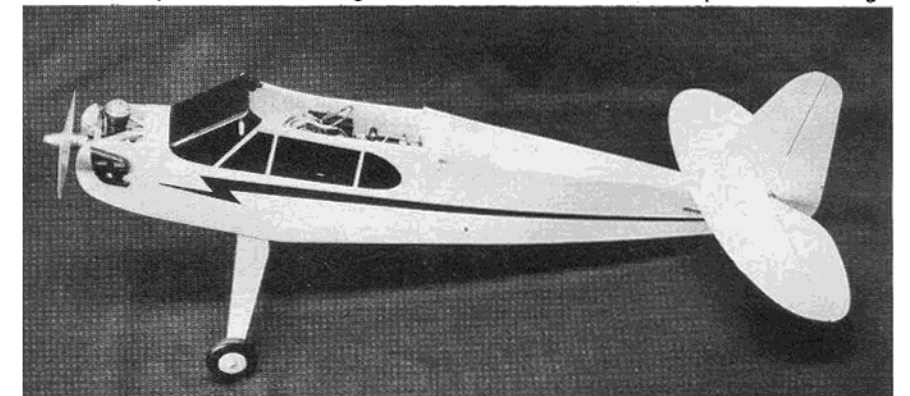
Add the remaining top and bottom 3/32" balsa sheeting. Sand the fuselage and apply a coat of Balsarite inside and out.



Cut out the tail parts from 3/32" balsa. Join the elevator halves with 1/8" dowel.



The Ace foam wing halves are joined with epoxy. Shape the wing tips using the template cut from the plan. Cover the wing with EconoKote or other low temperature covering.



Cover the model with EconoKote and decorate with black MonoKote trim. Add the dummy balsa engine. Hinge the rudder and elevator. Install the landing gear, engine and radio. Glue on the tail group.

**It continues to the
end article but
i have not this.**

**From
RCModeler
Aug. 1985**