The Afternoon Delite is a fast, maneuverable slope soarer that just might make a good slope racer, with some extra ballast. The model will fly in very light wind, due to its light (25 oz.) weight. Nicely-rounded fuselage is not hard to make, and is well worth the little extra work involved.

"Afternoon Delite"

By RANDY WRISLEY . . . This small, highly maneuverable slope soarer is light enough to stay up when the others won't. When the wind gets to blowing real good, put in lots of ballast and hold on tight!

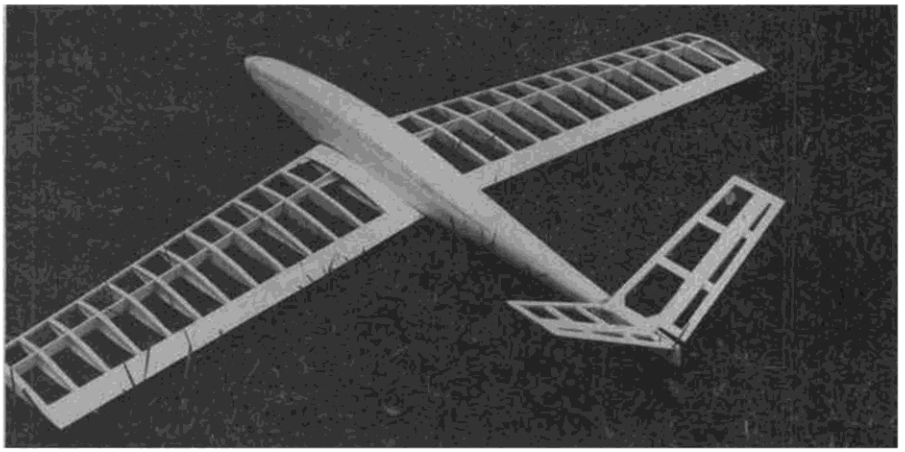
• You say you like the looks of those sleek, jet-like, fully aerobatic slope soaring gliders you see on the hill on windy days? And you'd like to build one, but the wind never blows more than 10 mph, and your pocketbook squeeks when you open it? Is that what's bothering you today, Bunky? Well, lift your head up high and read on! *Afternoon Delite* flies well on light-wind days. Mine cost under 25 bucks, including the covering material. The prototype weighs 25.5 oz. ready to fly. On windy days, you can add lots of ballast without fear of overstressing the airframe. It's even small enough to carry assembled in your car. Construction is simple, so let's get started. About the only way you'll get to fly one is to build one! Ready, here goes. . .

WING

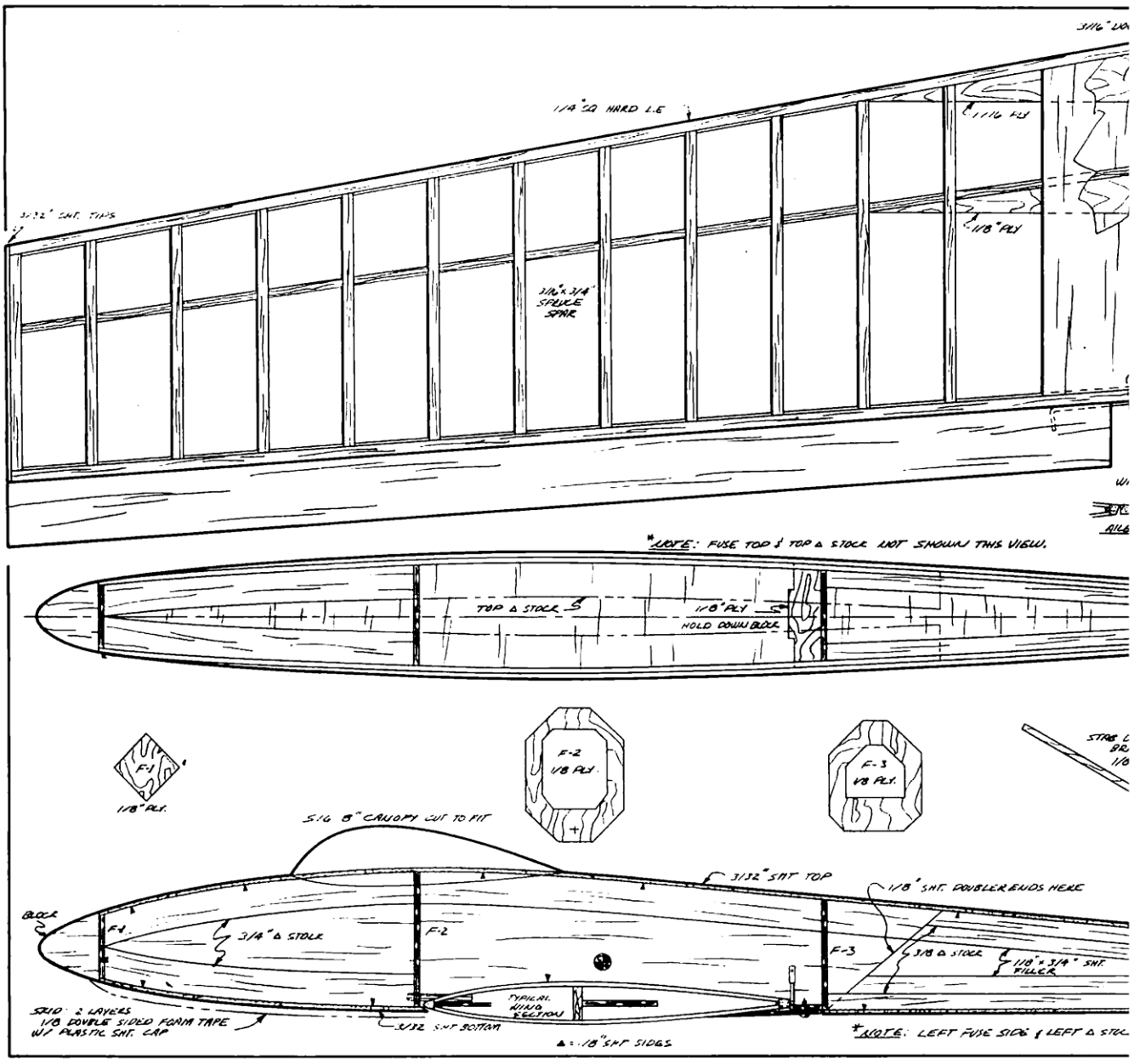
To begin construction, collect the necessary bits and pieces. Cut the l.e. and t.e. to the proper angle. Follow with the 3/16 x 3/4 spruce spar. Hot Stuff the 1/16-inch centering strips to the l.e. and t.e., as shown. Pin the spar down on the plan. Follow with the l.e. and t.e., which are pinned a 1/4 inch off the board on small blocks. Cut the sweepback braces from the correct size plywood, and install them on the l.e. and spar. The ribs are nothing more than 3/32 x 1/4 balsa capstrips. Cut these to size, roll over the backside to impart a curve, and install with Hot Stuff.

Once the top is done, flip the wing over and add 3/32 of an inch to the 1/4-inch l.e. and t.e. support blocks. Do the bottom just as you did the top. The center section sheeting is 3/32 sheet, applied with the grain running chordwise. Note: If you fly from a rocky area, do the bottom of the center section with 1/16 sheet, and face that with 1/32 plywood. Remove the wing from the board and Hot Stuff the 1/32 vertical grain webbing to each rib. Cement the 3/32 tips on and sand the structure to shape. Cut a slot in

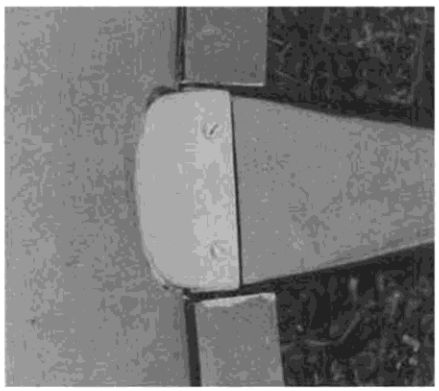
The Afternoon Delite doing what it does best . . . flying up a storm.



Ready for covering. Note the unusual rib construction. For racing, beef up the wing (to withstand mid-air collisions), and go pick up your trophy!



the top center section sheeting and epoxy the 3/16 hold-down dowel in place. The ailerons are cut from 3/16 balsa. Sand to a taper and angle the bottom of the t.e. for clearance. Horns can be installed now, and the ailerons fitted to the wing.



Wing hold-down detail. Uses dowel at l.e., two screws at t.e.

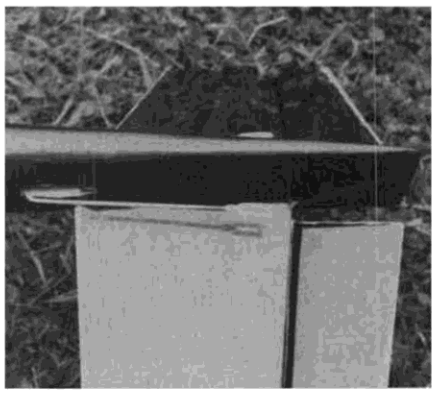
STABILIZER

Nothing much to say here. Build the tail as a complete unit. Cut in two, raise one side, and install the 1/8 ply dihedral brace. Some Hot Stuff, dropped onto the brace, will stiffen the assembly. The tip plates are cut from 1/16 ply and are installed after covering.

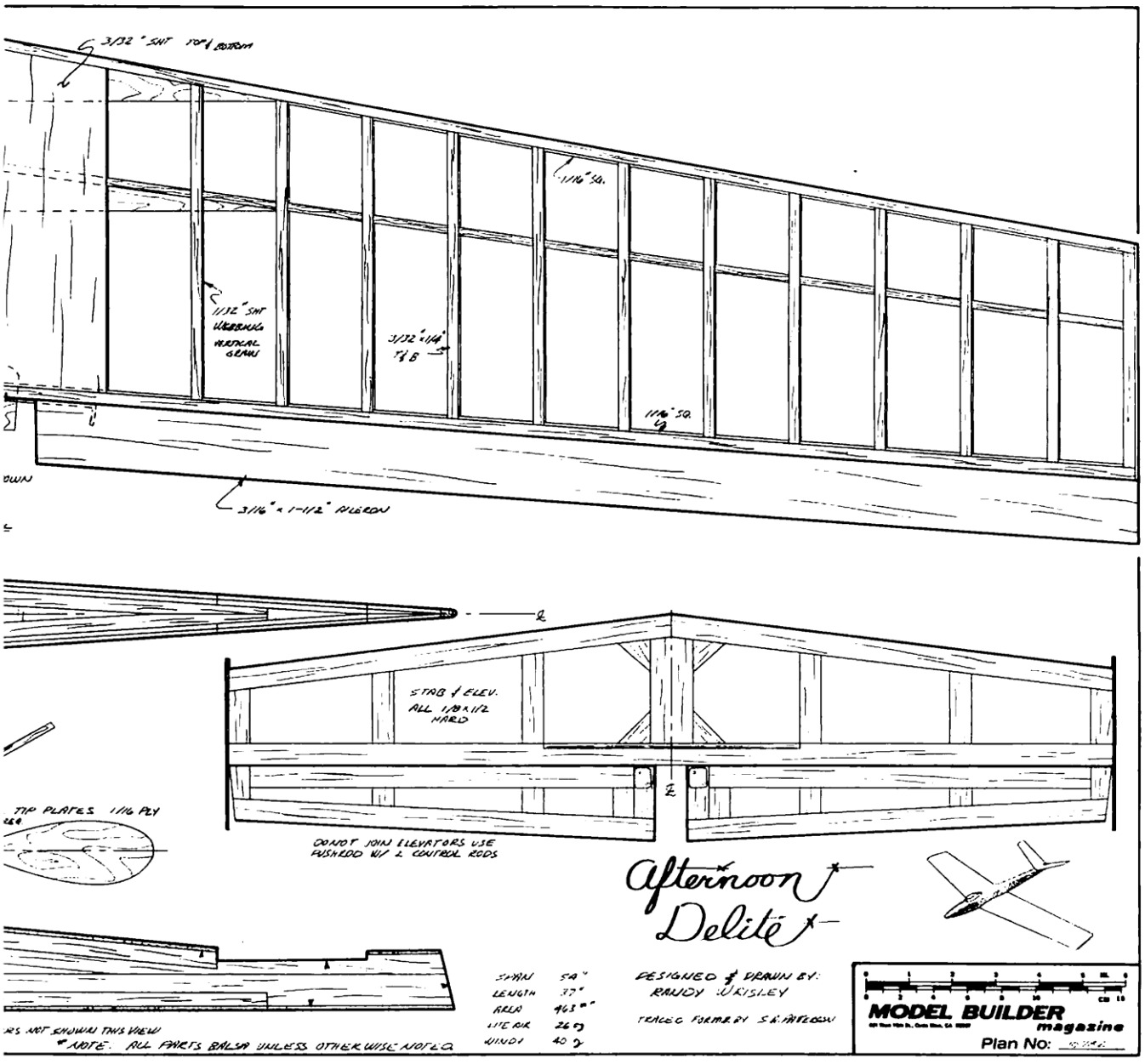
FUSELAGE

Cut two sides from 1/8 med. balsa. Doublers of 1/8 balsa are cemented to the sides, followed by the 1/8 x 3/4 balsa filler pieces. Remember that the filler pieces taper to nothing at the tail. Now comes the triangle stock around the edges. Use 3/4 and 3/8 stock, as called for on the plan. Should you have trouble bending the pieces, make relief cuts on the inside edges. With the sides over the top view, install F-3. Follow with F-2, and finally F-1. Sheet the top of the fuselage with 3/32 balsa, from F-3 to F-1. Once dry, remove from the board and sheet the bottom. Install the 1/8 ply hold-down block.

Fit the wing to the fuselage and install the 3/32 ply hold-down on the bottom of the wing. Don't forget to leave room for the aileron horns.



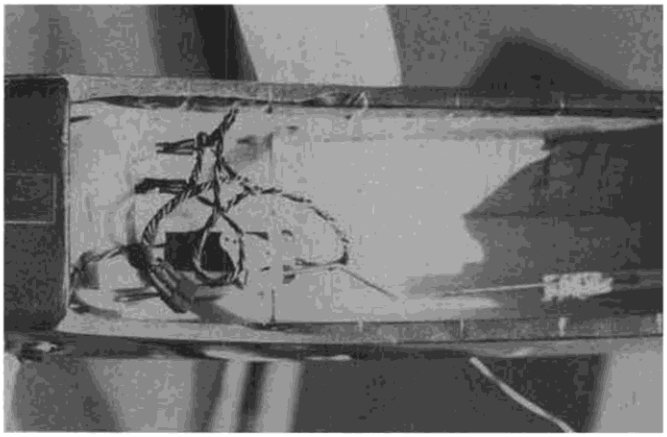
Separate elevator pushrods tie in to a common pushrod going to the servo.



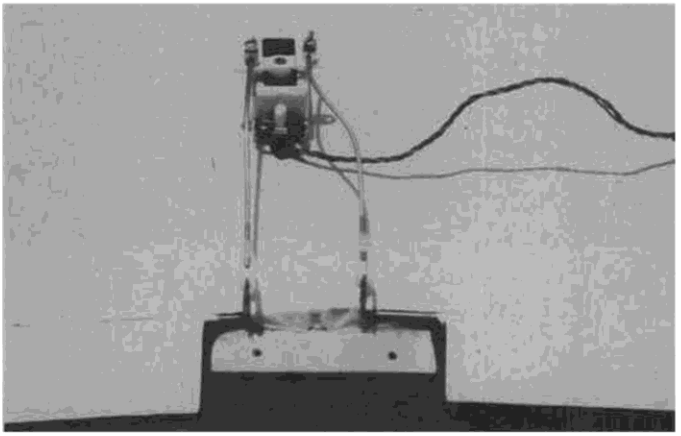
FULL SIZE PLANS AVAILABLE — SEE PAGE 144

Temporarily fit the stab to the fuse. and make up the elevator pushrod. Use two Kwik-Links and route one out each side. When the action of the elevators suits you, remove the stab and sheet the top of the fuselage. Add the noseblock and start shaping the fuselage. Use a razor plane, and carefully round the nose. The part over the wing has rounded corners and all points aft are round, or nearly so. Sand with 220 grit paper, and use a tack-rag to remove dust before covering.

Continued on page 113



Radio compartment. Elevator pushrod wire is bent in order to clear the aileron servo.



Aileron servo mounting. Servo is offset to one side to clear elevator pushrod. Wide, full-span ailerons are powerful!

Delight . . . . . *Continued from page 53*

COVERING

Use a low temperature film on the fuselage. With care, you should be able to cover it with 4 pieces. Take your time and work the material around the curves. I used covering material for the hinges, as well, but the choice is up to you. The wing and stab are covered in a normal manner.

ASSEMBLY

Epoxy the tip plates on the stab; when dry, epoxy the stab to the fuselage. Mount the elevator servo in the middle of the fuse with 1/4-inch spruce rails. Cut a hole in the wing's top sheeting and install the aileron servo with foam tape. Hook up the pushrods, bolt the wing on and try the controls. They should work without binding. A 500 or 550 mah battery pack fits in the nose, followed by the receiver. Don't forget to balance the model as per the plan. Do this by supporting the model by the wingtips, upside down. Install the canopy, if desired, and *Afternoon Delite* is ready to fly.

FLYING

Pick a day when the wind is blowing at least 10 mph. With the correct balance point and a working radio, give the model a hearty toss off the cliff. Remember to keep the speed up. The sharp leading edge makes the model go fast and penetrate well. However, it also stalls rather abruptly. Simply stated, keep the airspeed up until you feel out its characteristics. Once you're used to the way she flies, try some aerobatics. The heavier it is, the more you can do. I think you'll soon find that flying *Afternoon Delite* is the second most exciting thing you can do on a Saturday afternoon! •