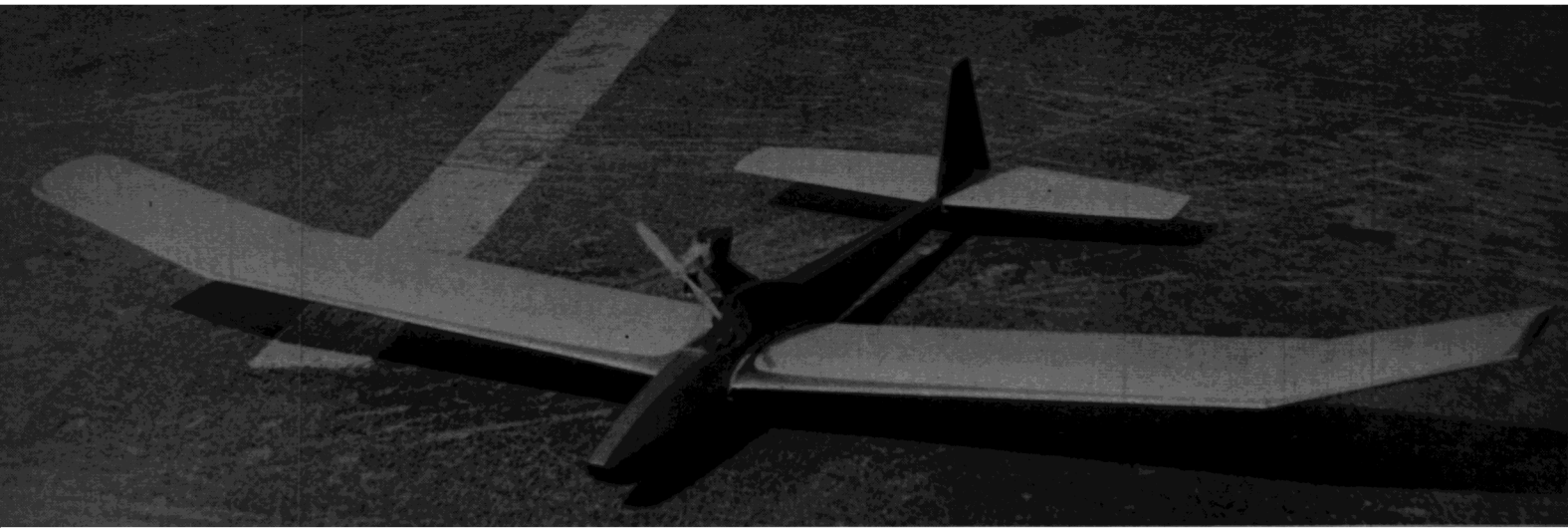


Lightly loaded, large in span, it is a floater.

Medium sized, fits nicely in a car, which helps.

Purists may shun the engine thrust, but it does a practical task. Towlining is an art, requires a good helper, smooth weed-free terrain. Engine gets you higher for more elusive thermals. Can be made detachable to fly it with or without.

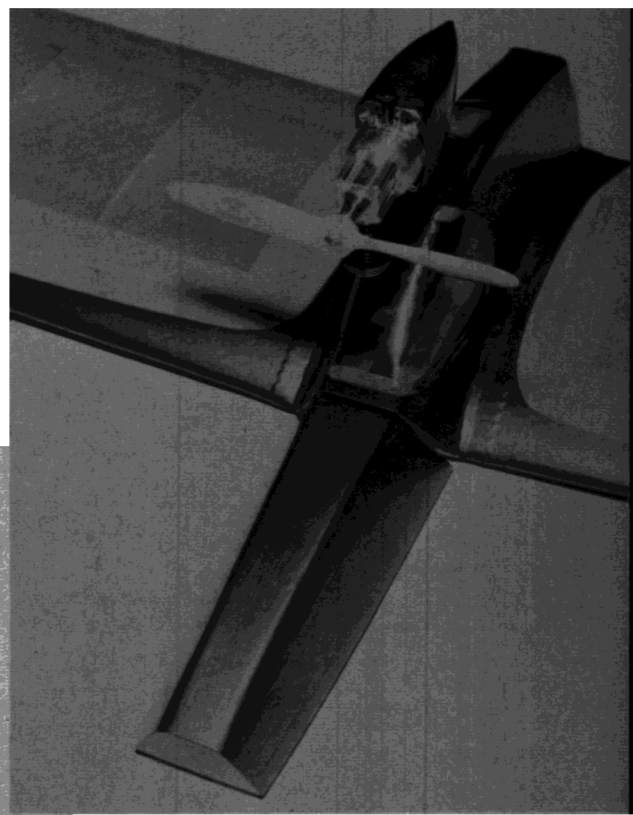
The mad scientist of Schenectady has concocted another:

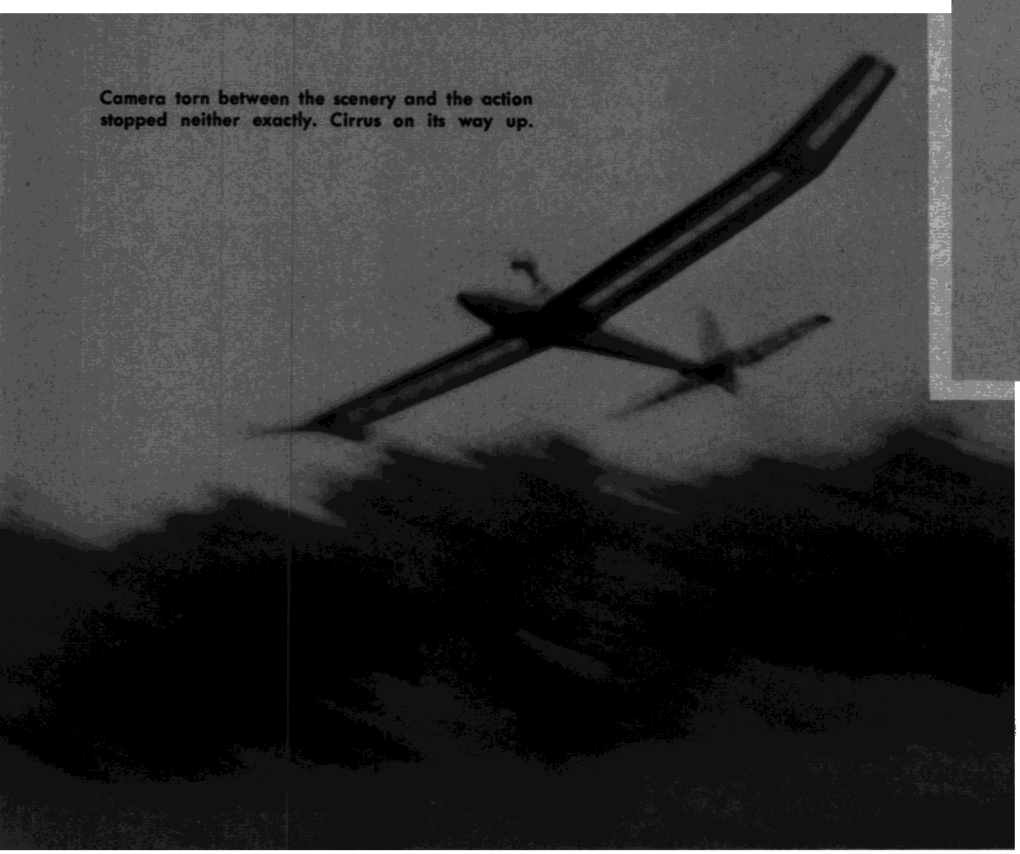
Ted Strader's

"Cirrus" Soarer

It thrives on an .049. Stuff it with Single Channel.

FULL SIZE "SPECIAL EDITION" PLANS AVAILABLE





Camera torn between the scenery and the action stopped neither exactly. Cirrus on its way up.

♦ There's something sobering about answering the phone and having a strange voice say in half humorous, half serious tones, "You're still alive! You haven't written or designed anything for so long that we were beginning to wonder!!"

The call did occur—made by a New Jersey modeler who happened to be in the Schenectady area on business and just decided to "let his fingers do the walking" so to speak, through the Tri-Cities phone directory until he found me—if I was still around to be found! To be sure, it makes you sit up and take notice.

So, forthwith and without more than

(Continued on Page 33)

a few weeks' delay, I decided to dust off the ole drawin' board, which I "hadn't been back to" in quite a spell, and scribble a few lines. I hope you like the result—which has been tagged "Cirrus" . . . a somewhat ethereal, yet fitting title—under the circumstances!

Originally, I had proposed that this ship would be strictly towline. During the course of contemplation, an idea "snuck" in from out of the blue (sorry about that) to design a removable power-pod. In the final analysis, the pod appeared and became permanently attached. There's no reason why you can't build a strictly towline version . . . if you enjoy running wildly forward while looking obliquely behind! In fact, I'll make a note right now to show alterations on the cabin bulkheads and all other parts affected so you can make either a towline or power version. . . . now, anyone who'd do that can't be all dead!!

Before the building is begun, take note of the plans anl photos to realize that the "Cirrus" is quite slim. We don't want you to get it two-thirds built only to realize that your old six tube single channel receiver won't fit!

This ship presents a minimum of flat plate area which makes for an efficient sailplane. Assuming that most modelers will use single channel equipment, everything you will require will fit quite neatly into place. Those who wish to add elevator control will either have to use the second compartment under the wing, or do as I have done (since taking the open hatch shot) and that is put the receiver up in the back compartment of the hatch cover and move the servo one compartment forward. The batteries have remained where they were. This shift was required to establish the proper balance.

In the event you plan to use an escapement for rudder movement, this should be mounted on bulkhead #3. The "Cirrus" was laid out with the weight of a single channel servo setup in mind. Using lighter equipment may necessitate the addition of some dead weight in the nose.

Construction: The center of building activity is a main crutch cut from ⅛" sheet. Because the profile of this is made up of straight lines, the outline can be transferred from the plan to a sheet of ⅛" x 3" x 36" by pin-pricking the points where the lines converge . . . then use a straight edge as a cutting guide. Make certain you denote the spots where the bulkheads mount. The exact dimensions of the cut-outs beneath the hatch and wing are not critical . . . so long as you have sufficient space in which to work, mount, and remove the equipment. Save the cut-out from the hatch area. When the hatch has been roughly constructed, this part is placed back in the area from which it was cut, cement applied to the top surface and then the hatch pinned into place. When dry, it becomes a key which eliminates any tendency of the hatch to shift sideways.

Cut out and cement all lower bulkheads to the crutch. Any alterations in control linkages should be taken care of at this time. Remove the crutch and bulkhead assembly from the bench and sand a slight bevel along both sides of the crutch so the lower sheet will lay flat against the bulkheads and make a good fit. Sand a bevel along the top of ⅛" sheets which form the lower side covering from bulkhead #3 back to the tail. Pin the crutch assembly back to the board and cement the side pieces in place. Do the same with the lower side sheets which go from #3 forward.

The portion of the crutch which fits aft of bulkhead #9 should be cemented in place. This acts as the stab platform.

Though we waited till the top was mostly finished on ours before adding the bottom sheeting, there is no reason why you can't sand off the sides while this portion of the fuselage is still pinned in place and add the bottom sheeting. Again, be certain you have allowed for whatever control linkage needed.

The top bulkheads (5T, 6T, 7T, 8T & 9T) are now cemented into place. Use the plywood cabin backbone to assist in arriving at the proper angle for bulkhead #5T. The hatch can also be constructed at this time and again the plywood cabin backbone will assist in getting the proper angle . . . this time for bulkhead 3H.

When the basic fuselage construction is completed, including the hatch cover, and sanded smoothly, the cabin can be built. The cabin also includes the wing center-section and plywood dihedral braces. Build the wing center-section in this manner: Lay down the bottom 1/16" sheeting, position the ribs, dihedral braces, the cabin backbone to which the ¼" sheet pylon sheets have been cemented and then bulkheads #4C and 5C in place. Let this dry thoroughly before going any further. (Note: If you decide to make your "Cirrus" strictly towline, alter the backbone and bulkheads as shown and eliminate the ¼" pylon sheets.)

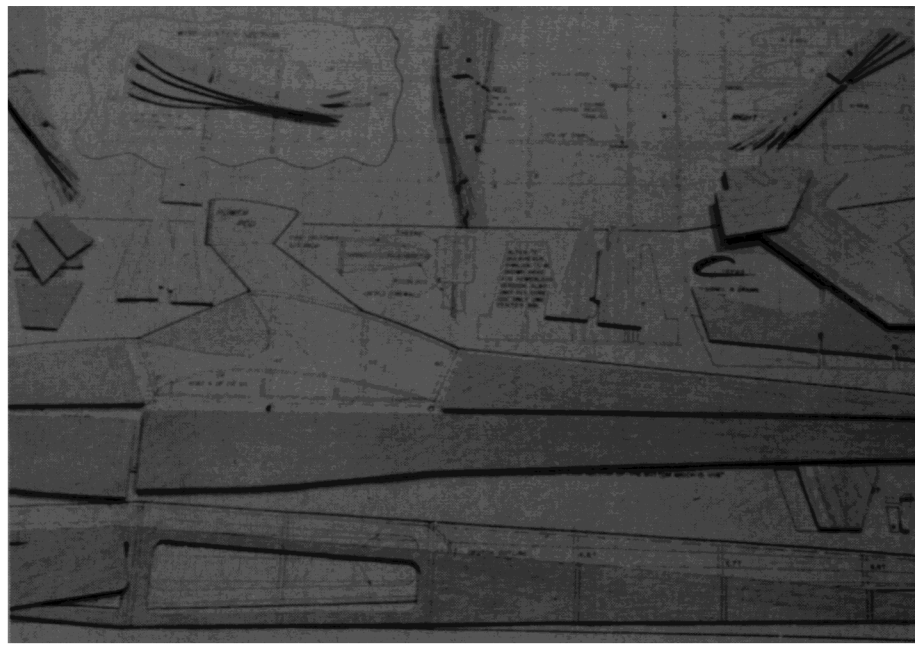
Once this piece of construction is sufficiently dry, remove it from the workbench and position it onto the fuselage (separated from the fuselage by a sheet of waxpaper) and fit bulkheads #3C and 6C (the numbering system became a bit awkward here!!) in place. This will make for a more uniform fit when finished. After this part has dried, the cabin side sheeting can be installed and then the top and pod completed. Of course, the 1/16" sheet over the ribs must be in place before fitting the cabin sides in place . . . (almost forgot that).

Aside from the dowels used to hold the wing and stab in place, all that remains is the noseblock (which you may have already taken care of) and the sub-fin. The 1/16" dia. steel wire which acts as a hinge pivot, plus skid, can be left until the Stab/Rudder assembly is built and fitted into place.

Wing: The two inboard wing sections can be built using the one plan layout (however, you must remove one before starting the other!!?). Begin this fun and frolick by pinning the 1/16" x3" x 24" sheets in place which make up the bottom leading and trailing edges. Position the spars and then cement the ribs in place. Next add the leading edge strip. This is a square strip which is quite easily sanded to outline after the top sheet has been cemented in place. Be sure the end ribs have been slanted slightly to accommodate the dihedral configuration when inner and outer panels are joined. Cement the ⅛" x ¼" spar to top of ribs and add top leading and trailing edge sheets.

Construction of the outer panels follows similar technique used on the inner panels. When the entire wing was completed and all parts joined together, add narrow strips of cotton cloth around each of the four joint areas.

Stab and Rudder: The photos show the original with elevators and the plans show the size suggested; however, once completed, I glued mine in neutral and have no plans of ever using them. You may wish to build your horizontal stabilizer in one piece. If this is the



case, it would seem that the easiest way to go about it would be to build the stabilizer portion as shown on the plans and simply cement the elevator pieces in place then and there.

The construction is simply a sandwich approach with geodetic placement of the cross members. Lay down the bottom sheet pieces, add the 1/8" x 1/2" and 1/8" x 1/4" strips and then cement the top sheeting in place. Sand the leading edge round and taper the trailing edge of the elevator somewhat if you prefer. I merely rounded off the edges and let it go at that. The fin is constructed in a similar manner. The rudder is a two piece sandwich of 1/8" sheet, similar to the elevators. Thread hinges are used in two spots with the bottom hinge mde up of a short length of 1/16" i.d. brass tubing which mates with that bent wire hinge pivot we mentioned a while back. The reason for this arrangement is so the stab/rudder/fin assembly is removable. It works fine as long as you take a little care positioning the lower hinge so it is in line with the total fin/rudder hinge line.

Finish: The original is completely covered with silk with the exception of the rudder . . . and I still don't know why I didn't cover that part. It wasn't a lack of silk . . . I think it was a lack of ambition that caused this part to be neglected.

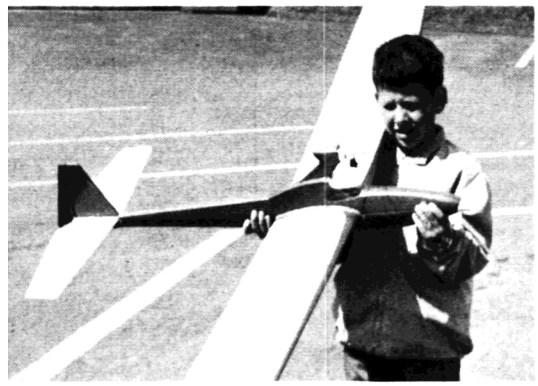
The color scheme is yellow wings sealed with six coats of clear; and blue fuselage covered with four coats of clear and two coats of blue pigmented dope.

Total flying weight is 30 ounces. This breaks down to the fuselage with all equipment in place and the stab and rudder attached weighing in at 15½ ounces; the wing with Cox .049 attached, weighing in at 14½ ounces. Projected wing area, not counting the center section is 540 square inches or 3.75 square feet. This makes the wing loading 8 ounces per square foot. My best guesstimate is that the ship glides at about 6 to 8 miles per hour.

(For those of you who like the figures a bit finer: the fuselage, less all equipment weighs 4 ounces and the stab-rudder and fin combo weighs 3 ounces. This leaves 8½ ounces which constitutes 5 pencells—two for the single channel Controlaire superhet and 3 for the Royal rudder servo.)

Flying: Balance reasonably close to the point shown on the plans. If anything, have your ship a trifle nose heavy. (That means it's better if your "Cirrus" balances at a point a little ahead of the spot shown rather than a bit behind.)

Pick a nice long lawn devoid of trees for your glide testing. The speed of a gentle trot and equally gentle forward thrust is all that's needed to get the "Cirrus" up to flying speed. Your glides should be quite slow and straight. When you're satisfied that all is in readiness, the rest is up to you. Good luck and Good Flying. ●



Eric, what do you think of Dad's new soarer? Say something nice Eric. Think of something!!