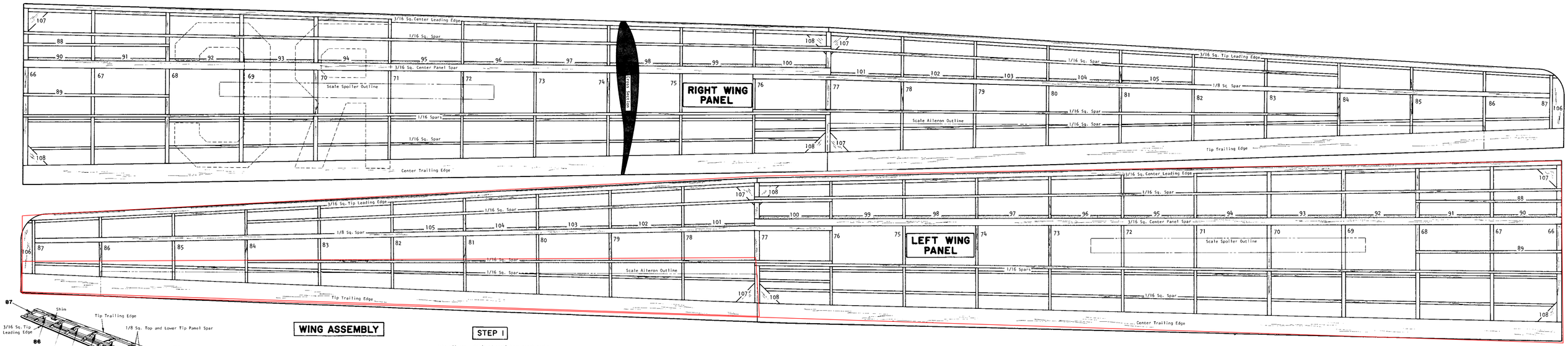
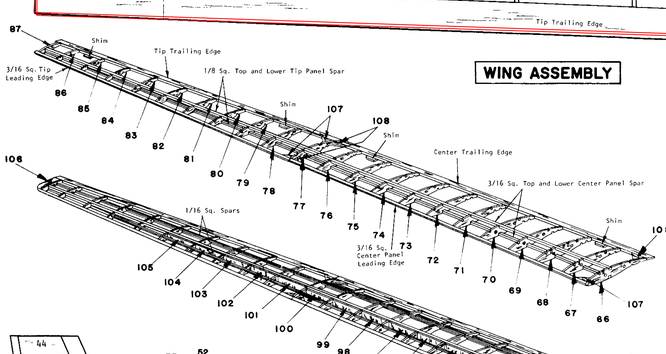
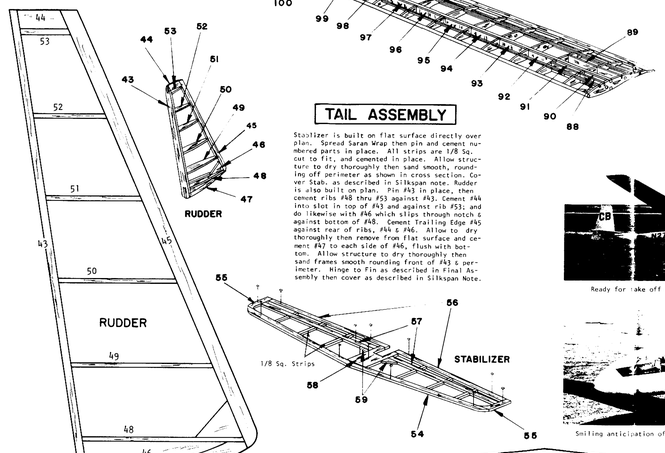


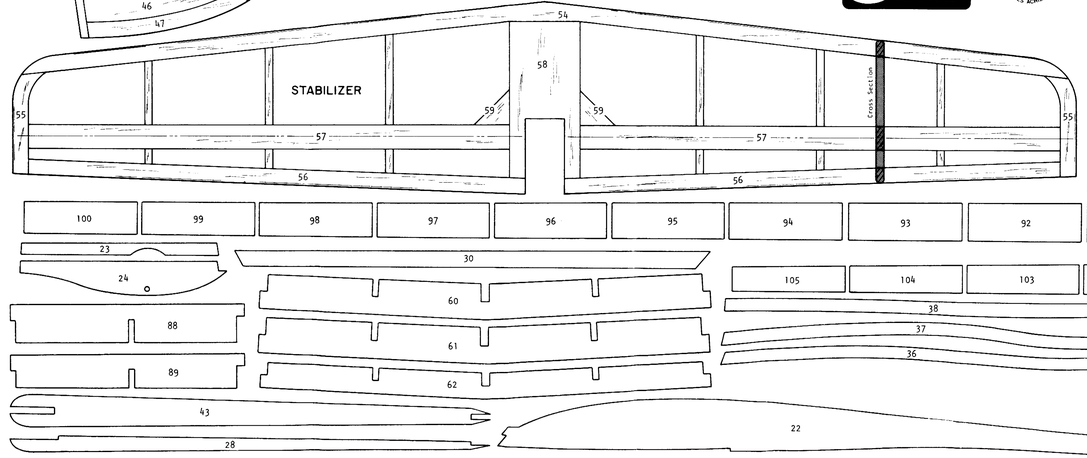


WING ASSEMBLY



TAIL ASSEMBLY

Stabilizer is built on flat surface directly over plan. Spread Saran Wrap then pin and cement numbered parts in place. All strips are 1/8 Sq. cut to fit, and cemented in place. Allow structure to dry thoroughly then sand smooth, rounding off perimeter as shown in cross section. Cover Stab. as described in Silkspan note. Rudder is also built on plan. Pin #43 in place, then cement ribs #48 thru #53 against #43. Cement #46 into slot in top of #43 and against rib #51; and do likewise with #46 which slips through notch & against bottom of #48. Cement Trailing Edge #45 against rear of ribs, #44 & #46. Allow to dry thoroughly then remove from flat surface and cement #47 to each side of #46, flush with bottom. Allow structure to dry thoroughly then sand frames smooth rounding front of #43 perimeter. Hinge to Fin as described in Final Assembly then cover as described in Silkspan Note.

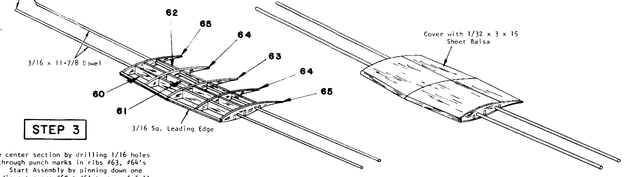


STEP 1

Ribs #66 thru #70 (2 of each) have punch marks thru which 3/16 holes are drilled. Start hole with 1/16, then 1/8, and finish with 3/16 drill; to be sure hole is round and clean to receive the 3/16" Dowel Wing Joiners. Build wing directly over plan. Spread Saran Wrap then pin 3/16 Sq. Lower center-panel Spar, followed by 1/8 Sq. Lower tip-panel Spar. Note they are cemented together between ribs #76 and #77 as they are pinned in place. Cement ribs #66 thru #87 in place as shown, then cement top 3/16 Sq. Center-Panel Spar and 1/8 Sq. Tip Panel Spar in place in notches; again cementing them between ribs #76 & #77. Cement Trailing Edge section against back of ribs. Front of Trailing Edge must be raised up with 1/16 Strips (Shims) as shown, so that angle will fit curve of ribs. Rear of Trailing Edge rest on flat surface. Center and tip Trailing Edges are butted and cemented together at rib #77. Cement 3/16 Sq. Leading Edges to front of ribs as shown, joining at rib #77. Cement triangular Gussets #107's & #108's into corners of panels as shown on sketch and full size drawings.

STEP 2

Cement wing tip #106 against rib #87, centered between Leading and Trailing Edges. Cement rib supports #88 & #89 between ribs #66 thru #68 as shown in sketch and full size drawings. Cement die-cut vertical webs (by the number shown) to front of cap & bottom Spars. Because wing tapers, so do webs. End mark C faces away from tip so tapered web is installed properly. Cement the front & rear 1/16 Sq. Top Spars into notches in ribs as shown. Allow structure to dry thoroughly (overnight preferred) before removing from flat surface, then remove and cement the two 1/16 Sq. bottom Spars to Center Panel and the one 3/16 Sq.Spars to the Tip Panel. After bottom 1/16 Sq. Spars are in place, frame should again be pinned down on flat surface until cement is thoroughly dry to prevent Warping. Opposite Wing Panel is built in same manner.



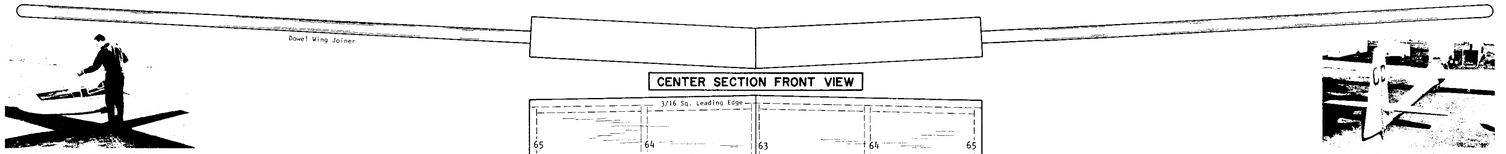
STEP 3

Assemble center section by drilling 1/16 holes (only) through punch marks in ribs #63, #64's & #65's. Start Assembly by pinning down one side of die-cut spars #60 & #61 to top of full size drawing. Cement ribs into notches as shown, add 3/16 Sq. Leading Edge and allow assembly to dry thoroughly. When dry, remove from flat surface and cement die-cut Spar #62 in place from bottom. Allow to dry thoroughly making sure that no twist has developed. 1/16 holes drilled into ribs are now enlarged to 3/16. Round off one end of each of the four 3/16 x 11-7/8 Wing Panel Joiner-Dowels and insert opposite end into holes joining at center rib. Cement securely in place against spars and ribs. Check angle of Dowel with front view drawing. Allow to dry then cover top & bottom of center section using 1/32 x 3 x 15 Sheet Balsa, seams joining over #62 and center rib as shown. Trim flush with outer ribs. Center section is ready to be installed as described in final assembly.

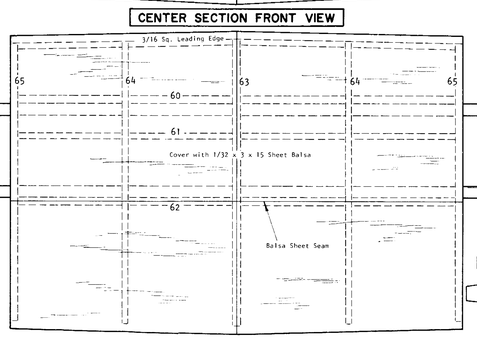
Ready for take off now in only a few minutes.

Smiling anticipation of a beautiful and smooth flight.

...and here's how the Canopy goes in place.



CENTER SECTION FRONT VIEW

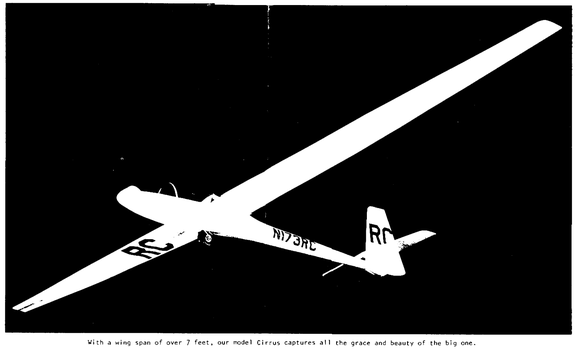


CENTER SECTION ASSEMBLY

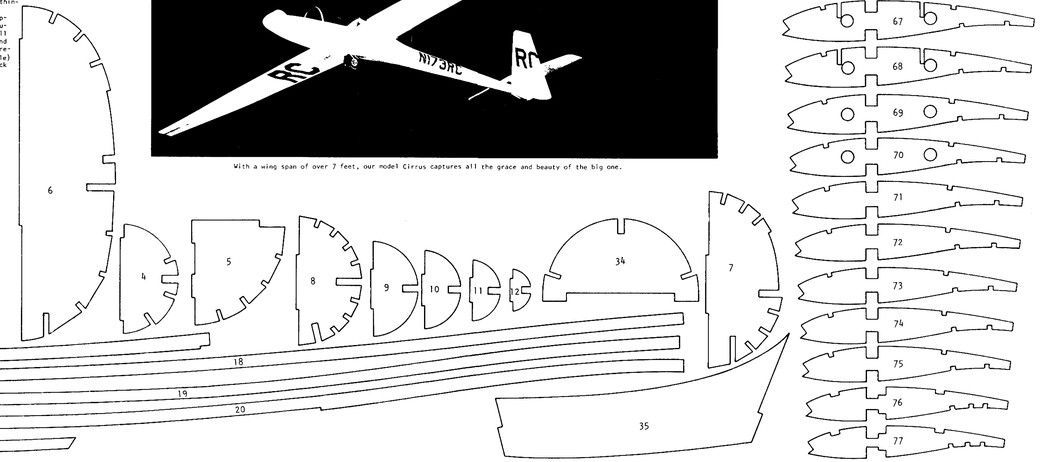
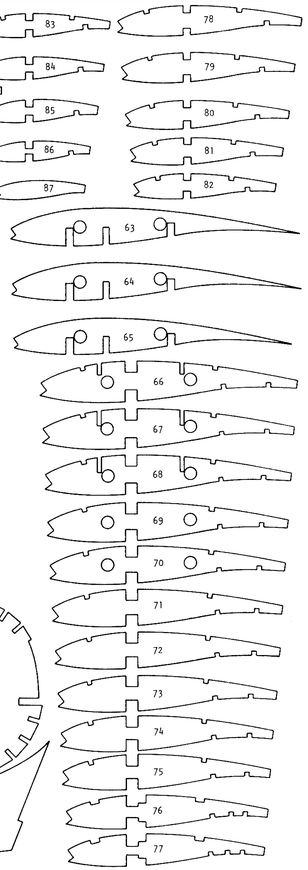
Rear shot shows Cirrus graceful at any angle.

SILKSPAN TISSUE COVERING

The finest grade wet strength Silkspan Tissue provided in this kit, permits covering of most compound curves without wrinkling, WHEN MOISTENED WITH WATER BEFORE APPLYING TO FRAME. Although tissue packed in kit may be wrinkled, these wrinkles all come out when tissue, (after being cut to pattern size) is placed on flat surface and thoroughly moistened with water. Tissue shrinks (when dry) to tight smooth surface. Use clear dope to attach tissue to frame as follows: Apply a coat of dope to the outside edges of the area to be covered. When dry, cut tissue to shape needed, about 1" oversize. Place tissue on flat surface and dampen with water-moistened cloth by dabbing. Apply a second coat of clear dope to the outer edges of the frame, then place moistened tissue on frame. Pull tissue GENTLY WITH FINGERS working out all wrinkles. WHEN COVERING WING AND TAIL SURFACES, PIN FRAMEWORK TO FLAT SURFACE TO PREVENT FRAME FROM WARPING AS TISSUE DRIES. Any area that wrinkles can be recovered by trimming out area (bounded by nearest framework) and then recovering in same manner. COVER WING FIRST: Cover top of center section first in two pieces, joining pieces in center. Botton is covered in same manner being certain to apply dope to entire Bottom Panel, so that tissue adheres to Airfoil curve. Top of Wing is covered in two pieces. First section from Rib #66 to Rib #77 and second section from Rib #77 to Tip. Botton is covered in same manner, except that the rear portion of Ribs that has the reverse curve (under Camber) must also be coated with clear dope so that tissue adheres to it and follows the curve. COVER TAIL SURFACES NEXT: Hinge Rudder & Fin as described in final assembly or R/C detail; then cover each side of Rudder and Fin and also top and bottom of Stabilizer with one piece for each side. COVER FUSELAGE NEXT: Fuselage from #8 to rear is a straight taper which allows covering of each half with one piece, fairing Tissue into bottom of Fin. Be careful to allow first side to dry thoroughly. When trimming covering on second side be careful to use a Sharp Razor & Trim tissue right in the center of the Center Keel. Fuselage front is a series of compound curves and must be covered in small sections to avoid wrinkling. Original model was covered 2 stringer widths at a time, from front to bulkhead #8. Care must be taken to avoid wrinkles. Section over wing is constructed and covered as described in Final Assembly Note. After the tissue covering is complete, apply 4 coats of thinned dope (3/4 dope, 1/4 thinner) to all tissue covering, holding surfaces flat to prevent warpage, while dope is drying. Company models required 2 additional coats of straight dope to fill pores before color was applied. Check Wings and Tail Surfaces, before assembly. Warps can be removed by holding over steam (from boiling kettle) and twisting gently in opposite direction. Check again when cool.



With a wing span of over 7 feet, our model Cirrus captures all the grace and beauty of the big one.

DIE CUT PART NOTE

All die-cut parts used in construction are shown full size either on full size Plan or individual layout. This will enable you to duplicate any part should it become necessary for any reason. Die-cut parts contained in sheet as furnished in kit are also available from the factory as replacements