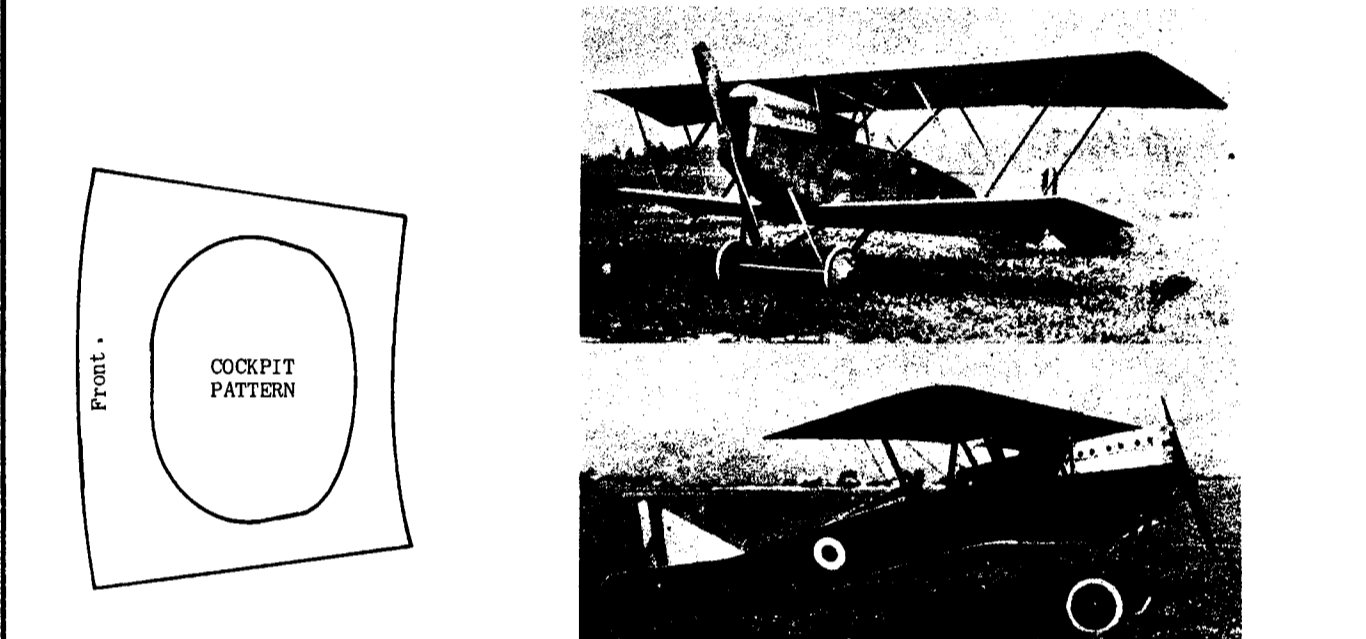
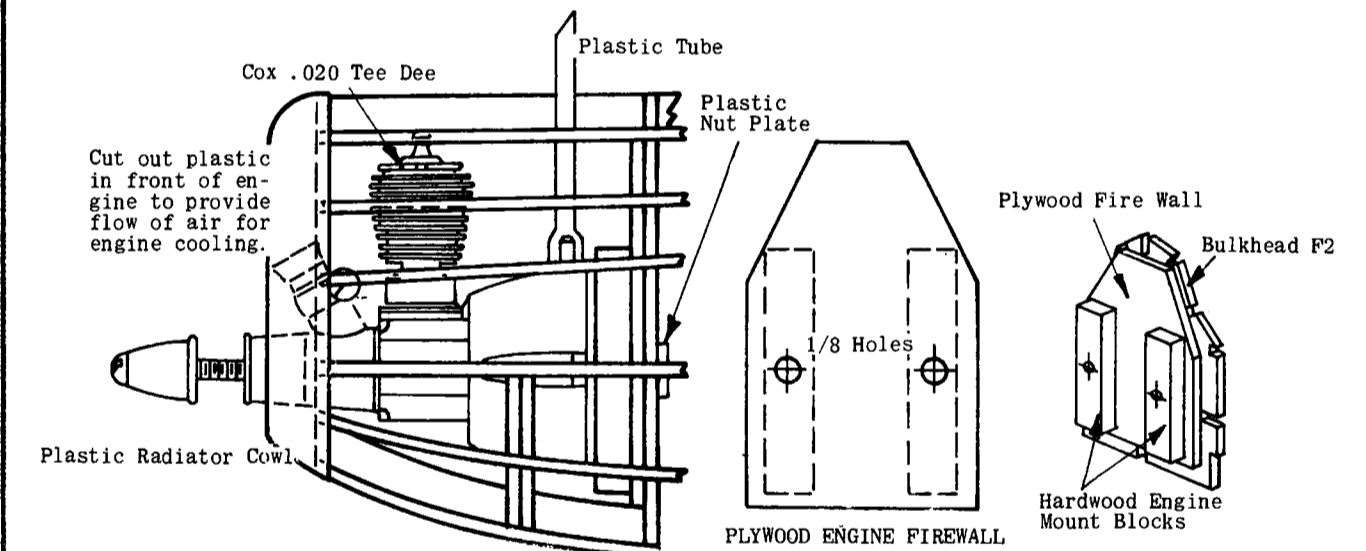


FINAL ASSEMBLY

Assemble and trim all plastic parts, see detail note. Cement cowl to P1 Cement stabilizer horizontally to top rear of fuselage. Cement rudder to top of stabilizer and against rear of fuselage in line with L2. Cement lower wing in place on bottom of fuselage. Lining up double ribs with fuselage sides. Check that both tips are same height from flat surface. Lower wing must be dry before proceeding. Prepare all struts as shown & described in detail note. Pin temporary wing support WS to top of L1, 1" back from rear of P1. Pin top wing in place, center ribs 1/2" over WS. Insert outer struts into gussets in top & bottom wings as shown, and cement in place, making sure wings are parallel with each other. Insert longer center struts into wing and L8 & L9 gussets as shown. Complete by installing short center struts into wing & L10 & L11 gussets. Use two coats of cement on all strut attachments, allowing drying time between coats. It is necessary to have access to rear hook to replace rubber motor. Fit a piece of 1/16" balsa between F7 & F8 on side of fuselage from L6 to bottom stringer. Cut out stringer in between. Cement cloth tape to top end, half over door to act as hinge. Hold free end with Scotch Tape. Open when installing rubber motor. Complete propoganda leaflet mechanism as described in detail note. Make landing gear struts as described in detail note. Cement front struts over wire landing gear as shown. Slip top of rear struts into notch in WT in lower wing. Top remains free to provide shock absorbing travel. Securely cement SB



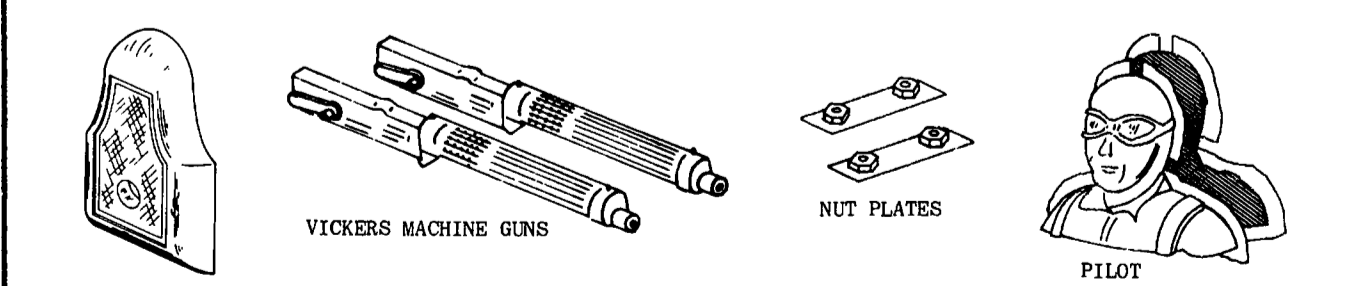
Factory new Ansaldo's awaiting delivery



ENGINE INSTALLATION

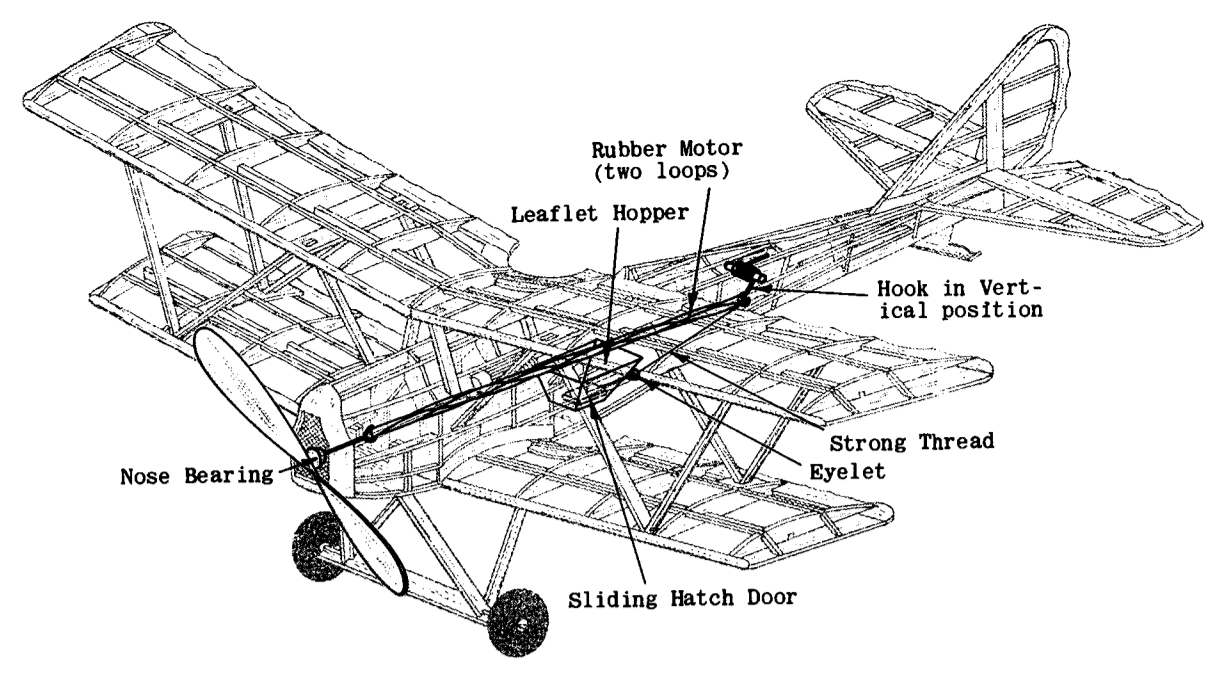
Engine is used if model is being built for control line, free flight or radio. Engine & installation material not provided in kit. Drawing shows installation of Cox .020 Tee Dee engine, however, any other similar engine may be used. Front of model should be covered with 1/32" or 1/16" sheet balsa back to F6. Top is cut out for engine clearance. Obtain a piece of 1/16" plywood & cut engine fire wall, using full size drawing, drilling holes indicated. Cut two engine mount blocks 3/16" x 1/4" x 1/4" from hardwood. Cement them securely to plywood fire wall in position shown. When dry, drill 1/8" holes thru blocks & fire wall. Mount engine to fire wall with #2 nuts & bolts, tightening nuts securely. Cut plastic nut plates from molded sheet & securely cement to back of wire wall over nuts, drilling hole thru so that bolts can protrude. Use cement generously. Nut plate keeps nuts from turning

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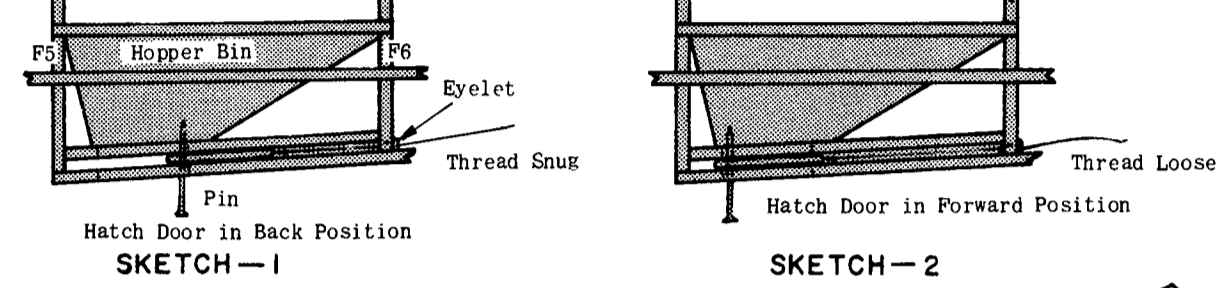
PLASTIC PARTS DETAIL

For best results, follow instructions carefully. PILOT: Cut halves from plastic sheet, leaving about 1/16" excess material. Carefully cut out slots on excess material (about 1/8" wide) on top, bottom and both sides, right to the edge of the pilot itself as shown. This will permit accurate assembly of halves. Cement halves together, lining up carefully at slots. Use plastic or model airplane cement when assembling and attaching plastic parts in place. Use SPARINGLY, since excessive use of cement may distort the plastic. After assembly is thoroughly dry, trim and sand off smooth. After painting (first read Pilot Instructions at end of this note) pilot is cemented in cockpit as shown in side view. NUT PLATES: Cut from sheet and install behind firewall as described in Engine Installation. COWL: Cut from sheet, leaving about 1/16" excess material. Trim excess material carefully and sand smooth. Cowl may be placed on F1 for support while trimming and sanding. Install as described in Final Assembly or Engine Installation. MACHINE GUNS: Cut from plastic sheet and install as shown. Paint Olive Drab and cement in place after model is painted. PAINTING: Use regular plastic model paint or enamel. Model airplane paint can be used ONLY IF APPLIED IN LIGHT SPRAY COATS, allowing paint to dry thoroughly between coats. Excessive use of dope may deform plastic. Parts may be used red. If painting a lighter color, apply a light coat of silver, followed by a light coat of white; before painting final color. Darker colors may be applied directly to red plastic. When cementing parts in place on model, use light coats of cement applied SPARINGLY. If necessary, use more than one coat, but DO NOT APPLY A THICK COAT AT ANY TIME.



AUTOMATIC LEAFLET DROPPING

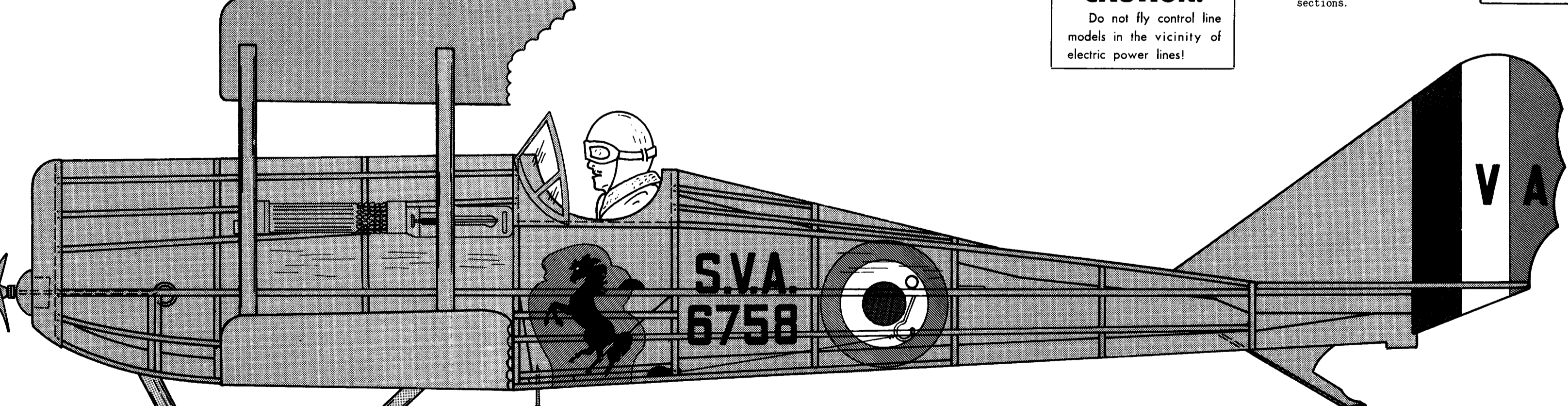
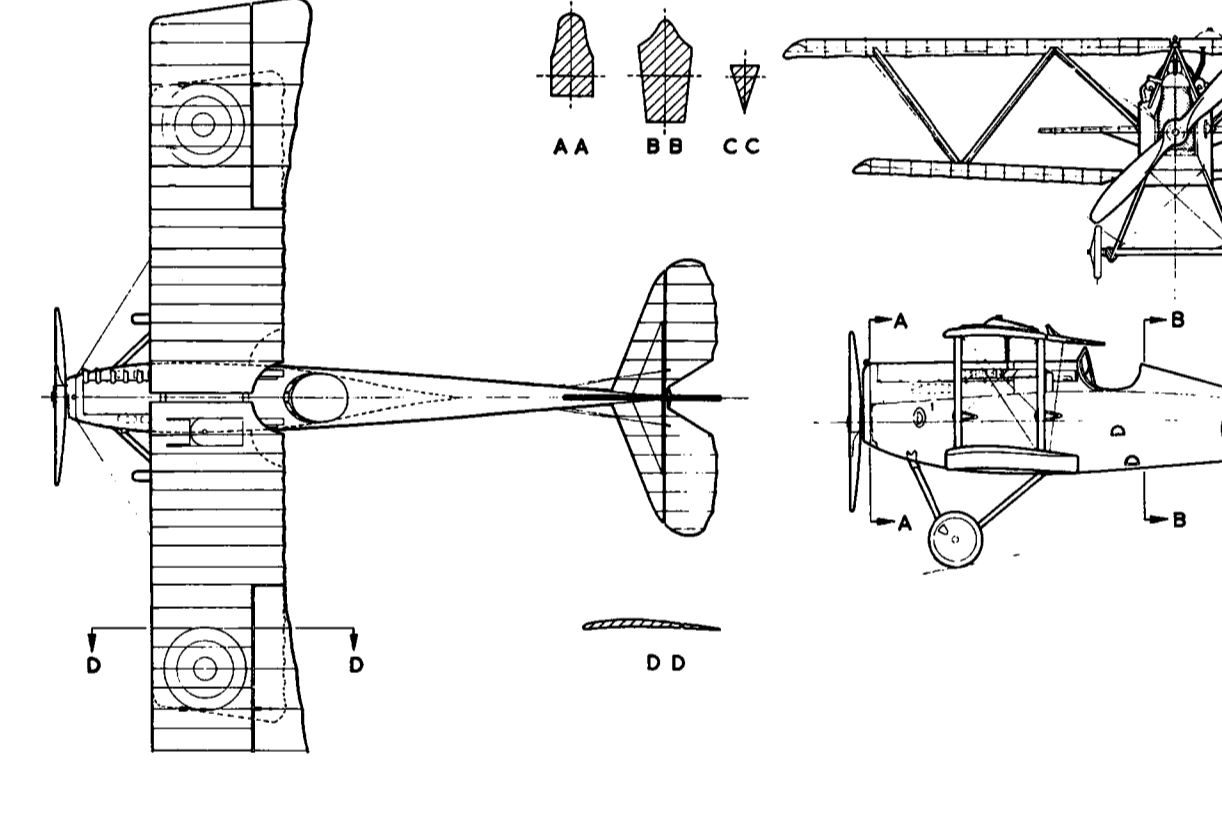
Automatic leaflet dropping in flight operates on rubber powered models only. Installation is simple and action is positive, if instructions are followed carefully. Make hole and cement eyelets in bottom of bulkhead F6, against left side of center keel. Insert thread from rear of hatch door back until pin is against rear of opening. Then tie thread to rear hook while hook is in vertical position as shown above. Thread must be snug when hatch door is in this position as shown in sketch #1. Coat knot with cement. This completes mechanism. To operate Wind rubber motor. This will pull rear hook forward to a horizontal position, loosening thread. Turn model over and pour confetti or small squares of paper into hopper. Loose thread now permits moving the hatch door forward, closing off hopper as shown in Sketch #2. Model is now released, and towards end of flight when motor unwinds, rear hook pulls back into vertical position. This tightens the line, pulling hatch door open, permitting leaflets to drop out.



HOPPER ASSEMBLY DETAIL

Cut Hopper from stiff paper, using pattern provided. Fold on dotted lines and cement together at glue flap. Cement a length of 1/16" sq flush with both sides of K as shown. Sand moving hatch door J smooth and slightly thinner than thickness of 1/16" sq strips on K. Cement 1/4" length of 1/16" sq across door, 1/16" from front. When dry, insert pin thru center of strip as shown, with head on bottom. Cement securely in place, clipping off top of pin so that 1/4" is above & also below door. Pin acts as handle and door stop. Make pin hole 1/8" from rear then tie a 6" length of thread thru hole. Cement in place & allow to dry. Cement slide assembly together by sandwiching J between K and I. J must move up and back freely and easily; if not, sand thinner until it does. When dry, hopper and slide unit are installed as described in Fuselage Step 3. Be certain hopper slide is also cemented to bottom of paper hopper.

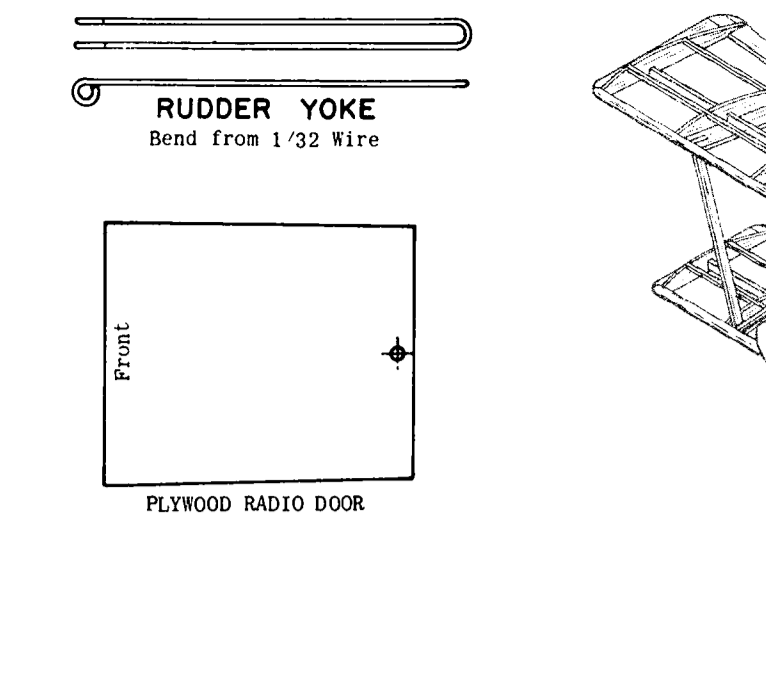
ANSALDO S.V.A.5 SPECIFICATIONS AND COLOR SCHEME



The mainstay of the Italian Air Force until the end of the first World War was this long range scout-fighter. The Ansaldo S.V.A.5 was also used for propaganda purposes. Our model DCR'S LEAFLETS just like its real-life counterpart did, automatically in flight.

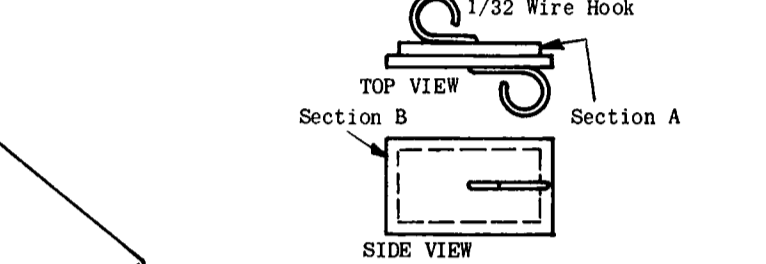
FLIGHT INSTRUCTIONS

When model has been completed, it must balance at point shown on side view. DO NOT ATTEMPT TO FLY MODEL UNTIL BALANCE HAS BEEN ACHIEVED, and weight, if necessary, check wing and tail. If warps have developed, remove using steam method described in Silkspan Step. Model is now ready. Pick a calm day for test flying. On rubber powered models, wind propeller clockwise approximately 100 turns and launch into any prevailing wind slightly nose down at a point on the ground approximately 50 feet ahead of you. If model noses up and then falls off and stalls, (AFTER MODEL WAS BALANCED) then bend elevators down slightly using hot breath in same manner as steam. If model dives, bend elevators up. If model veers too much to one side, bend rudder to opposite side. Take-offs require more power and therefore more turns in rubber motor. For longer flights and competition, it is recommended that the loops of rubber be lubricated with model lubricant (Available at most Hobby Shops) or Castor Oil. Apply sparingly and KEEP OFF KNOT OR IT WILL COME UN-DONE! Use winder which you can make by tightening hook into hand drill. To store winds in motor, stretch rubber out three to five times original length, then proceed to wind, moving slowly back to model. Feeling rubber from time to time to be certain it does not get so taut that it breaks. Upon reaching the nose motor should be completely wound. When replacing rubber motor, purchase contest grade T56 brown rubber at your favorite hobby shop. Engine powered free flight models are tested and flown in same basic manner as above and as described in Flight Instructions at end of Radio Control Installation Note. GOOD LUCK AND GOOD FLYING!!!



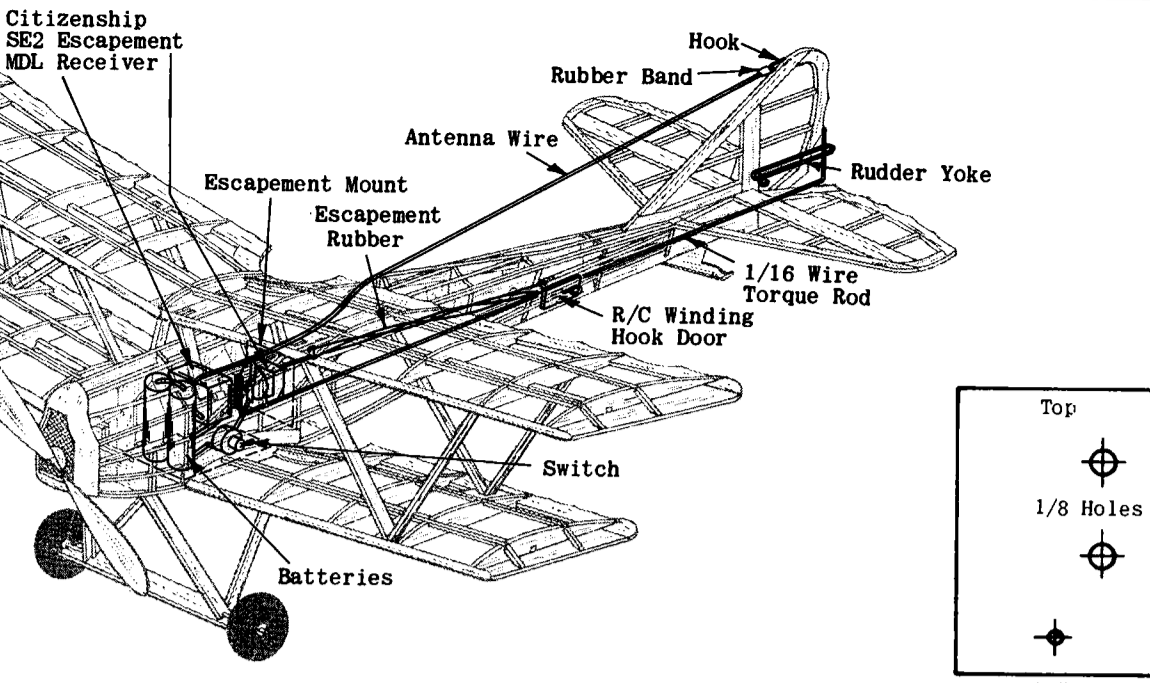
RADIO CONTROL INSTALLATION

Test models used and drawing shows, Citizen-Ship MDL Receiver, SE2 Escapement, used with SPX Transmitter. This equipment and other material necessary is not provided in kit. Radio is installed after lower wing is cemented in place as described in Final Assembly. Access to R/C equipment is thru 1/16" plywood (not provided) door made using full size drawing above. Door fits between outer ribs W. Cut out center rib WA back to WT6, and fuselage keel above it, as well as 1/16" sq spars Cement 1/8" x 3/16" x 1-1/4" hardwood strip, across front of WT6, recessed 1/16". to act as door stop. Cement cloth tape to front end, half over door, for hinge. Rear of door is held with small wood screw into hardwood strip. Cut rudder apart at location shown by dotted lines. Cement back in place with cloth hinges. Bend wire yoke from 1/32 wire, install on rudder with 2/56 nut & bolt. Trim bulkhead P4 so that escapement fits. Cut escapement base from 1/16" plywood and mount escapement, then cement to front of bulkhead F5 as shown. Cut a



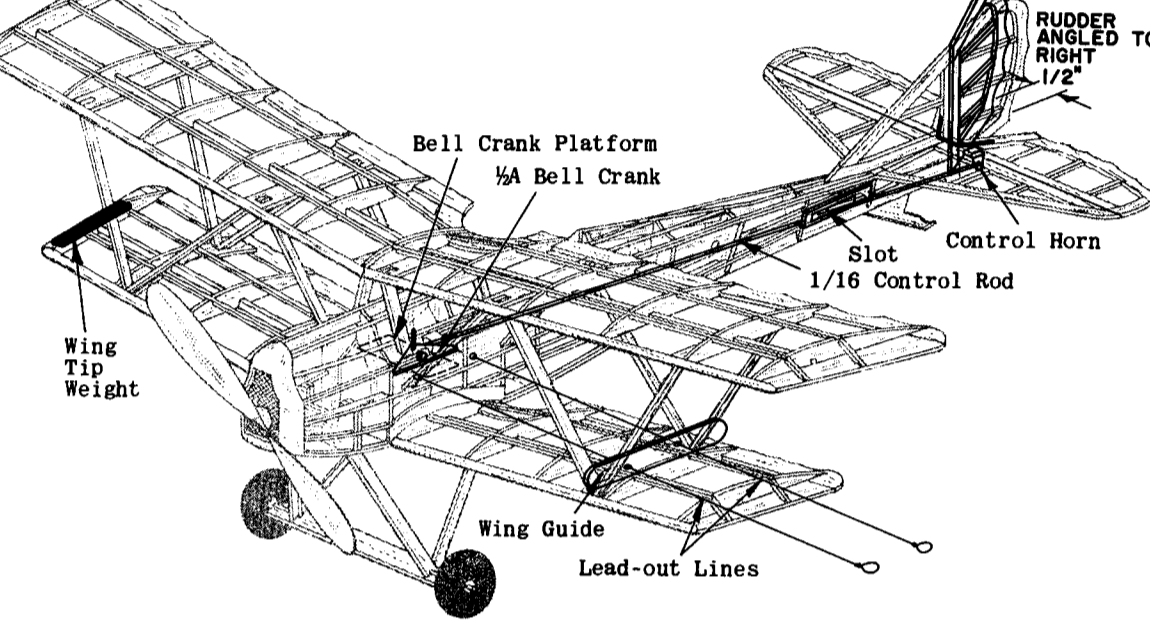
R.C. WINDING HOOK DOOR

Cut out stringer above side keel between F7 and F8 and inset 1/16" balsa flush. Cut out section to shape of part A (see sketch) and cement it to a piece of 1/16" balsa cut to shape of section B, grain running crosswise, to form door. Bend half of hook shown from 1/32 wire and push straight end thru door. Bend hook in other end and cement securely to door in position shown. Place loop of rubber between escapement and inner door hook.



RADIO CONTROL INSTALLATION

3/32 slot in rear of fuselage for torque rod. Using a length of 1/16" wire at least 18" long, insert thru hole, then bend "U" in front of wire according to R/C manufacturer's instructions and as shown above. Pull back and engage U in escapement. Bend rear at right angle as shown, to engage in yoke. Cut off wire 3/4" above yoke. Raising and lowering yoke will increase or decrease the amount of rudder movement. Wire all radio equipment together in accordance with R/C manufacturer's instructions. Batteries are stored between F2 and F3. After they have been soldered, line compartments with foam rubber, then insert batteries. Wrap receiver with foam rubber and place in fuselage in same compartment behind batteries. Close radio mount door and secure with screws. Bend small wire hook for antenna attachment and cement to front of rudder. Bring antenna out of cockpit and fasten to hook with rubber band as shown. When model has been completely finished, it must balance as shown on side view. If necessary, add weight but DO NOT ATTEMPT TO FLY UNTIL BALANCE HAS BEEN ACHIEVED. Check wings and tail for warps; if any have developed, remove with steam method as described in Covering Instructions. Wait for calm weather for test flights. Field test R/C equipment before flying, as described in manufacturer's instructions. Start engine and THROTTLE DOWN TO LOW SPEED, then launch model with nose pointed slightly down at a point 50 or 60 feet in front of you and release at approximate flying speed. Model should fly in a straight line and either maintain or slightly lose altitude. If model turns to either side, rudder or engine may be off set to opposite side to achieve a straight flight, which is how it should glide and fly. If model glides well but stalls under power, point front of engine down (down thrust) by placing shim under top of fuel tank. Increase engine RPM as adjustments are made, checking R/C controls before each flight. GOOD LUCK AND GOOD FLYING!!!



CONTROL LINE INSTALLATION

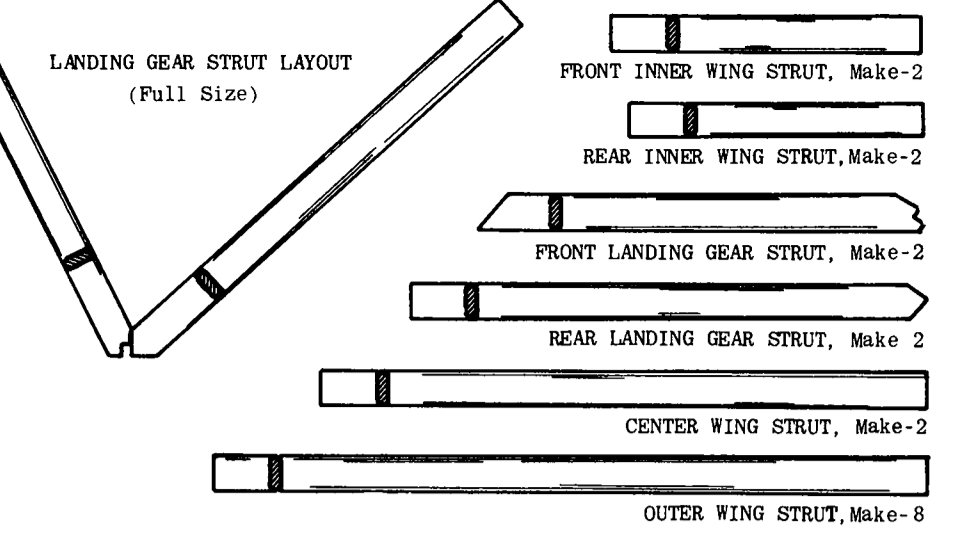
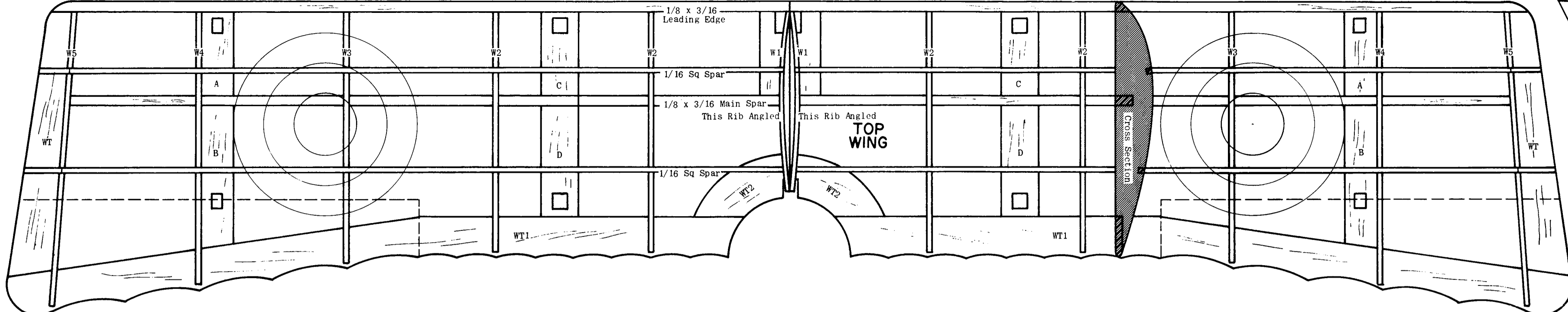
Materials required are not provided in kit. Make bell crank platform from 1/16" plywood using full size plan above. Securely cement across L6's against front of F8. Fill in area from F9 to F10 between L6 and stringer below it in same manner. Cut two 14" lengths of lead-out lines and fasten them to bell crank. Push rod is 1/16" wire at least 13" long. Make a right angle bend at one end. Place in fuselage, insert in bell crank, and mount assembly to plywood platform as described in instructions that come with bell crank. Cut stabilizer in half thru wide main spar as indicated by dotted lines. Round edges & install control horn at location shown on drawing, then join together with cloth hinges shown. Bend "U" shape elevator joiner from wire. Make hole for joiner in rudder - then cement spurs to both elevators in position shown. Elevators now move as one unit. Cement stabilizer horizontally in place against F10. Tape elevators in neutral position (in line with stabilizer, neither up or down). Make right angle bend at rear end of control rod at precisely the location of hole in elevator horn, with bell crank in neutral position as shown.



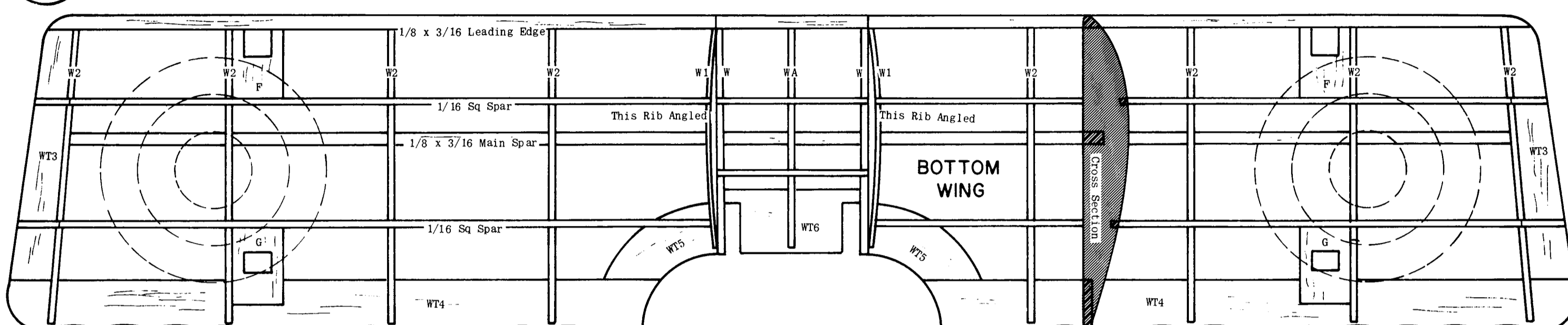
CAUTION:
Do not fly control line models in the vicinity of electric power lines!



L24U74
STERLING MODELS PHILA. PA. USA
KIT A18 WING SPAN 19"



STRUT DETAIL
All Struts shown full size are made from 3/32 x 1/4 strips provided in kit. Round edges to cross section shown and cut to pattern. Struts are installed as described in Final Assembly Note.

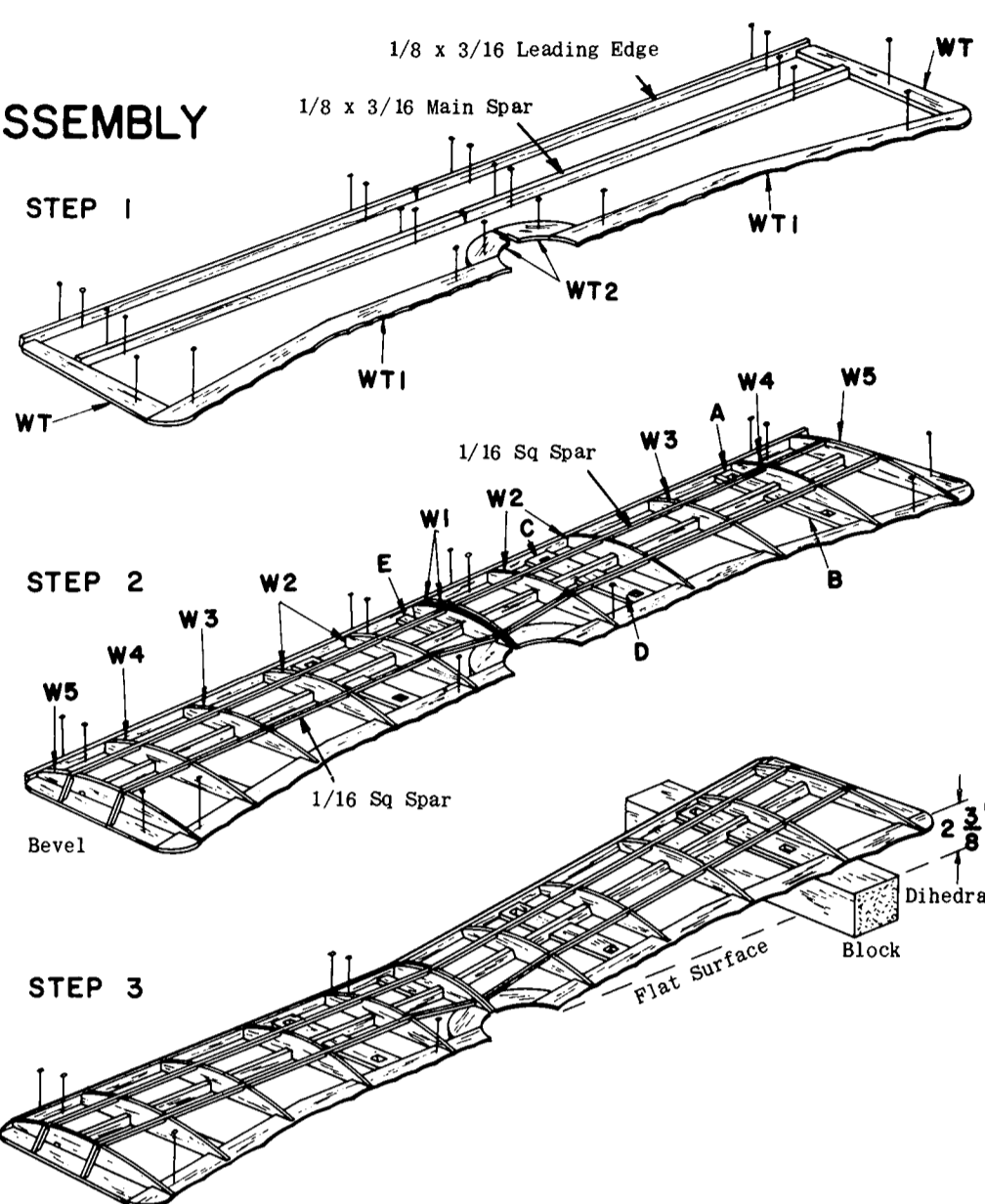


TOP WING ASSEMBLY

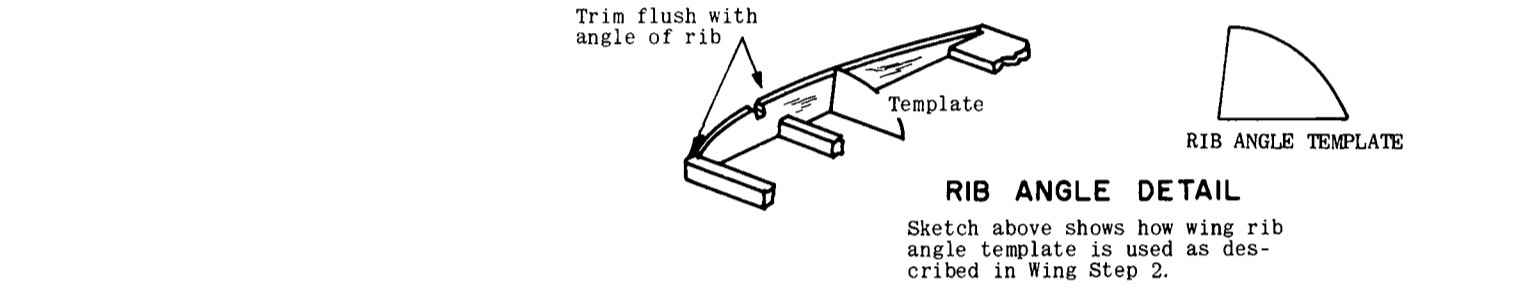
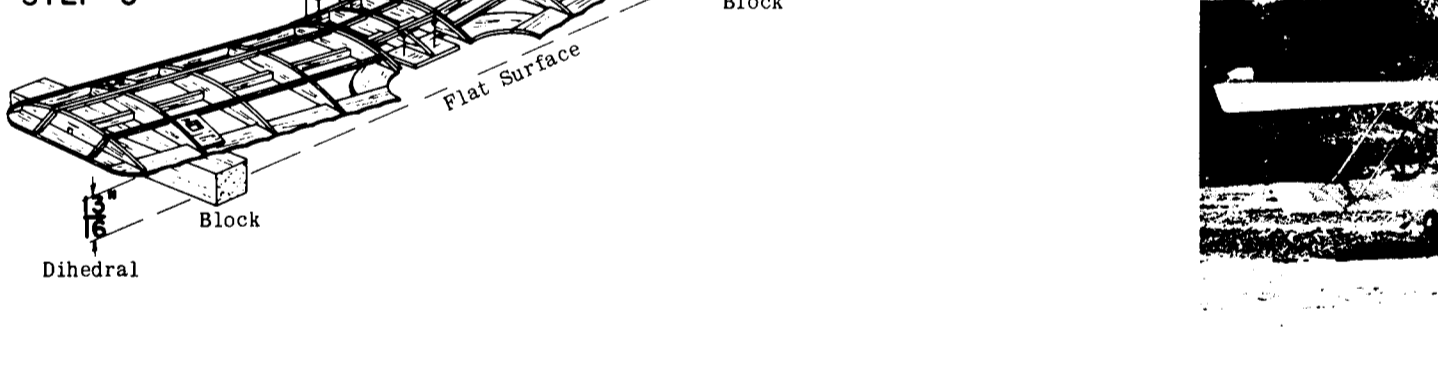
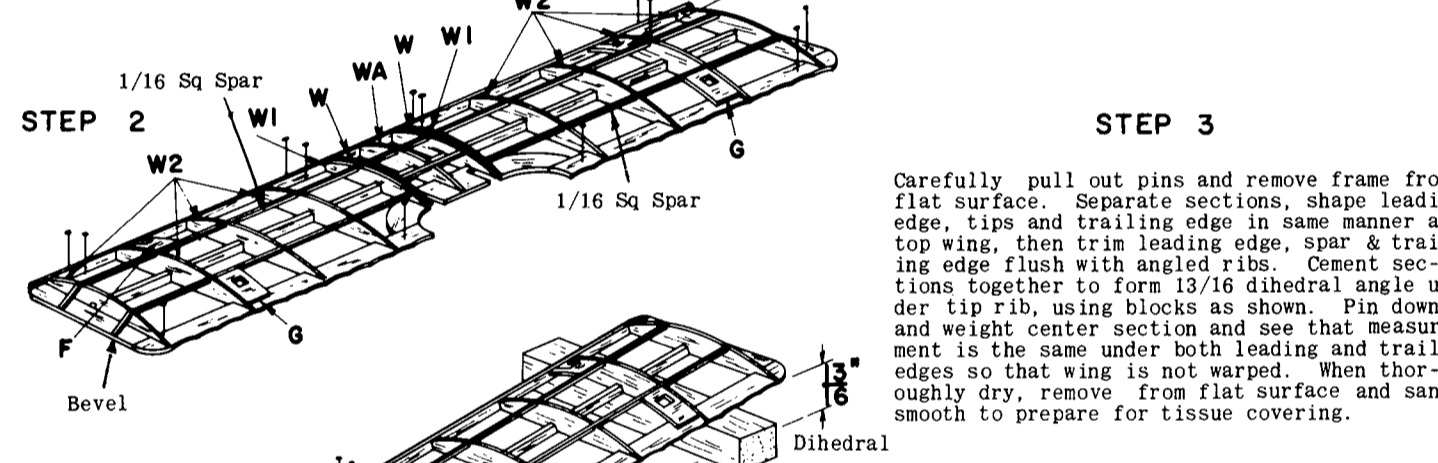
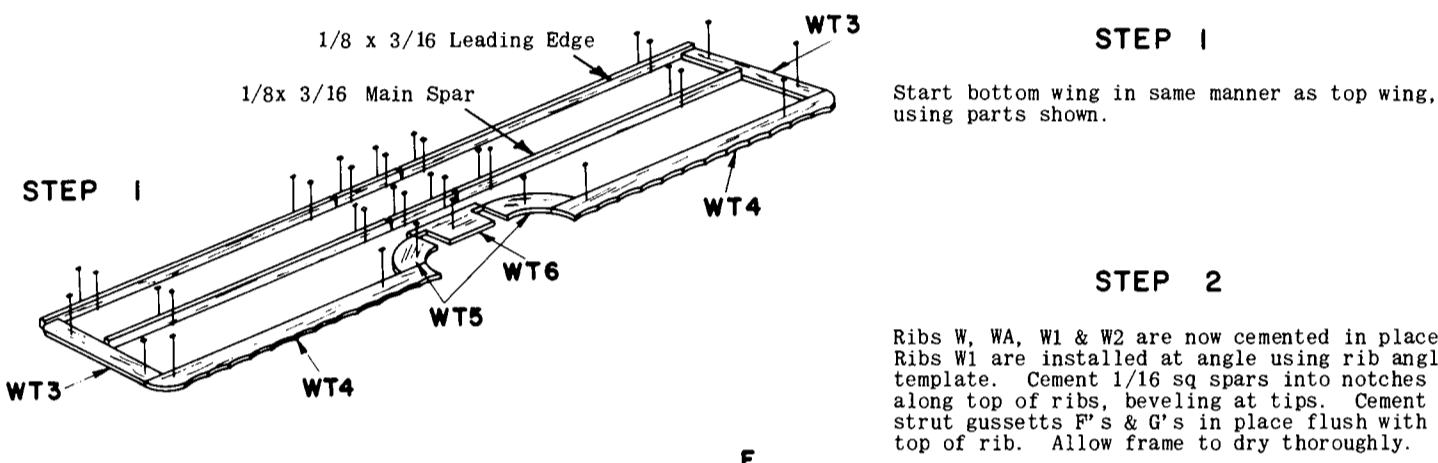
STEP 1
Build wings on flat surface directly on plan. Pin all WT parts in place, cementing to each other where they join, except at center joint. Using 1/8 x 3/16 x 1/2, cut Main Spar and Leading Edges to proper length. Pin in place upright, cementing to WT's.

STEP 2
Ribs W1's to W5's are now cemented in place. All ribs are vertical except ribs W1's at center joint which are cemented in place at angle as shown, using rib angle template (see detail note). This provides for dihedral angle shown and described in next step. Cement strut gussets A, B, C, D & E in place as shown on sketch and full size plan. Cement 1/16 sq spars into notches along top of ribs. Bevel ends of 1/16 sq to fit at tip as shown. Allow frame to dry thoroughly before removing from flat surface.

STEP 3
Pull out pins carefully and remove frame from flat surface. Separate sections & trim & sand leading edge to shape shown on wing cross section. Round off tips & trailing edge as shown, to blend smoothly into each other. Trim off leading edge, spars and trailing edge flush to angle of ribs W1, then cement sections together on flat surface, blocking up 2-3/8" at tip rib as shown. Measurement must be the same at leading and trailing edge so that wing is not warped. Other side is pinned or weighted to keep flat on surface. Use cement generously and allow to dry thoroughly. When dry, sand frame smooth to prepare for tissue covering.

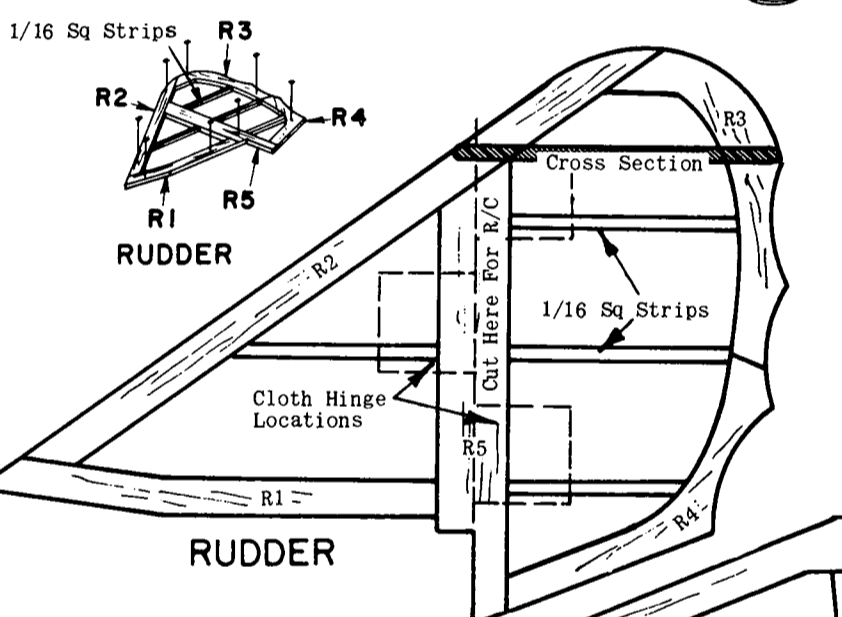


BOTTOM WING ASSEMBLY



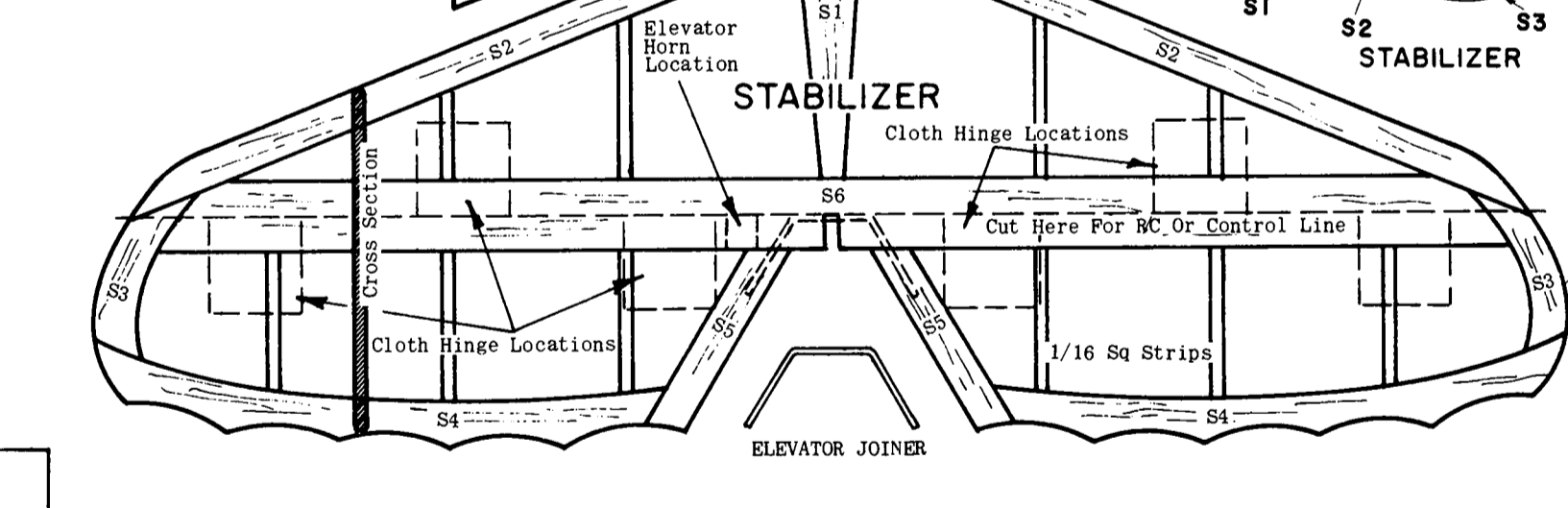
SILKSPAN TISSUE COVERING

The finest grade wet strength silkspan tissue provided in this kit permits covering of compound curves without wrinkling, when moistened with water before applying to frame. Tissue shrinks when dry to tight smooth surface. Follow directions for a smoothly covered warpage-free, fine flying model. Use clear dope to attach tissue as follows: Apply a light coat to the outside edges of area to be covered and allow it to dry. Cut tissue to shape needed, about 1/4" over size. Place tissue on flat surface and dampen with moistened cloth by dabbing. Apply second coat of clear dope to frame then place moistened tissue on frame. Pull tissue gently with fingers, working out all wrinkles. WHEN COVERING WINGS & TAIL SURFACES, PIN FRAMEWORK TO FLAT SURFACE TO PREVENT WARPING AS TISSUE DRIES. Cut out any wrinkled areas (bound by nearest framework) and re-cover. Apply two or three coats of clear dope, thinned 50-50 with thinner, to wings and tail surfaces before assembling, pinning on flat surface to prevent warps. COVER TOP WING FIRST: Cover bottom in two pieces from center ribs to tips. Cover top in two pieces from center ribs to tip ribs W5. Cover tips with small separate pieces. On control line models, add about 1/2 ounce of weight to lower tip on outside of circle flown. COVER BOTTOM WING NEXT: Bottom of wing is covered in one piece. Cover top of wing in two pieces from dihedral break to tip ribs W2. Cover tips with small separate pieces. Center section is left uncovered. COVER STABILIZER AND RUDDER NEXT: Cover both sides of each in one piece. Install leaflet dropping mechanism (see detail) before covering fuselage. COVER FUSELAGE NEXT: Cover fuselage sides first with one piece each. Cover each side of top front section from F1 to F5 with one piece, joining over L1. Tissue must be attached to frame to follow shape of fuselage. Cover front & rear sections of bottom of fuselage. Cover top rear of fuselage in two pieces, from F6 to rear, joining over L2. Using patterns provided, cut cockpit cover from stiff paper, and cement in place. Trim tissue out of notches in all gussets in wings and fuselage. Apply four coats of thinned dope to tissue covering on fuselage. Check wings and tail surfaces for warps before assembly. Warps can be removed by holding over steam (from boiling kettle) and twisting gently in opposite direction. Check again when cool.

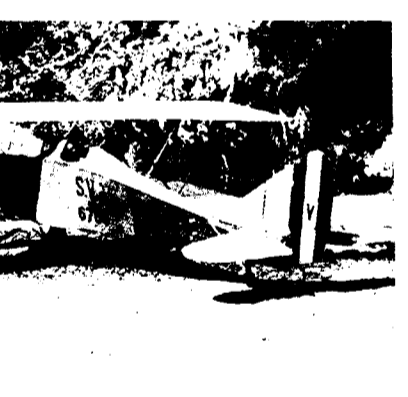
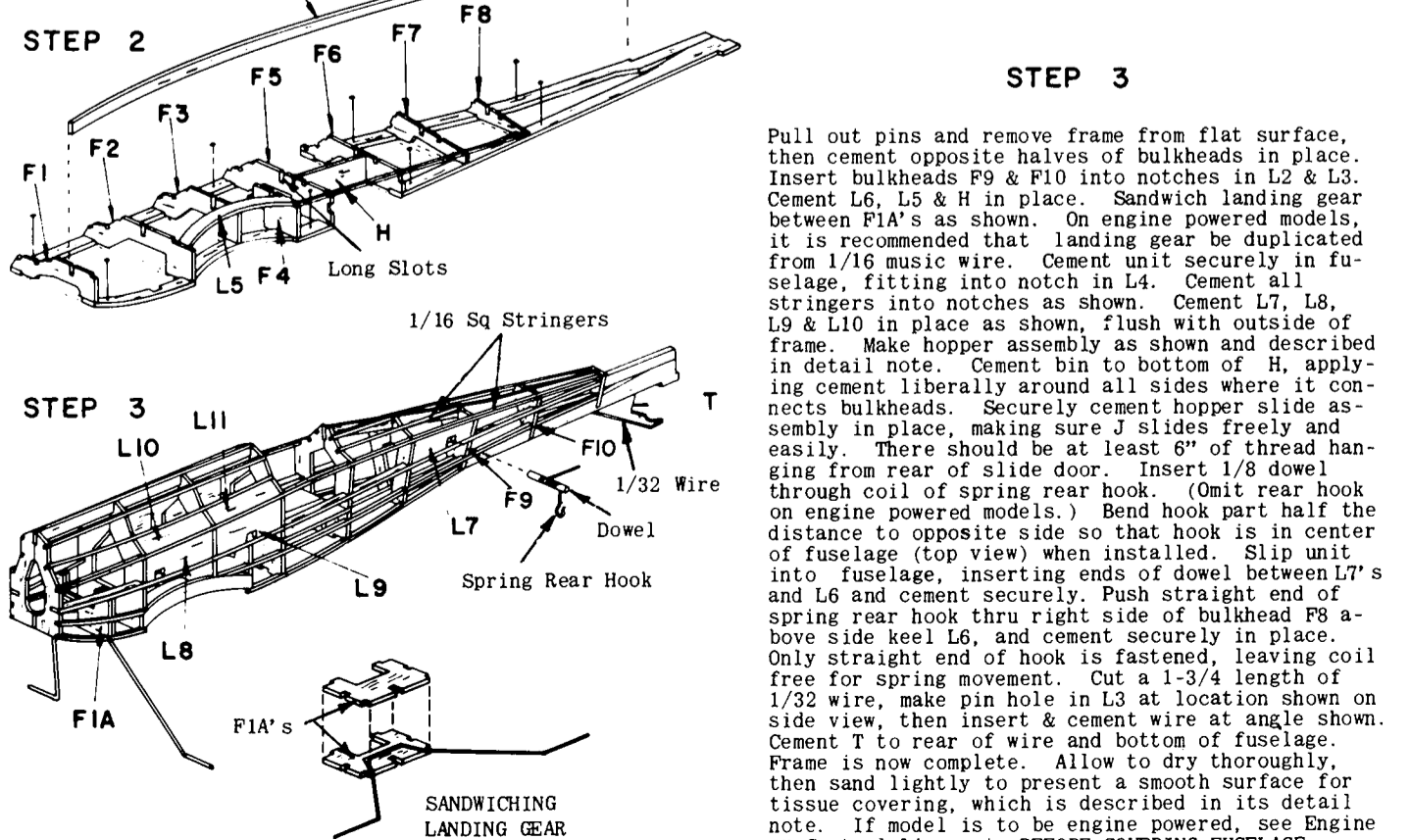
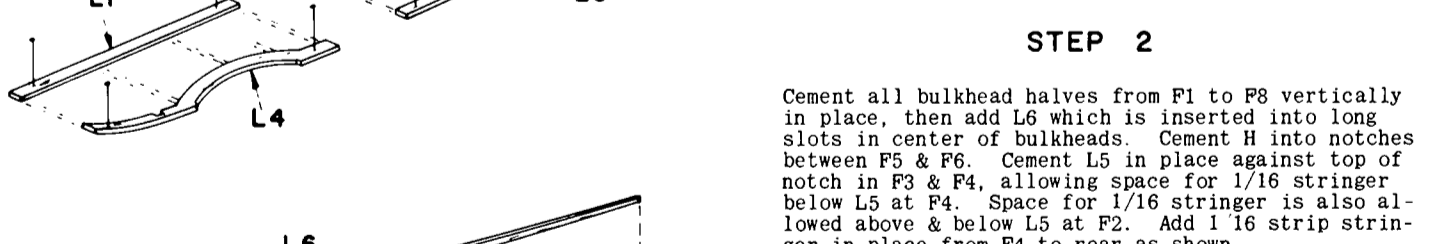
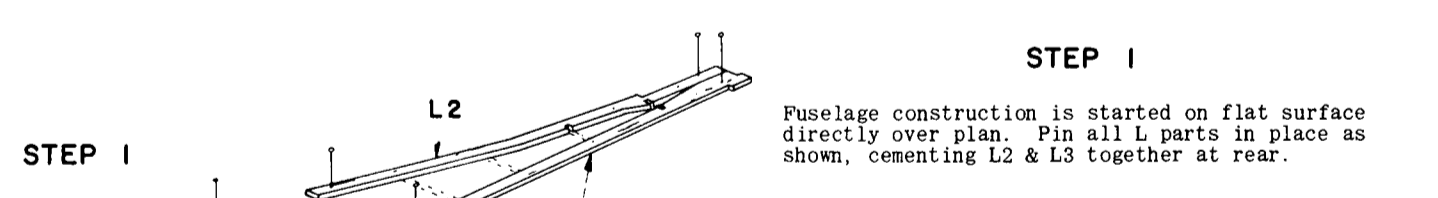


TAIL SURFACE ASSEMBLY

Assemble stabilizer by pinning all 8 parts directly on plan as shown, cementing to each other where they join. Cut 1/16 sq strips to fit, and cement in place. Rudder is built in same manner, using 8 parts shown. Allow assemblies to dry thoroughly on flat surface, then sand smooth, rounding edges (except bottom of R1 & R5) as shown on cross section. If model is being built for control line, check note before covering with tissue.



FUSELAGE ASSEMBLY



DIE CUT PART NOTE

All die cut parts used in construction are given 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.

