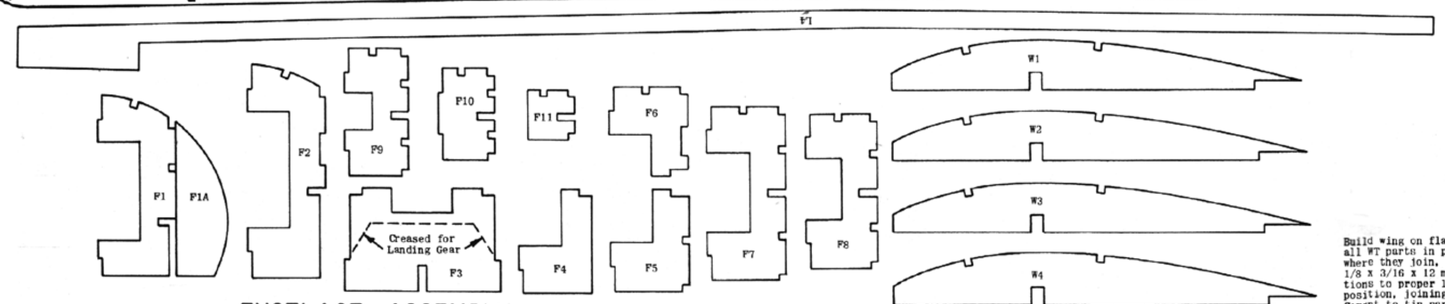
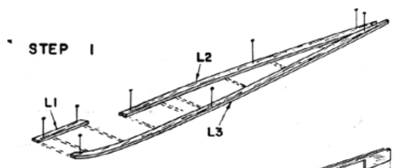
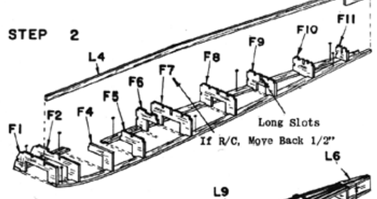
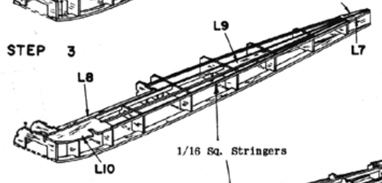


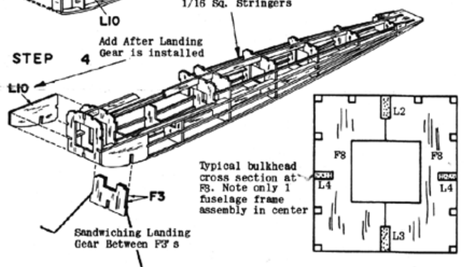


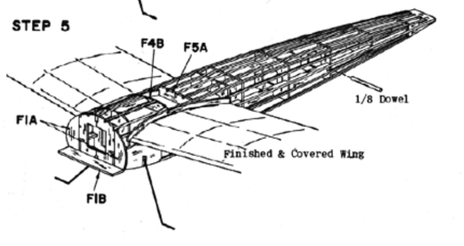
FUSELAGE ASSEMBLY











STEP 1

Fuselage construction is started on flat surface directly over plan. Pin all L parts in place as shown, cementing where they join at rear.

STEP 2

Cement all bulkhead halves from F1 to F11 vertically to frame as shown (except F3 which is installed in Step 4), then add L4, which is inserted into long slots in center of bulkheads. If installing radio control, bulkhead F7 must be moved back 1/2" from position shown on drawing.

STEP 3

Cement parts L6 to L10 in place as shown, then install all stringers shown (1/16 sq. strip balsa) into notches in bulkheads. Top stringers which are omitted at this time, are installed AFTER covered wing is in place, as described in Step 5. Allow frame to dry thoroughly to prevent warping or twisting. Over night is recommended. Assembly of wing or tail surfaces are started in the meantime.

STEP 4

Carefully pull out pins and remove from flat surface, then cement opposite halves of bulkheads in place, followed by L4. Sandwich landing gear by cementing it between bulkheads F3 at crease mark. Clamp together. When dry, insert in fuselage and slip notch over L3; add L10 at same time. Sides of F3 fit into notches in L10's which position it correctly. Add parts L6 to L9 then stringers.

STEP 5

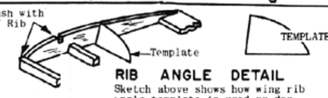
Completed wing (including covering) is now cemented to L8's. Cement L5's in place over wing and into notches in F2 & F5. Cement F4B in place at angle matching rear of L1. Cement F5A across fuselage against L2. Top stringers are now installed as shown. Fuselage is now sanded smooth and covered as described in silkspan tissue note; then F1A's & F1B are cemented in place as shown. 1/8 dowel provided is inserted through hole in L9's to hold rubber band, as described in Final Assembly note. Do not install at this time.

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.

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. Use clear dope to attach tissue as follows: Apply a light coat to the outside edges of area to be covered. When dry, cut tissue to shape needed, about 1/4" over size. Place tissue on flat surface and dampen with moistened cloth by dabbing. Apply a second coat of clear dope to outer edges of 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 WARPS AS TISSUE DRIES. Cut out any wrinkled areas (bounded by nearest framework) and recover. Apply two or three coats of clear dope, thinned 50-50 with thinner on wing and tail surfaces before assembling to model. COVER WING FIRST: On control line models add about 1/2 ounce of weight to wing tip on outside of circle flown. Cover top & bottom of center section first with one piece each. Then tip sections next in same manner. COVER TAIL SURFACES NEXT: Cover both sides of rudder and stabilizer in one piece each. COVER FUSELAGE NEXT: Wing must be installed before fuselage is covered. Cover fuselage sides first. Cover top back to F4B in one piece. Cover rear in one piece from F5A to rear. Cover entire bottom in one piece. Apply four coats of thinned dope to tissue covering on fuselage. When final coat is dry, trim out all notches. 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.



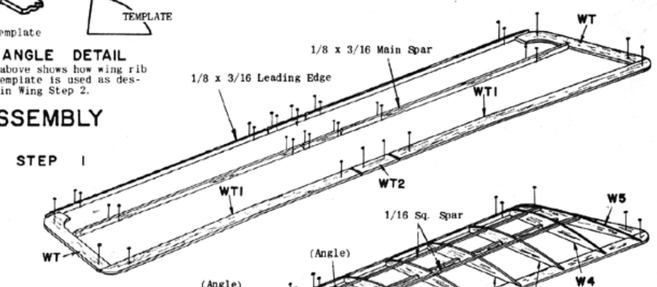
RIB ANGLE DETAIL

Sketch above shows how wing rib angle template is used as described in Wing Step 2.

WING ASSEMBLY

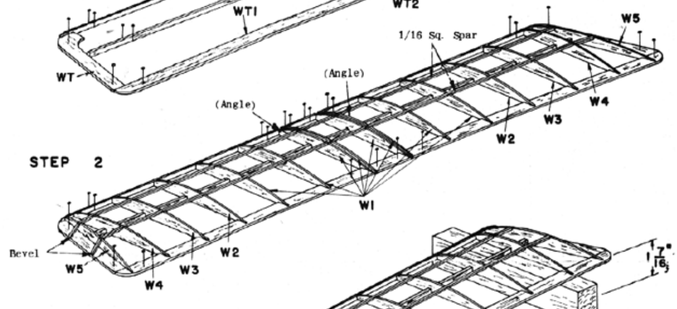
STEP 1

Build wing on flat surface directly on plan. Pin all WT parts in place. Cement parts to each other where they join, except at center joints. Cut 1/8 x 3/16 x 12 main spars and leading edge sections to proper length. Pin in place in upright position, joining directly over center joints. Cement to tip parts as shown.



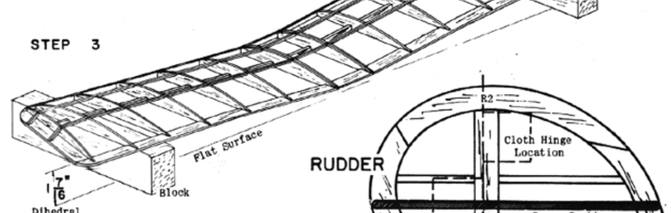
STEP 2

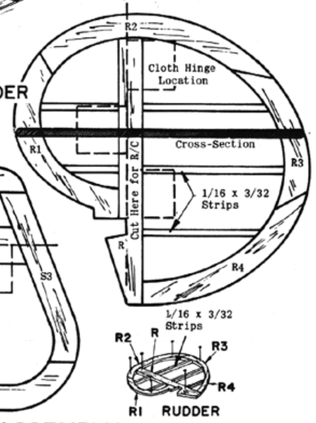
Ribs W1's to W5's are now cemented in place. Center ribs marked are cemented in place on angle, using rib angle template as shown in detail sketch. This insures proper dihedral angle. All other ribs are vertical. Cement 1/16 sq. spars into notches along top of ribs. Spar tips are beveled to fit on WT's as shown. Trim leading edge to curve of tip. Allow frame to dry thoroughly before removing from flat surface.

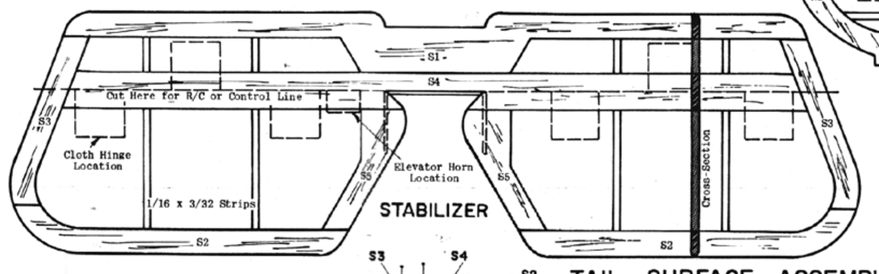


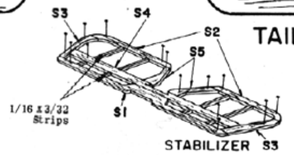
STEP 3

Pull pins out carefully and remove from flat surface. Separate wing panels and trim and sand leading edge to shape shown on wing cross-section. Round off tips and trailing edge to blend smoothly into each other. Trim off leading edge spars and trailing edge flush to angle of center joint ribs. Cement panels together on flat surface, blocking up tips 1-7/16 as shown. Measurement must be the same at leading & trailing edge so that wing is not warped. Center panel is pinned or weighted to keep flat on surface. Use cement generously and allow to dry thoroughly. When dry, sand frame smooth for tissue covering. When covered, wing is ready to be installed as described in fuselage Step 5.



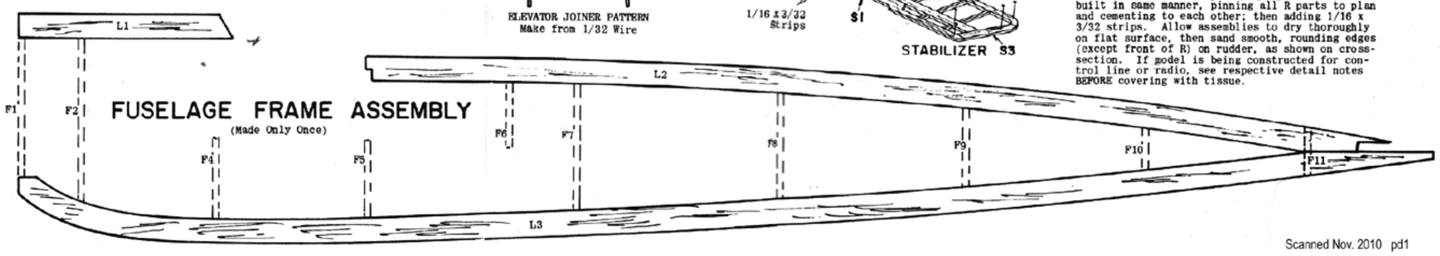






TAIL SURFACE ASSEMBLY

Assemble stabilizer by pinning all S parts shown to plan on flat surface and cementing to each other where they join. Cut 1/16 x 3/32 strips to fit, and cement in place, upright. Rudder is built in same manner, pinning all R parts to plan and cementing to each other; then adding 1/16 x 3/32 strips. Allow assemblies to dry thoroughly on flat surface, then sand smooth, rounding edges (except front of R) on rudder, as shown on cross-section. If model is being constructed for control line or radio, see respective detail notes BEFORE covering with tissue.



FUSELAGE FRAME ASSEMBLY

(Made Only Once)

Scanned Nov. 2010 pd1