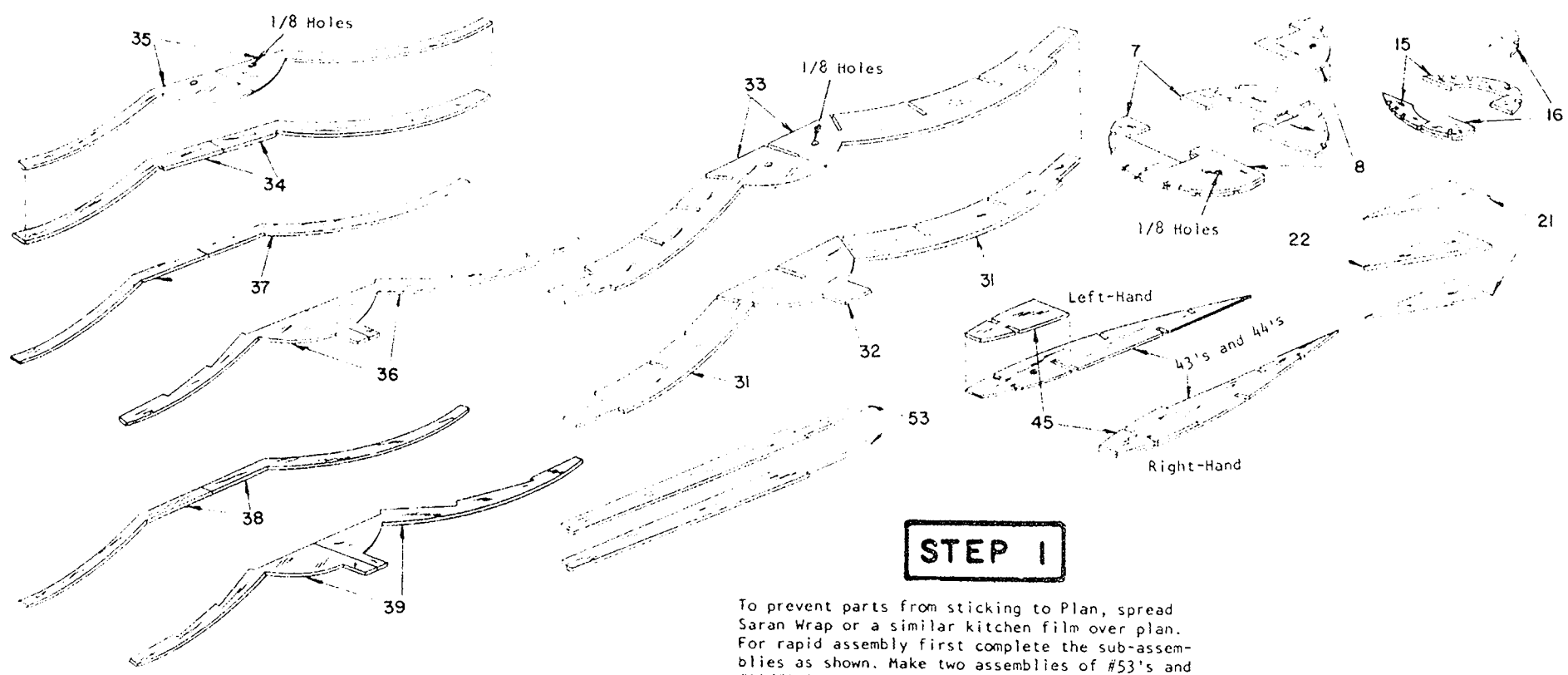
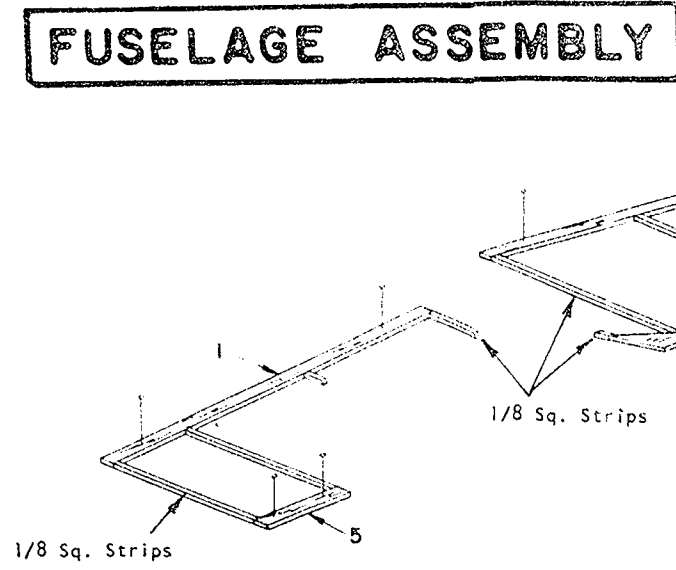




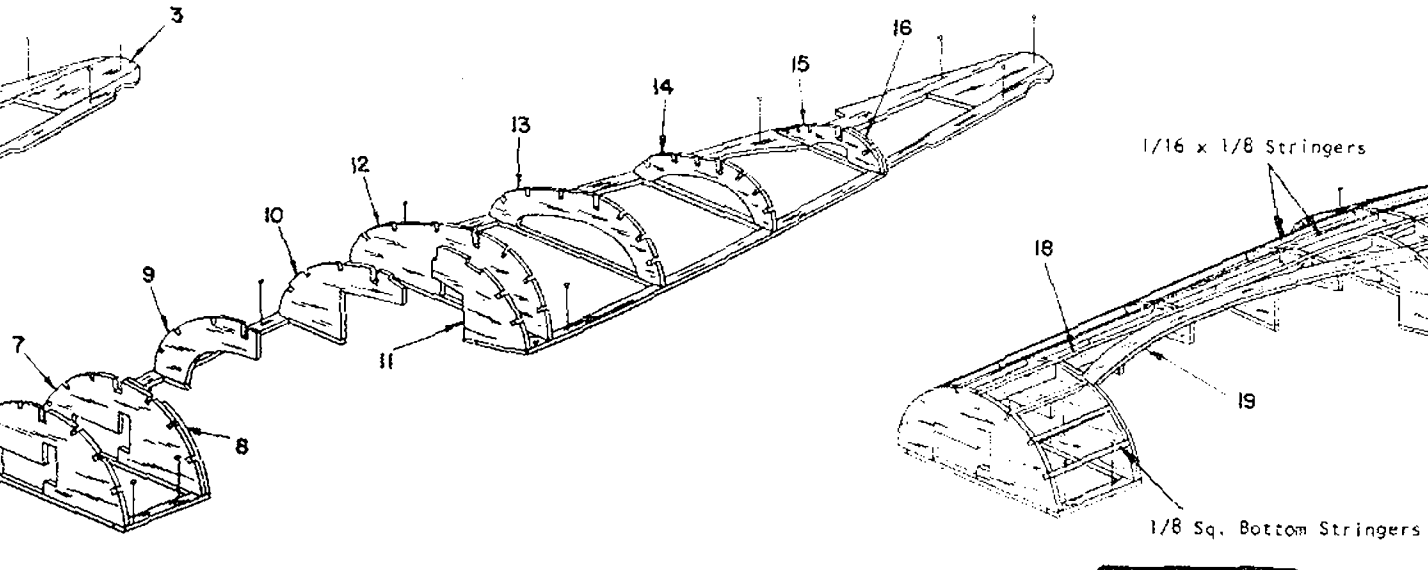
STEP 1

To prevent parts from sticking to Plan, spread Saran Wrap or a similar kitchen film over plan. For rapid assembly first complete the sub-assemblies as shown. Make two assemblies of #31's and #21/#22's, when assembling Bulkheads #7/#8, #15/#16 and Wing Ribs #45/#44. Be sure to make a Left and Right-hand assembly as shown. Cement Wing Spars #32's to sides of #32 and cap with #33's as shown - forming a double thickness. Spar #31's 1/8 dia. holes at punch marks in #33. Assemble #24's and #25's in same manner and drill 1/8 holes. Assemble remaining Wing Spars #35's, #37's, #38's and #39's as shown.



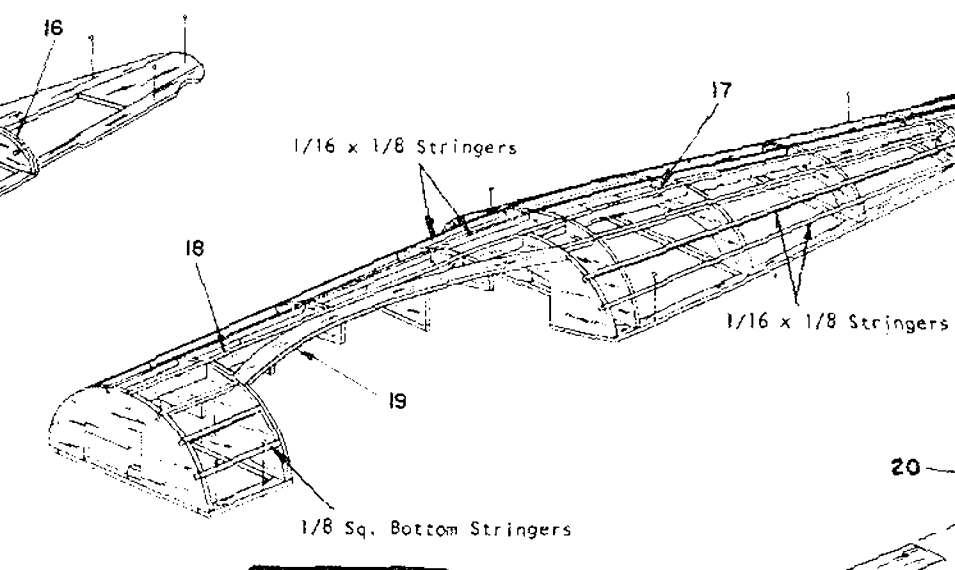
STEP 2

Fuselage is built on flat surface directly on Plan. Pin Parts #1, #2, #3, #4 and #5 in place as shown, cementing together where they join. Cut 1/8 Sq. strips to length and pin and cement in place as shown.



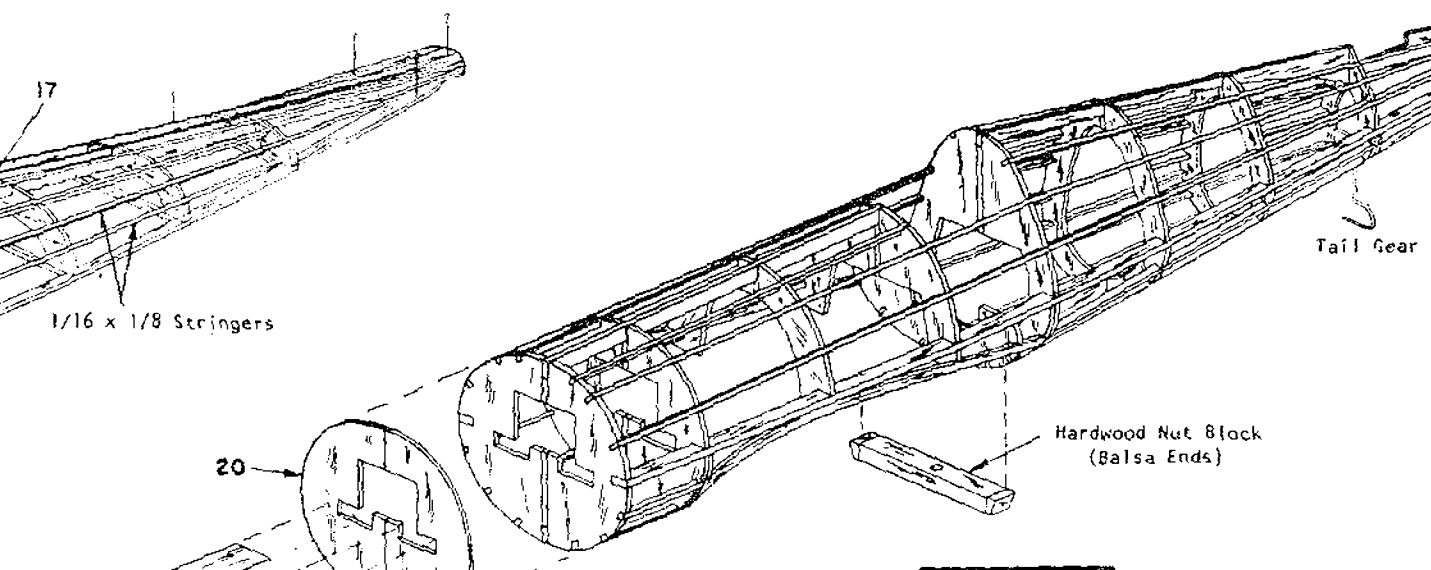
STEP 3

Cement all Bulkhead-halves from #6 through #16 vertically in place as shown. Be sure #6 is behind #7 and #16 is behind #15.



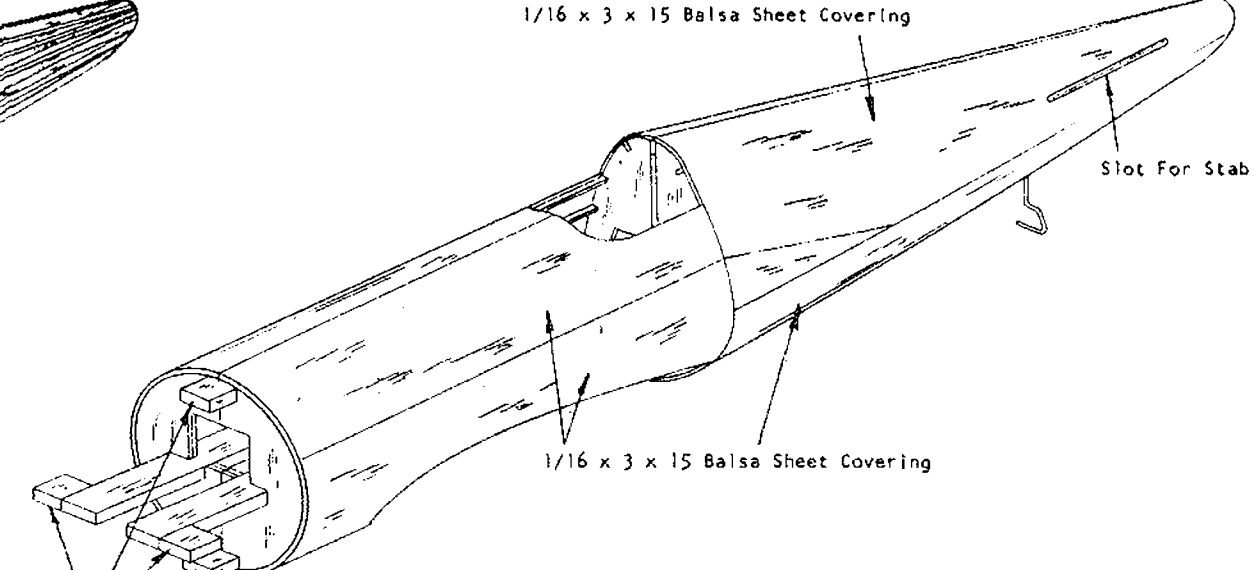
STEP 4

Cement Side Keel #17 in place from #18 back followed immediately by #18 which is flush with front of #16. Cement #19 in place into notches from #18 to #11. Install the three 1/8 Sq. Bottom Stringers into notches between Bulkheads #6 and #7. All other Stringers are cut from 1/16 x 1/8 Stringers and cemented into their respective notches as shown on sketches and Side View, dovetail at rear as necessary. Stringers not visible in this sketch can be seen in Step 5 sketch. Allow to dry thoroughly.



STEP 5

Cement #20's together as shown. Remove Fuselage half from flat surface. Complete opposite side of Fuselage in same manner as described in Steps 3 and 4. (DO NOT MAKE ANOTHER FUSELAGE CENTER FRAME ASSEMBLY). These Bulkhead-halves are cemented to the same Fuselage frame that you have just removed from the flat surface. Allow entire framework to dry thoroughly then cut out the 1/8 Sq. strips in center areas of Bulkheads as shown. Sand framework smooth to prepare for sheet covering described in next step. Cement Bulkhead #20 to front as shown. Cement the two 5/16 x 7/8 x 5-1/4 Hardwood Engine Mounts in place. Flush with rear of Bulkhead #7. Bend Tailgear to shape using 1/16 wire and full-size drawing. Securely Epoxy Tailgear in place against back of Bulkhead #16, as shown in sketch and Side View. Hardwood Nut Block is installed by cementing a piece of scrap Balsa to each end of Nut Block then taping Balsa so Nut Block fits between #19's and against front of #11. Balsa ends allow Nut Block to tear away in the event of rough landings.



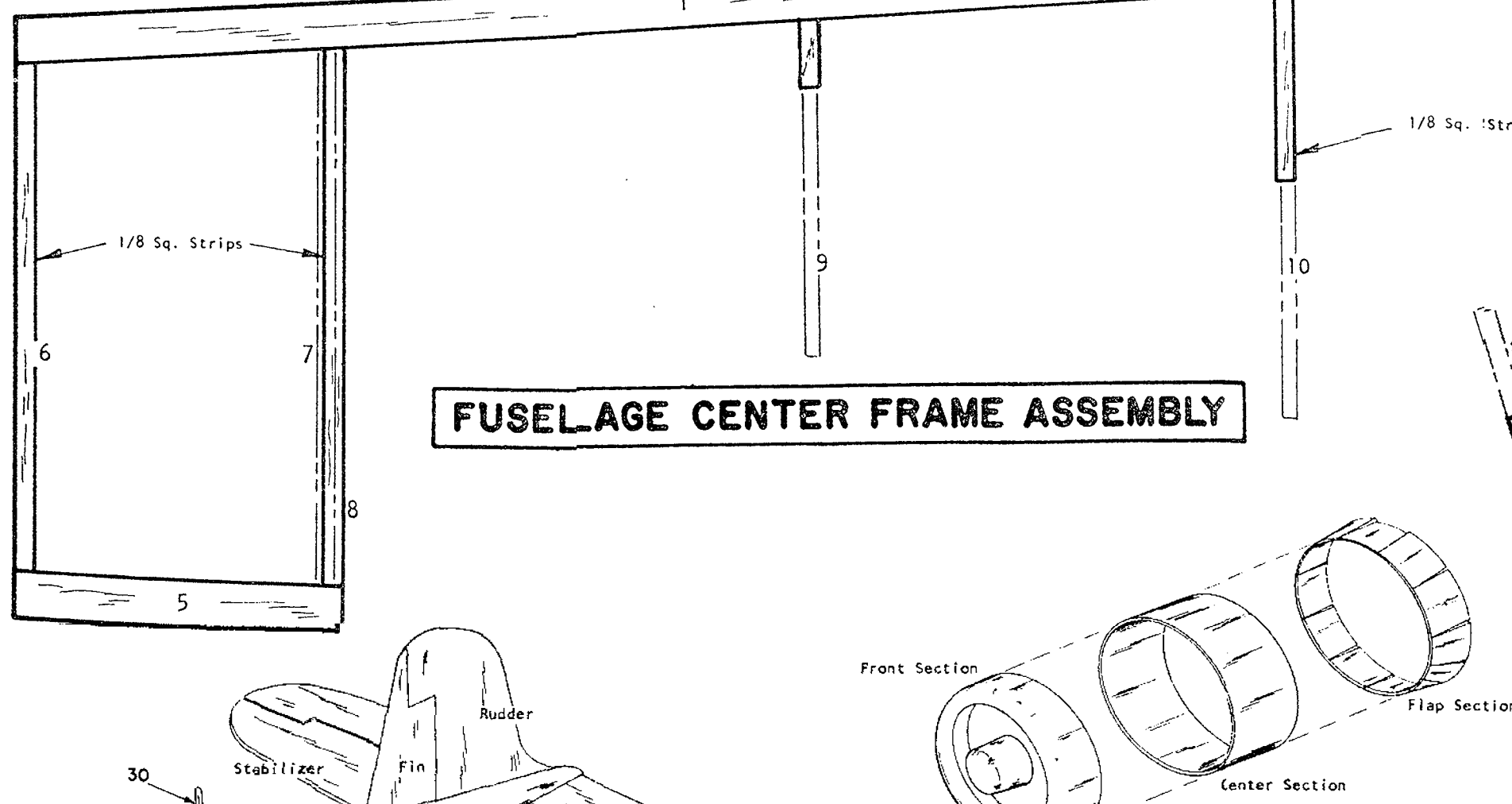
STEP 6

Entire Fuselage is sheet covered using 1/16 x 3 x 15 Balsa. Cover top front from #20 to #12 and from Center Keel #1 to 17/8 x 1/8 Stringer above Side Keel as shown. Moisten outside of sheet with water to aid banding. Sides of front are covered down to bottom 1/8 Sq. Stringer with a small filler piece in center. Trim out flush with #19 and Bulkheads. Rear is covered from #12 back and from Top Keel #2 to Side Keel #17 as shown. Bottom is covered from Side Keel #17 to Bottom Keel #4. Note that a small triangular piece must be fit into side to complete covering. Hold sheets in place with pins and tape until cement is thoroughly dry. Cut out Cockpit area using pattern on Plan. Sand entire Fuselage smooth then cover with silk-span or Tissue (not provided). Cut out slot for stab as shown in sketch and Side View. Cement the 5/16 x 3/4 x 3/4 Hardwood Cow Mount Blocks in place as shown. One on each side of Engine Mounts flush with front and one at top and bottom of #20. 1/16" from edge of Fuselage to allow for thickness of Plastic Cowl.

INTRODUCTORY NOTE

The Corsair is a relatively easy kit to build and fly. Pay careful attention to and follow the notes step-by-step exactly as they appear on the plans. Examine the full-size drawings and Assembly Sketches before starting construction. If any discrepant parts stick in the sheet, they are easily removed by sanding back of sheet lightly. Company models used two-channel Radio equipment with Cox .049 and .051 Tee Dee engines, stock and with diesel conversion as well as .09 and .10 engines. Best flight performance was achieved with the larger engines and it is suggested that they be used. You must decide before assembling what control surfaces you wish to use. We recommend the two-channel mode of Elevator and Aileron control since this offers a much larger range of maneuvers which can be performed by the model. It does, however, mean that model must be hand-launched. The advantage the Rudder and Elevator mode gives you, is the ability to take off from the ground rather than hand-launching. It does, however, limit the maneuvers which can be performed. When model is complete, be sure to read Flying Instructions.

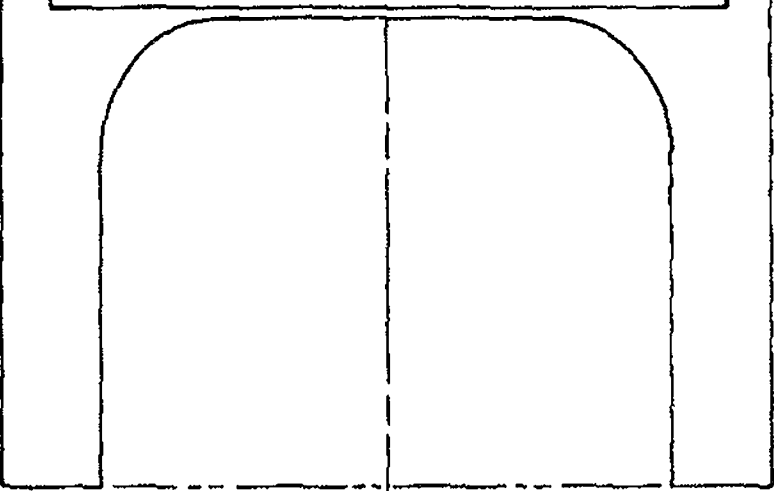
FUSELAGE CENTER FRAME ASSEMBLY



PLASTIC COWL DETAIL

Cut the three sections for Cowl from the Plastic sheet as shown. They are cemented together with a minimal amount of Plastic Model Cement. Center section fits over hump of flap section and front section fits over ledge of center section. Note that the larger of the two flat sections on the Flap Ring is the top center of completed Cowl. When assembly is completely dry, it is trimmed out in front and as necessary to suit your particular engine. Paint and install on fuselage as described in Final Assembly.

COCKPIT CUT-OUT PATTERN



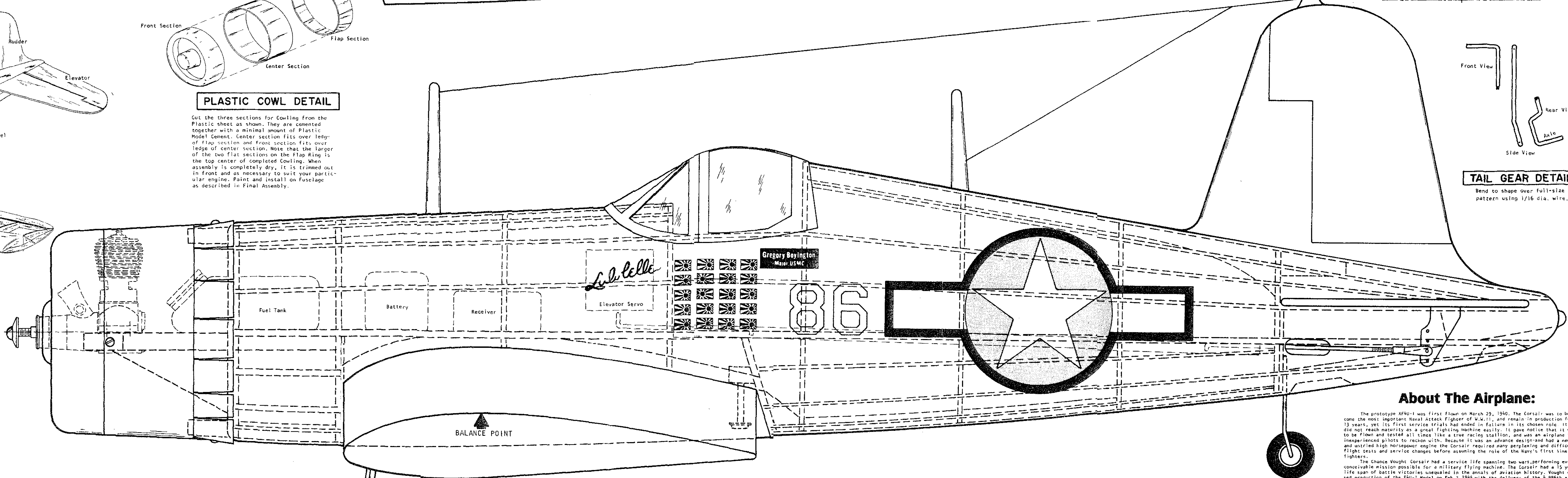
TAIL GEAR DETAIL

Send to shape over full-size pattern using 1/16 dia. wire.

FINAL ASSEMBLY

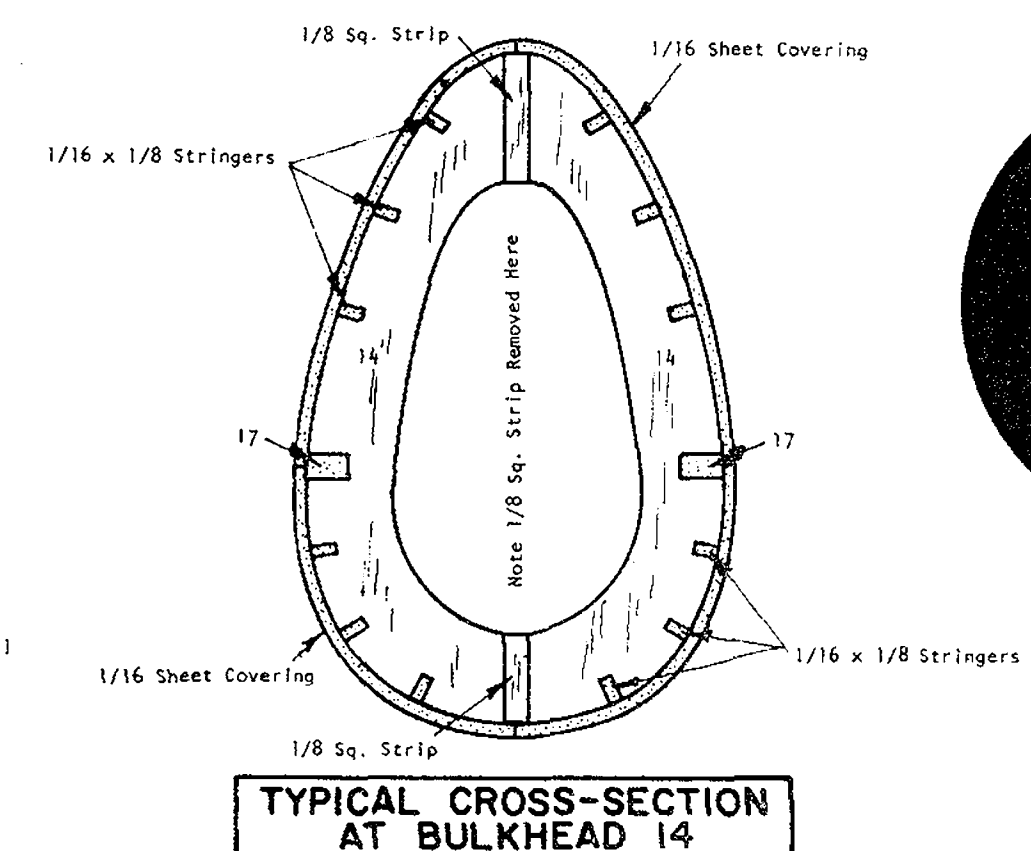
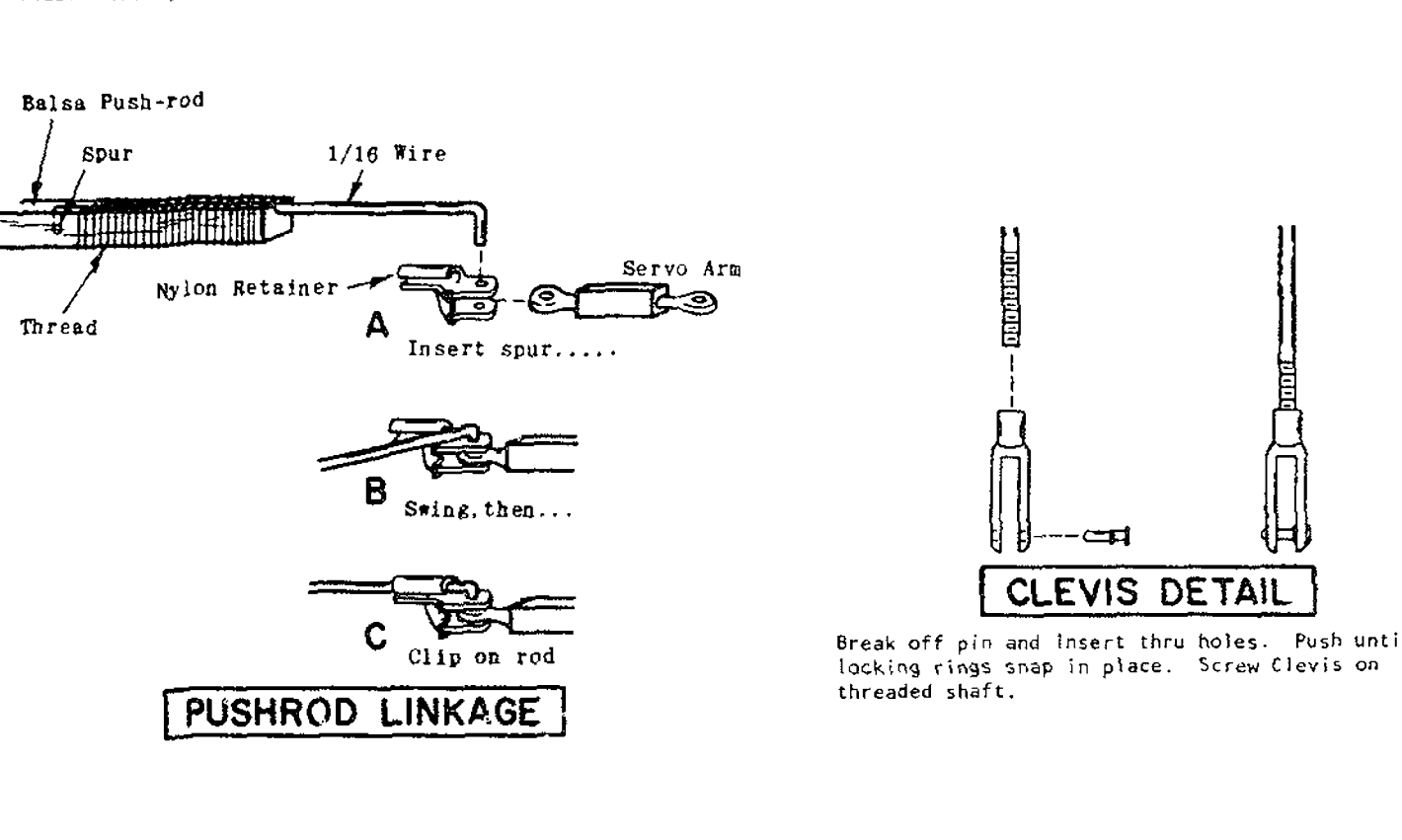
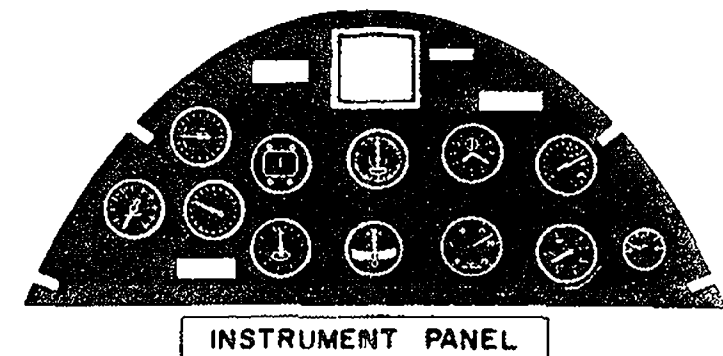
Although sketch shows all components uncovered, they are all covered before Final Assembly continues. Slip Elevator and Stab into slot in rear of Fuselage and securely cement Stab in place being certain it is horizontal when viewed from front and properly aligned when viewed from top. Cut out slot for Vertical Fin Tab in Fuselage covering and securely cement Fin in place making sure it is vertical. Secure Wing to Fuselage with dovetail fitting into holes in Bulkhead #8 and back with Nylon Screw into Nut Block. Drill 3/32 Dia. hole thru inside of Slotted Landing Gear Block and up into Spur Block. Place Landing Gear as shown with Front Edge. Model is now painted with the three-color color scheme as follows: Top Surface: Sea Blue; Sides of Fuselage, Vertical Fin and Bottom of Wing Panels: Intermediate Blue; Bottom Surface: White or Light Gray; Interiors: Zinc Chromate. Scale Details such as Nuts #19 and #30 can be painted and cemented in place. Assemble Elevator and Stab with screw hinge method (see detail) and touch up with paint. Wheel Well covers #57 can be cemented to bottom of Wing but not to Landing Gear. Cut Instrument Panel from Plan and cement to back of Bulkhead #10. Canopy is cut from Plastic Sheet, raised framework painted and then

cemented in place. Install Wheels (not supplied) according to manufacturer's instructions. Main Wheels are 1-1/2" Dia., Tailwheel is 7/8" Dia. Apply Details. Many other Scale Details may be added by Modeler if he wishes. Scrap material is used for all such detail such as Pilot Tube, Six 50 Cal. Machine Guns in Wing, Wheel Well Doors, Main and Tailgear, Scale Prop, etc. Remember though, all such detail adds weight and will impair flight performance. Install engine of your choice. Engine Beams are simply cut open wider as required for larger engines. Cowl is held in place with four #2 Top Screws into Hardwood Blocks. Company models used 2 oz. Pylon brand Sport Style fuel tank. Radio equipment (not supplied) is now installed in accordance with manufacturer's instructions. Typical position of equipment is shown on Plan, as is Control Linkage. IT IS IMPERATIVE THAT MODEL BALANCES AT POINT SHOWN ON SIDE VIEW! Radio components may be shifted forward or aft to achieve balance point. IF NECESSARY ADD WEIGHT TO FRONT OR BACK, SINCE MODEL MUST NOT BE FLOWN UNTIL THIS BALANCE IS ACHIEVED. Fitted model with .051 engine and R/C equipment (dry gas tank) should weigh between 23 and 28 oz., larger engines should bring weight between 28 and 35 oz. We welcome your comments on the Corsair kit, as well as its flight performance. Address correspondence to: STERLING HOBBIES, INC., 3100 "C" ST., PHILA., PA. 19134, U.S.A.



FLIGHT INSTRUCTIONS

It is suggested that inexperienced flyers enlist the aid of an experienced R/C pilot in your area to first check over your model and then help you through the initial flights. Be CERTAIN model balances (nose slightly down) at point shown on side view. You can shift your R/C equipment to achieve this balance or, although less desirable, add weight. Check that all surfaces are free of warps and are in proper alignment with each other. Any deviation may result in erratic flight. If any warps have developed, they can be removed by holding area over steam and twisting gently in opposite direction. Remove from steam while still holding, allow to cool, then release. Repeat as necessary. Flight testing is done in calm weather. Experienced modelers may test glide model; however, it is not recommended for beginners. All power testing is done only after Radio equipment has been checked out as recommended by manufacturer and this should be done with engine running. Start engine and adjust until running smoothly. Lift nose of model vertically, engine should continue to run. If not, open needle valve slightly and repeat until engine continues to run. This will prevent engine from stalling during maneuvers in flight. Launch model into any prevailing wind at normal flying speed by holding fuselage in front of and behind wing, running forward with model level for slightly nose down, and allowing model to almost lift out of your hand. DO NOT throw model like a spear since it will cause erratic flight or a stall with the resultant crash. Model should fly smoothly either level or climbing slightly. If model stalls, add 1/16 Balsa shim at front of wing. If model dives, add shim to back of wing. In either case, check balance before adding shim. Stalls may also be corrected by tilting front of engine down (down turn). Once model is in the air, all control movements should be gradual until you become accustomed to flying. Inexperienced flyers may cause model to crash if it hasn't sufficient altitude, and in most cases model will recover its flight path if controls are simply left alone. When engine stops running you will find that it takes slightly more control for turns since you no longer have the same airspeed and prop blast over your control surfaces. When the engine stops, model vertically, engine should continue to run. For landing keep the nose down slightly to maintain airspeed and prevent a stall. Experience will enable you to do many maneuvers with your Corsair. GOOD LUCK AND GOOD FLYING!!!



About The Airplane:

The prototype F4U-1 was first flown on March 29, 1940. The Corsair was to become the most important naval aircraft fighter of World War II, and remain in production for 13 years, yet its first service trials had ended in failure in its chosen role. It was not until 1942 that the Corsair was finally accepted by the Navy as a fighter. It was to be flown and tested all times like a true racing stallion, and was an airplane for those who loved to race. Because it was an advanced design and a new and untried high horsepower engine the Corsair required many perplexing and difficult flight tests and service changes before assuming the role of the Navy's first jet fighters.

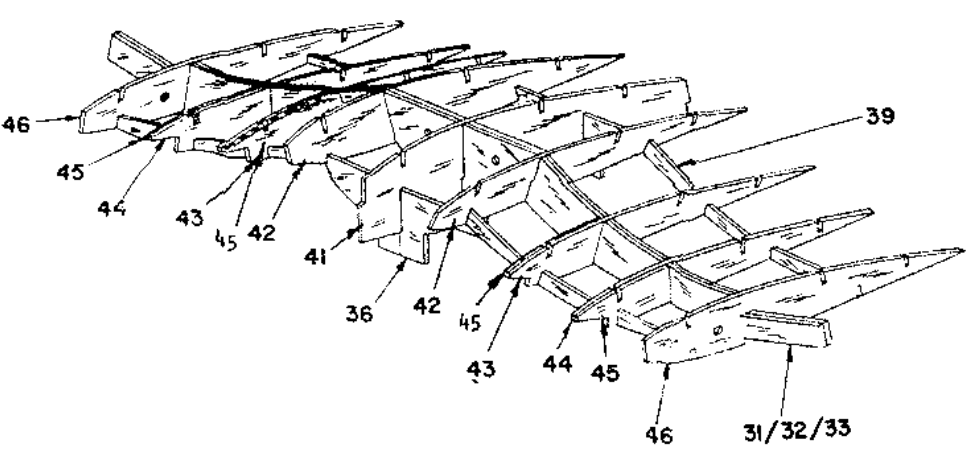
The Corsair's distinctive whistling war cry caused by the wingroot intake for engine air, earned it the nickname "whistling death" among the Japanese. The first prototype Corsair was destroyed by the Japanese during the attack on Pearl Harbor. The first Corsair to be destroyed in action was the first Corsair to be destroyed in action. The first Corsair to be destroyed in action was the first Corsair to be destroyed in action.

Chance Vought F4U-1A CORSAIR

Kit FS-36
Wing Span 36"



STEP 1



STEP 1

Build Wing on flat surface directly over Saran covered Plan. Center section is built by slipping Ribs #41 to #46 into respective notches in assembled Main Spar #31/32/33. Be certain all Ribs are seated into notches properly then add Front Spar #36 and Rear Spar #35 as shown. Wing section is pinned to flat surface directly over Plan and properly aligned before cement is applied to all joints. Be certain Ribs #44/#45 have #45's, toward tips as shown. Allow to dry thoroughly.

STEP 2

Cement the three Top Spars #37, #38 and #40 into their respective notches as shown. Cement assembled Leading Edge #34/35 to front of Ribs and allow framework to dry thoroughly. Remove framework from flat surface and cement #56 against rear of Rib #41 and under rear tips of #42's. Remove bottom rear portion of Rib #41 for Hardwood Wing Mount Block then cement the 3/8 x 1 x 1 Hardwood Wing Mount Block in place against front of #56, flush with bottom. Remove building tabs from bottom of Spars #32, #36 and #39. Cement the 3/8 x 1/2 Landing Gear Spur Blocks against outside of Rib #43. Followed by Slotted Landing Gear Block which is cemented into notches between Ribs #43 & #45 as shown, against rear of Leading Edge. Cut two 3/72" lengths of 1/8 Dowel and round off one end. Insert opposite end thru holes in Leading Edge and Main Spar and cement in place. Allow framework to dry thoroughly before continuing Wing construction.

STEP 3

Using 1/16 x 3 x 21 Balsa sheet, cover top of Center Section by cutting sheets to fit as shown. Leave area between #31 and #38 open and remove Center Section of Rib #41 at crease marks for your servo installation. Bottom of Gull Section is covered next. Cement two pieces of 1/16 x 3 x 21 Balsa together lengthwise and allow to dry. Cover each side of Wing from #42 to #46 with one piece using glued-up sheet, from Main Spar #31/32/33 to trailing Edge. Forward section of bottom of Wing is covered using 3/32 x 3/8 strips. Strips should be moistened with water to aid in bending. Lapped and beveled to fit as necessary. Allow to dry thoroughly. Cover bottom Center Section with four separate pieces joining over Center Rib and Main Spar. Although sketch shows top of Gull Section covered, it is shown for clarity only at this point. It is covered after Wing panels are cemented in place and Aileron Pushrods are installed.

STEP 4

Left and Right-hand Wing panels are built directly over Saran covered Plan. Cut the 3/16 Sq. Main Spars to length and pin Bottom Spar in place. Pin the lower #59 to Plan then pin and cement the assembled #53 in place as shown. Drill holes for Pushrod in Ribs #47 and #48 at punch marks. Pin and cement Ribs from #47 to #52 in place as shown followed by top 3/16 Sq. Spar. Be certain everything is aligned properly over Plan then add the top #59. Leading Edge and #55 as shown. Allow to dry thoroughly—overnight recommended.

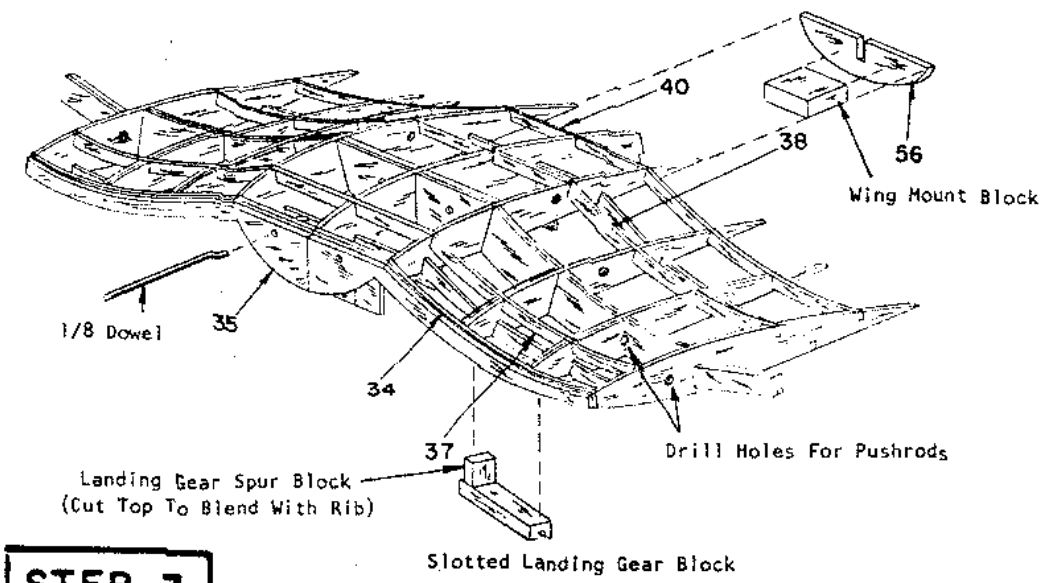
STEP 5

Sheet cover top and bottom of Wing from Spars to Leading Edge using 1/16 x 3 x 21 Balsa sheet cut to fit as shown. Cement Wing Tip #54's (double thickness) in place followed by Gull #58 as shown. Allow to dry thoroughly then sand entire panel smooth (see Cross-section). Opposite Wing panel is built in the same manner.

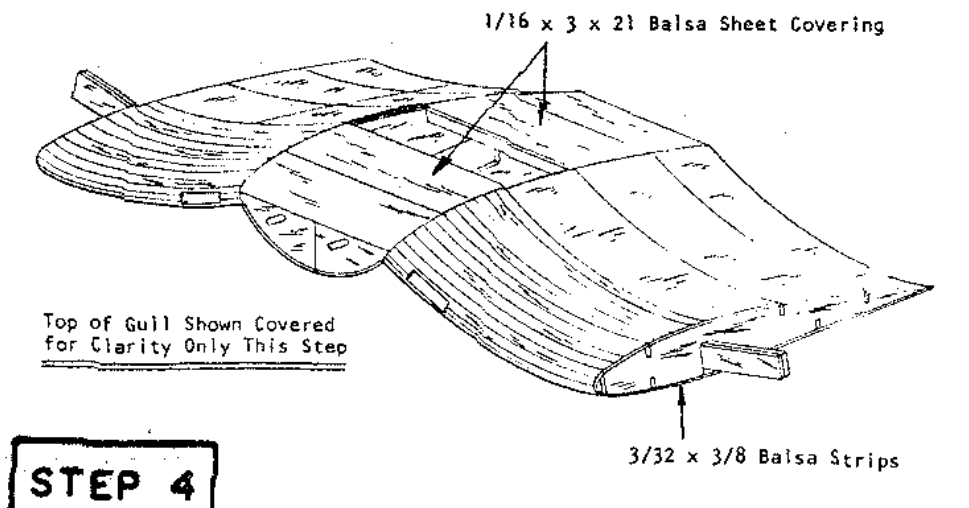
STEP 6

Completed Wing panels are slipped onto protruding Main Spar and cemented snugly to center section of Wing. Be certain Panels are tight against Center Section and properly aligned. Nylon tubing is not supplied for Aileron line flying aileron pushrods do not have to be installed and ailerons are simply cemented in place. The larger tubing is now inserted thru holes in Ribs and at Ribs #42. Check with smaller tubing to be certain it moves thru easily and no binding occurs. With Pushrod tubing in place, top of Gull Section can be covered in same manner as bottom. Only difference is that large sheets at rear cannot be compound curve. It is done in three pieces joining over each Top Spar as shown in this Top Sketch and proceeding sketch of Center Section. Allow frame to dry thoroughly, then sand entire Wing smooth. Cut out small section size drawing for Plastic Air Scoops. Trim and Right-hand) and hinge to Wing with Poly Hinge material. When Wing is installed in Fuselage, hole for Nylon Screw can be marked off then drilled and counter-bored to depth for nylon screw length. Wing can now be covered with material of your choice. Company models used Silkskin to keep weight at a minimum.

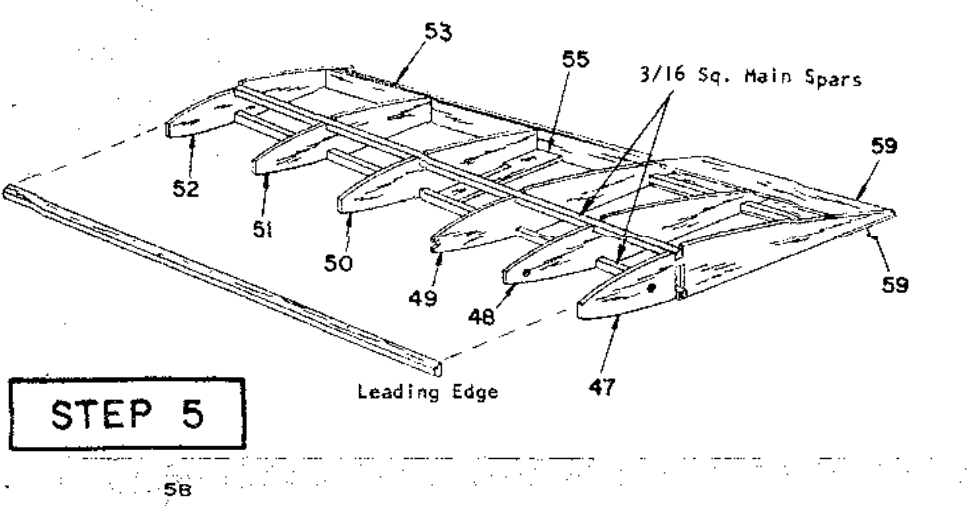
STEP 2



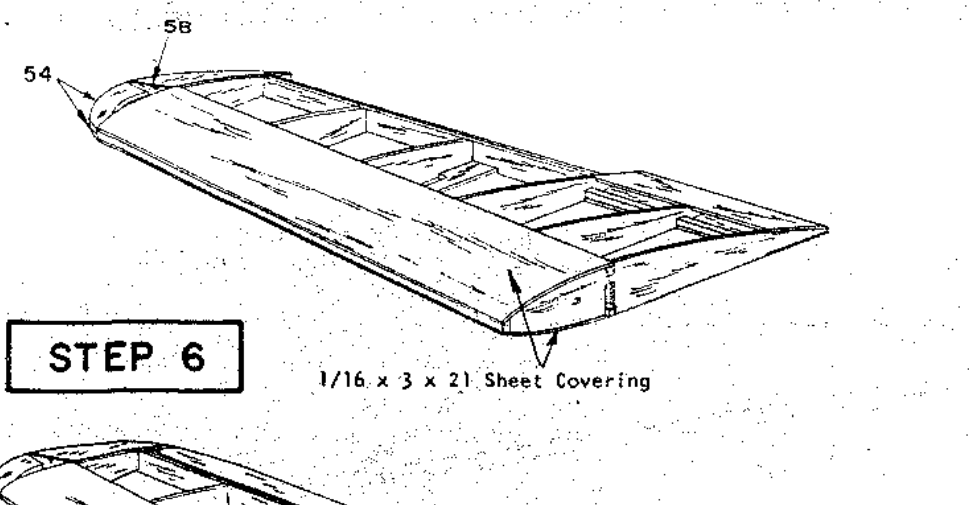
STEP 3



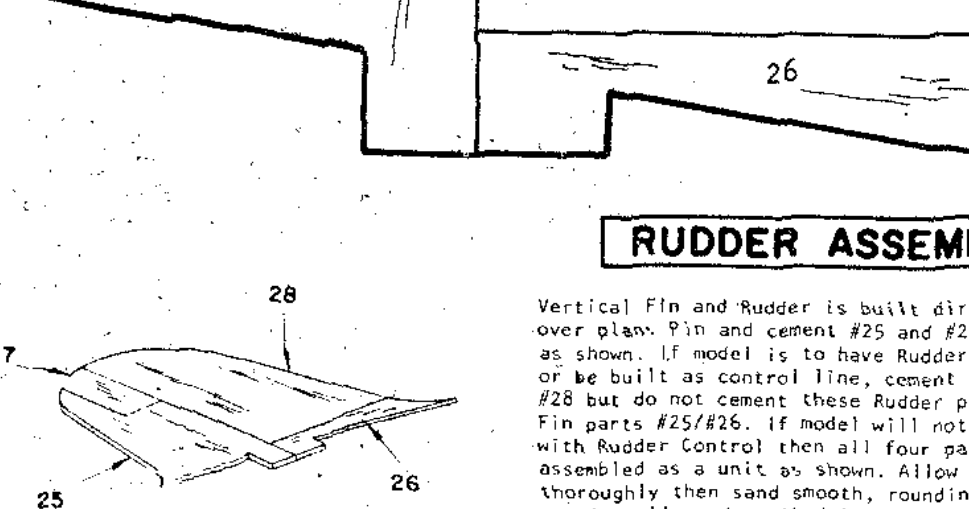
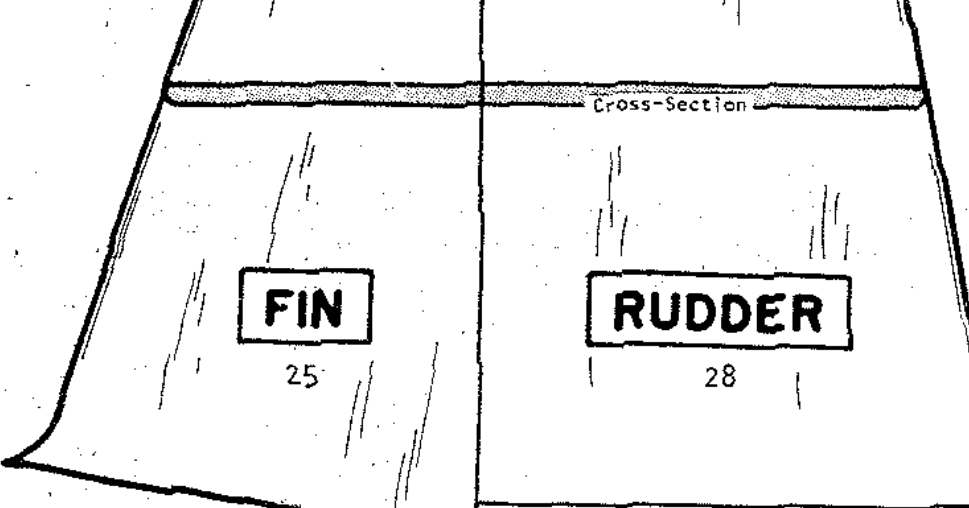
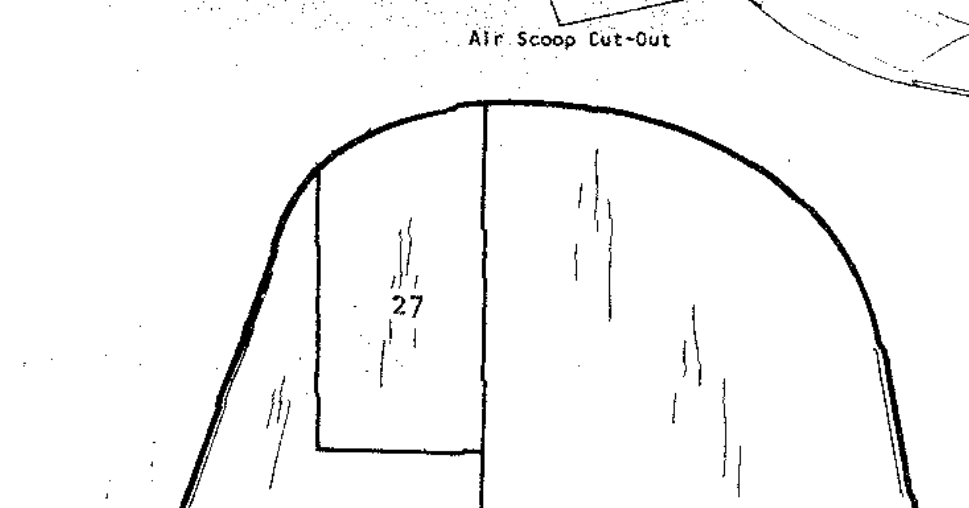
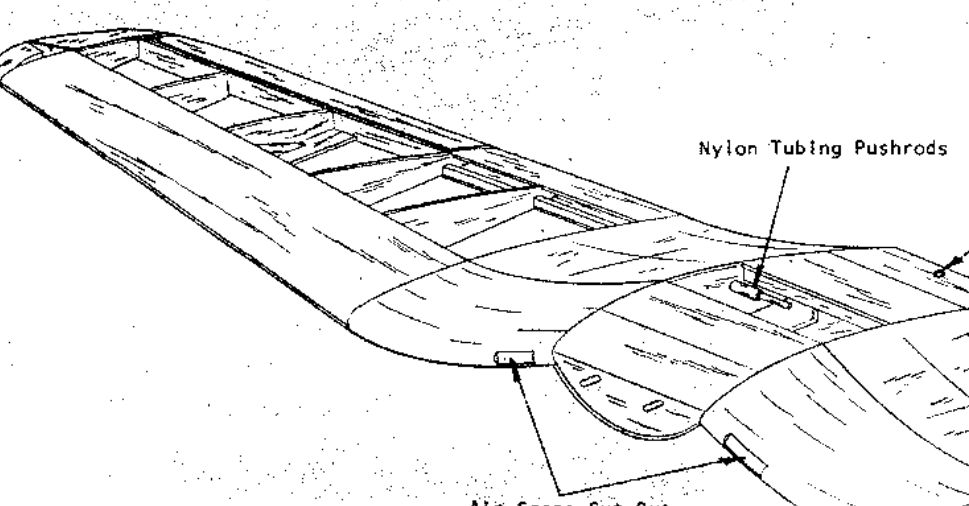
STEP 4



STEP 5

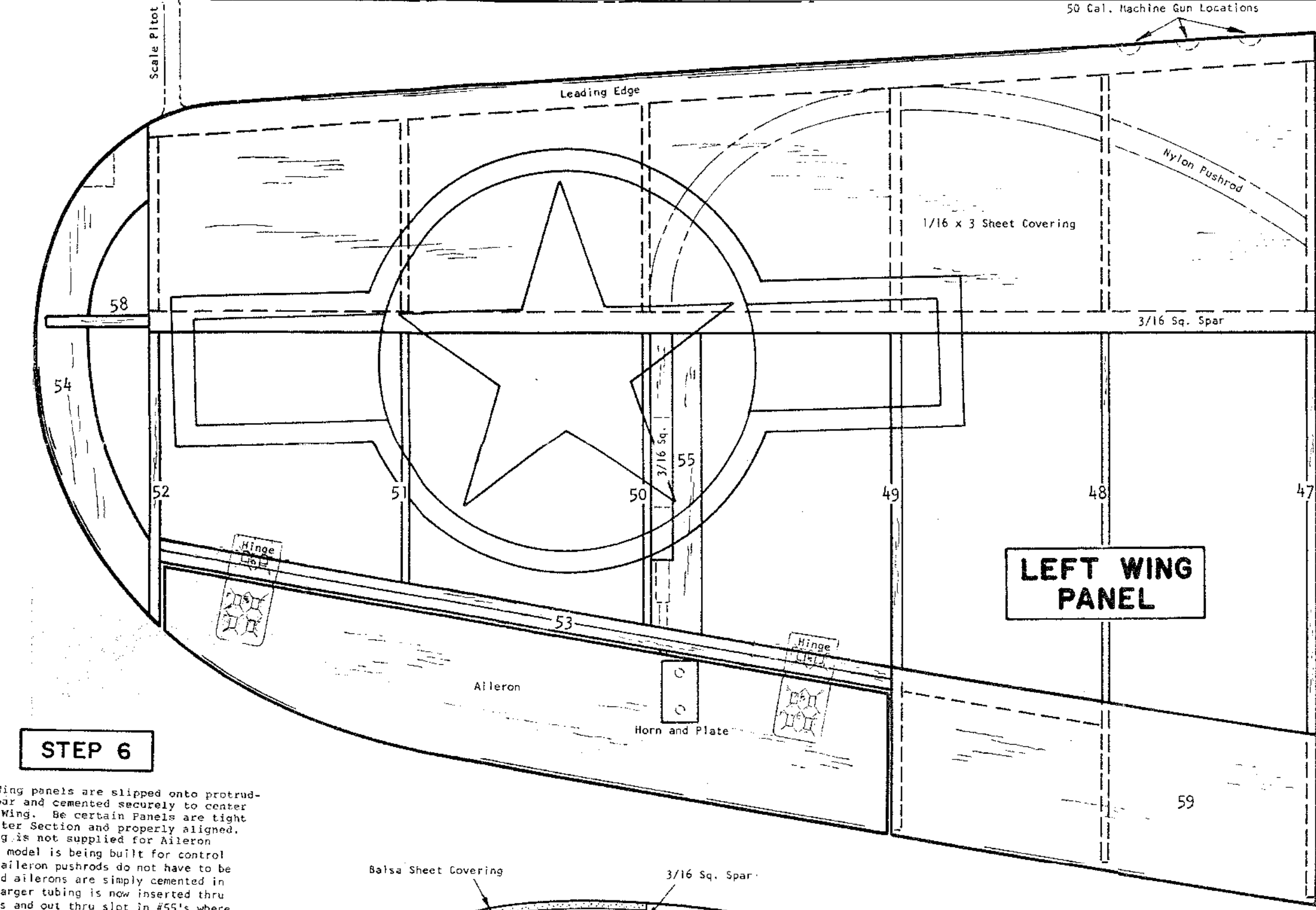
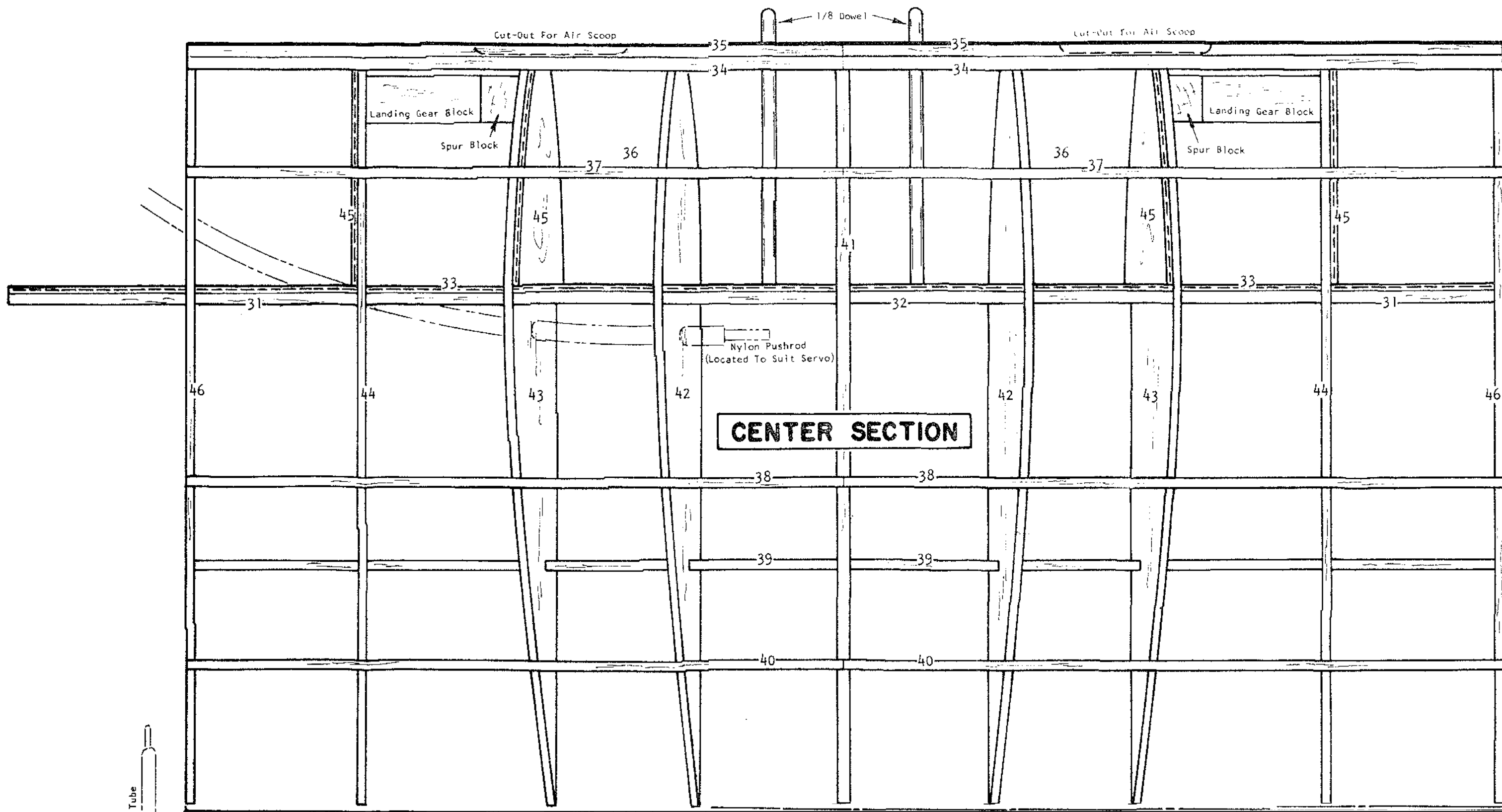


STEP 6



WING ASSEMBLY

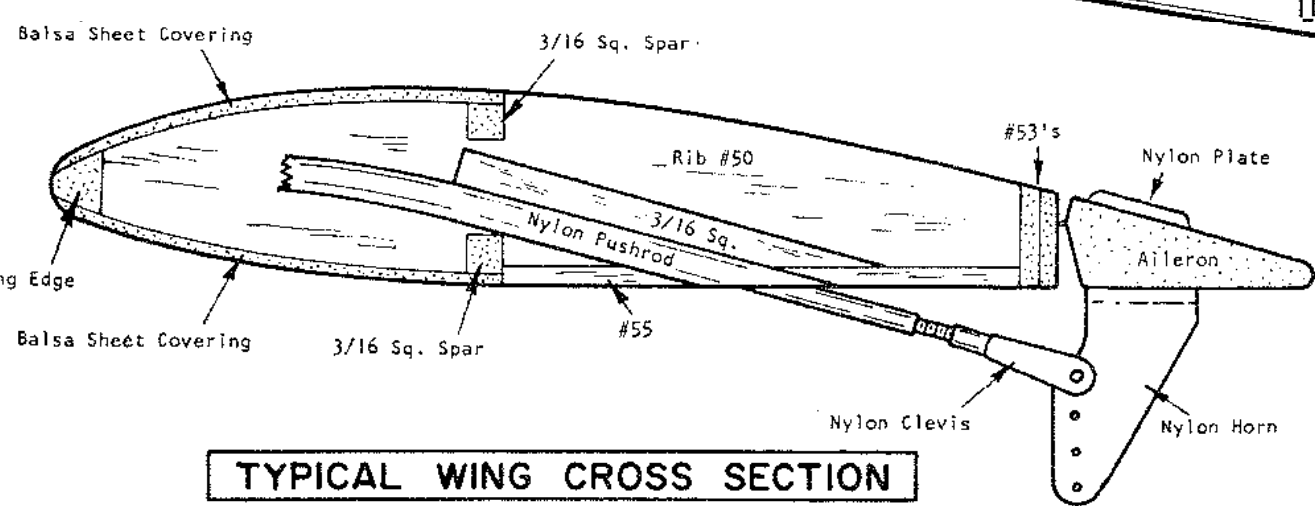
CENTER SECTION



LEFT WING PANEL

STEP 6

Completed Wing panels are slipped onto protruding Main Spar and cemented snugly to center section of Wing. Be certain Panels are tight against Center Section and properly aligned. Nylon tubing is not supplied for Aileron line flying aileron pushrods do not have to be installed and ailerons are simply cemented in place. The larger tubing is now inserted thru holes in Ribs and at Ribs #42. Check with smaller tubing to be certain it moves thru easily and no binding occurs. With Pushrod tubing in place, top of Gull Section can be covered in same manner as bottom. Only difference is that large sheets at rear cannot be compound curve. It is done in three pieces joining over each Top Spar as shown in this Top Sketch and proceeding sketch of Center Section. Allow frame to dry thoroughly, then sand entire Wing smooth. Cut out small section size drawing for Plastic Air Scoops. Trim and Right-hand) and hinge to Wing with Poly Hinge material. When Wing is installed in Fuselage, hole for Nylon Screw can be marked off then drilled and counter-bored to depth for nylon screw length. Wing can now be covered with material of your choice. Company models used Silkskin to keep weight at a minimum.



TYPICAL WING CROSS SECTION

DANGER

RULES FOR SAFE FLYING

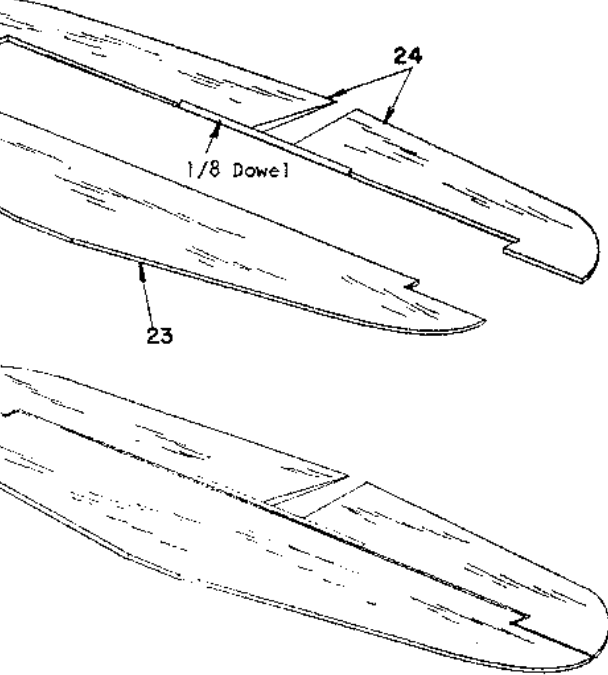
1. All equipment must be checked before each flight to make sure it is in good operating condition.
2. Fly only in a clear unobstructed area.
3. Model must never be flown in the vicinity of High Tension Lines or any Electrical Lines.
4. Model should never be flown when thunder and lightning storms are in the area.
5. Precautions should be taken to insure the safety of all spectators, modeler and property. Sterling Models, Inc. Phila., Pa., 19134, U.S.A.



POLY HINGE INSTALLATION

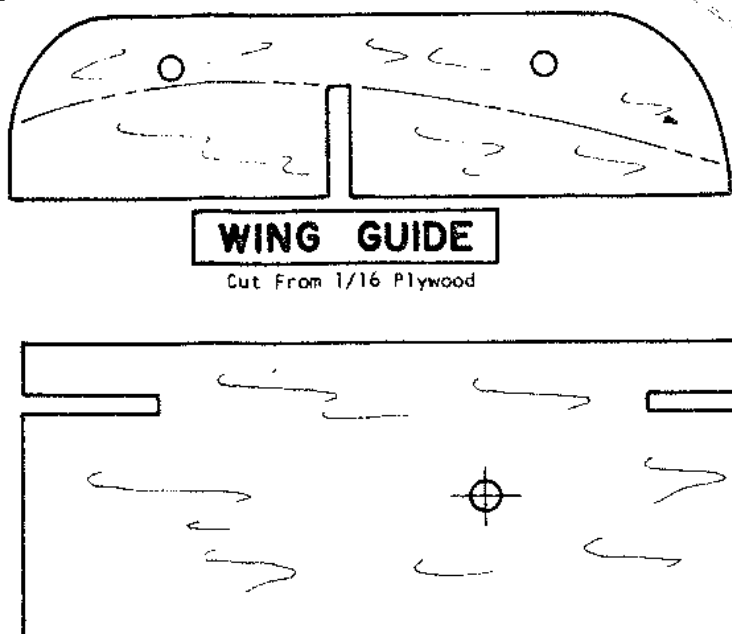
TO INSTALL: Cut strip to desired hinge width (generally about 1/16"). Strip surfaces to be joined as shown (in center of thickness). Epoxy hinge into slots. (Hinge line in center between surfaces) leaving enough space for free movement. Secure hinge by pushing straight pin through wood AND HINGE as shown. Pins are clipped flush.

Nylon Pushrods (such as Sullivan Gold-N-Rolls, Duro Laser-Rolls, etc.) are required for control surface operation. Purchase a small diameter Nylon Pushrod because the radius curvature inside the Wing for Aileron actuation will be tight.



STABILIZER ASSEMBLY

Stabilizer is built directly over Plan. Pin Elevator halves #24 in place and securely cement 1/8" Dowel into notches. Allow to dry thoroughly, then remove and add second coat of cement, making certain Elevators remain aligned with each other. Sand Stabilizer & Elevator smooth, rounding edges as shown in cross-section. Elevator is joined to Stabilizer with new hinges (see details). AFTER ASSEMBLY IS INSTALLED IN FUSELAGE, Elevator Horn shown in full-size drawing is in approximate location. This may vary with the installation of your own radio gear.



WING GUIDE

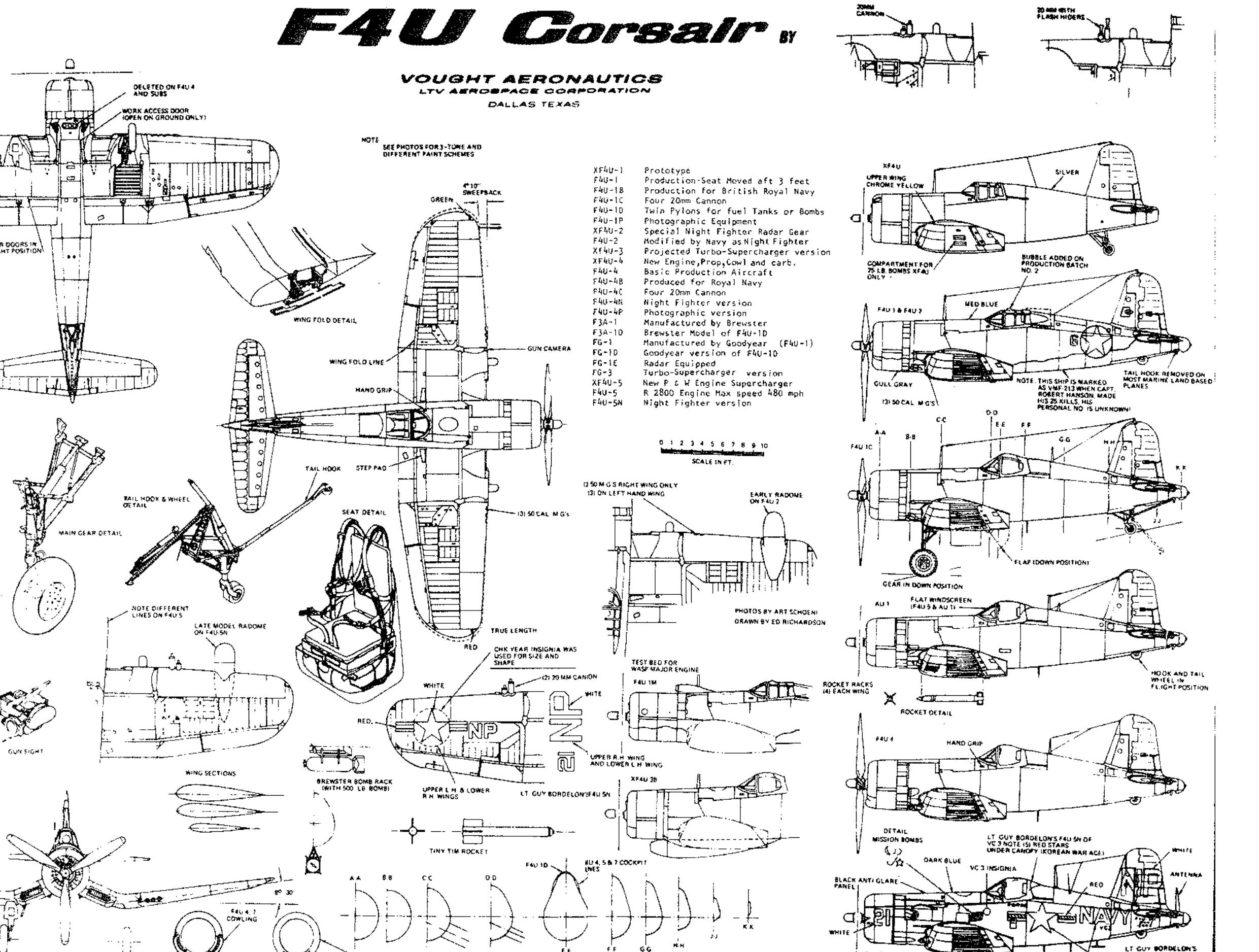
BELLCRANK PLATFORM

Cut From 1/8 Plywood

SEWN HINGE DETAIL

Sketch shows how thread hinge is made when assembling Elevator to Stabilizer and Rudder (if operated) to Fin. Drill slot holes just large enough for needle to pass through. Sew surfaces together with strong thread (not supplied) using over and under stitch sewing. Tie ends and cement securely to prevent unraveling. Keep glue out of hinge area. Check that surfaces swing freely.

Original drawing from Chance Vought.



F4U Corsair

VOUGHT AERONAUTICS
LTV AEROSPACE CORPORATION
DALLAS, TEXAS

CONTROL LINE INSTALLATION

If model is being built for Control Line flying, installation can be made after model has been completed. Materials required for Control Line Model are not supplied. Cut a 1/8" Plywood Bellcrank Platform using full-size pattern and cement in place at Bulkhead #9 as shown, against top of #18. Mount your Bellcrank on Platform according to manufacturer's instructions. Mount Elevator horn then cut slot in rear of fuselage under stab for pushrod exit. Pushrod is made from a piece of 3/32 Dia. wire and inserted thru fuselage engine on Horn and Bellcrank with both in neutral position. Rudder is cemented to Fin angled 1/2" toward inside of circle flow. One ounce weight (fishing sinker) is cemented

securely into outside Wing Tip as shown. Make a Wing Line Guide from 1/16 plywood using full-size pattern on Plan. Cement to outside of Tip Wing Rib #52. Drill holes in fuselage side for lead-out lines and reinforce with Eyelets or Washers. Attach steel lead-out lines to Bellcrank and make loop on opposite end about 2" past Wing Tip. Be sure lines are of equal length with Elevator in neutral position. NOTE: Model must balance slightly nose down at point where front Control Line exits Fuselage. Recommended engine size for Control Line version is .19 to .35. Be sure to read Safe Flying Rules before flying your Corsair! GOOD LUCK AND GOOD FLYING.