

**PLEASE READ FIRST !!**

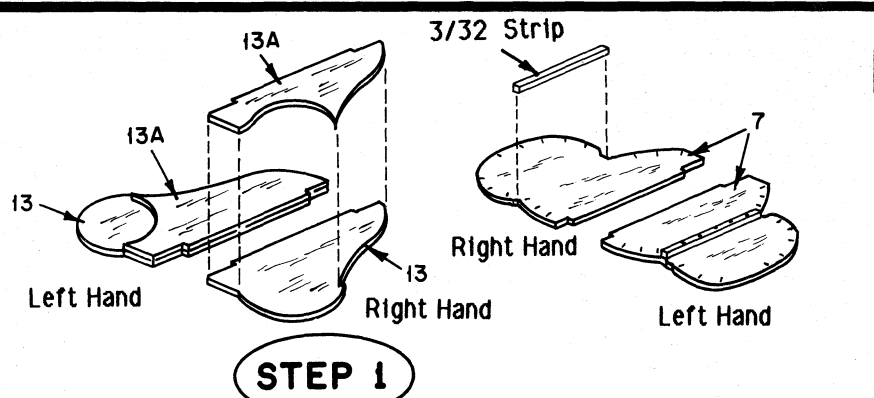
Before you start construction of your model, study the plan and construction procedure carefully so you have a complete understanding of the step - by - step method of building this airplane. Careful attention to detail, patience and quality workmanship will insure a beautiful model. Remember - work slowly and carefully at all times. This multi-purpose model has been designed to give you a variety of building choices. You can build the model for static display on table top with landing gear in position. You can build the model for static display in flying mode without landing gear (simulated retract position) or you can build the model for flying either as a hand launch or catapult launched glider. You must decide how you want to build your model now and then proceed accordingly. Choose a flat building board and always cover plan with a clear kitchen film or wax paper to prevent parts from sticking to plan.

**ADHESIVES YOU CAN USE**

Your model can be built using many different products such as white glue, epoxy, regular model cements or cyanoacrylate (CA) glues. You may choose to use any one or a variety of these adhesives for your model. For example, white glue will not hold plastic parts together or on the model but any of the others will. WARNING - be very careful when using CA glues and read the manufacturers instructions completely. Also when using CA glues you should cover the plan with WAX PAPER rather than the clear plastic kitchen film.

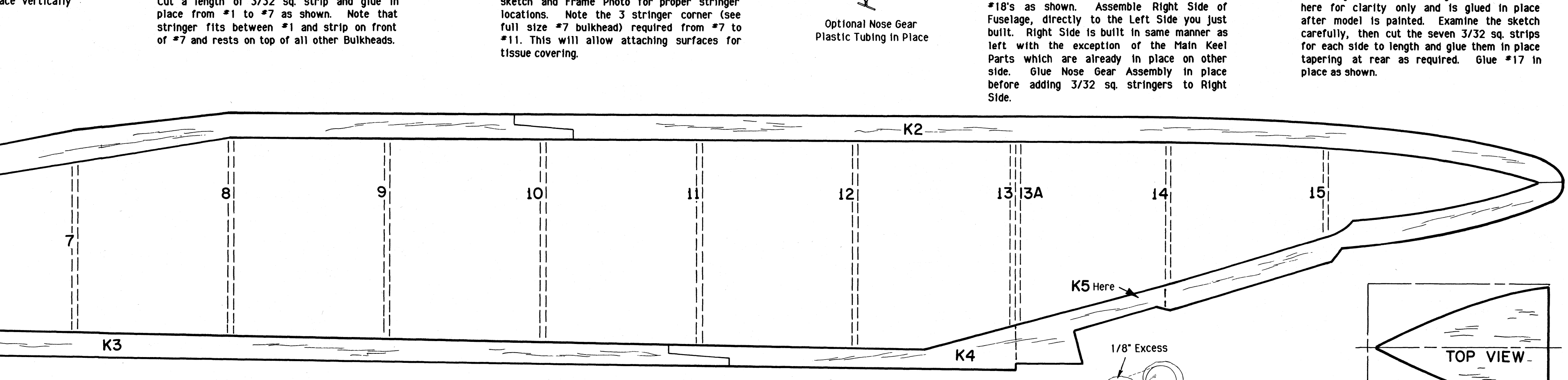
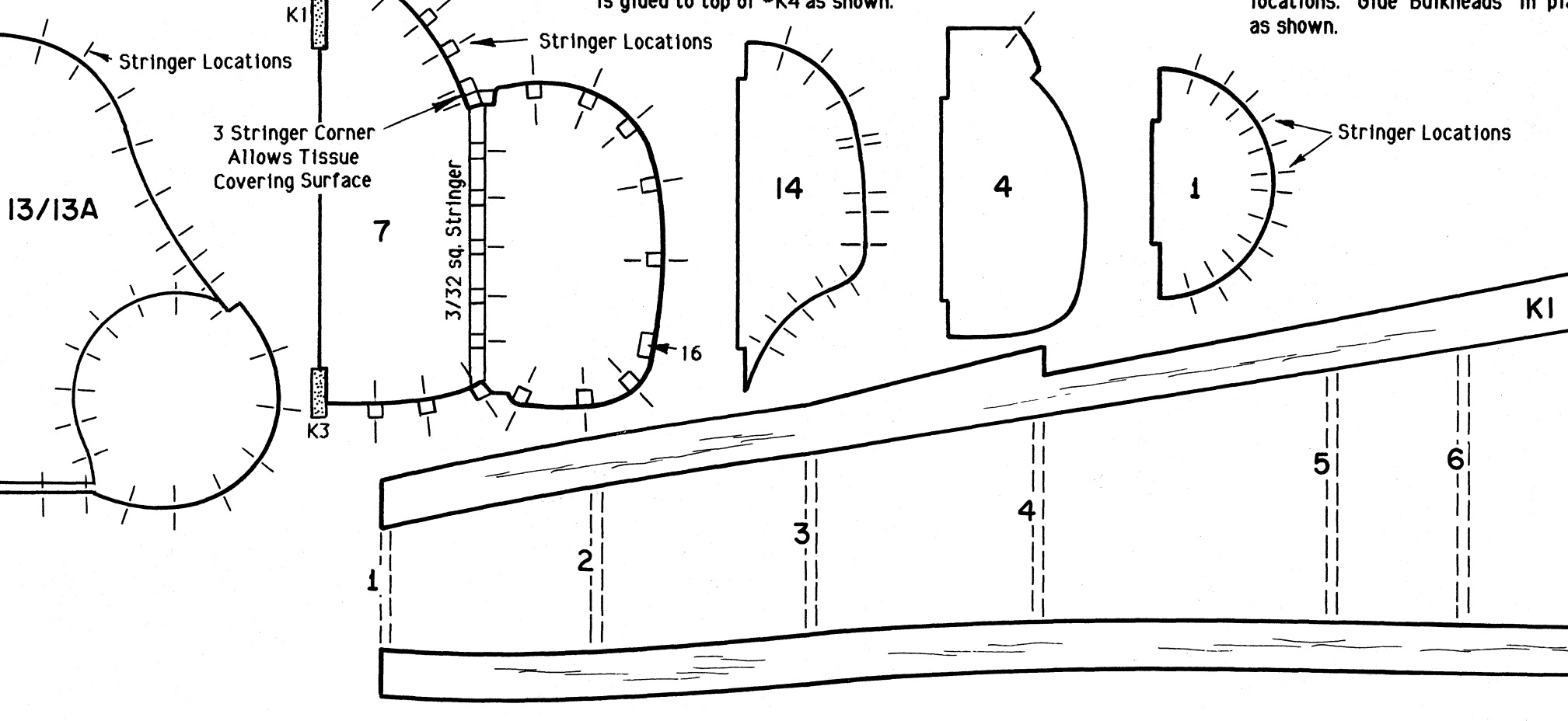
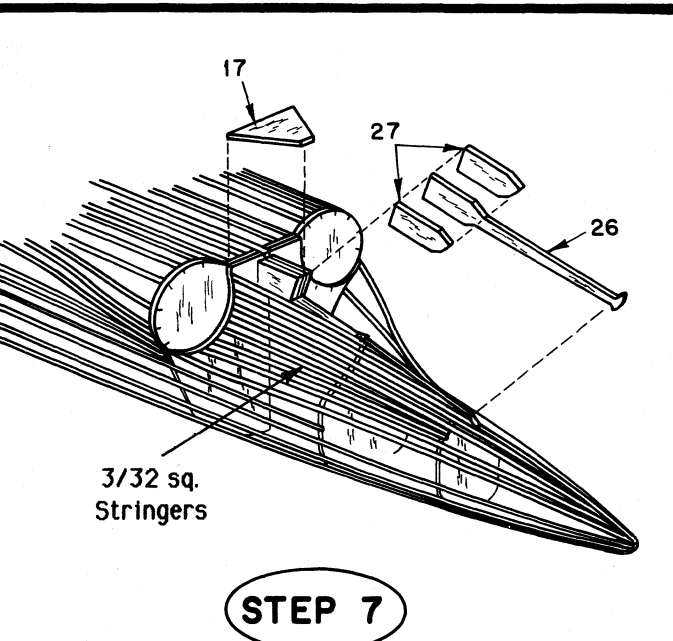
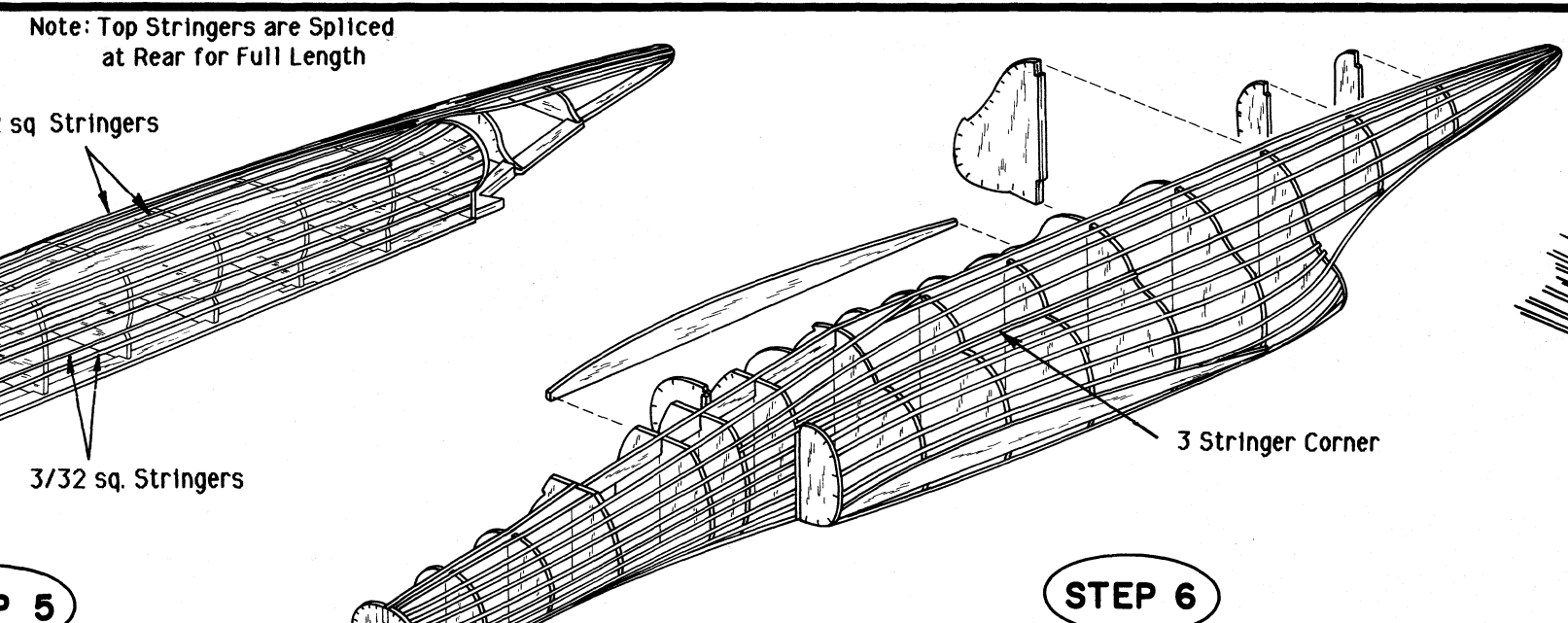
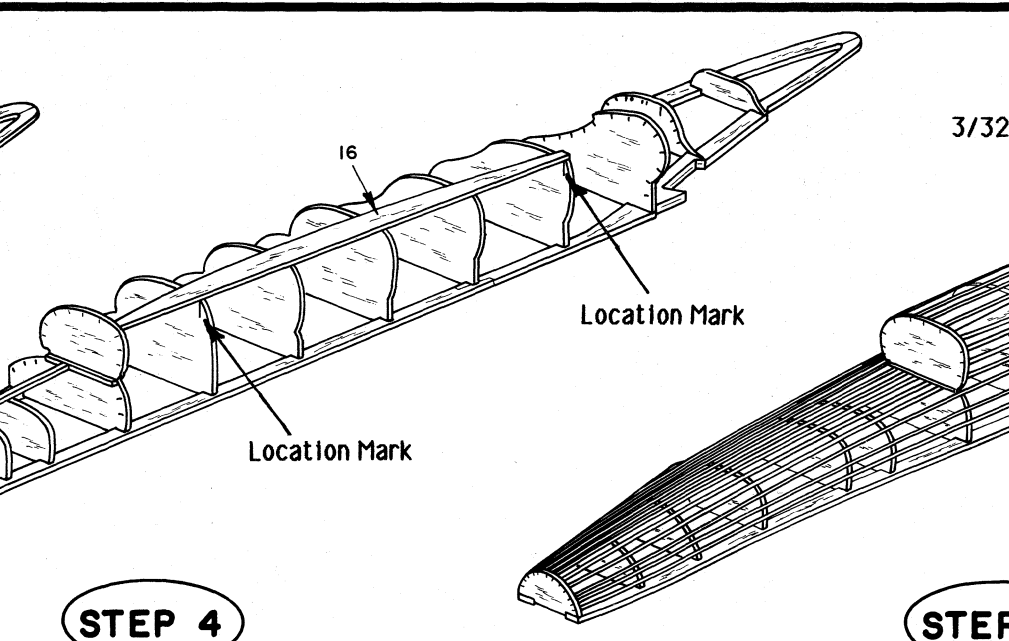
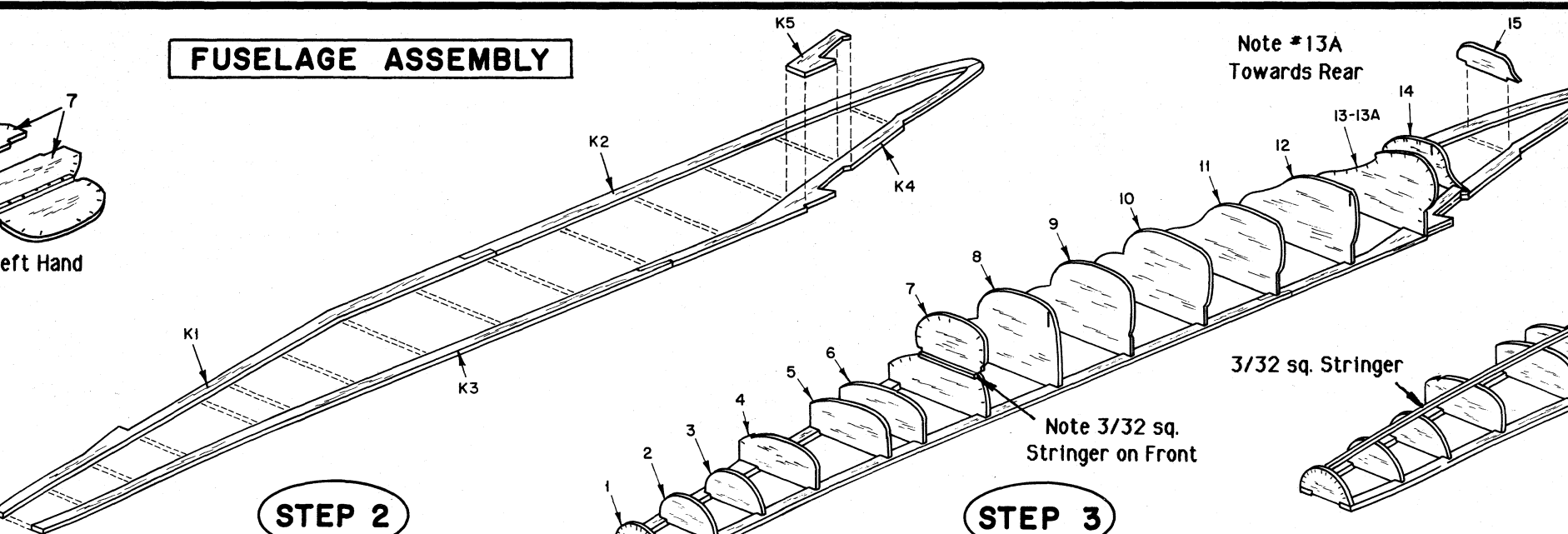
**PROUD OF YOUR MODEL**

If you wish, send us a photo of your completed model. We have a photo album for display at trade shows and exhibitions. Don't forget your name, address and age on back of the photo so we can credit the builder.



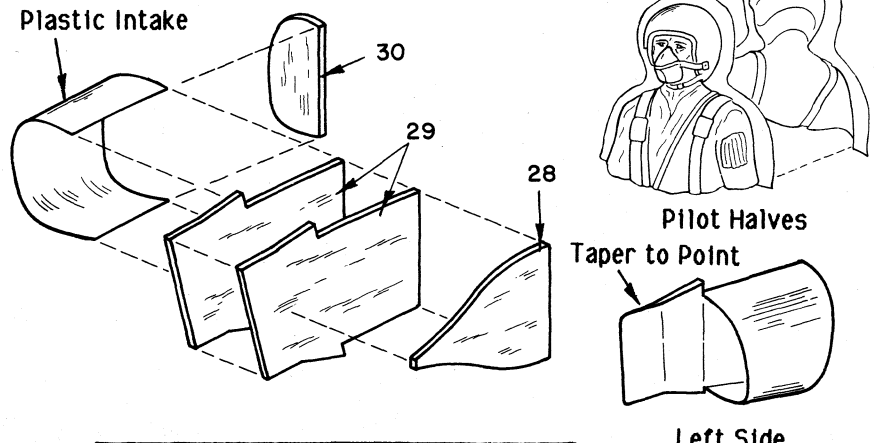
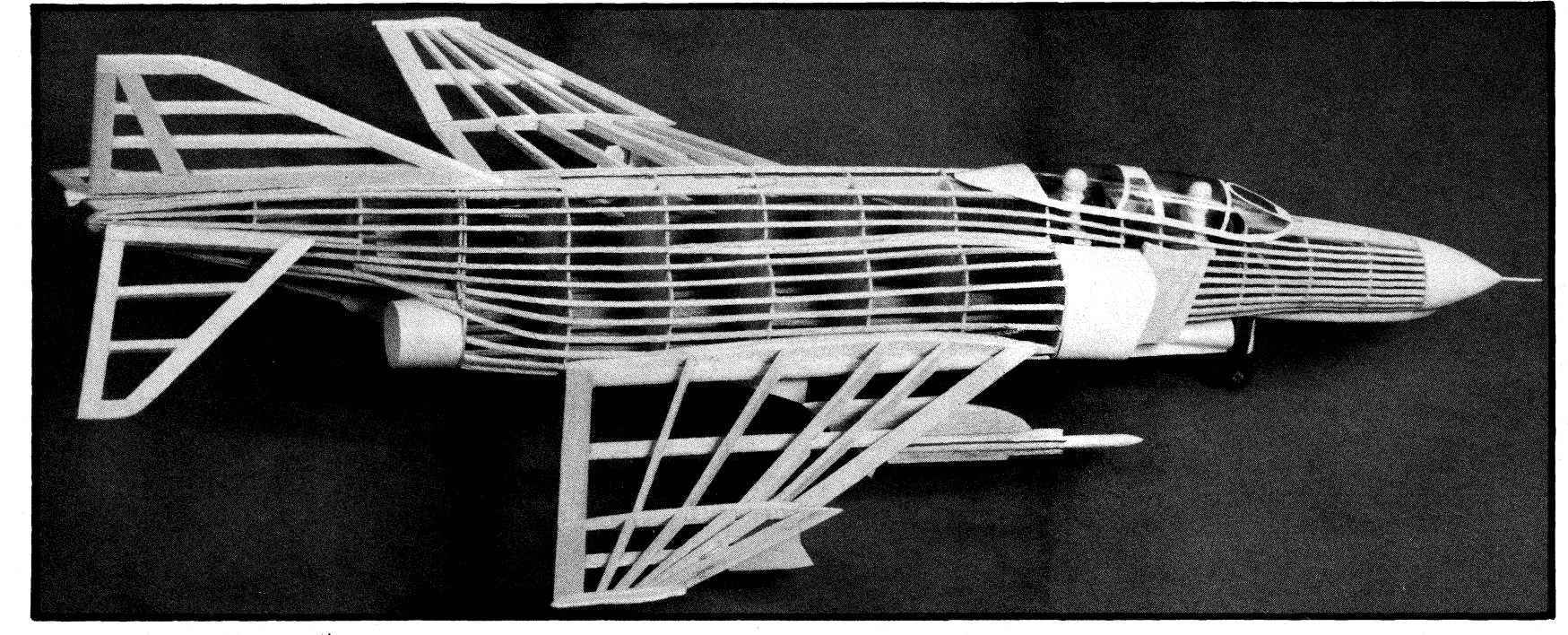
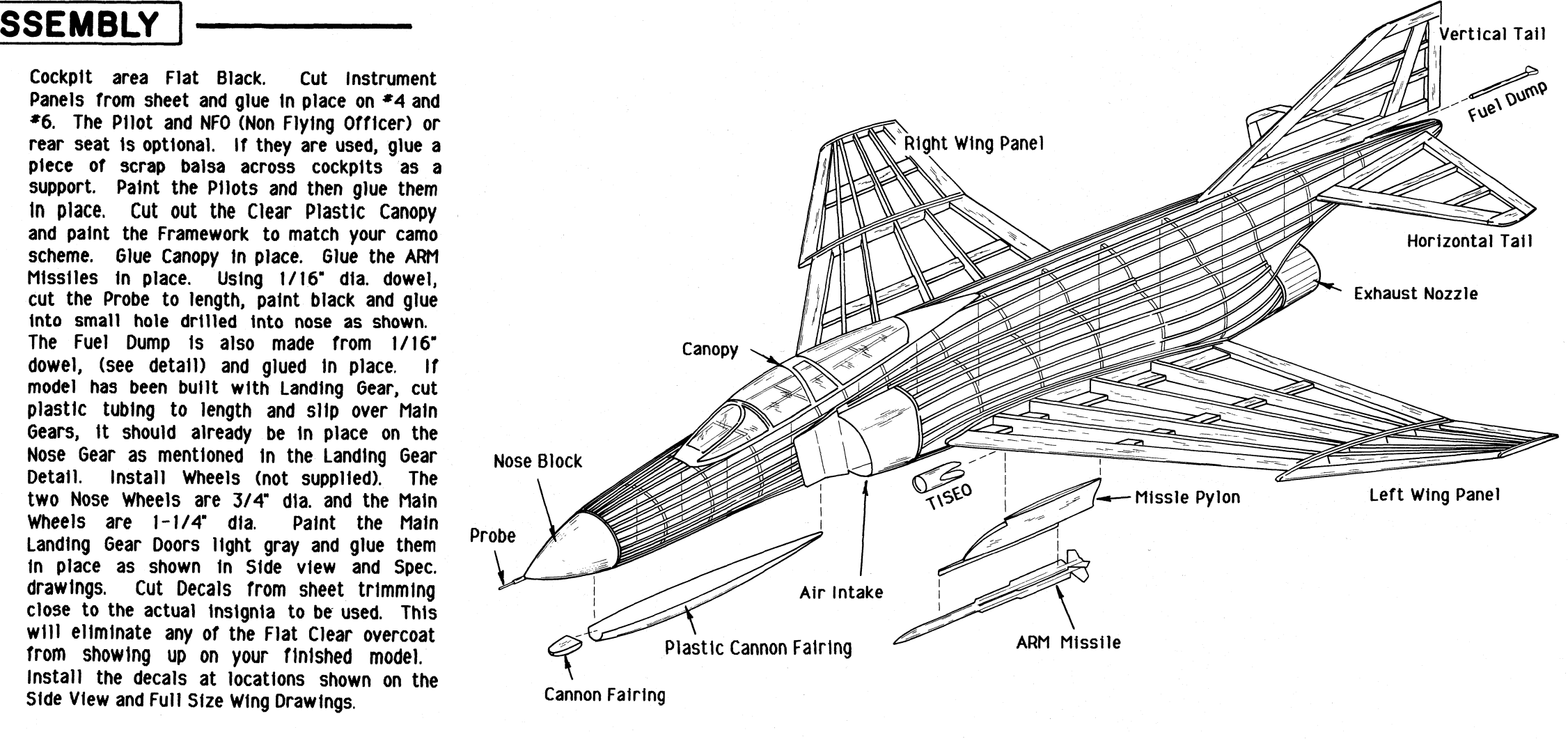
**FUSELAGE ASSEMBLY**

Cover the building area of the Plan with any clear plastic kitchen wrap or wax paper to prevent parts from sticking to plan. Carefully remove Bulkheads #7, #13 and #13A from diecut sheets. Cut two lengths of 3/32 sq. strip and glue to front of #7's as shown. BE SURE to make a right and left hand assembly as shown. Now glue #13A's to #13's as shown again making a right and left hand assembly. Now lay these Bulkheads over full size drawing of each and mark stringer locations.



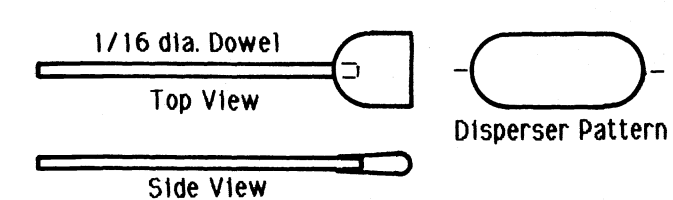
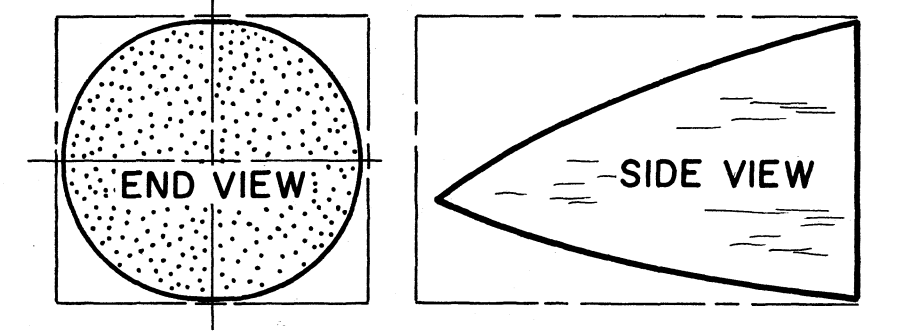
**FINAL ASSEMBLY**

Carve Nose Block (see detail) and glue to front of Fuselage. Sand entire Fuselage smooth. Trial fit all other parts, Wings, Tails, and Plastic Parts to make sure everything fits well then cover Fuselage with tissue. The Final Assembly Sketch shows parts uncovered for clarity only, they are covered separately, then joined. Glue Wing Panels in place aligning carefully against #16's at location shown on sketch and Side View. Glue Air Intake assemblies and Exhaust Nozzles in place. Glue Horizontal Tails in place at locations shown on sketch, Side View and Spec. Drawings. Use Angle Template on Plan to get the proper downward angle on the Horizontal Tails. Glue Vertical Fin in place. Check alignment of all surfaces carefully as glue dries. Make Missile Rails and Missiles (see detail). Glue the Pylon and Rails to bottom of Wings. Carve the front piece of the Cannon Fairing from 3/8 x 3/4 x 7/8 balsa block as shown. Glue to front of Plastic Cannon Fairing then glue assembly to bottom front of Fuselage. If Model has been built with Landing Gear, this Cannon Fairing also houses the Nose Gear when it is retracted on the real aircraft, therefore it must be cut at the door locations and glued in place in the open position. Check the Side View, Frame Photo and Spec. Drawings. Carve the TISEO (Target Identification Systems, Electro Optical) from the 3/8 x 3/8 x 1-3/8 balsa block (see detail) and glue in place on left Wing as shown. Model is now painted. If it is to be a flying model, use only two coats of clear Dope thinned 50-50 with thinner, then one light spray coat of each color. If it is to be static display model painted Scale Colors, see color photo on box top and refer to photo of real aircraft on plan. Entire bottom of airplane is very light gray. Top of Airplane is a three-tone camouflage scheme in Light Tan, Dark Green and Medium Green. Nose is Black with a silver tip. The Exhaust Nozzles, Center of Horizontal Stabilizers and Bottom of Fuselage from Exhaust back is a dark Grey-silver Metallic color. Paint



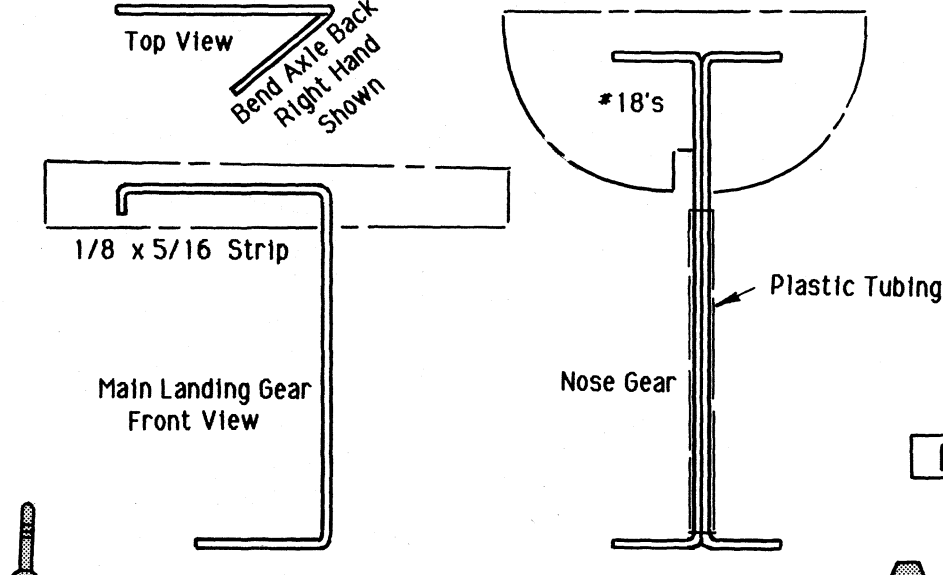
**PLASTIC PARTS**

Carefully trim all plastic parts from sheet. Leave about 1/8" excess around front and rear Pilot halves as shown. Glue the two halves together and allow to dry thoroughly. Trim off excess and sand seam smooth. Assemble the Left and Right Hand Air Intakes as shown by gluing two #29's together. Now glue #28 to make a inside of #29's. Here you must be sure to make a Left Hand and Right Hand assembly. Front of #29's are now tapered from the step to almost a point at the front. Now glue a #30 in place followed by the Plastic Intake part as shown. Drawing shows Right Side Assembly exploded and Left Side completed. Exhaust Nozzles, Cannon fairing and Canopy are shown and installed in Final Assembly.



**FUEL DUMP DETAIL**

Make fuel dump by cutting a piece of 1/16 dowel to length. Trace off dispenser pattern and cut from scrap paper. Fold over and glue to end of dowel.



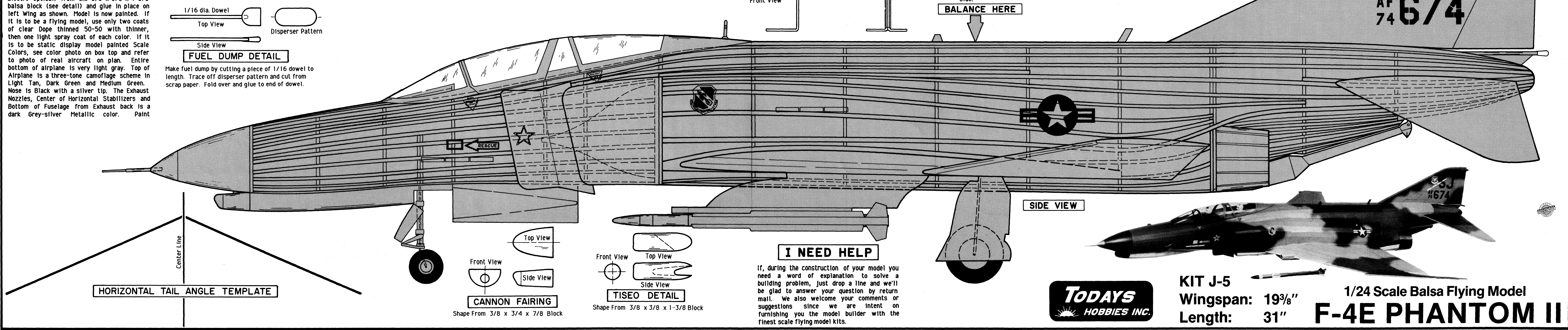
**LANDING GEAR DETAIL**

Landing Gear is optional. Cut and bend Main Gears and Nose Gear from .045 dia. wire. NOTE: slip the piece of Plastic Tubing over Nose Gear Wires before making second bends. Glue the Nose Gear wires into crease marks and sandwich them between #18's as shown. Nose Gear is installed in Step 6. Cut a piece of 1/8 x 5/16 strip to length, groove to accept gear and then glue to front of Spar B sandwiching gear between. Repeat for other side.



**NOSE BLOCK DETAIL**

Make balsa nose block using 1-1/2 x 1-5/8 x 2-5/16 stock. Trace off side view, top view and end view from plan. Trim and sand block to this shape and install in final assembly.

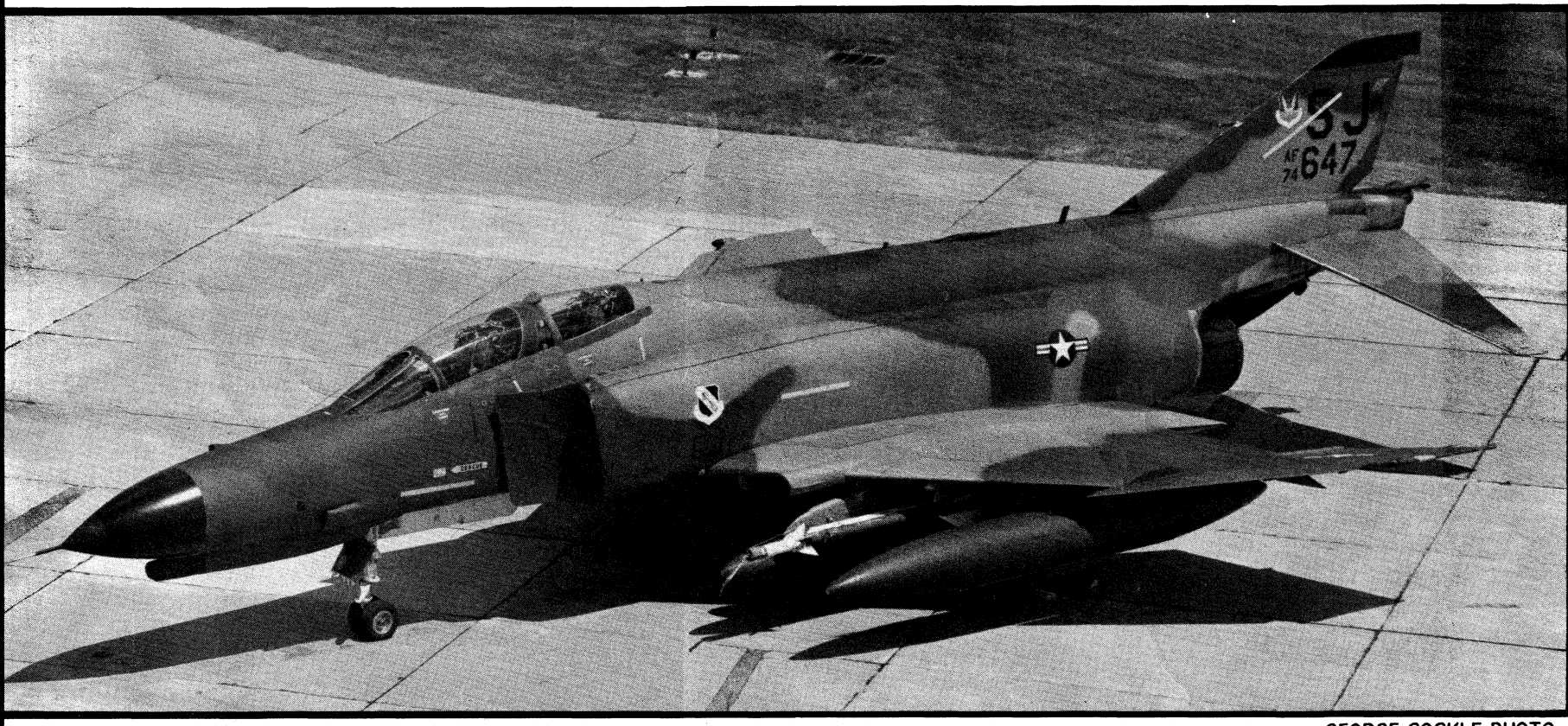
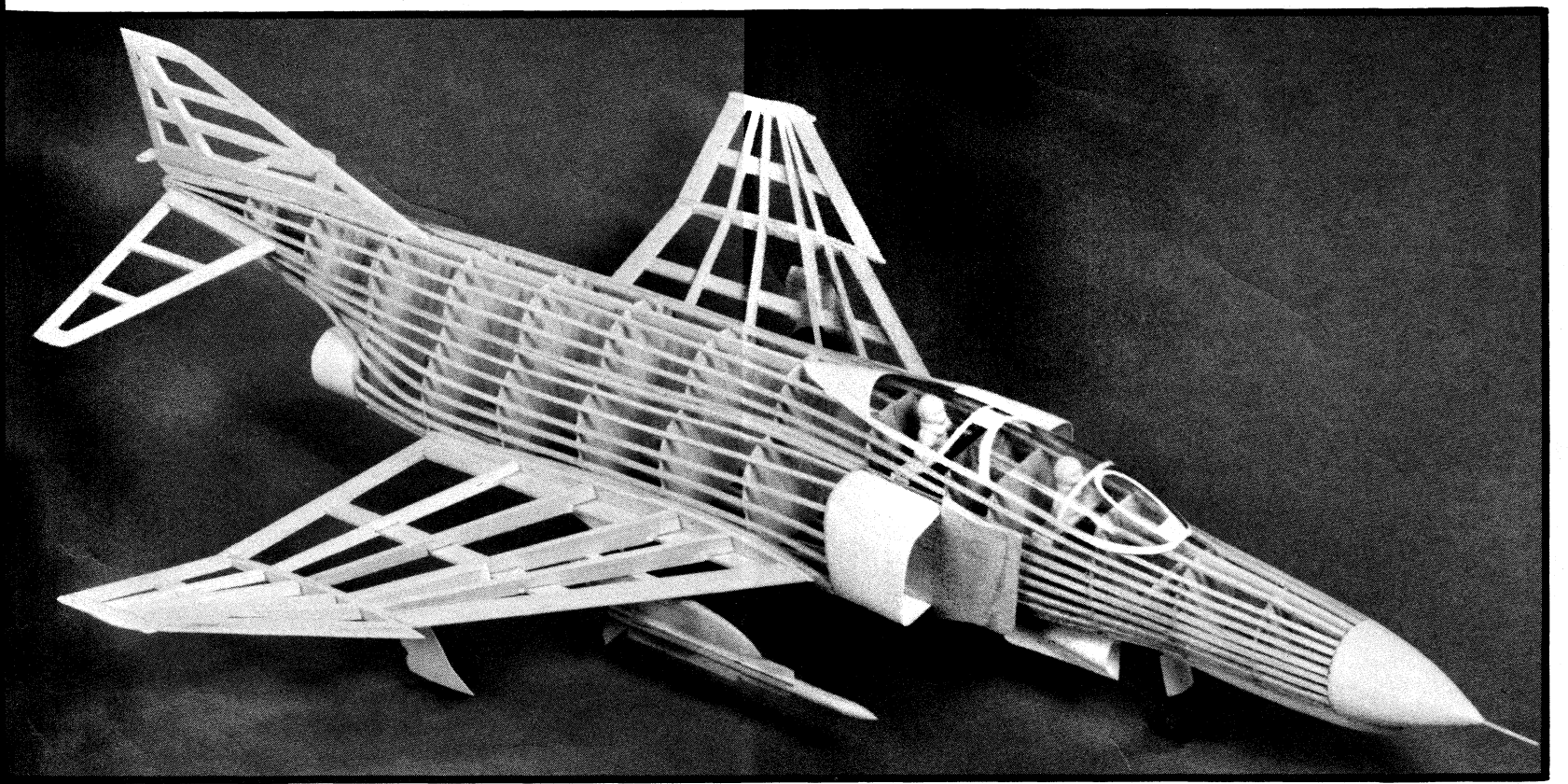
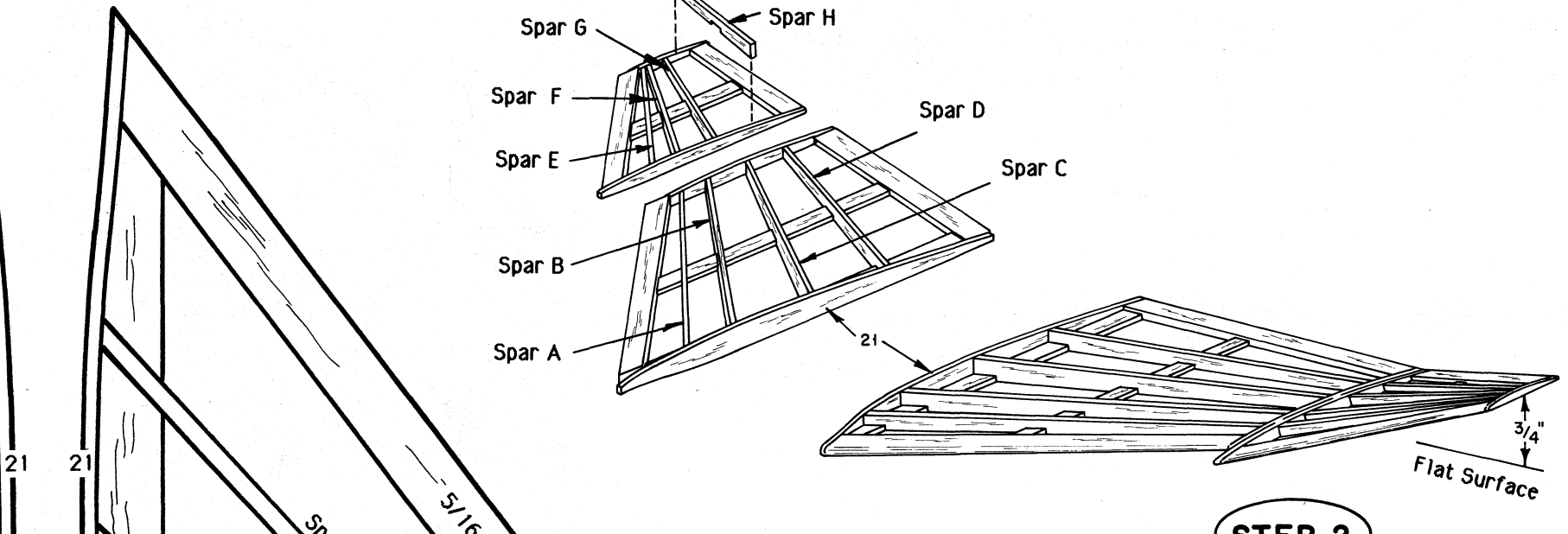
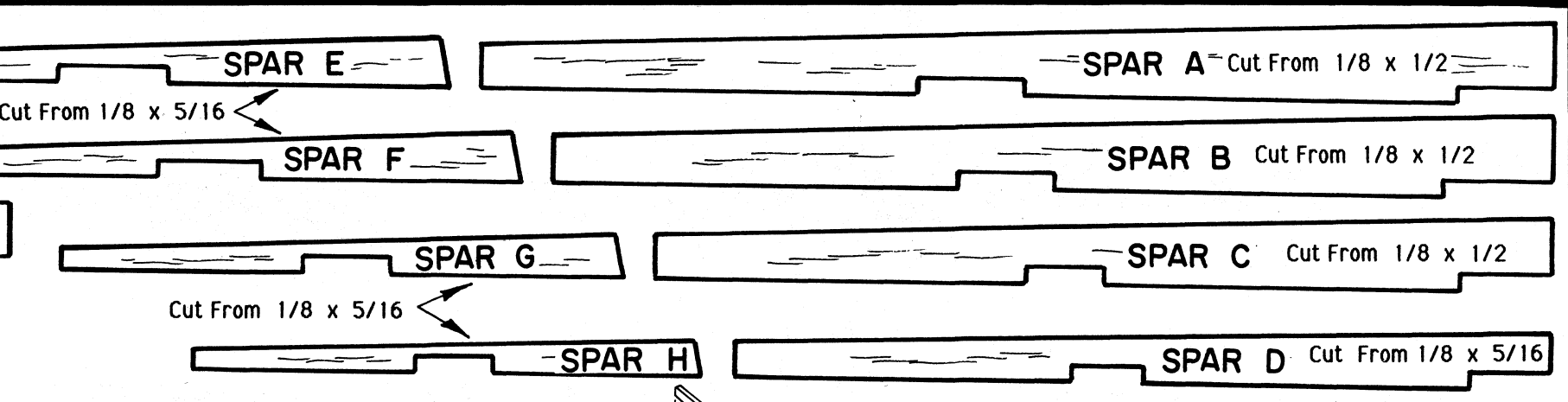
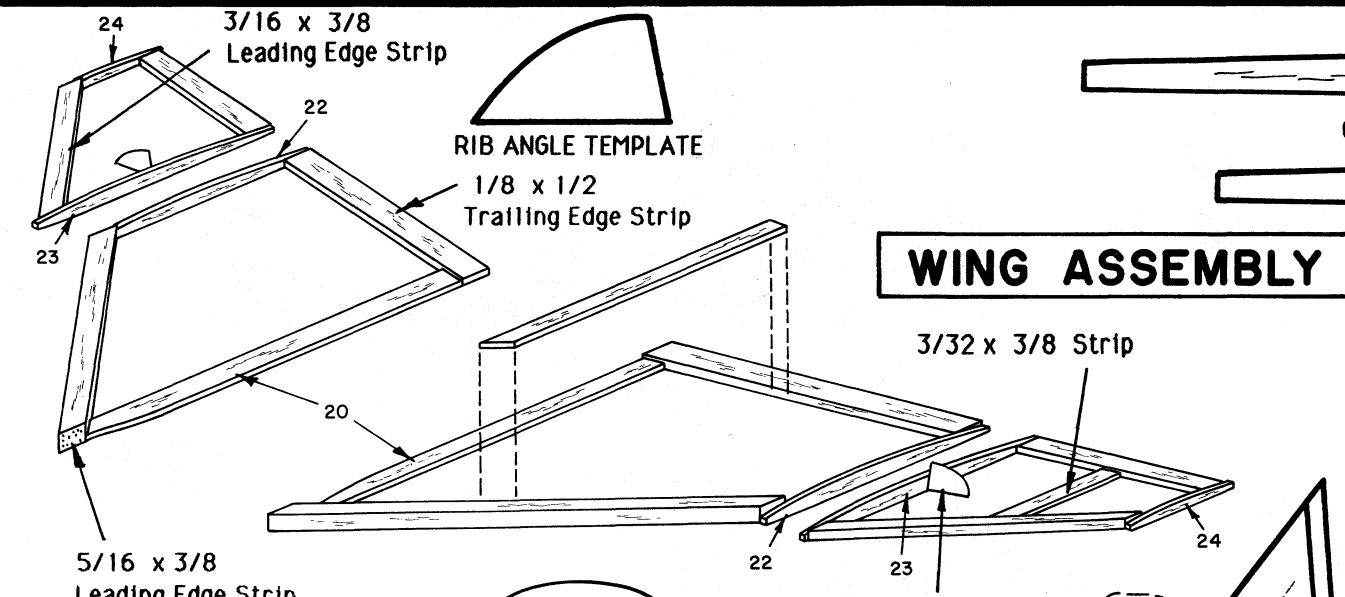
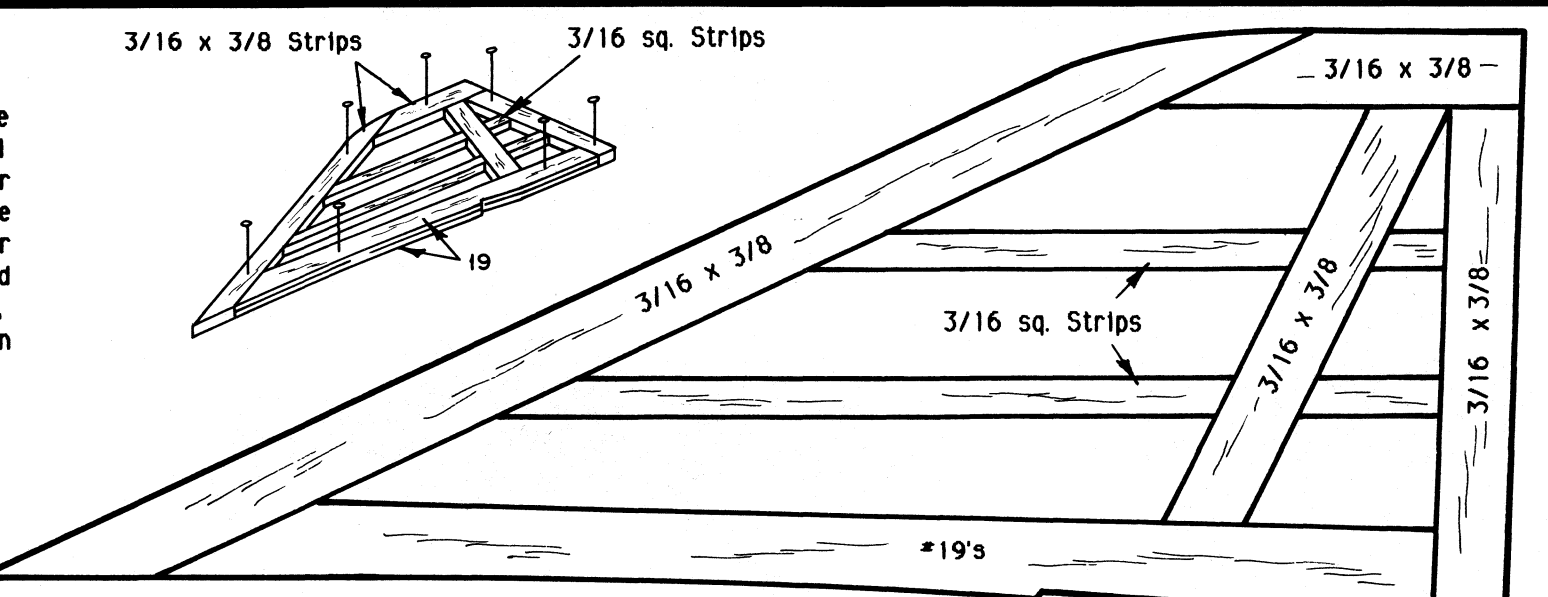
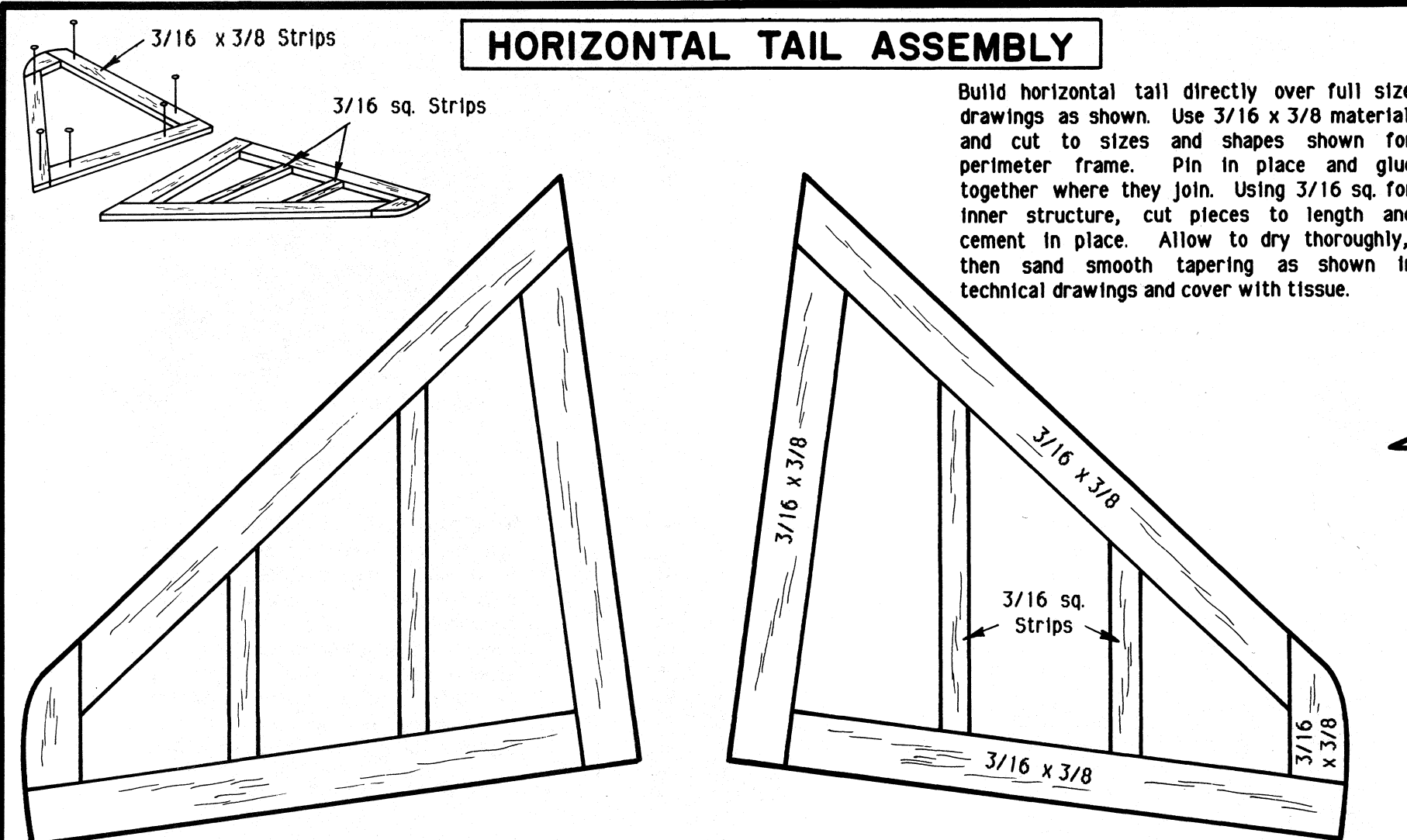


**KIT J-5**  
**Wingspan: 19 3/8"**  
**Length: 31"**  
**1/24 Scale Balsa Flying Model**  
**F-4E PHANTOM II**

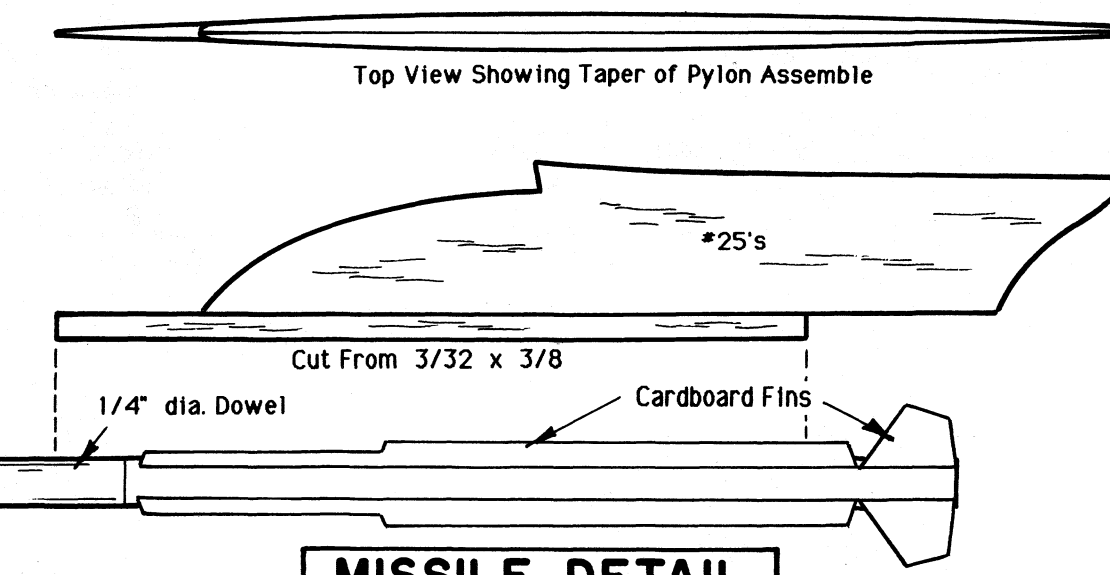


**I NEED HELP**

If, during the construction of your model you need a word of explanation to solve a building problem. Just drop a line and we'll be glad to answer your question by return mail. We also welcome your comments or suggestions since we are intent on furnishing you the model builder with the finest scale flying model kits.



**SPECIAL THANKS**  
TO  
BERT KINZEY  
&  
IN DETAIL & SCALE PUBLICATION  
FOR TECHNICAL REFERENCE DATA  
AND SPECIFICATION DRAWINGS

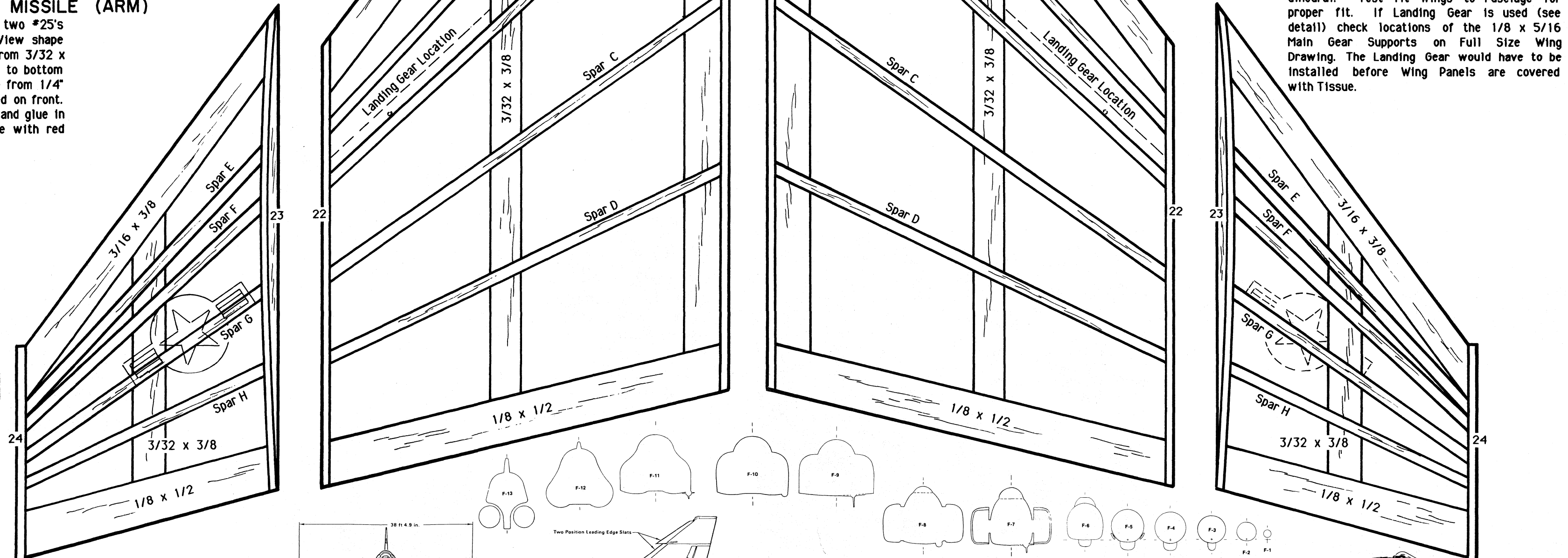


**PARTS IN THE KIT**  
We strive to supply quality materials in all our kits. All parts are inspected with regard to the function they serve. If an imperfection is spotted in a scrap area of die cut sheets, plastic parts, etc. and doesn't affect the actual part, the sheet is considered acceptable. Also, when wooden parts are cut, natural internal stresses can be relieved. These relieved stresses may allow parts to bow or twist. These will readily straighten out as parts are assembled into a structural unit.

**SUGGESTIONS FOR BUILDING A SUPER SCALE STATIC DISPLAY MODEL**  
An even more highly detailed model can be built for static display. None of the extra material for this type of model is included in the kit. Since this model is not meant to be flown, weight is not a factor. The real aircraft framework is covered with sheets of aluminum, fiberglass, carbon fiber, etc. To duplicate this full skin covering, all tail surfaces can be duplicated with sheet balsa of the proper thickness and not built with open framework. The wing panels are also duplicated with balsa sheet cut to shape. Glue center and tip ribs in place, then shape and sand wing to conform to rib shape. The fuselage is a bit more involved. Instead of using 3/32 sq. stringers spaced as shown in drawings the entire fuselage is planed with 3/32 x 3/8 strips. All assembled components are sanded smooth and covered with tissue to fill wood pores more quickly and result in a smooth surface. This method will eliminate framework from being visible through covering and allow you to add as much detail as you wish, using the scale spec drawings as reference.

**SUGGESTIONS FOR BUILDING A LIGHTWEIGHT FLYING MODEL**  
Sand all finished parts (wing panels, stab, vertical fin, fuselage) very carefully tapering surfaces (see specification views) so that all surfaces have a minimum of wood structure. Do not install landing gears, missiles, or any unnecessary details. After applying tissue use two coats of clear dope thinned 50 - 50 with thinner and one very light spray coat of finish color.

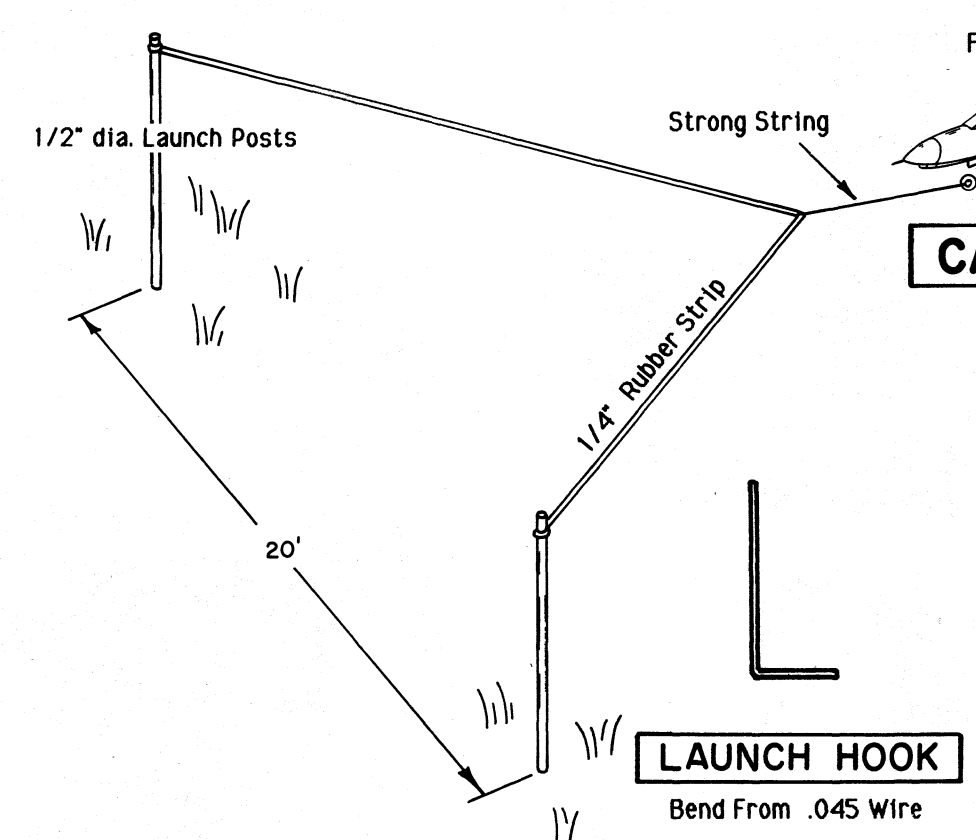
**HAND LAUNCH FLYING**  
If you choose to fly your model as a Hand Launched Glider read Suggestions for Building a Lightweight Flying Model. After construction is completed, model MUST balance at point shown on Side View. Add weight as needed to nose or tail. Choose a calm day for flying and a field with tall grass for first test flights. Allow model to rest on your forward hand at air intake and push off hard and slightly nose down with your other hand. If model stalls and balance is correct - adjust horizontal tail to a slightly down position. If model dives adjust tail up slightly. Continue adjustments until model glides well. Remember - this is a scale model of a Jet Airplane. Flying speed is CRITICAL due to small wing area and heavy loading. Model will glide well under speed and drop quickly when flying speed is lost.



### TISSUE COVERING

Read entire note before starting. The tissue supplied in this kit allows covering of compound curves without wrinkling when moistened with water before applying to framework. Tissue shrinks as it dries to a tight, smooth surface. Use clear dope to attach tissue as follows. Apply a light coat of dope to outside edges of area to be covered. Allow to dry and sand smooth with fine sandpaper. Cut tissue to shape needed plus about 1/2" oversize on all sides. Place tissue on a flat surface and dampen with moistened cloth by dabbing. Apply a second coat of clear dope to area to be covered, then place moistened tissue over frame and pull tissue gently to work out wrinkles and sags. Allow to dry - trim off excess. Apply two coats of clear dope (thinned 50 - 50 with thinner) before final assembly. All parts are covered with the largest piece of tissue possible without causing wrinkles. For instance: The wing panels can be covered with two pieces for the top and two pieces for the bottom. The tail parts can be covered with one piece for the top and one for the bottom of each piece. The fuselage however, will require many separate pieces. You can use your own skill and judgement to determine just how large and many pieces you will need to do the entire fuselage. Remember: any area that develops wrinkles can be cut out and recovered. Check wing panels and tail surfaces for warps. If any have developed, they can be removed by holding over steam from a boiling kettle, and twisting gently in opposite direction. Check again when cool. BE CAREFUL - STEAM IS VERY HOT - DON'T BURN YOURSELF.

### FLYING INSTRUCTIONS



**CAUTION**  
Do not fly any model in the vicinity of Electric Power Lines, or if flying sight is obstructed or spectators are in unsafe positions.

### CATAPULT LAUNCH FLYING

If you choose to fly your model as a Catapult Launched Glider read Suggestions for Building a Lightweight Flying Model. Balance and adjust model as described in Hand Launch Glider Note. None of the material required for Catapult Flying is supplied. Two 1/2" dia. x 36" long hardwood dowels are FIRMLY driven into ground about 20 feet apart. A 30 foot length of 1/4" rubber strip is tied to the top of each dowel with a 5 foot length of strong string tied to middle of rubber strip. Now tie a metal washer to the other end of string. Bend a launch hook from wire using full sized drawing as pattern. Firmly glue hook into bottom of fuselage directly behind bulkhead #4. When catapulting model, BE CERTAIN FLYING AREA IS CLEAR AND UNOBSTRUCTED, then slip washer over launch hook. Take steps backward, stretching rubber while holding model in flight position, then release model. Model will be launched forward and when it reaches the dowels, washer will slip from launch hook and model will glide free.

