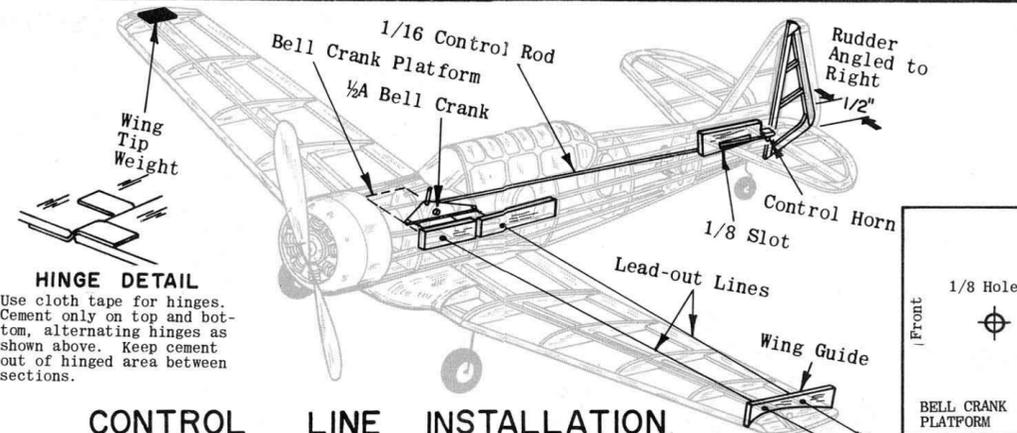


FINAL ASSEMBLY

Wing (including plastic wheel well fairing), tail and fuselage are now covered as described in Silkspan Tissue Note, before proceeding. Cement wing securely in fuselage between bulkhead F1 and F4. PRESS WING TIGHTLY AGAINST BOTTOM OF L5 IN CENTER, AND OUTER KEELS L6's to insure proper incidence. OTHERWISE MODEL MAY NOT FLY! Hold with pins until dry. Cement 1/16 sq. strip from notches in bottom of F1, horizontally to front of plastic wheel well as shown on side view. Using pattern provided, cut bottom fuselage cover from stiff paper and cement in place. It is necessary to have access to rear hook for rubber motor. Cut out stringer above side keel L7 on right side between F5 and F6. Fit piece of 1/16 scrap balsa into space. Cement cloth tape to top (half over door and half over fuselage) to act as hinge. Cement a strip of 1/16 sq. to L7 to act as door stop, to keep door flush with surface. Hold bottom in place with Scotch Tape. Cement stabilizer horizontally in place. Cement rudder to top of stabilizer and against rear of fuselage. ALIGNMENT OF WING AND TAIL SURFACES IS NOW CHECKED. Tips are equal distance from flat surface when model is at rest, rudder is vertical. Using pattern provided, cut tail fairing from stiff paper and cement in place. Prepare all plastic parts for installation as described in detail note. Make 2

steps from scrap balsa using patterns provided and cement to left side of fuselage, see side view. Model is now painted. For scale colors, see three view drawing or box top. For best performance, use a minimum of color dope. Apply decals by dipping in water and sliding off into position shown. Cut instrument panel from plan and cement to F3 in cockpit. Cement all plastic parts in place as described in detail note. Outlines of scale control surfaces may be drawn in place with India Ink. Insert bearings into wheels and place wheels on axles; hold in place with drop of cement or solder. Insert straight end of propeller shaft through rear of nose bearing. Slip on two washers and insert shaft through rear of propeller. Bend front of shaft to "U" shape as shown on side view and cement securely to propeller. Make two loops of rubber. Insert rubber through trap door and engage on rear hook. Slip remainder of rubber into fuselage and shake down towards nose. Bend hook on piece of wire. Slip wire through hole in cowl and capture rubber. Pull through cowl and attach rubber on prop shaft. Keep knot away from rear hook. Nose bearing fits into cowl. Your North American AT-6 Texan is now complete. See Flight Instructions before flying. GOOD LUCK AND HAPPY LANDINGS!!!

Insert small black wheel bearings firmly into hole in large wheels, brass bearing into small wheel.



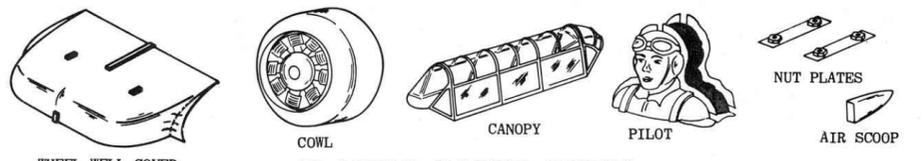
HINGE DETAIL

Use cloth tape for hinges. Cement only on top and bottom, alternating hinges as shown above. Keep cement out of hinged area between sections.

CONTROL LINE INSTALLATION

Materials required for control line installation are not provided in kit. INSTALL CONTROLS AFTER FUSELAGE STEP 4 HAS BEEN COMPLETED. Obtain 1/16 plywood and cut out bell crank platform, using drawing provided; drilling hole indicated. Fill in area between F2 and F4, from side keel L7 to stringer above it; with scrap 1/16 sheet balsa flush with outside of frame. Cover area between bulkhead F6 and rear, and between stringers as shown in sketch in same manner. Cut 1/8 slot in rear covering for control rod as shown. Mount 1/2A bell crank to plywood platform as described in instructions that come with bell crank. Cut two 15" lengths of lead-out lines and fasten them to bell crank. Cement platform securely in fuselage, against front of F3, and top of L7's. Lead-out lines come through fuselage at holes drilled for them in covering as shown. Use cement generously, applying at least two coats on entire installation. Cover fuselage with tissue as described in detail note. Cut stabilizer in half through wide main spar as shown by dotted lines on full size drawing. Round edges and install control horn at location shown on drawing, then join together with cloth hinges shown. Cement stabilizer horizontally to top rear of fuselage. Tape elevators in neutral position (in line with stabilizer, neither up or down). Obtain a piece of 1/16 music wire at least 12" long for control rod, and bend 1/4" of one end at right angle. Loosen bell crank and insert rod from bottom,

with spur vertical, then secure bell crank. Rod rests on plywood platform and should be in line with elevator horn; if not, bend accordingly so that rod slides through slot freely. Make a right angle bend at rear end of rod at the exact location of hole in elevator horn, with bell crank in neutral position as shown. Clip off excess wire and insert into horn. Solder washer on end to prevent rod from coming off. Controls are now in neutral position. Remove tape from elevator and check that controls work freely and easily. Cut rudder in half through wide rudder post as shown by dotted lines on full size drawing. Cement together with rudder angled 1/2" to right side as shown above. Cement rudder to top of stabilizer and against rear of fuselage. Cement wing to fuselage as described in Final Assembly Detail. Make wing guides from 3/32 balsa, drilling holes indicated. Cement securely to wing, over rib W8 as shown. Reinforce holes in fuselage and wing guide with washers or eyelets. Thread lines through holes in wing guide and tie loops in end of lines at least 2" past wing tip. Lines must be of equal length when elevator is in neutral position. CAUTION: MODEL MUST BALANCE (OR BE SLIGHTLY NOSE DOWN) AT POINT SHOWN ON SIDE VIEW FOR CONTROL LINE! If necessary, add weight. Use regular 1/2A control lines and handle when flying your North American AT-6 Texan. GOOD LUCK AND GOOD FLYING!!!



PLASTIC PARTS DETAIL

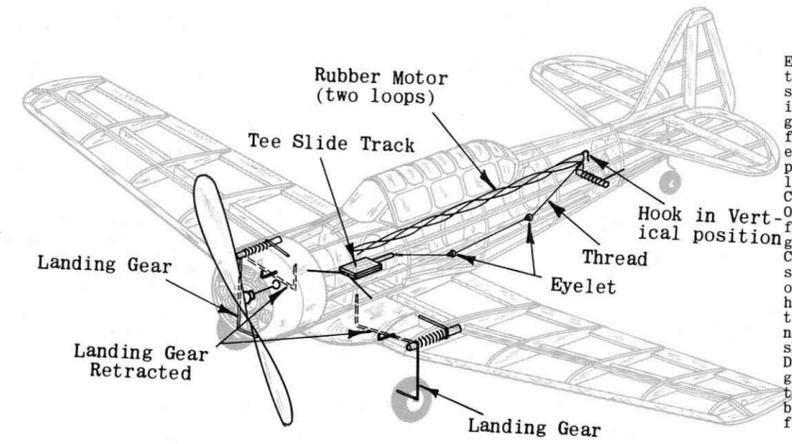
For best results follow instructions carefully. CANOPY: Cut from sheet, trim edges smooth, then fit in place on fuselage. Paint raised portions (frame) of canopy same color as fuselage. AFTER READING paint instructions at end of this note. NUT PLATES: Cut from sheet on trim lines and install as described in Engine Installation. AIR SCOOP: Cut from sheet on trim lines and cement in position shown on left side of fuselage behind cowl. 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. Plastic or model airplane cement is used in 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. Cement in cockpit, see side view. WHEEL WELL COVER: Cut out of sheet, leaving 1/16" excess material. Trim excess material carefully to trim lines; then cut out notch in front, and three notches on top which completes unit as shown.

Cement unit to wing against front of WT4, flush with bottom; over top of ribs W3 and to front of 1/16 sq. spar. Retract gear manually as described in Automatic Landing Gear Detail to check clearance. End of axles protrude through small notches on top. When cementing wing to fuselage, L5 fits into long notch. COWL: Cut from sheet leaving about 1/16" excess material. Trim excess material carefully to edge of cowl and sand smooth. Cowl may be placed on bulkhead F1 for support while sanding. Install as described in Final Assembly or Engine Installation. PAINTING: Use regular plastic model paint or enamel. Model airplane dope 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, or if painting a lighter color than red, 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.

FLIGHT INSTRUCTIONS

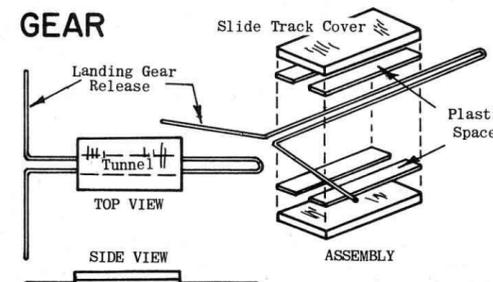
When model has been completed, it must balance at point shown on side view, when held at wing tips. DO NOT ATTEMPT TO FLY MODEL UNTIL BALANCE HAS BEEN ACHIEVED, add weight if necessary. Model is now ready. Pick a calm day for test flying. Wind propeller clock-wise about 100 to 150 turns and launch into any prevailing wind (slightly nose down) at a point on the ground about 50 feet ahead of you. DO NOT THROW MODEL, but push gently into the air after first allowing propeller to spin for a second or two. If model noses up, then falls off and stalls (AFTER MODEL WAS BALANCED), then bend elevators down slightly, using breath in same manner as steam, described in Covering Note. 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 contest flying, it is recommended that the loops of rubber be lubricated

with model lubricant (available at some hobby shops) or Castor Oil. Apply sparingly AND KEEP IT OFF KNOT OR IT WILL COME UN-DONE! Use winder, which you can buy at hobby shop or can make by tightening hook into hand drill. To store winds in motor, slowly stretch rubber out three to five times original length, then proceed to wind, moving slowly back to model. Feel rubber from time to time to be certain it doesn't get too taut so it breaks. Upon reaching the nose, motor should be completely wound. When replacing rubber motor, purchase contest grade T56 Brown Rubber at your hobby shop. Engine powered free flight models are tested and flown in same basic manner as above, with engine at lowest possible speed until model is adjusted to fly properly. If model glides well but stalls under power, point front of engine down (down thrust) by placing washers behind top of tank or where necessary. Engine speed then can be slowly increased. GOOD LUCK AND GOOD FLYING!!!



AUTOMATIC LANDING GEAR

Landing gears are operational on rubber powered models only. Installation is simple and action is positive, if directions are followed carefully. Make hole and cement eyelet in center of bulkheads F4 and F5, directly over keel. Assemble landing gear Tee slide track as shown and described in detail note. Track (with landing gear release inserted) is now cemented securely to top of center keel L5 flush with rear of F3 as shown. Use two heavy coats of cement on this installation and allow to dry thoroughly, making sure release Tee slides freely inside track. Tie a length of thread securely to rear hook as shown above. Coat knot with cement. Insert thread through eyelets in bulkheads and tie knot to rear of release Tee as shown, so that front of Tee is against slide track when thread is snug. Coat knot with cement. Install wheels as described in Final Assembly. This completes mechanism. To operate, wind rubber motor. This will pull rear hook forward to a horizontal position, loosening thread. Tee is now moved forward as far as it will go, then wheels are retracted manually (by hand) up into place in wing, slipping under 1/32 wire landing gear retainers. BE CERTAIN THAT TEE IS IN FRONT OF WHEEL AXLES. Landing gear is now locked in place. Model is hand launched, and towards the end of the flight, as motor unwinds, rear hook pulls back to vertical position, tightening lines. This pulls landing gear release Tee back, moving landing gears off retaining wires. Landing gear then snaps down into position for landing.



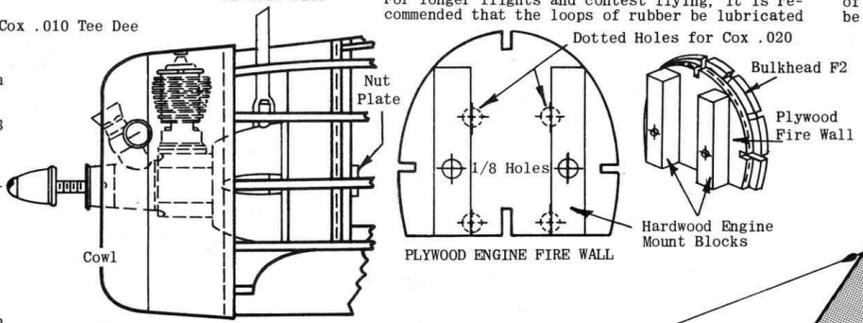
SLIDE RELEASE DETAIL

Make landing gear slide release by cutting two slide track covers 1/16 x 3/8 x 3/4 from scrap balsa, grain running as shown. Cut a strip of plastic (from plastic parts sheet) 1/8" wide, and cement a double layer to each side between track covers, to form tunnel as shown. Long "U" section of Tee shaped wire landing gear release should slide snugly, yet freely through tunnel between plastic spacers. Allow to dry thoroughly. Cement assembled slide track with Tee into fuselage as described in Automatic Landing Gear Installation Note.

Engine is used, if model is being built for control line or free flight flying. Engine and installation material is not provided in kit. Drawing shows the installation of Cox .010 Tee Dee engine, which is suitable for both control line and free flight. The .020 Tee Dee and similar size engines can be used for control line only, if more power is desired. Fuselage should be covered, at least back to F3, with 1/32 or 1/16 sheet balsa. Cowl and F1 are both cut out for engine clearance. Obtain a piece of 1/16 plywood and cut out engine fire wall, using full size drawing. Cut two engine mount blocks 1/4 x 5/16 x 1-1/4 from hardwood. Cement securely to plywood fire wall in position shown. When dry, drill 1/8" holes through center of blocks and fire wall as shown. The other four holes shown are for Cox .020 engine. Mount engine to fire wall with #2 nuts and bolts, tightening nuts securely. Cut plastic nut plates from molded sheet and cement to back of fire wall, over nuts. Drill hole so that bolts can protrude. Use cement generously. Nut plate keeps nuts from turning so that engine can be removed by just unscrewing bolts. When dry, remove engine. Securely cement fire wall to front of F2. Cut molded engine cowl

ENGINE INSTALLATION

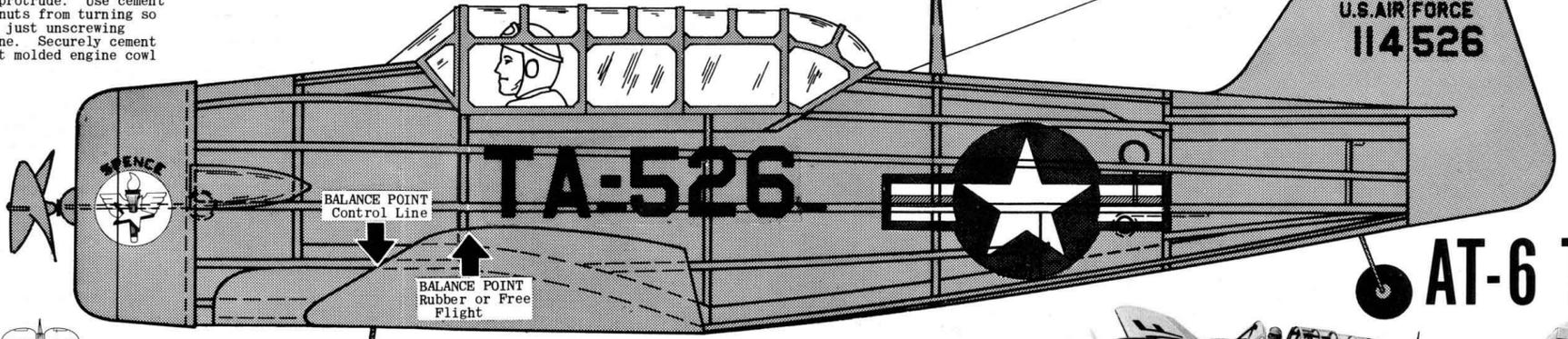
from plastic sheet as described in detail note and fit over F1. Trim out top three cylinders in front of cowl, and also where necessary at the top front of the cowl itself, for cooling. Make needle valve extension by forcing a length of 1/8 I.D. plastic fuel tubing over head of needle valve, then forcing a length of 1/8 dowel into end of tubing. Dowel should protrude about 1/2" past cowl. Cut 1/16 I.D. plastic tubing for filler and overflow, and force tubing over tubes in fuel tank. Tubing should extend about 1/4" past fuselage, and top should be cut at angle facing forward for easy admission of air stream. After model and cowl have been painted, install engine through enlarged hole in F1, then cement cowl in place. If it becomes necessary to remove engine for any reason, cowl glue-joint is broken carefully and then replaced in same manner. Cowl can also be made removable by cementing small blocks to F1 which receive tiny wood screws through cowl.



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INSTRUMENT PANEL
Cut from plan, cement to F3



AT-6 TEXAN SPECIFICATIONS AND COLOR SCHEME

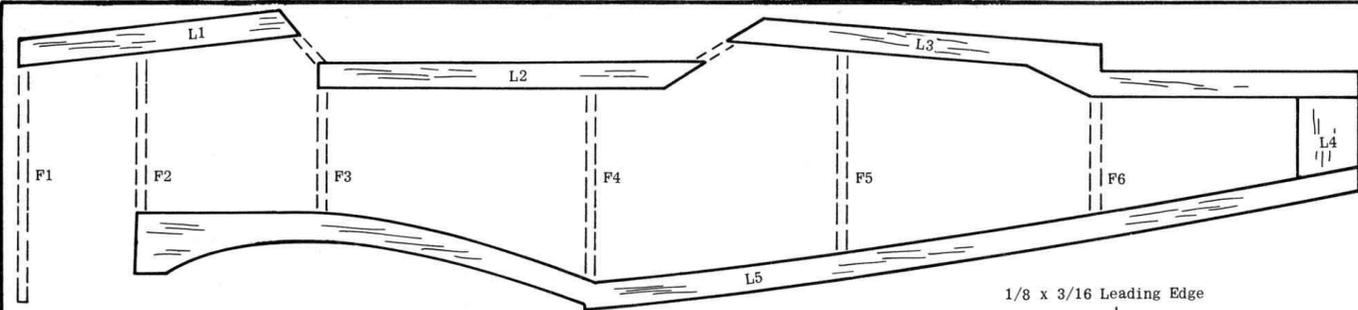
Wing Span - 42 Ft. 1/4 In.
Length - 29 Ft.
Height - 11 Ft. 8 In.
Maximum Speed - 212 M.P.H.
Engine - Pratt & Whitney 1340 H.P.
Service Ceiling - 24,750 Ft.

The AT-6 Texan was used by many services by many countries, therefore color schemes were quite varied. Box top shows typical all yellow paint job used at Spence. Anti-glare strip on cowl and cockpit interior dull olive drab. All decals supplied. Three view drawings on plan shows U.S. Navy version. Entire plane silver. Wing and fuselage bands, light green. Anti-glare strip dull olive drab. All letters and markings black.



Sterling MODELS
PHILA. PA. USA

KIT A9-149
WING SPAN 18"



FUSELAGE ASSEMBLY

STEP 1

Build fuselage directly on plan. Pin L parts in place as shown, cementing where they join at rear.

STEP 2

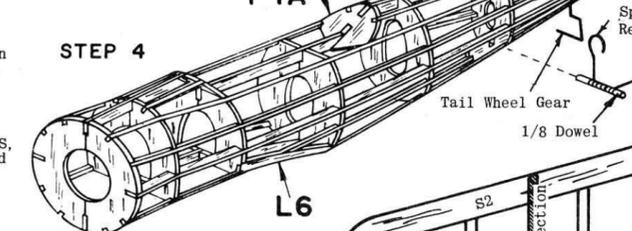
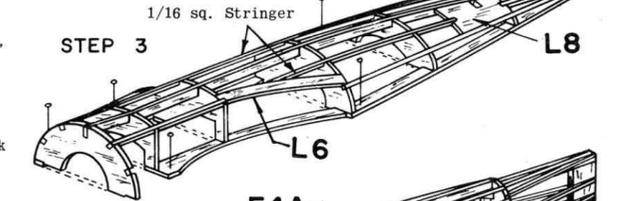
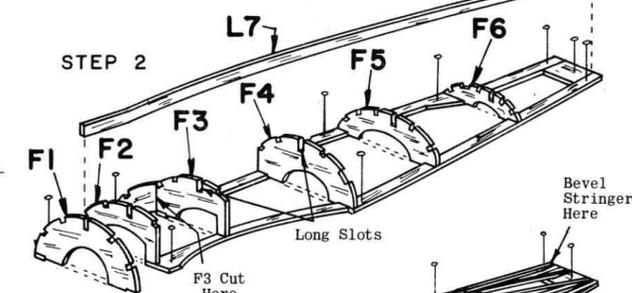
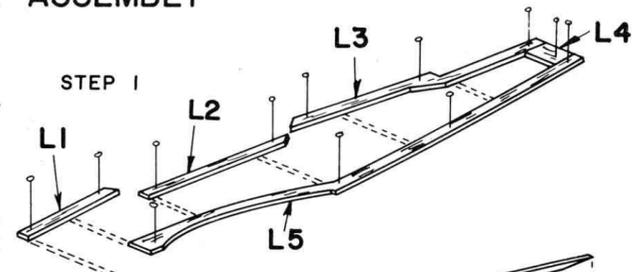
Cement bulkhead halves from F1 to F6 vertically in place as shown. Top of F3 is cut through permitting it to be cemented on angle to L1 as shown above and on side view. Insert and cement L7 into long slots in center of bulkheads.

STEP 3

Pin and cement L6 into notches from F3 to F4. Push to top of notches to leave 1/16" space for stringer. Cement 1/16 sq. strip (stringer) into lower notch from bottom of L6 to rear, bevelling rear to knife edge. Cement L8 against front of F6 between stringer and L7. Install remainder of 1/16 squares into notches provided as shown, omitting top rear stringer. Bevel stringers to knife edge at rear. Allow frame to dry overnight to prevent warping. Wing or tail can be started meanwhile.

STEP 4

Pull out pins and remove frame from flat surface, then cement opposite halves of bulkheads in place, followed by L7. Repeat installation of L6 and bottom stringer, then install L8. Cement all 1/16 sq. stringers in place, omitting top rear stringer as before. Cement F4A at angle between rear of L2 and front of L3 as shown, then add rear stringers on each side. Insert 1/8 dowel through coil of spring rear hook. (Omit rear hook on engine powered models). Bend hook part half the distance to opposite side so that hook is in center of fuselage (top view) when installed. Slip unit into fuselage, inserting ends of dowel into L6's and cement securely. Straight end of spring rear hook is securely cemented to side keel L7. Only straight end of hook is fastened, leaving coil free for spring movement. Straighten top of tail wheel gear and bend 1/8 spur as shown on side view. Sink spur into front of L4 and cement securely in place. Frame is now complete. Allow to dry thoroughly then sand lightly to present a smooth surface for tissue covering, which is described in its detail note. ON RUBBER MODELS, IF INSTALLING OPERATING LANDING GEAR, see note and make installation before covering fuselage. IF MODEL IS ENGINE POWERED, see Engine or Control Line Note before covering fuselage.



SILKSPAN TISSUE COVERING

The finest grade wet strength silkspan tissue provided in this kit, permits covering of compound curves without wrinkling WHEN FIRST MOISTENED WITH WATER BEFORE APPLYING TO FRAME. Tissue shrinks when dry, to tight smooth surface. Use clear dope to attach tissue to frame as follows: Apply a coat to the outside edges of area to be covered, and allow to dry. Cut tissue to shape needed, about 1/4" larger on all sides. Place tissue on flat surface and dampen with moistened cloth. Apply a second coat of clear dope to frame, then place moistened tissue in position. 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 area that wrinkles (bound by nearest framework) and re-cover section in same manner. Apply two 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 1/4 ounce of weight to right wing tip. Cover top center section of wing between W4's, then cover remainder of panel to tip rib W8. Cover tips with small separate pieces. Cover bottom of wing in three pieces joining under W4's. COVER TAIL SURFACES NEXT: Cover both sides of rudder and stabilizer with one piece each. SLIDE RELEASE MUST BE INSTALLED IN FUSELAGE AS DESCRIBED IN DETAIL NOTE, BEFORE COVERING AS FOLLOWS: Cover sides of fuselage first (from front to back) from stringer at cockpit level down to stringer below L6. Cover top front section with one piece, and likewise top rear section. Cover bottom rear section with one piece. Apply four coats of thinned dope to tissue covering on fuselage. Check wings and tail surfaces for warps before assembling. Warps are removed by holding over steam (from boiling kettle) and twisting in opposite direction. Finished model must be warp-free if successful flights are to be obtained.

WING ASSEMBLY

STEP 1

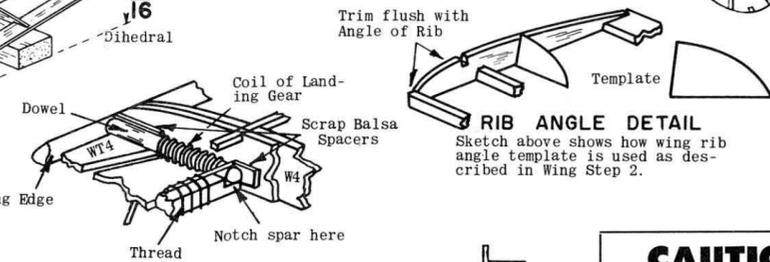
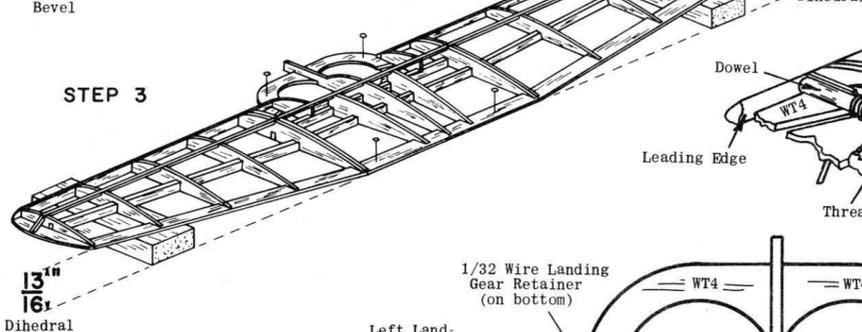
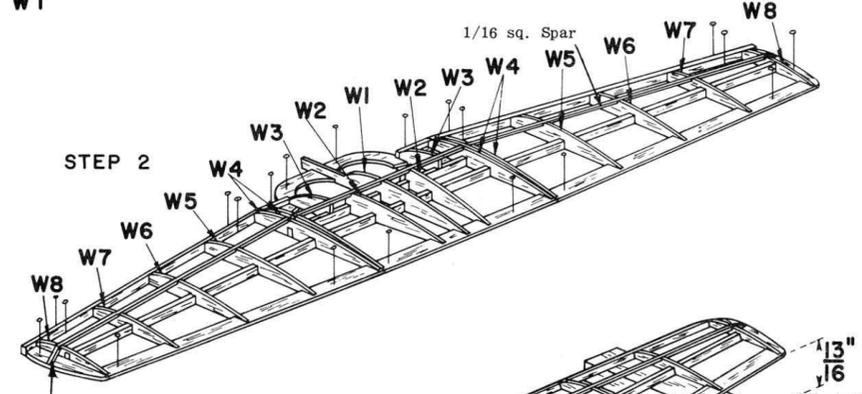
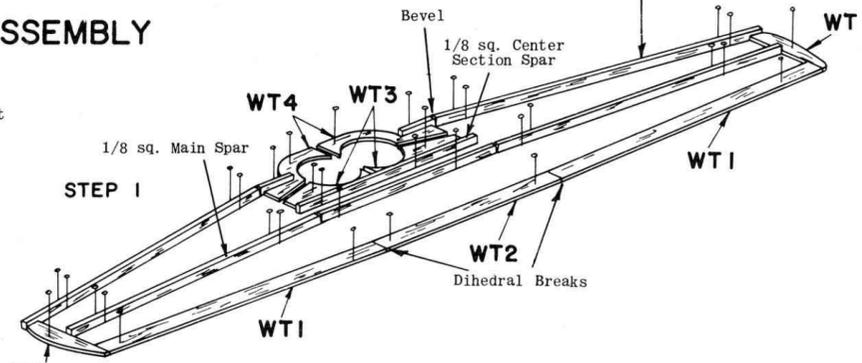
Build wing on flat surface directly on plan. Pin all WT parts in place, cementing to each other except where they join at dihedral breaks. Cut 1/8 sq. x 12 main spars to proper length. Pin in place, joining directly over dihedral joints; cement to WT's. Cut 1/8 x 3/16 x 12 leading edges to length bevelling where they join the short center leading edge sections. Pin in place in upright position, cementing short sections to front of WT4's and long sections to front of WT's. Cut 1/8 sq. center section spar to length and pin in place, cementing to back of WT3's.

STEP 2

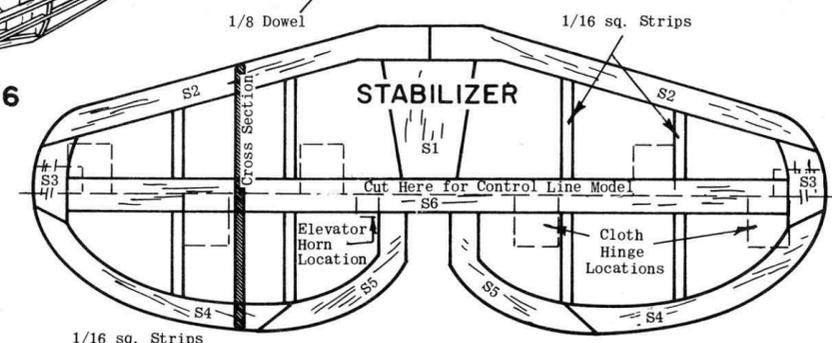
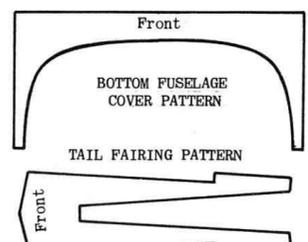
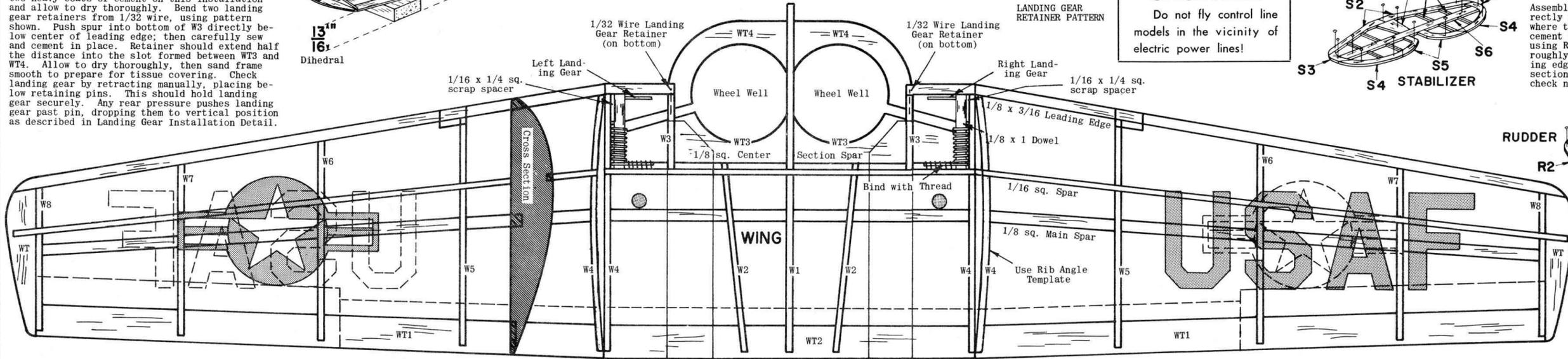
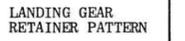
Cement ribs W1 to W8 in place as shown. Outer ribs W4's are set at angle, using rib angle template as shown in detail sketch. This insures proper dihedral angle. All other ribs are vertical, including inner ribs W4. Cement 1/16 sq. spar into notches along top of ribs. Spar is cracked at W8 and bevelled on bottom where it is cemented to WT as shown. Allow frame to dry thoroughly before removing from flat surface.

STEP 3

Pull out pins and remove frames from flat surface. Separate panels, then trim and sand leading edge to shape shown on wing cross section. Round off tips and trailing edge as shown, to blend smoothly into each other. Trim leading edge, spars, and trailing edge flush with angle of outer panel ribs W4. Pin center section down on flat surface, then cement panels to center section, blocking up tips 13/16" for dihedral angle as shown. Use cement generously and allow to dry thoroughly. When dry, install landing gear. IF MODEL IS ENGINE POWERED, it is recommended that landing gear be duplicated with 1/16 music wire (not provided in kit), omitting spring coil since that is only used in operational landing gear. Cut four 1/4" squares out of 1/16 scrap balsa and cement to inside of inner ribs W4 at location shown on full size wing drawing, flush with bottom of rib. Notch ends of center section spar as shown in detail sketch down to level of WT3. Cut two 1" lengths of 1/8 dowel and insert through coil springs of right and left landing gear struts. Install struts with axles facing inward. Securely cement ends of dowel against inside of ribs W4, in corner formed by 1/4 sq. scrap balsa spacer, WT3 and WT4; as shown in sketch and full size drawing. Keep cement from coil to allow free spring movement. Bind and cement (sew with needle and thread) top spur securely to center section spar. Use two heavy coats of cement on this installation and allow to dry thoroughly. Bend two landing gear retainers from 1/32 wire, using pattern shown. Push spur into bottom of W3 directly below center of leading edge; then carefully sew and cement in place. Retainer should extend half the distance into the slot formed between WT3 and WT4. Allow to dry thoroughly, then sand frame smooth to prepare for tissue covering. Check landing gear by retracting manually, placing below retaining pins. This should hold landing gear securely. Any rear pressure pushes landing gear past pin, dropping them to vertical position as described in Landing Gear Installation Detail.



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



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 R parts shown. Allow assemblies to dry thoroughly on flat surface, then sand smooth, rounding edges (except R1 and R6) as shown on cross section. If model is being built for control line, check note before covering with tissue.

