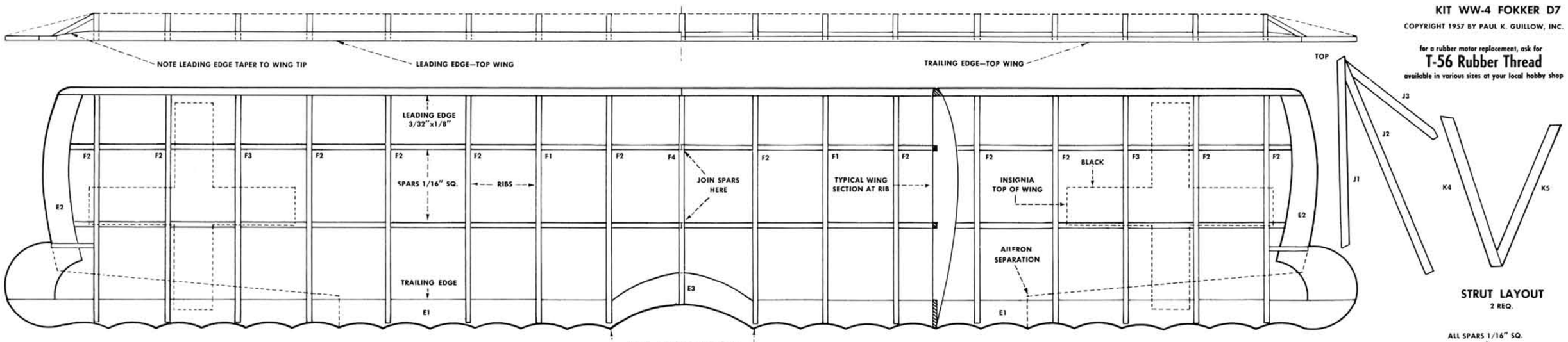
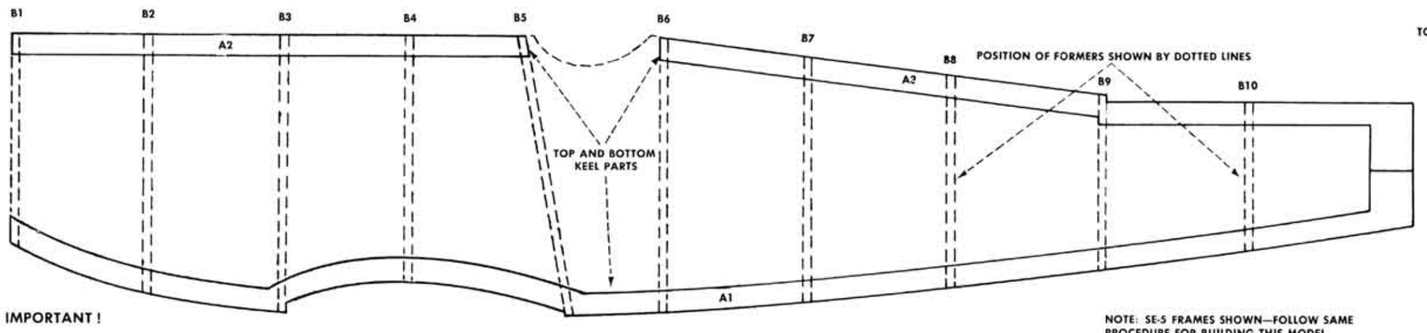
KIT WW-4 FOKKER D7



TOP WING LAYOUT

CRACK LEADING AND TRAILING EDGES AND SPARS AT THIS BAY WHEN ADDING WING DIHEDRAL — BOTH WINGS.

BOTTOM WING LAYOUT



FUSELAGE LAYOUT

IMPORTANT !

COVER ALL LAYOUTS WITH WAX PAPER BEFORE STARTING FRAME CONSTRUCTION. THIS WILL PREVENT PARTS FROM STICKING TO PLAN AFTER CEMENTING FRAMES TOGETHER.

NOTE: SE-5 FRAMES SHOWN—FOLLOW SAME PROCEDURE FOR BUILDING THIS MODEL

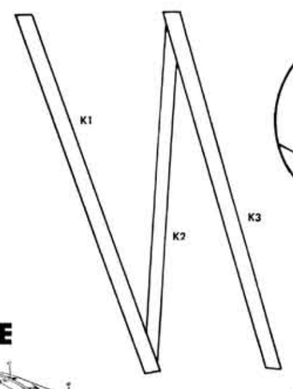
THE ELEVATOR, RUDDER AND AILERON SEPARATION LINES ARE TO BE INKED IN WITH RULING PEN OR BY APPLYING THIN STRIPS OF BLACK PAPER SUCH AS THE BORDER OF THIS PLAN.

BRIEF HISTORY

The Fokker D7 appeared over the Western Front in the summer of 1918 and severely challenged Allied air supremacy. The D7's rapid climb and lightning recovery made it formidable in combat and enabled it to defeat 565 Allied aircraft in August of 1918. It's ability to retain sensative control at slow flying speeds and high altitudes was surprising and made good pilots out of novices. Famous pilots such as Goering, Bolle and Bongartz flew this outstanding German scout plane.

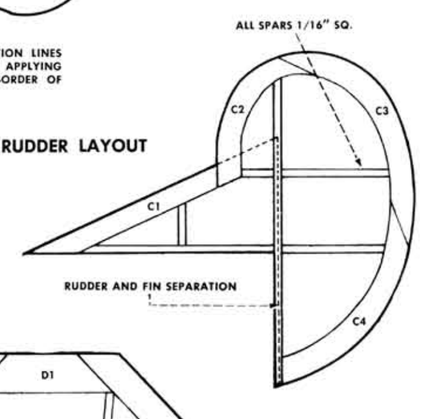
NOTE: INCREASE OR ADD WING DIHEDRAL FOR BETTER FLYING STABILITY.

TOTAL DIHEDRAL (NOT IN ADDITION TO SCALE DIHEDRAL)
BOTTOM WING—⅞" PER PANEL
TOP WING—1" PER PANEL

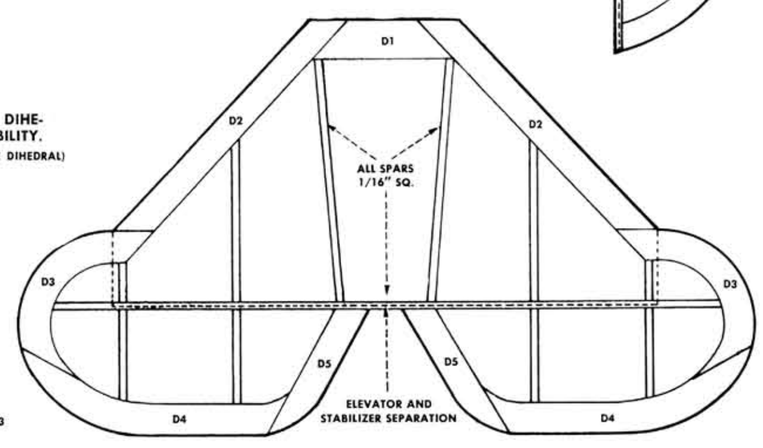


STRUT LAYOUT

2 REQ.

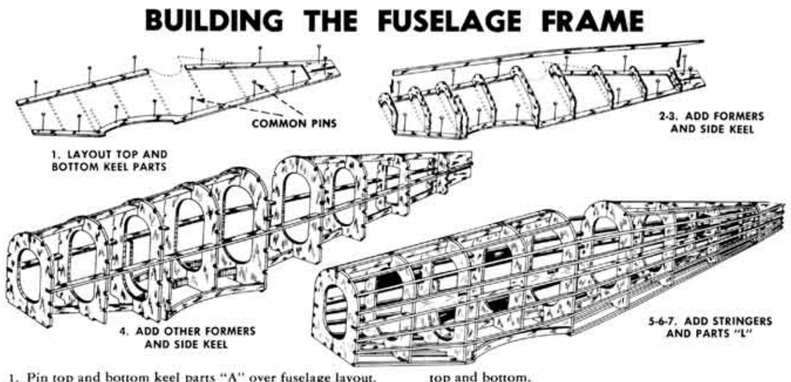


RUDDER LAYOUT



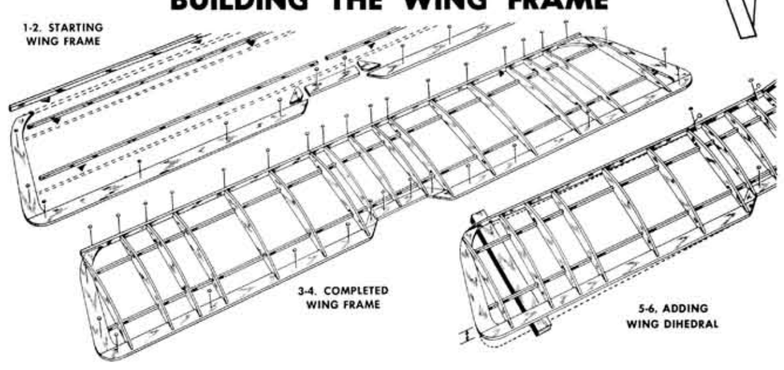
STABILIZER LAYOUT

BUILDING THE FUSELAGE FRAME



1. Pin top and bottom keel parts "A" over fuselage layout.
2. Cement one each of formers "B" into position on keel — be sure formers are at right angles to keel.
3. Cement side keel "A" into deep notches of formers "B".
4. When dry, remove frame from plan. Cement other halves of formers "B" to center keel; then add remaining side keel.
5. Cement 1/16" sq. stringers into their respective notches. NOTE: To obtain uniform tension on fuselage, cement stringers alternately to left and right sides and top and bottom.
6. Cement one each of parts "L" into place between stringers and formers on left and right sides of fuselage. Also add headrest former if shown on plan and fair into fuselage with stringers.
7. Lightly sandpaper completed fuselage frame to remove balsa fuzz and excess cement.
8. Trace or cut out stiff paper cockpit pattern on plan and cement to formers and stringers in cockpit area.

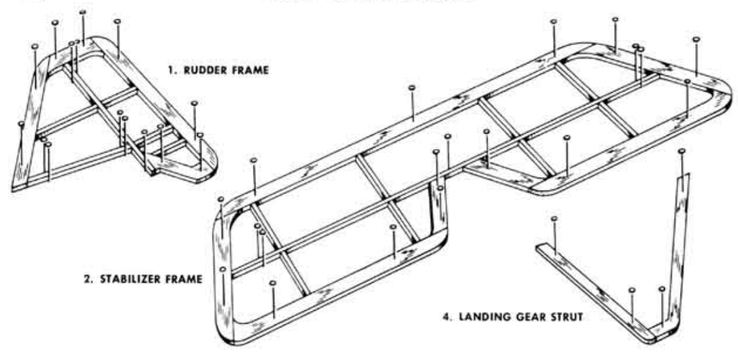
BUILDING THE WING FRAME



1. Pin to plan, and cement respectively to each other, all "E" parts of top wing.
2. Cement leading edge and spars in position.
3. Cement wing ribs "F" into position between leading and trailing edges — also cement to spars.
4. Follow the same procedure in assembling the bottom wing — pin and cement parts "G" in place then add the wing ribs.
5. When dry, remove wing frames from plan. Sandpaper leading edges to shape and gently round all other edges.
6. The wings of models with scale dihedral should be cracked at ribs shown on front view of wing plan. Raise wing tips to height shown and then cement the cracked joints — hold in position until dry. Refer to special note on plan for increased dihedral as an aid to better lateral stability in flying.

BUILDING THE TAIL SURFACES

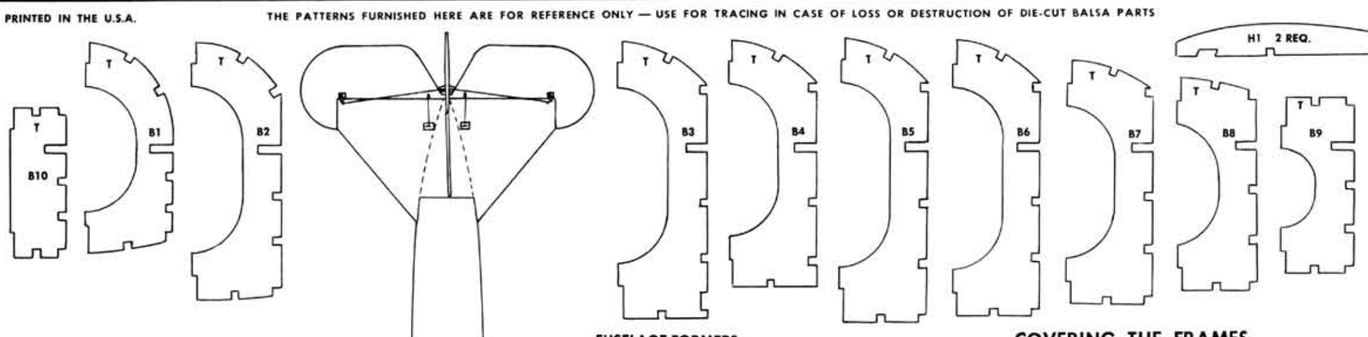
AND OTHER FRAMES



1. Pin to plan, and cement respectively to each other, all rudder parts "C". Cut 1/16" sq. members to size and cement in position.
2. Build stabilizer frame in a similar manner using parts "D" and 1/16" sq. members.
3. Remove frames from plan and sandpaper lightly, rounding all edges.
4. Pin landing gear parts "K" to strut layout after cementing pieces together.
5. For models with N or V cabane struts, assemble parts "J" over layout. For models with N or V wing struts, assemble parts "K" over layout.

PRINTED IN THE U.S.A.

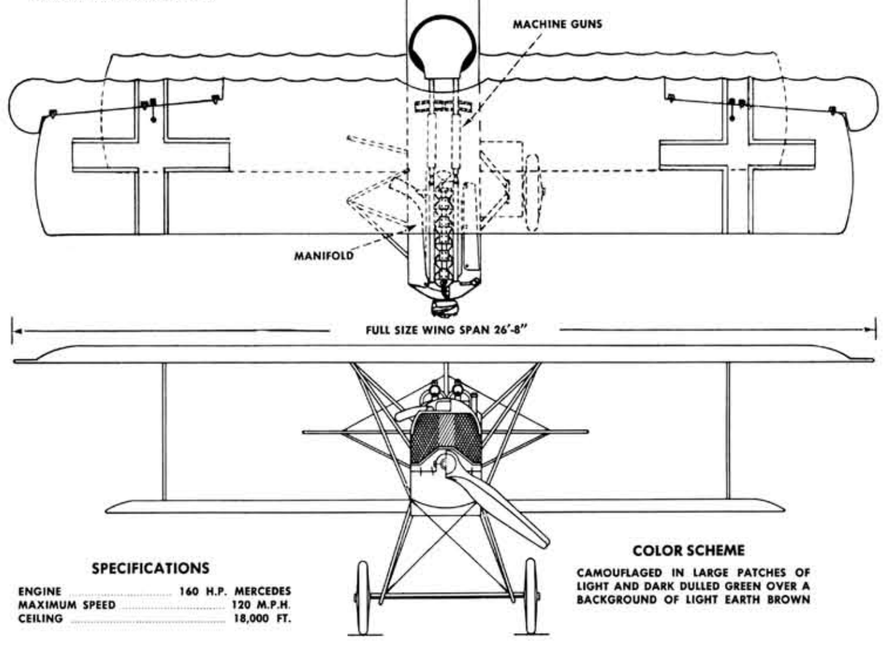
THE PATTERNS FURNISHED HERE ARE FOR REFERENCE ONLY — USE FOR TRACING IN CASE OF LOSS OR DESTRUCTION OF DIE-CUT BALSA PARTS



FUSELAGE FORMERS

2 OF EACH REQUIRED

Additional sheets of decals available at 25c per sheet. Send stamps or coin to Paul K. Guillow, Inc., Wakefield, Mass.

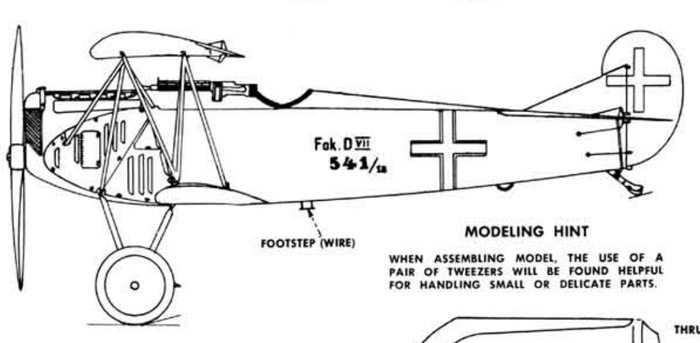


SPECIFICATIONS

ENGINE	160 H.P. MERCEDES
MAXIMUM SPEED	120 M.P.H.
CEILING	18,000 FT.

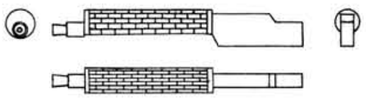
COLOR SCHEME

CAMOUFLAGED IN LARGE PATCHES OF LIGHT AND DARK DULLED GREEN OVER A BACKGROUND OF LIGHT EARTH BROWN

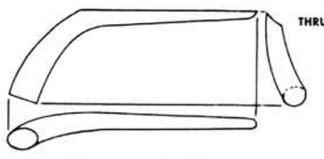


MODELING HINT

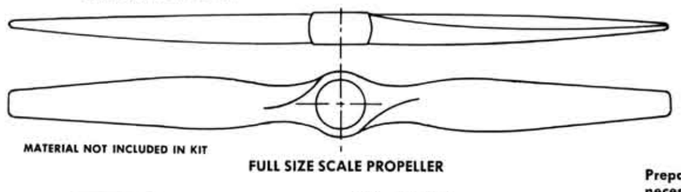
WHEN ASSEMBLING MODEL, THE USE OF A PAIR OF TWEEZERS WILL BE FOUND HELPFUL FOR HANDLING SMALL OR DELICATE PARTS.



SPANDAU MACHINE GUN — 2 REQ.
MAKE FROM SCRAP BALSA



EXHAUST MANIFOLD
MAKE FROM SCRAP BALSA



MATERIAL NOT INCLUDED IN KIT

FULL SIZE SCALE PROPELLER

COVERING THE FRAMES

When attaching the tissue covering to the frames, it is best to use thinned out clear dope as an adhesive instead of cement or full strength dope. Mix thinner and dope about 50-50 for proper consistency. Only apply dope to *outside* edges of areas being covered — do not apply dope to frame work within area covered by section of tissue.

FUSELAGE: First cover any flat surfaces such as sides and bottom of frame. Cover curved areas of fuselage in separate sections — vertically between formers. Dry fit tissue over curved sections to see how much of an area can be covered with one piece of tissue without wrinkling. Cut tissue slightly larger than area to be covered then trim off excess after attaching to frame.

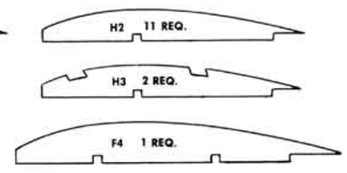
WINGS: Cover bottom of wings with single pieces of tissue. Cover top of wings between center section and tip ribs with one piece of tissue. Cover center section and tips with separate pieces of tissue.

TAIL SURFACES: Cover both sides of rudder and top and bottom of stabilizer with single pieces of tissue.

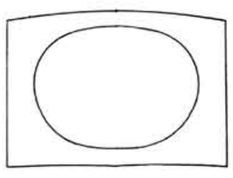
DOPING THE COVERED PARTS: After covering is completed and all excess tissue is trimmed off, spray tissue with water from an atomizer and let dry until covering becomes smooth and taut. For best flying performance, the model should be kept light and it is suggested that only one coat of clear dope be applied to the surfaces. (If model is to be used for display only, it can be given several coats of clear dope then finished up with colored dope.) Lightly sandpaper remaining balsa parts and apply one coat of dope to all surfaces.

ASSEMBLING THE MODEL

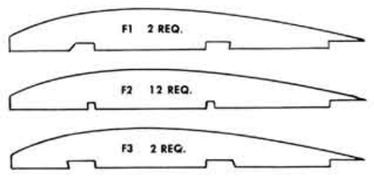
1. With a sharp razor, remove tissue from around notches in wing ribs that receive the wing and cabane struts. Also remove tissue from notches in parts "L" of fuselage.
2. Cement bottom wing to the fuselage. NOTE: Some models have short stringers between the formers at the bottom wing center section. Insert these stringers at this time; cover section with tissue and dope.
3. Cement stabilizer and rudder to fuselage. Align carefully before cement dries hard.
4. Cement cabane struts into prepared notches in fuselage.
5. Cement wing struts in notches in bottom wing.
6. Cement top wing to all struts — line up carefully before cement dries hard.
7. Cement landing gear into notches in fuselage and bottom of wing.
8. Cement fixed sub-wing panel between bottom of landing gear struts. Cement tail skid "K" in place.
9. Cut wheel axle to length then force through right and left landing gear struts beneath the sub-wing — cement solidly in place.
10. Slip wheels on axles and bend up ends with a pair of needle nose pliers.
11. Cut celluloid windbreaker to shape and cement in position in front of cockpit. (Pattern furnished on plan). **(EXCEPT Fokker D7)**
12. At this time, balance model at point shown on plan by placing softened clay inside the front and bottom of fuselage behind the front former. Press firmly in place so that it will not become dislodged during flights.
13. Bead edges of plastic nose cowl with cement — attach to nose of fuselage — line up carefully before cement dries hard.
14. Assemble propeller, prop hook, head and nose bearing as shown on plan. Install rubber motor as follows: insert one end in fuselage and fasten in place by sliding rear motor mount (cut from excess axle wire) through loop and "L" parts. Attach other end of rubber loop over prop hook and slip propeller unit into hole in plastic nose cowl.



WING RIBS



STIFF PAPER COCKPIT PATTERN

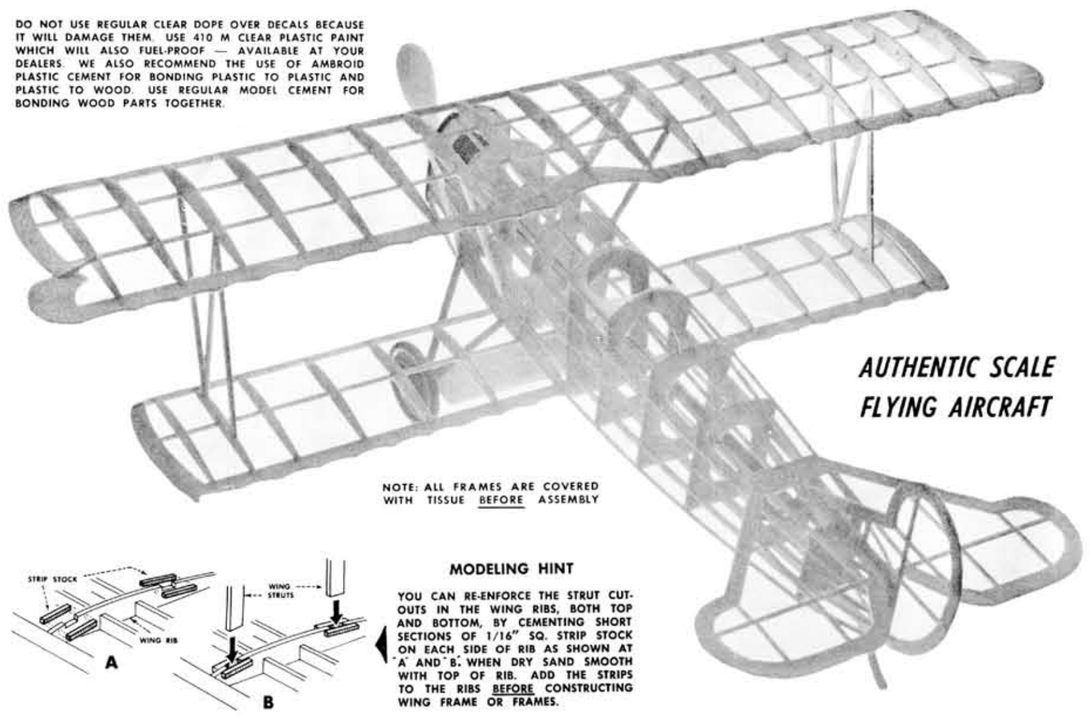


NOTE

FOR A SUPER LIGHT FLYING MODEL, DO NOT USE COLORED DOPE. APPLY ONE COAT OF CLEAR DOPE OVER TISSUE THEN ADD DECALS.

IMPORTANT NOTE ON PAINTS AND ADHESIVES

DO NOT USE REGULAR CLEAR DOPE OVER DECALS BECAUSE IT WILL DAMAGE THEM. USE 410 M CLEAR PLASTIC PAINT WHICH WILL ALSO FUEL-PROOF — AVAILABLE AT YOUR DEALERS. WE ALSO RECOMMEND THE USE OF AMBROID PLASTIC CEMENT FOR BONDING PLASTIC TO PLASTIC AND PLASTIC TO WOOD. USE REGULAR MODEL CEMENT FOR BONDING WOOD PARTS TOGETHER.



NOTE: ALL FRAMES ARE COVERED WITH TISSUE BEFORE ASSEMBLY

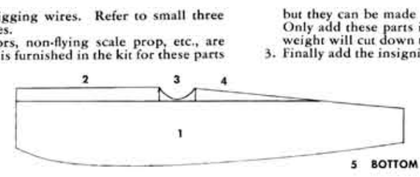
AUTHENTIC SCALE FLYING AIRCRAFT

MODELING HINT

YOU CAN RE-ENFORCE THE STRUT CUT-OUTS IN THE WING RIBS, BOTH TOP AND BOTTOM, BY CEMENTING SHORT SECTIONS OF 1/16" SQ. STRIP STOCK ON EACH SIDE OF RIB AS SHOWN AT 'A' AND 'B'. WHEN DRY SAND SMOOTH WITH TOP OF RIB. ADD THE STRIPS TO THE RIBS BEFORE CONSTRUCTING WING FRAME OR FRAMES.

COMPLETING THE MODEL

1. Use black thread to simulate rigging wires. Refer to small three view plan for location of all wires.
2. Full scale details of guns, motors, non-flying scale prop, etc., are furnished on plan. No material is furnished in the kit for these parts but they can be made from pieces of scrap balsa or similar material. Only add these parts if an exhibition model is desired — their extra weight will cut down the flight endurance of a flying model.
3. Finally add the insignia as per instructions on reverse side of decal.



KEY TO FUSELAGE COVERING

COVER FRAME WITH PIECES OF TISSUE IN ORDER SHOWN

FULL SIZE SIDE VIEW

PRE-WORK INSTRUCTIONS

Prepare for building your model by accumulating necessary tools and materials such as pins, cement, single edge razor blade or modelers knife, wax paper, common pins, fine sandpaper, dope, brush, etc. All frames are built on the opposite side of plan. Lay plan on a workboard and pin wax paper over layouts to prevent parts from sticking to plan during assembly. Carefully remove all parts from the die-cut sheets and lay on workboard with the identifying letters face up.

ADJUSTING AND FLYING THE MODEL

1. Check wings for possible warps. If warped, correct by holding the warped section over steam from a boiling kettle and twisting gently in the opposite direction until wing is straightened — be careful and don't get scalded!
2. Test glide model over grassy area by gently thrusting model forward from shoulder height. Adjust model for level flight by gently bending stabilizer either up or down to compensate for a dive or climbing stall. ("up" stabilizer for dive — "down" stabilizer for stall). If model veers right or left, adjust for straight glide by bending rudder in opposite direction of curved flight.
3. Wind propeller 100 turns (clockwise when facing nose of model) and gently thrust into prevailing wind. If model climbs too rapidly or goes into a stall, correct flight by bending rudder slightly to the right to give a climbing right turn. Longer flights can be made after initial tests by winding propeller motor up to 200 turns.

Guillow's

KIT WW-4

GERMAN FOKKER D7

WING SPAN—18" App. Scale 5/8" = 1'-0" LENGTH—13½"

PAUL K. GUILLOW, INC., WAKEFIELD, MASS.