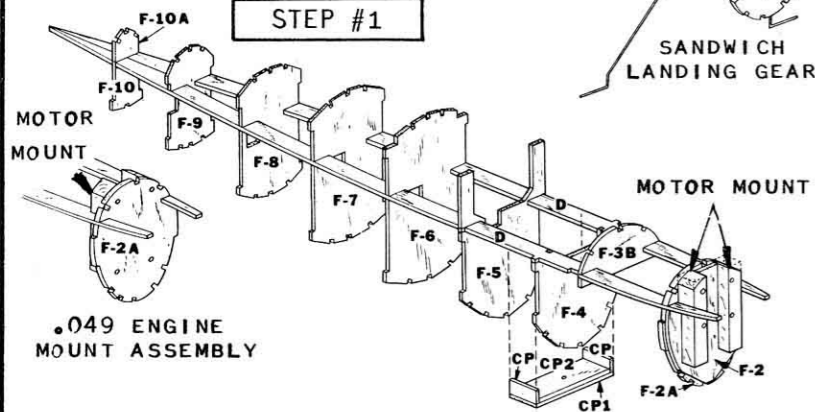


SAND BACK OF SHEET FOR EASY REMOVAL OF PARTS THAT STICK

FUSELAGE CONSTRUCTION

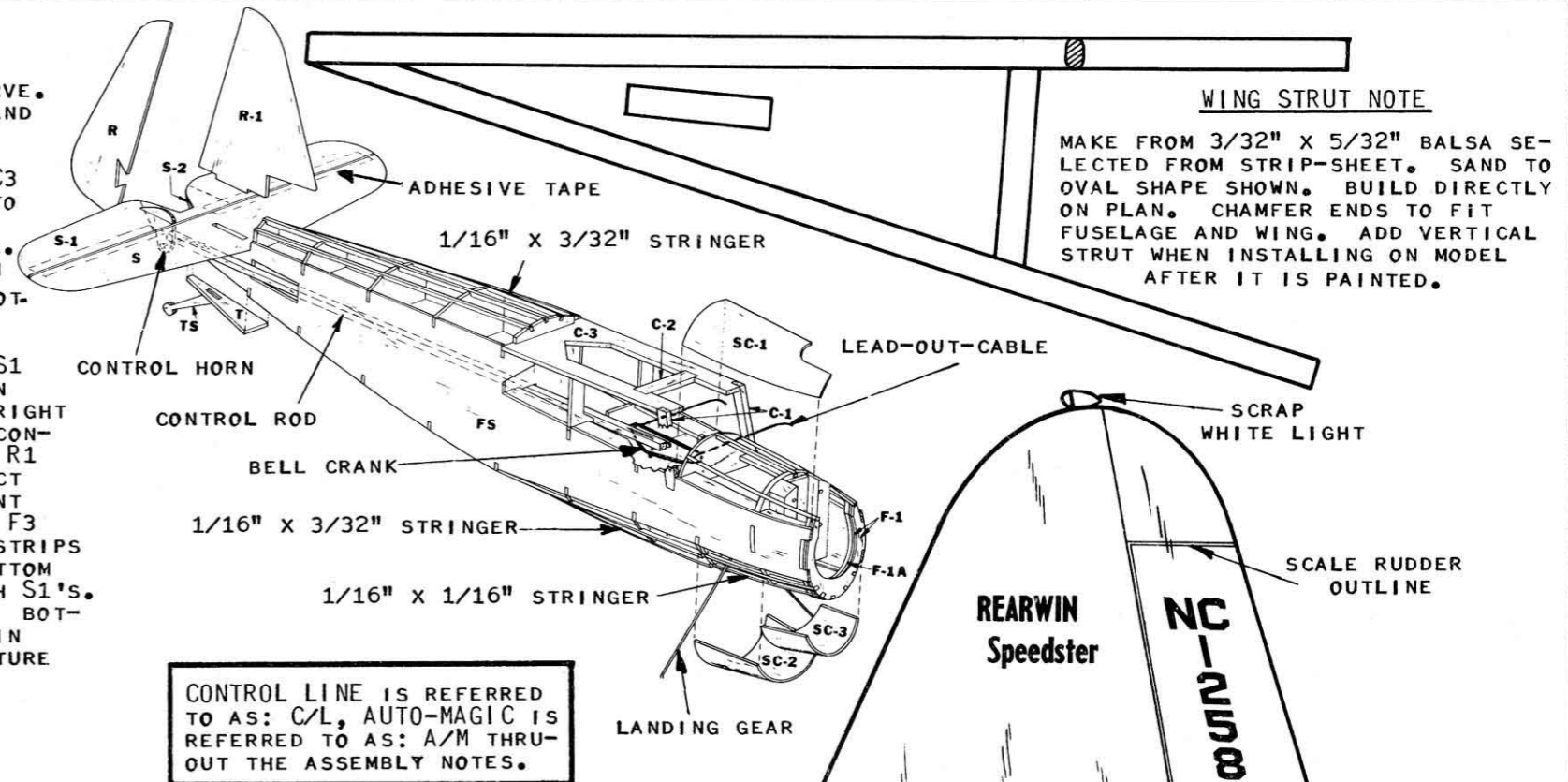
STEP #1



CEMENT REAR OF D'S TOGETHER. CEMENT LANDING GEAR INTO CREASES BETWEEN F3 AND F3A. (SEE SKETCH) FOR .020 ENGINES (RECOMMENDED FOR FREE FLIGHT) ASSEMBLE MOTOR MOUNT BULKHEAD AS SHOWN IN SKETCH. F2 AND MOTOR MOUNTS ON FRONT OF F2A. REVERSE FOR .049 INSTALLATION (SEE SKETCH). DRILL SMALL HOLES AT PUNCH MARKS IN BULKHEADS (THROUGH MOTOR MOUNTS) TO RECEIVE TINY WOOD SCREWS FOR ENGINE INSTALLATION. SLIP BULKHEADS INTO NOTCHES BETWEEN D'S. FOR CONTROL LINE OR AUTO-MAGIC (SEE NOTE) FLYING, CEMENT CP ASSEMBLY BEHIND F4, FLUSH WITH D'S.

STEP #2

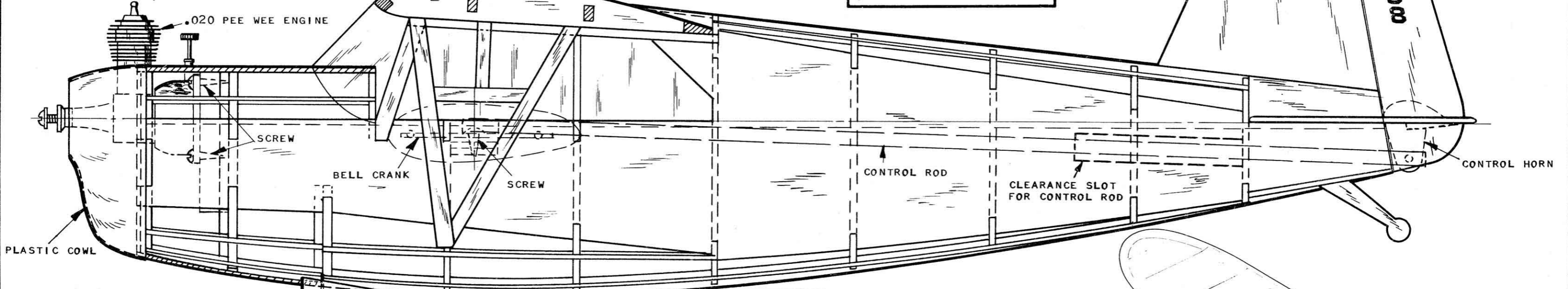
CEMENT SIDES FS TO EITHER SIDE OF FUSELAGE. MOISTEN SHEET AT NOSE WITH WATER TO OBTAIN CURVE. HOLD IN PLACE WITH PINS UNTIL DRY. GLUE F1A AND F1'S TOGETHER. CEMENT TO FRONT OF FUSELAGE AGAINST D'S. CEMENT LANDING GEAR-BULKHEAD IN PLACE. FINISH CABIN BY CEMENTING BOTH C1'S, C3 AND C2 IN PLACE. CEMENT TS'S TOGETHER AND INTO NOTCH IN T. CEMENT IN PLACE. ON FREE FLIGHT MODELS, PERMANENTLY CEMENT S TO S1 AND R TO R1. SAND SMOOTH ROUNDING OUTER EDGES AND CEMENT IN PLACE. FOR C/L OR A/M FLYING, CEMENT S2 TO BOTTOM OF S1. DRILL SMALL HOLES THROUGH PUNCH MARKS IN PLYWOOD BELL CRANK AND CONTROL HORN. CEMENT HORN INTO NOTCH IN S1. ASSEMBLE S TO S1 WITH ADHESIVE TAPE LEAVING 1/16" SPACE BETWEEN UNITS. CEMENT TO FUSELAGE. CUT OUT SLOT IN RIGHT REAR SIDE FOR CONTROL ROD. MAKE AND INSTALL CONTROL SYSTEM (SEE NOTE). CEMENT R AT ANGLE TO R1 3/8" TOWARD RIGHT. CEMENT TO FUSELAGE. SELECT 1/16" SQUARE STRIPS FROM STRIP-SHEET AND CEMENT INTO NOTCHES FROM F1 TO F3B ON TOP, AND F1 TO F3 ON BOTTOM OF FUSELAGE. CEMENT 1/16" X 3/32" STRIPS INTO REMAINING BULKHEAD NOTCHES ON TOP AND BOTTOM OF FUSELAGE. COVER TOP-FRONT OF FUSELAGE WITH S1'S. FOR EASY BENDING, MOISTEN OUTSIDE WITH WATER. BOTTOM-FRONT IS COVERED WITH SC2 AND SC3. HOLD IN PLACE WITH PINS. WHEN DRY, SAND ENTIRE STRUCTURE SMOOTH.



WING STRUT NOTE

MAKE FROM 3/32" X 5/32" BALSA SELECTED FROM STRIP-SHEET. SAND TO OVAL SHAPE SHOWN. BUILD DIRECTLY ON PLAN. CHAMFER ENDS TO FIT FUSELAGE AND WING. ADD VERTICAL STRUT WHEN INSTALLING ON MODEL AFTER IT IS PAINTED.

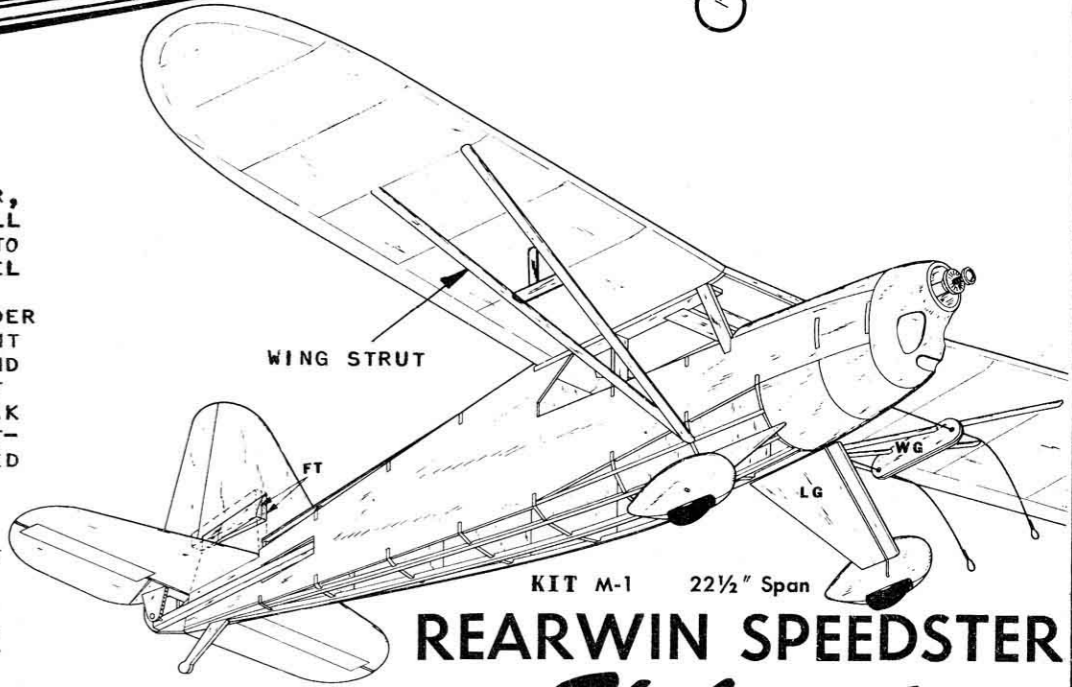
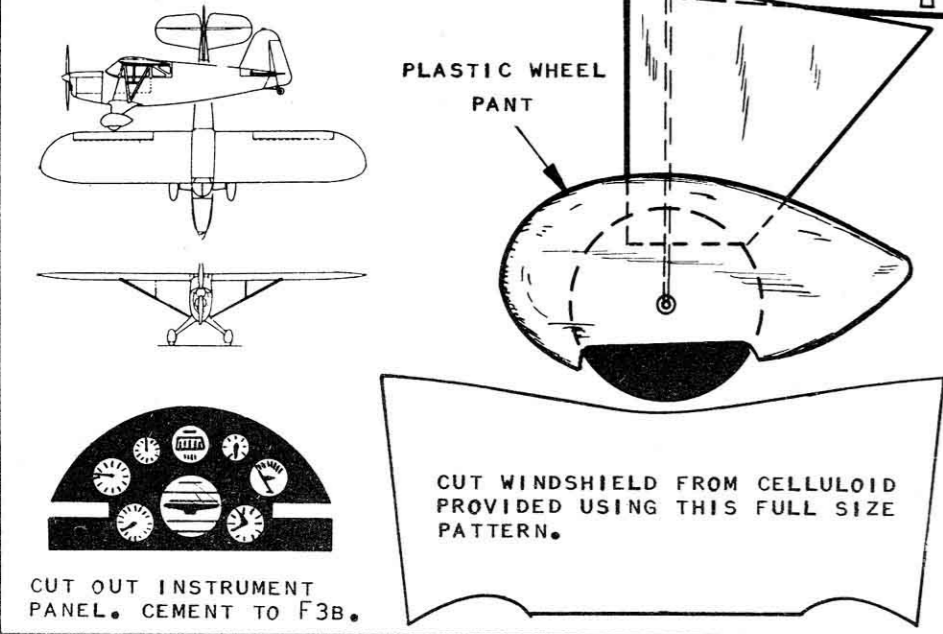
CONTROL LINE IS REFERRED TO AS: C/L, AUTO-MAGIC IS REFERRED TO AS: A/M THROUGH THE ASSEMBLY NOTES.



FINAL ASSEMBLY

CEMENT 2 FT'S TOGETHER. SAND TO SHAPE AND CEMENT TO EITHER SIDE OF RUDDER. CEMENT FINISHED WING TO TOP OF CABIN AGAINST F6. ADD FILLET C4 (SEE WING SKETCH). COVER FUSELAGE WITH TISSUE APPLIED WET. GIVE ALL WOOD AND TISSUE PARTS TWO COATS OF CLEAR DOPE. USING TINY WOOD SCREWS, SECURE ENGINE TO MOTOR MOUNT. CUT MOLDED WHEEL-PANT HALVES FROM PLASTIC SHEET. TRIM OUT BOTTOM FOR WHEEL CLEARANCE. CEMENT GROOVED AND PLAIN HALF TOGETHER TO FORM UNIT. PLASTIC MAY BE TRIMMED SMOOTH WITH SAND PAPER. WITH PIN, PUNCH THROUGH LOCATING HOLES IN WHEEL-PANT. SLIP ON AXLE WITH WHEEL. CEMENT LANDING GEAR IN GROOVE, ALSO CEMENT END OF AXLE. WHEELS MUST ROLL FREELY. CEMENT LG'S TO WHEEL-PANT AND OVER LANDING GEAR. CUT MOLDED COWL FROM PLASTIC SHEET AND TRIM OUT ALL HOLES. CUT TOP AWAY TO FIT AROUND ENGINE, AND CEMENT IN PLACE. MAKE WING STRUTS (SEE NOTE) CEMENT AFTER

PAINTING. IF MODEL IS C/L OR A/M FLYER, CEMENT WG'S TOGETHER, AND DRILL SMALL HOLES AT PUNCH MARKS. CEMENT UNIT TO WING STRUTS ON LEFT SIDE, HOLES LEVEL WITH BELL CRANK. PAINT WING AND STABILIZER YELLOW; FUSELAGE AND RUDDER BLUE (COLOR SCHEME OPTIONAL). CEMENT CELLULOID TO BOTH SIDES OF CABIN, AND TOP OF WING. USING PATTERN, CUT OUT WINDSHIELD AND CEMENT IN PLACE. SOAK DECALS IN WATER AND SLIDE INTO POSITION ON MODEL. ORIGINAL MODEL TRIMMED WITH WHITE SCOTCH TAPE CUT TO SHAPE (OPTIONAL). ADDAILERON, ELEVATOR AND RUDDER MARKINGS IN SAME MANNER WITH BLACK SCOTCH TAPE. FREE FLIGHT MODELS SHOULD BALANCE LEVEL (SIDE) WHEN BALANCED ON FINGER TIPS 1-1/4" BEHIND FRONT OF WING. IF NECESSARY, ADD WEIGHT TO FRONT OR REAR OF FUSELAGE. FOR C/L OR A/M FLYER, CHECK THAT CONTROLS OPERATE FREELY. DRAW LEAD-OUT-LINES THROUGH WG TYING LOOPS FOR FLYING LINES.



KIT M-1 22 1/2" Span

REARWIN SPEEDSTER

Phila. Pa., Sterling models U.S.A.

CUT OUT INSTRUMENT PANEL. CEMENT TO F3B.

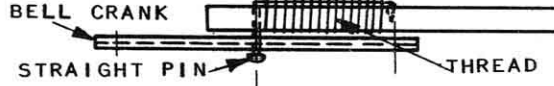
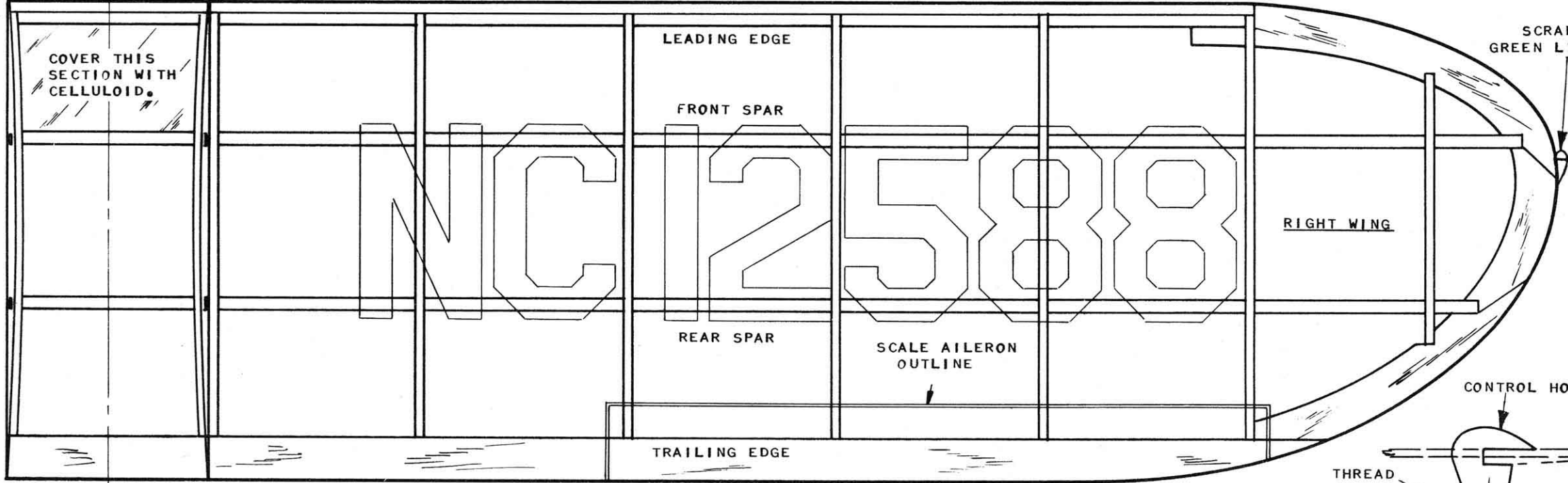
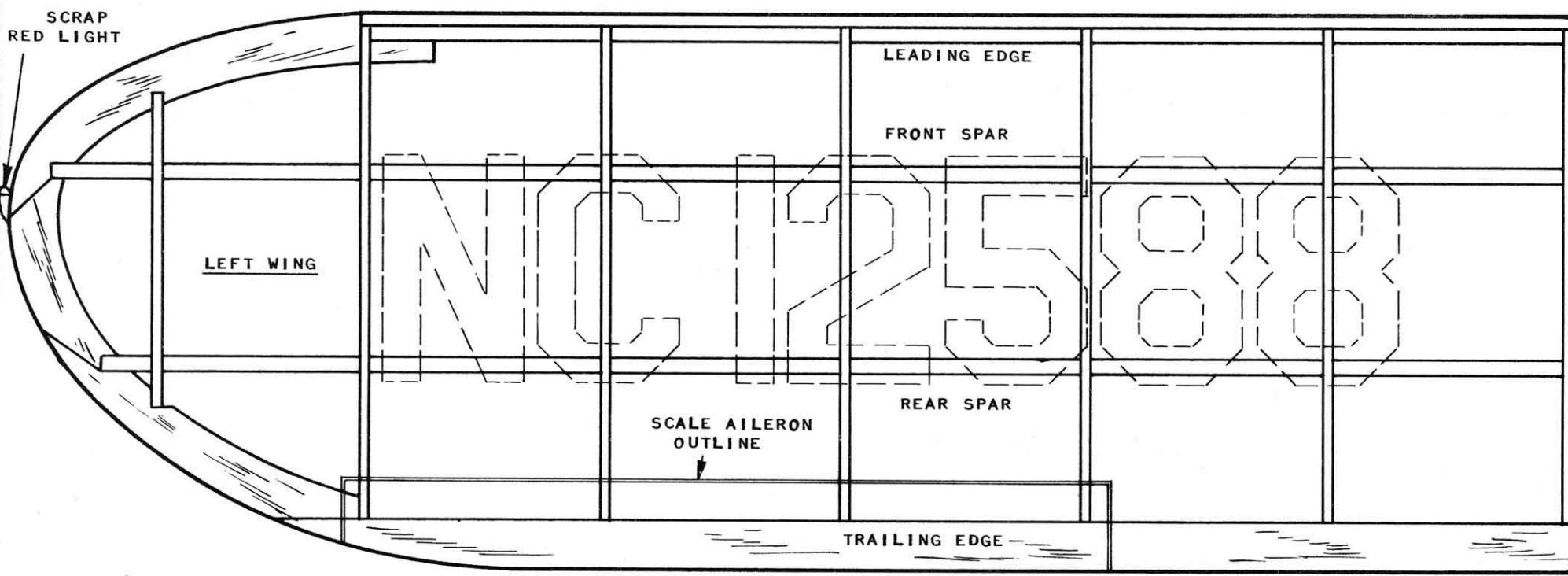
2 REQUIRED REAR SPAR 3/32" X 1/4" (SELECT FROM STRIP-SHEET) WING TIP

SPAR NOTE

DRAWING OF SPARS IS FULL SIZE. CUT TO EXACT LENGTH AND TAPER WING-TIP END AS PER DRAWING.

WAX PAPER OVER PLANS WILL PREVENT FRAME FROM BEING CEMENTED TO PLAN.

2 REQUIRED FRONT SPAR 3/32" X 5/32" (SELECT FROM STRIP-SHEET) WING TIP



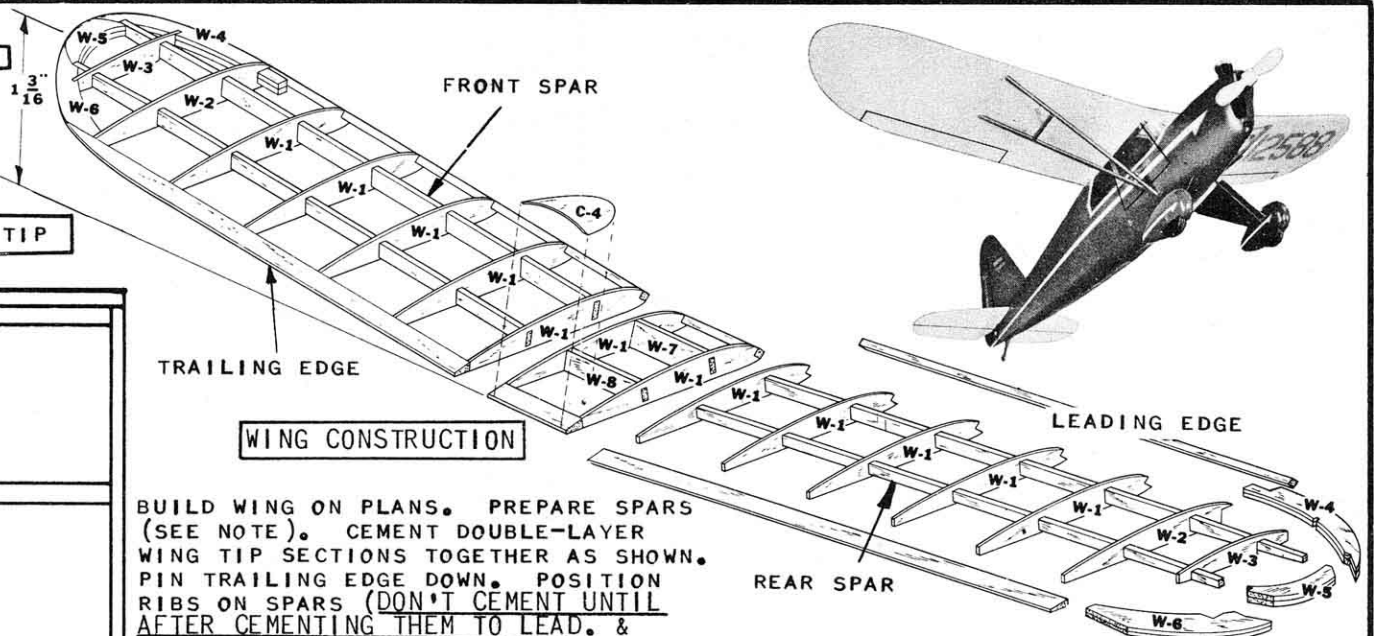
CONTROL SYSTEM NOTE

DRAWING SHOWS CONTROL SYSTEM FULL SIZE. CUT 1/8" SQ. BALSA CONTROL-ROD TO LENGTH. INSERT STRAIGHT PIN THROUGH SMALL CENTER HOLE (NEAR POINT) IN BELL CRANK AND THROUGH ROD AS SHOWN. USING NEEDLE-NOSE PLIERS, BEND PIN OVER (INCLUDING SPUR POINT). CEMENT AND WRAP WITH THREAD. THERE SHOULD BE CLEARANCE

BETWEEN ROD AND BELL CRANK TO ALLOW FREE MOVEMENT. PUSH PIN THROUGH REAR OF ROD LOCATING PIN HOLE FOR HORN THEN REMOVE. PLACE ROD IN FUSELAGE INSERTING THROUGH HOLES IN BULKHEADS. SECURE BELL CRANK TO CP ASSEMBLY WITH SMALL MACHINE SCREW. PLACE WASHER BETWEEN BELL CRANK AND CP. SLIP WASHER AND

TWO NUTS ON PROTRUDING MACHINE SCREW. RUN NUTS CLOSE TO CP (SO THAT BELL CRANK MOVES EASILY) AND TIGHTEN TOWARDS EACH OTHER. A COAT OF CEMENT OR DROP OF SOLDER WILL PREVENT NUTS FROM LOOSENING. INSERT PIN THROUGH CONTROL HORN AND HOLE MADE IN ROD. BEND OVER, AND SECURE IN SAME MANNER AS FRONT PIN. MOVEMENT OF BELL

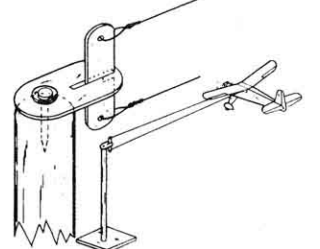
CRANK SHOULD MOVE ELEVATOR UP AND DOWN FREELY AND EASILY. ANY STICKING TENDENCIES MUST BE REMOVED. TIE A LENGTH OF NYLON (OR STRONG THREAD) LINES TO HOLE ON BOTH SIDES OF BELL CRANK. KNOTS WILL BE TIED AFTER WING GUIDE (WG) IS INSTALLED IN FINAL ASSEMBLY.



BUILD WING ON PLANS. PREPARE SPARS (SEE NOTE). CEMENT DOUBLE-LAYER WING TIP SECTIONS TOGETHER AS SHOWN. PIN TRAILING EDGE DOWN. POSITION RIBS ON SPARS (DON'T CEMENT UNTIL AFTER CEMENTING THEM TO LEAD. & TRAIL. EDGES) AND CEMENT TO TRAILING EDGE. RIBS SHOULD BE VERTICAL. CEMENT LEADING EDGE TO FRONT OF RIBS. CEMENT WING TIP SECTIONS TOGETHER AND INTO POSITION, RAISING SO THAT IT IS FLUSH WITH SPARS. BUILD OPPOSITE PANEL IN SAME MANNER. BUILD CENTER SECTION IN SAME MANNER USING W7 AND W8 AS SPARS. RIBS ARE ANGLED, SO THAT WHEN SECTIONS ARE CEMENTED TOGETHER, WING TIPS ARE 1-3/16" HIGH ON EACH SIDE AS SHOWN. ALLOW FRAMEWORK TO THOROUGHLY DRY

ON FLAT SURFACE TO PREVENT WARPS. SAND WING TIPS ROUND TO BLEND SMOOTHLY INTO LEADING AND TRAILING EDGE. SECURELY CEMENT WING PANELS TOGETHER, THEN COVER EACH PANEL WITH TISSUE PROVIDED, APPLIED WET. APPLY TWO COATS OF CLEAR DOPE, CHECKING STRUCTURE CONSTANTLY AGAINST WARPS. IF WARP OCCURS - APPLY CLEAR DOPE AND TWIST IN OPPOSITE DIRECTION, HOLDING UNTIL DRY. C4 IS INSTALLED AFTER WING HAS BEEN CEMENTED ON FUSELAGE.

AUTO-MAGIC-PILOT FLYING



NEW METHOD OF CAPTIVE FLYING FOR SMALL AREAS. HAND CONTROLLING AS IN U-CONTROL NOW UNNECESSARY. PREVENTS CHASING AND POSSIBLE LOSS OF MODEL, OR COLLISION DAMAGE, AS EXPERIENCED IN FREE-FLYING. MODEL AUTOMATICALLY FLIES TO PRE-DETERMINED HEIGHT UNTIL GRACEFUL LANDING IS MADE. INSTALL CONTROLS IN MODEL AS DESCRIBED IN CONTROL SYSTEM NOTE. DRILL OUT SMALL HOLE (IN VERTICAL) AND LARGE HOLE (IN HORIZONTAL) PLYWOOD A/M UNITS AND SECURELY CEMENT TOGETHER. SECURE A POST (BROOMSTICK) APPROXIMATELY 4 FT. HIGH. DRIVE POST INTO GROUND OR NAIL BOARD TO BOTTOM AND WEIGHT SAME TO PREVENT POST FROM SHIFTING. FASTEN A/M PILOT UNIT TO TOP OF POST WITH NAIL. USE WASHERS ABOVE AND BELOW UNIT. BE CERTAIN HOLE IS LARGE ENOUGH SO THAT IT SWINGS FREELY AND EASILY. TIE 12 FT. TO 15 FT. NYLON (OR STRONG THREAD) LINES FROM A/M UNIT TO LINES COMING FROM MODEL. BE CERTAIN LINES ARE SAME LENGTH. WHEN LINES ARE TAUT, AND MODEL IS HELD AT SAME LEVEL AS A/M UNIT, ELEVATOR IS NEUTRAL. WHEN MODEL IS LOWERED ELEVATOR GOES UP; WHEN RAISED, ELEVATOR GOES DOWN. RUDDER "R" MUST BE ANGLED 3/8" TOWARDS OUTSIDE OF CIRCLE. TO FLY MODEL, START ENGINE, PULL MODEL AWAY FROM POST UNTIL LINES ARE TIGHT, THEN RELEASE FOR TAKE-OFF.