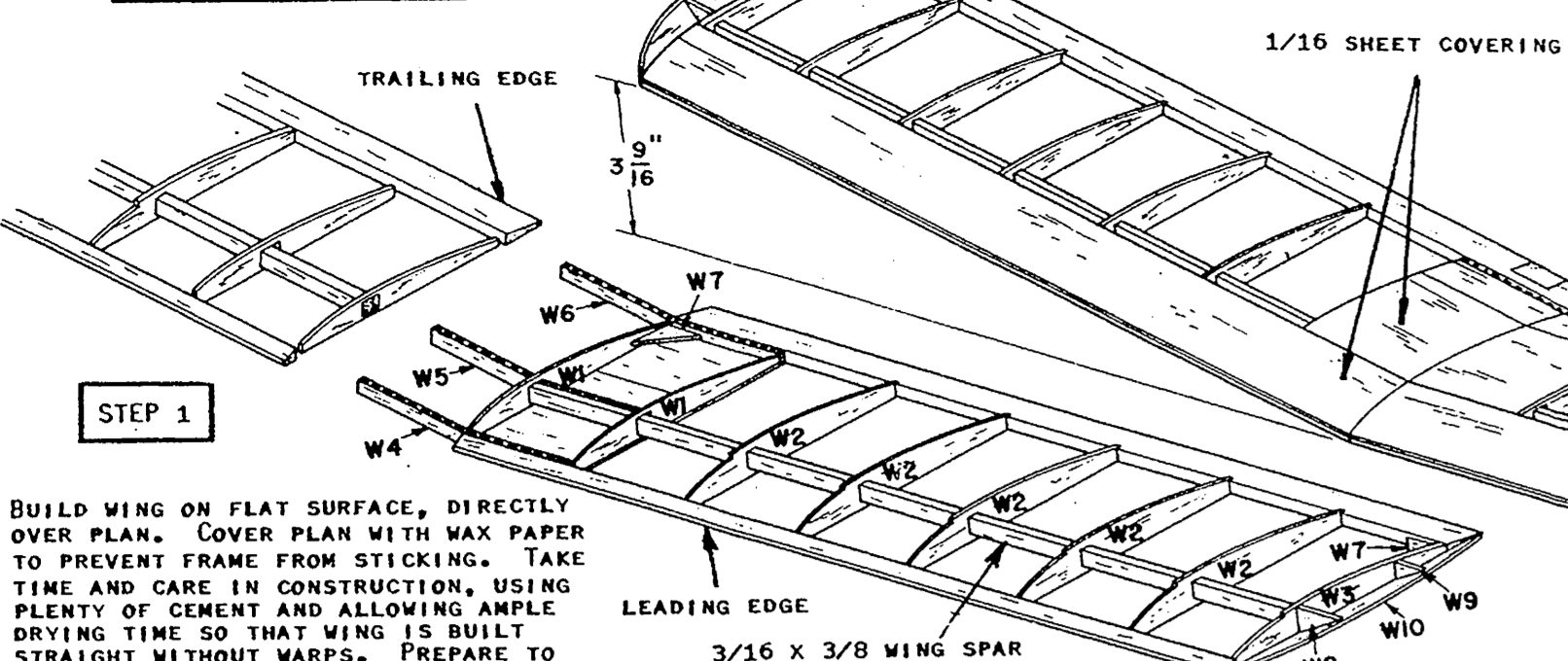


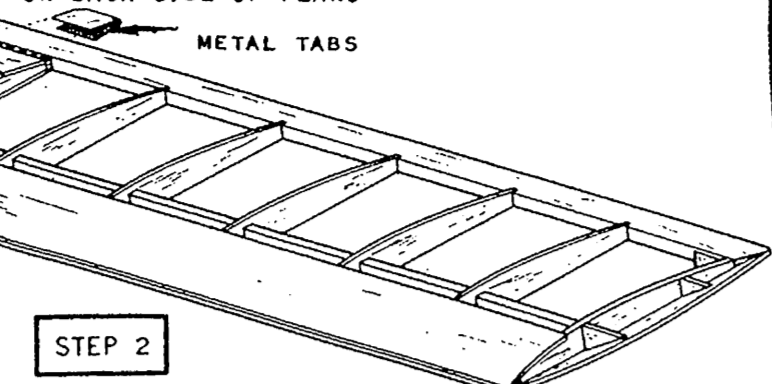
WING ASSEMBLY



STEP 1
 BUILD WING ON FLAT SURFACE, DIRECTLY OVER PLAN. COVER PLAN WITH WAX PAPER TO PREVENT FRAME FROM STICKING. TAKE TIME AND CARE IN CONSTRUCTION, USING PLENTY OF CEMENT AND ALLOWING AMPLE DRYING TIME SO THAT WING IS BUILT STRAIGHT WITHOUT WARPS. PREPARE TO ASSEMBLE WING FRAME BY CEMENTING HALF THE LENGTH OF PLYWOOD DIHEDRAL GUSSETS W4, W5 & W6 TO THE LEADING EDGE, SPAR AND TRAILING EDGE AS SHOWN IN SKETCH. ALL UNITS ARE FLUSH ON TOP. ALLOW TO DRY THOROUGHLY. PIN TRAILING EDGE DOWN ON PLAN. SLIDE RIBS ONTO SPAR IN NUMERICAL ORDER SHOWN. INSERT REAR OF RIBS INTO NOTCHES FOR SAME IN TRAILING EDGE AND CEMENT SECURELY. PIN DOWN LEADING EDGE AGAINST FRONT OF RIBS AND CEMENT ALL RIBS SECURELY TO LEADING EDGE. CEMENT REAR CORNER GUSSETS W7 IN PLACE. CEMENT TRIANGULAR TIP GUSSETS W8 AND W9 IN PLACE AT LOCATION SHOWN ON SKETCH AND WING DRAWING AGAINST W3, FLUSH WITH TOP OF RIB. CEMENT WING FLOOR W10 AGAINST RIB AND BOTTOM OF W8 AND W9 AS SHOWN. USE CEMENT GENEROUSLY AND HOLD PARTS WITH PINS IF NECESSARY, UNTIL THOROUGHLY DRY. BOTTOM CENTER SECTION COVERING IS

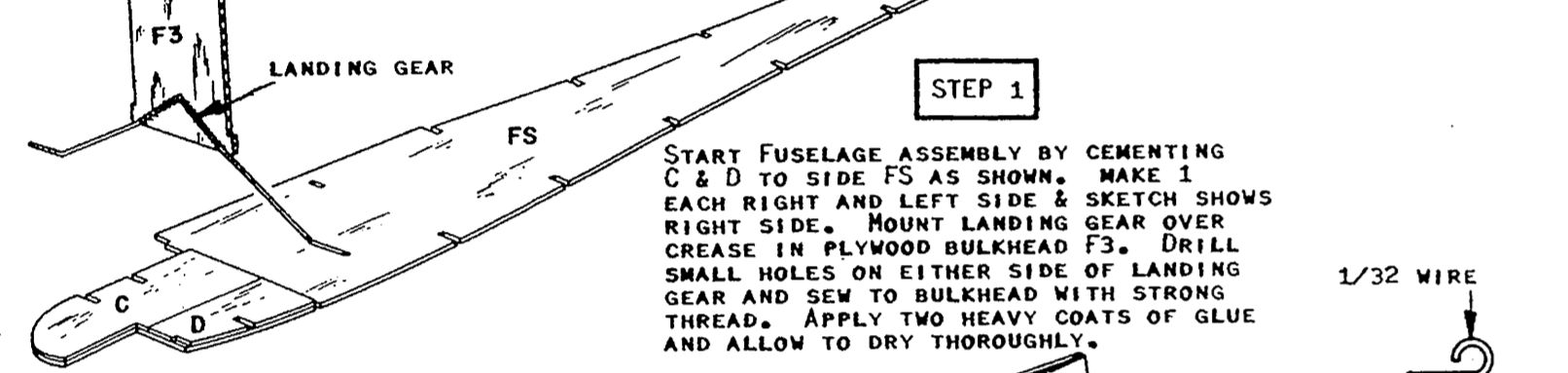
GENERAL INFORMATION AND PRE-CONSTRUCTION NOTE

THE MINNIE MAMBO 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 DRAWINGS BEFORE STARTING CONSTRUCTION. IF ANY DIE-CUT PARTS STICK IN THE SHEET, THEY ARE EASILY REMOVED BY SANDING BACK OF SHEET. FOR MAXIMUM STRENGTH, COAT PARTS WITH CEMENT (LIGHTLY) ALLOW TO DRY, THEN JOIN WITH SECOND COAT. THIS IS KNOWN AS PRE-GLUING. TO BUILD OPPOSITE WING PANEL, COAT PLAN LIGHTLY WITH SALAD OIL. THIS WILL MAKE DRAWING SHOW THRU ON BACK SIDE OF PLAN.

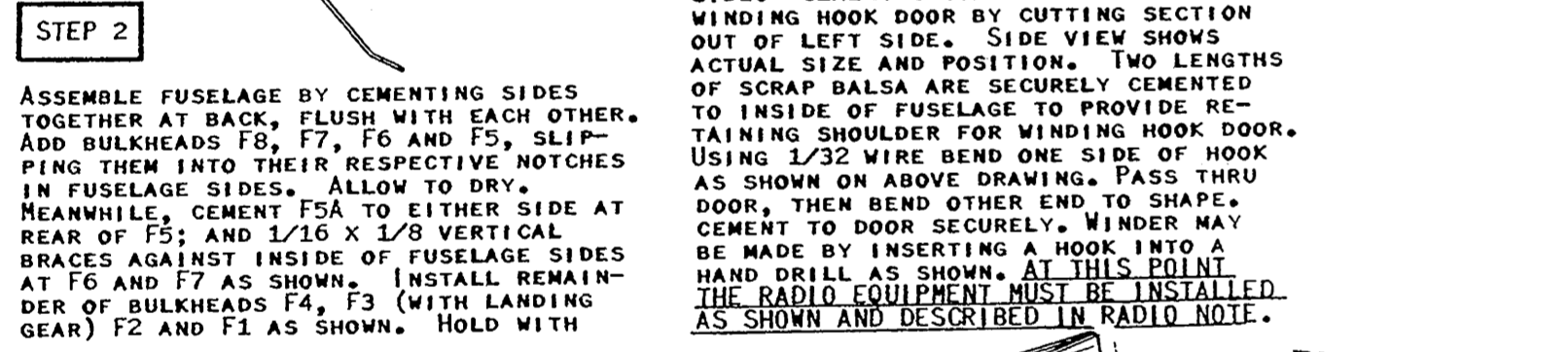


STEP 2
 COVER BOTTOM OF CENTER SECTION (RIBS W1) WITH 1/16 X 3 SHEET BALSA LEFT OVER FROM COVERING BOTTOM OF FUSELAGE. COVER THE TOP LEADING EDGE OF WING WITH 1/16 X 3 X 22 SHEET CUT IN HALF TO MAKE TWO PIECES 1-1/2" WIDE. NOTE THAT RIBS ARE NOTCHED TO RECEIVE THIS COVERING AND THAT IT EXTENDS OVER AND IS CEMENTED TO TOP OF LEADING EDGE. COVER THE TOP CENTER SECTION OF WING AS SHOWN WITH REMAINDER OF 1/16 X 3 SHEET BALSA. ALL SHEET COVERING CAN BE HELD IN PLACE WITH PINS UNTIL THOROUGHLY DRY. WHEN STRUCTURE IS COMPLETELY DRY, REMOVE ANY PINS AND SAND SMOOTH WITH FINE SAND PAPER. LEADING EDGE IS SANDED TO MATCH CURVE SHOWN ON SIDE VIEW. BEND METAL TABS FROM ANY AVAILABLE THIN METAL (TIN CAN MAY BE USED) AND CEMENT TO TRAILING EDGE AT LOCATION SHOWN. THIS WILL PREVENT BEING DAMAGED BY RUBBER BANDS WHICH HOLD WING ON MODEL. COVER WING WITH SILKSPAN (APPLIED WET) GRAIN RUNNING SPANNISE. CHECK WING CONSTANTLY WHILE COVERING TO PREVENT ANY WARPS FROM DEVELOPING. WHEN SILKSPAN IS DRY, APPLY TWO COATS OF CLEAR DOPE. IF WARP SHOULD OCCUR, APPLY AN ADDITIONAL COAT OF DOPE AND TWIST WING IN OPPOSITE DIRECTION, HOLDING UNTIL DRY. WING IS NOW READY TO BE PAINTED AS DESCRIBED IN FINAL ASSEMBLY NOTE.

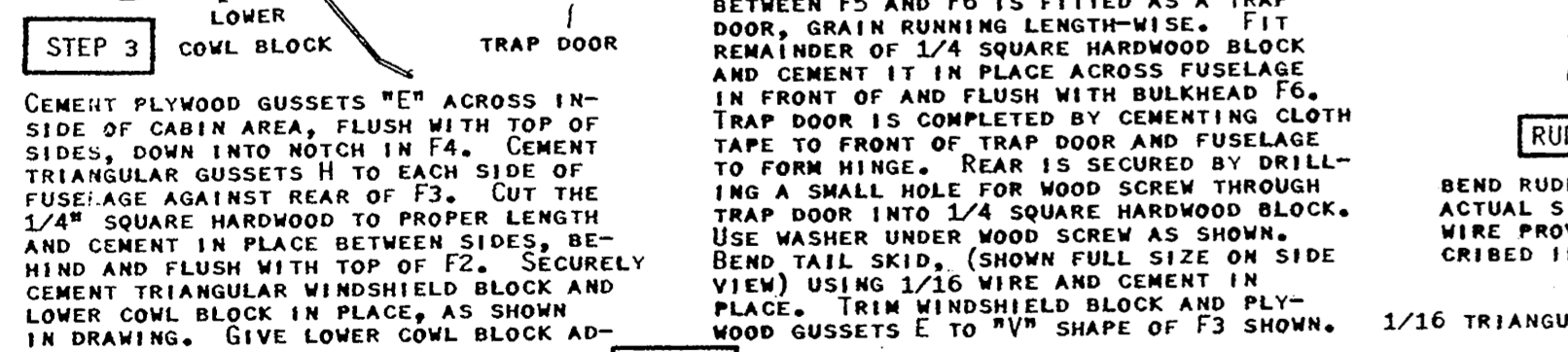
FUSELAGE ASSEMBLY



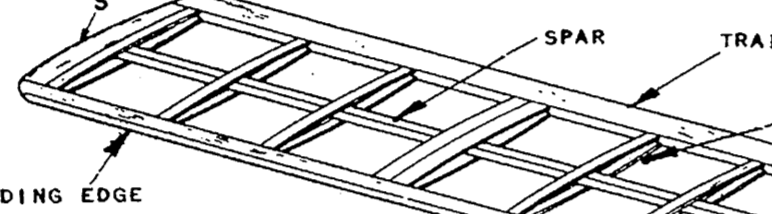
STEP 1
 START FUSELAGE ASSEMBLY BY CEMENTING C & D TO SIDE FS AS SHOWN. MAKE 1 EACH RIGHT AND LEFT SIDE & SKETCH SHOWS RIGHT SIDE. MOUNT LANDING GEAR OVER CREASE IN PLYWOOD BULKHEAD F3. DRILL SMALL HOLES ON EITHER SIDE OF LANDING GEAR AND SEM TO BULKHEAD WITH STRONG THREAD. APPLY TWO HEAVY COATS OF GLUE AND ALLOW TO DRY THOROUGHLY.



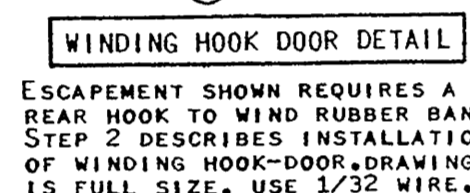
STEP 2
 ASSEMBLE FUSELAGE BY CEMENTING SIDES TOGETHER AT BACK, FLUSH WITH EACH OTHER. ADD BULKHEADS F8, AT F6 AND F5, SLIPPING THEM INTO THEIR RESPECTIVE NOTCHES IN FUSELAGE SIDES. ALLOW TO DRY. MEANWHILE, CEMENT F5A TO EITHER SIDE AT REAR OF F5; AND 1/16 X 1/8 VERTICAL BRACES AGAINST INSIDE OF FUSELAGE SIDES SAME MANNER AS BOTTOM TRAP DOOR. CENTER OF BULKHEADS F4, F3 (WITH LANDING GEAR) F2 AND F1 AS SHOWN. HOLD WITH



STEP 3
 ADDITIONAL COAT OF CEMENT ON INSIDE JOINTS. COVER REAR TOP OF FUSELAGE FROM F5 TO F8 USING 1/16 X 2 X 13 SHEET BALSA. PUSH FRONT DOWN INTO V-HOLE ON TOP OF F5 BULKHEAD. BOTTOM OF FUSELAGE IS COVERED USING 1/16 X 3 X 23 BALSA SHEET IN SECTIONS, GRAIN RUNNING ACROSS FUSELAGE, AS SHOWN. SECTION BETWEEN F5 AND F6 IS FITTED AS A TRAP DOOR, GRAIN RUNNING LENGTHWISE. REMAINDER OF REAR TOP OF FUSELAGE IS CEMENTED IN PLACE ACROSS FUSELAGE IN FRONT OF AND FLUSH WITH BULKHEAD F6. TRAP DOOR IS FITTED WITH HARDWOOD CLOTH TAPE TO FRONT OF TRAP DOOR AND FUSELAGE TO FORM HINGE. REAR IS SECURED BY DRILLING A SMALL HOLE FOR WOOD SCREW THROUGH TRAP DOOR INTO 1/4 SQUARE HARDWOOD BLOCK. USE WASHER UNDER WOOD SCREW AS SHOWN. BEND TAIL SKID, (SHOWN FULL SIZE ON SIDE VIEW) USING 1/16 WIRE AND CEMENT AND MOUNT YOKES WITH 2/56 MACHINE SCREW AND NUT, FLAT SIDE OF NUT AGAINST WOOD. SOLDER NUT TO PREVENT LOOSENING.



STABILIZER ASSEMBLY
 PIN 3/16 X 3/8 LEADING EDGE, 3/16 SQUARE X 15" SPAR, AND 3/16 X 5/8 X 16" TRAILING EDGE, DIRECTLY ON PLAN. CEMENT TWO STABILIZER WING TIPS TOGETHER TO FORM DOUBLE LAYER TIP. MAKE TWO. CEMENT IN PLACE BETWEEN LEADING AND TRAILING EDGE, SLIPPING SPAR INTO NOTCH AS SHOWN. BREAK OFF THE 1/16 X 1/4 CAP RIBS FROM STRIP SHEET. CUT TO LENGTH AND CEMENT CAP RIBS IN PLACE FLUSH WITH LEADING AND TRAILING EDGE, WHICH WILL CAUSE THEM TO BOW, AS SHOWN. ADD THE CENTER SECTION CAP RIBS WHICH ARE 3/8" WIDE. ALLOW STRUCTURE TO DRY, THEN TURN OVER AND INSTALL BOTTOM CAP RIBS IN SAME MANNER. TRIM TIPS TO SHAPE AND ROUND OFF LEADING EDGE AND TIPS, TAPERING TRAILING EDGE, AS SHOWN ON SIDE VIEW. COVER WITH SILKSPAN TISSUE (APPLIED WET) GRAIN RUNNING SPANNISE. WHEN DRY APPLY TWO COATS OF DOPE. STABILIZER IS NOW READY TO BE INSTALLED AS DESCRIBED IN FUSELAGE STEP 4.



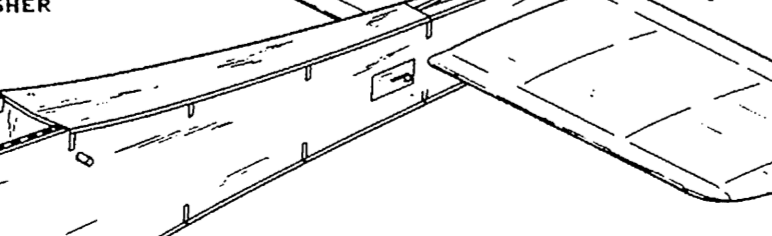
WINDING HOOK DOOR DETAIL
 ESCAPEMENT SHOWN REQUIRES A REAR HOOK TO WIND RUBBER BAND. STEP 2 DESCRIBES INSTALLATION OF WINDING HOOK-DOOR DRAWING IS FULL SIZE. USE 1/32 WIRE. PINS OR RUBBER BANDS IF NECESSARY AND ALLOW TO DRY THOROUGHLY. CUT A 2 1/2" LENGTH OF DOWEL. REMAINING LENGTH OF DOWEL IS USED LATER FOR FRONT TIE-DOWN PIECE. CUT OUT HOLE FOR SAME AS INDICATED BY PUNCH MARK ON FUSELAGE SIDES, AT REAR OF BULKHEAD F5. INSERT DOWEL THROUGH FUSELAGE SIDES, AGAINST F5, ALLOWING ENDS TO STICK OUT 1/2" ON EACH SIDE. CEMENT SECURELY IN PLACE. MAKE WINDING HOOK DOOR BY CUTTING SECTION ON LEFT SIDE. SIDE VIEW SHOWS ACTUAL SIZE AND POSITION. TWO LENGTHS OF SCRAP BALSA ARE SECURELY CEMENTED TO INSIDE OF FUSELAGE TO PROVIDE RETAINING SHOULDER FOR WINDING HOOK DOOR. USING 1/32 WIRE BEND ONE SIDE OF HOOK AS SHOWN ON ABOVE DRAWING. PASS THRU DOOR, THEN BEND OTHER END TO SHAPE. CEMENT TO DOOR SECURELY. WINDER MAY BE MADE BY INSERTING A HOOK INTO A HOLE AND DRILL AS SHOWN. AT THIS POINT THE RADIO EQUIPMENT MUST BE INSTALLED AS SHOWN AND DESCRIBED IN RADIO NOTE.



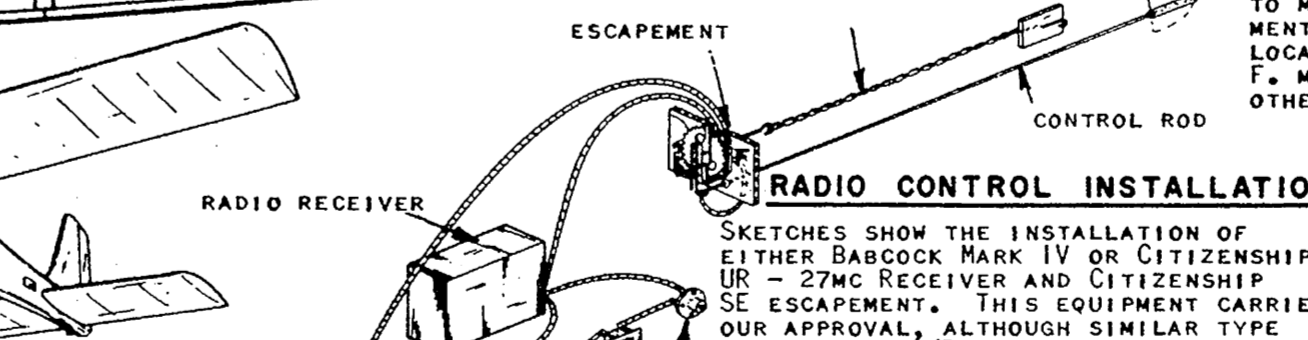
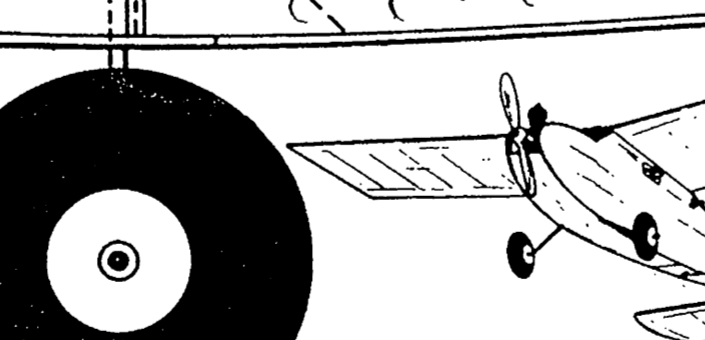
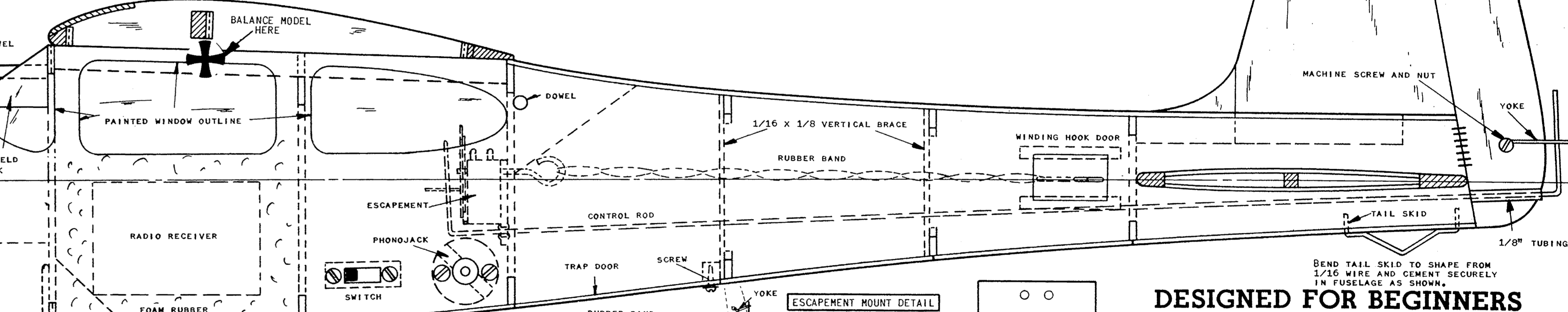
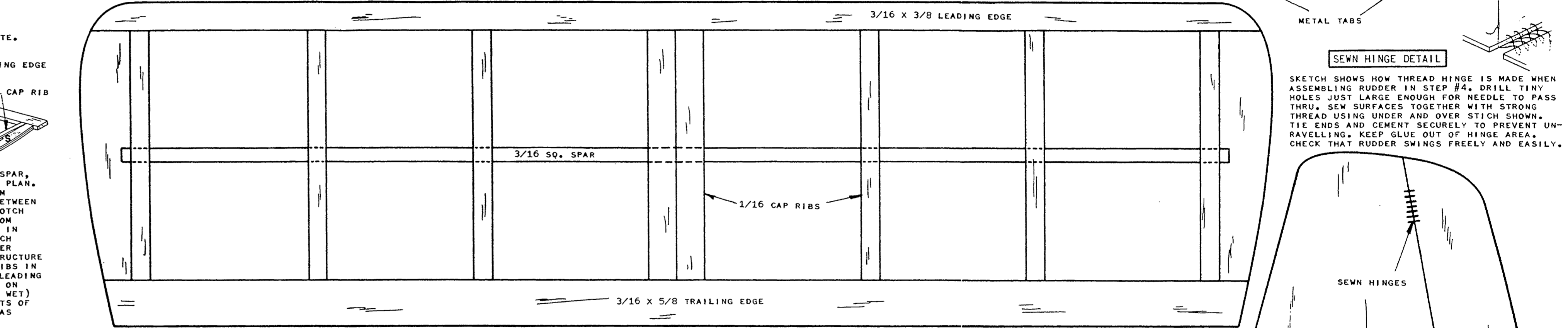
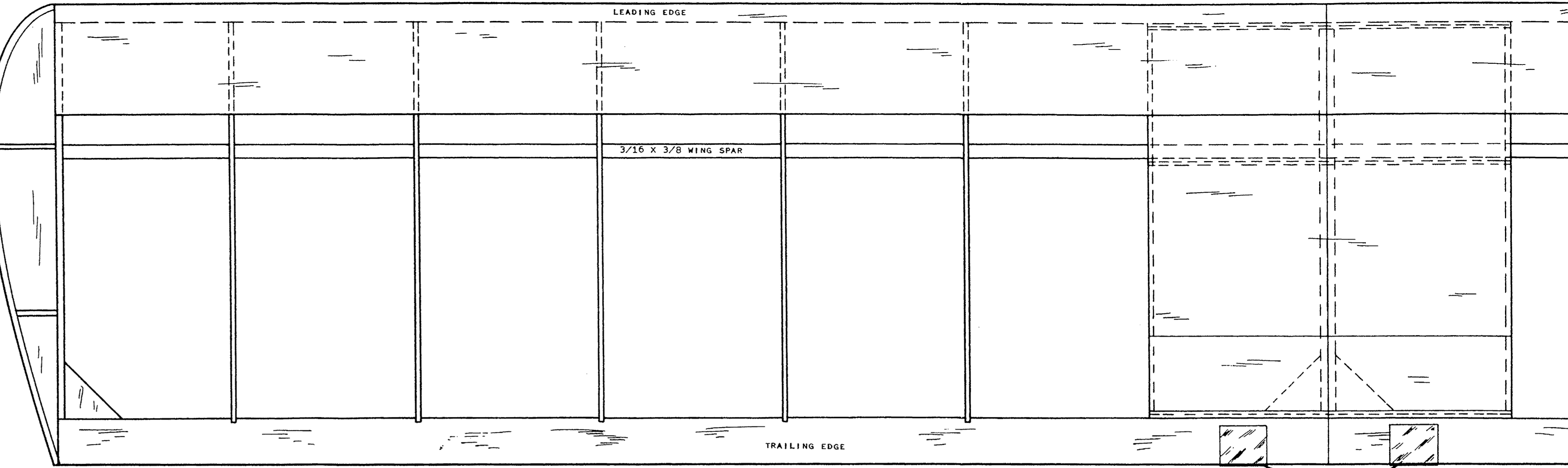
WINDING ESCAPEMENT RUBBER BAND
 SKETCH SHOWS HOW DRILL-WINDER IS ENGAGED IN OUTSIDE DOOR-TO BE SURE TO WIND SO THAT ESCAPEMENT REVOLVES IN PROPER DIRECTION, THEN REPLACE DOOR.



RUDDER YOKE DETAIL
 BEND RUDDER YOKE TO SHAPE SHOWN ACTUAL SIZE ABOVE USING 1/32" WIRE PROVIDED, INSTALL AS DESCRIBED IN STEP #4 BELOW.



CONTROL-ROD DETAIL
 DRAWING ABOVE IS FULL SIZE. BEND TO PATTERN FOR 1/16 WIRE PROVIDED. BEND TO SHAPE SO THAT IT FITS OVER PIN IN ESCAPEMENT FREELY. REMOVE BURRS FROM END OF 1/8" TUBING AND SLIP OVER ROD. THEN MAKE LAST BEND. CONTROL ROD IS NOW READY TO BE INSTALLED AS DESCRIBED IN RADIO CONTROL INSTALLATION NOTE.



FINAL ASSEMBLY AND PAINT NOTE

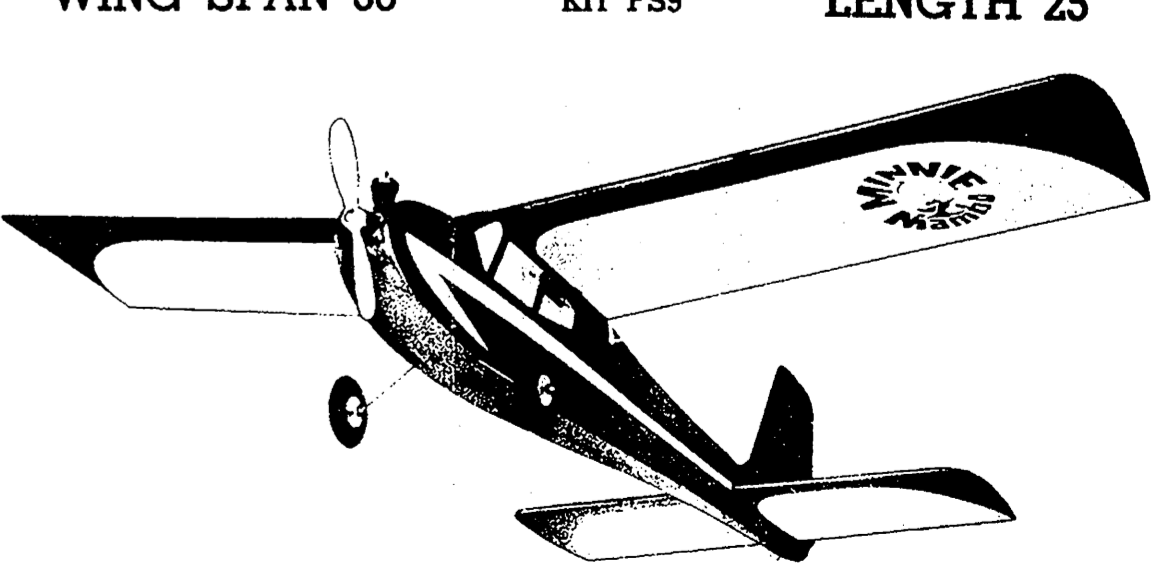
WHEN WING AND FUSELAGE HAVE BEEN COMPLETED AS DESCRIBED IN THEIR RESPECTIVE STEPS MODEL IS THEN READY TO BE PAINTED USING HOT FUEL PROOF PAINT. ANY RADIO EQUIPMENT IN MODEL SHOULD BE COVERED TO PROTECT IT FROM PAINT. ORIGINAL MINNIE MAMBO PAINTED RED WITH YELLOW TRIM. WINDOWS SHOWN ON SIDE VIEW ARE PAINTED SILVER. SINCE MINNIE IS ORIGINAL DESIGN IT MAY BE PAINTED TO SUIT THE INDIVIDUAL TASTE OF THE MODEL BUILDER. INSTALL ENGINE IN FUSELAGE USING 2/56 SCREWS AND NUTS PROVIDED, FLAT SIDE OF NUTS AGAINST WOOD. ACCESS FOR NUTS IS MADE THROUGH BATTERY COMPARTMENT. ENGINE SHOWN IS COX .049. ANY OTHER SIMILAR ENGINE MAY BE USED. CEMENT STRIP OF FINE SAND PAPER TO TOP OF E AND CABIN SIDE, AND AGAINST BOTTOM OF WING IN CORRESPONDING POSITION. THIS WILL PREVENT WING FROM SHIFTING. WING IS SECURED BY WRAPPING RUBBER BANDS ACROSS WING FROM 2/16 DOVELS ON EITHER SIDE OF FUSELAGE AT REAR, TO SINGLE DOWEL PIN PROTRUDING FROM FRONT OF CABIN. INSTALL 2" DIAMETER WHEELS, (NOT FURNISHED IN KIT) AND SECURE WITH WASHERS SOLDERED ON ENDS OF AXLES OR YOU MAY PURCHASE WHEEL RETAINERS AT HOBBY SHOP. MOUNT COLORFUL MINNIE MAMBO DECAL AND SLIDE IN POSITION.



SEWN HINGE DETAIL

SKETCH SHOWS HOW THREAD HINGE IS MADE WHEN ASSEMBLING RUDDER IN STEP #4. DRILL TINY HOLES JUST LARGE ENOUGH FOR NEEDLE TO PASS THRU. SEW SURFACES TOGETHER WITH STRONG THREAD USING UNDER AND OVER STITCH SHOWN. TIE ENDS AND CEMENT SECURELY TO PREVENT UNRAVELLING. KEEP GLUE OUT OF HINGE AREA. CHECK THAT RUDDER SWINGS FREELY AND EASILY.

DESIGNED FOR BEGINNERS
MINNIE MAMBO
 WING SPAN 36" KIT FS9 LENGTH 25"



HALF-A RADIO CONTROL TRAINER FOR SINGLE CHANNEL OPERATION
Sterling models

FLYING INSTRUCTIONS

BE CERTAIN MODEL BALANCED (NOSE SLIGHTLY DOWN) 2" TO 2 1/2" BEHIND FRONT OF WING. ADD WEIGHT IF NECESSARY. CHECK THAT ALL SURFACES ARE FREE OF WARPS AND ARE IN PROPER ALIGNMENT WITH EACH OTHER. ANY DEVIATION MAY RESULT IN ERRATIC FLYING. 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 FOR A DISTANCE OF AT LEAST 500 FT. WITH THE ENGINE RUNNING. THROTTLE ENGINE DOWN TO SLOW SPEED AND LAUNCH INTO ANY PREVAILING WIND AT NORMAL FLYING SPEED (DOWN THRU). ONCE MODEL IS IN THE AIR DO NOT ATTEMPT TO CONTROL WITH RADIO UNTIL AN ALTITUDE OF AT LEAST 100 FT. HAS BEEN ACHIEVED. INEXPERIENCED RADIO FLYERS MAY CAUSE MODEL TO CRASH IF IT HASN'T SUFFICIENT ALTITUDE. IN MOST CASES, MODEL WILL RECOVER ITS FLIGHT PATH IF LEFT ALONE. GIVE SHORT BEEPS TO CONTROL MODEL WHILE ENGINE IS RUNNING, LONGER BEEPS WILL BE NECESSARY WHEN MODEL IS GLIDING AFTER MOTOR HAS STOPPED. EXPERIENCE WILL ENABLE YOU TO DO MANY MANEUVERS WITH YOUR MINNIE MAMBO. IF YOU WILL DROP US A NOTE RELATING YOUR EXPERIENCES WITH THE KIT, WE ARE HAPPY TO SEND YOU A FREE DECAL, SHOWING YOUR RADIO FREQUENCY, IF YOU REQUEST IT. **GOOD LUCK AND GOOD FLYING!**