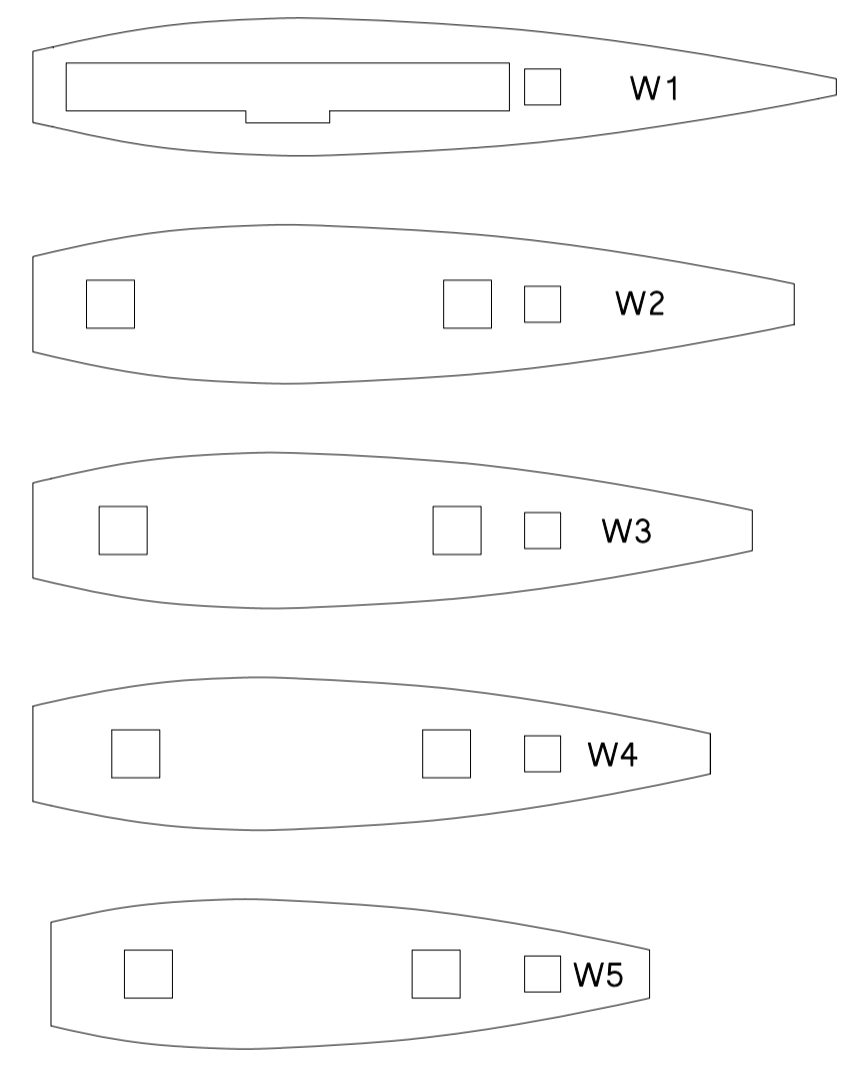
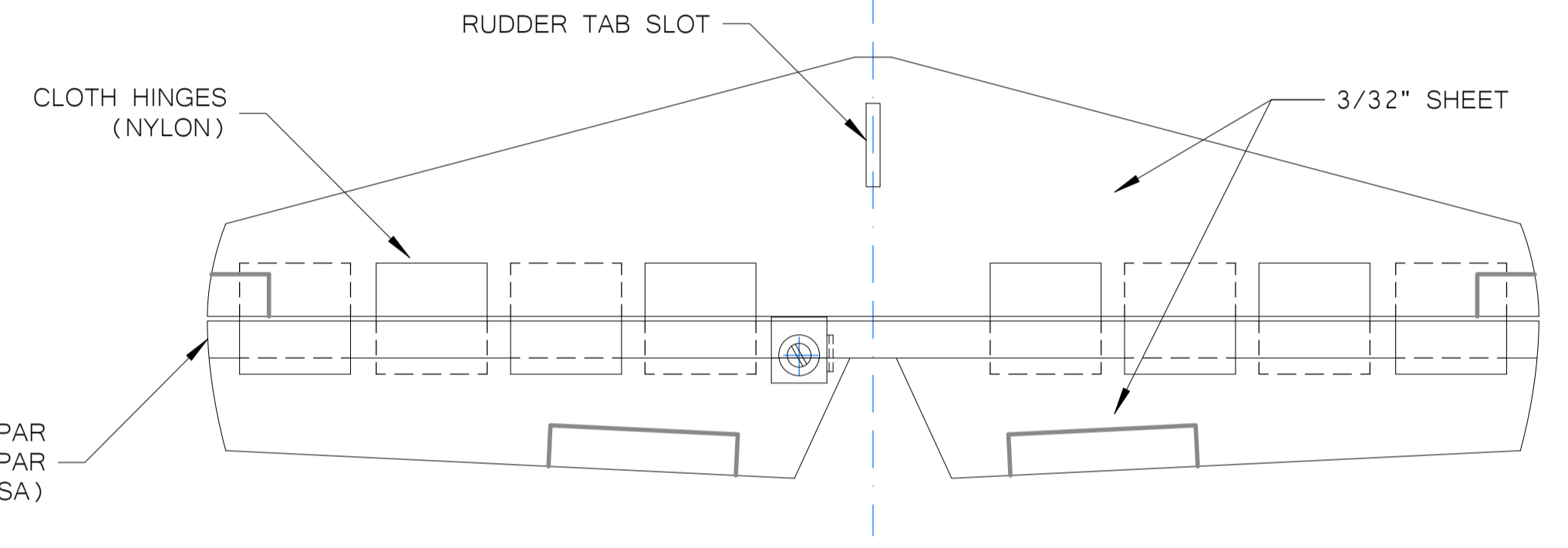
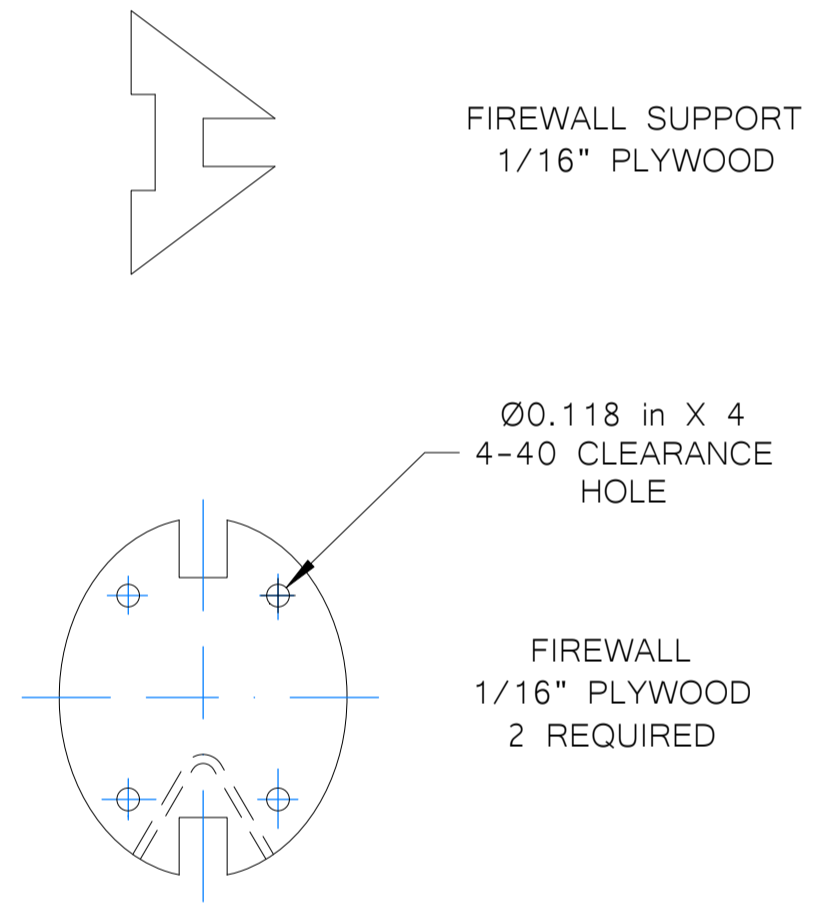


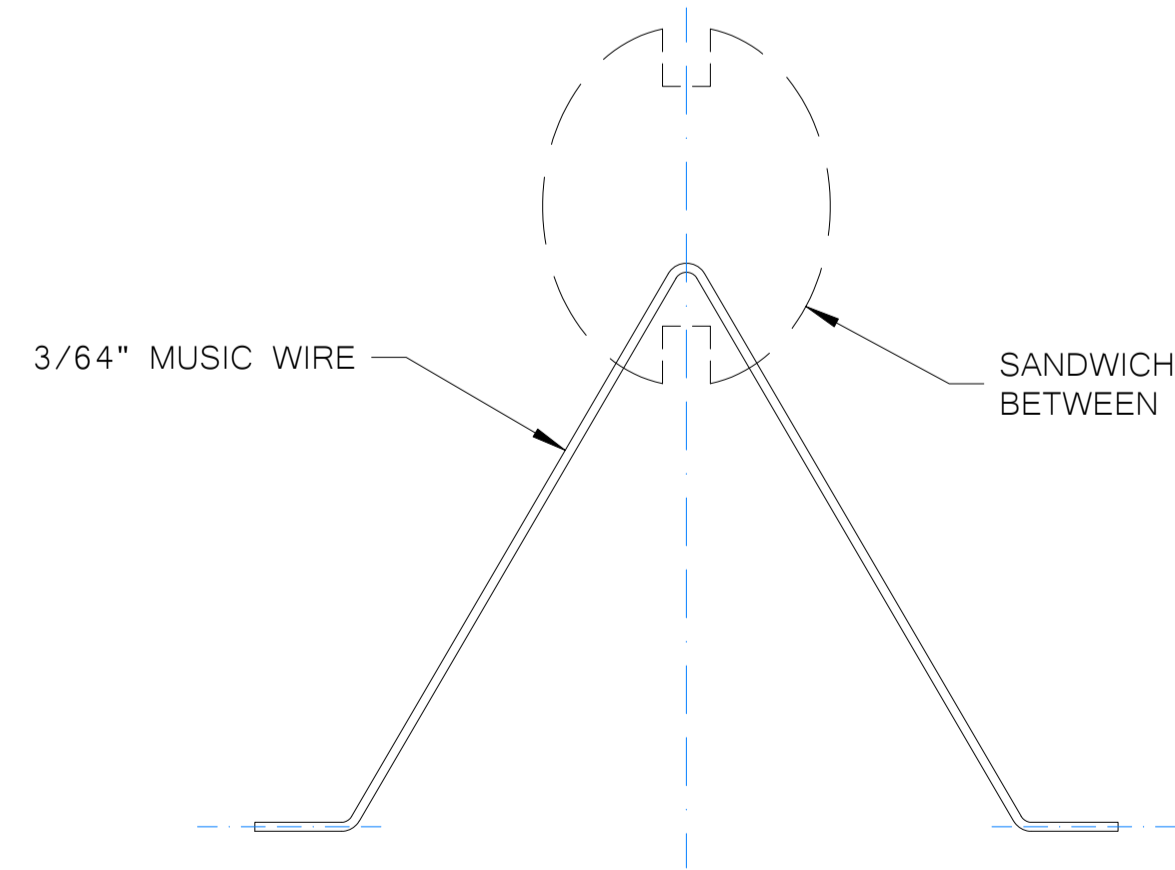
WING TOP VIEW



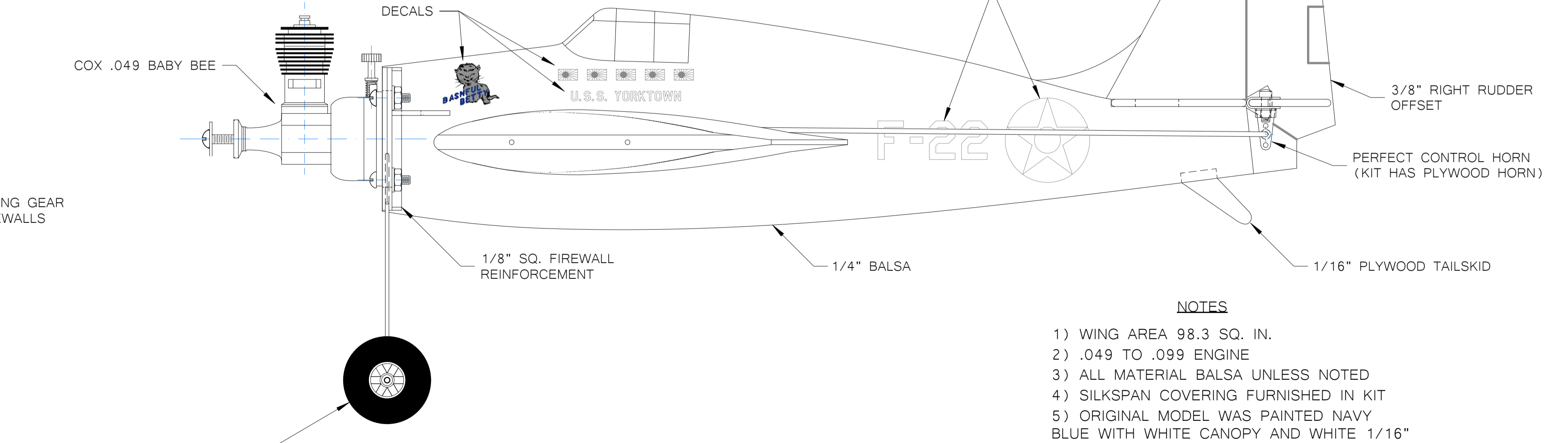
ALL RIBS 1/16" Balsa  
2 OF EACH REQUIRED



HORIZONTAL STABILIZER TOP VIEW

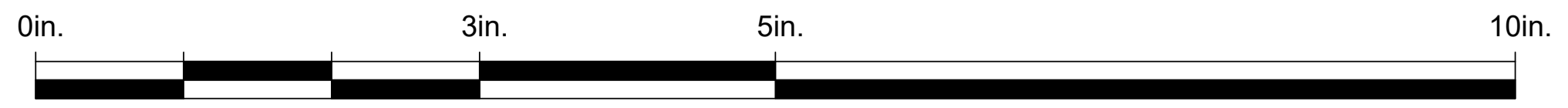


LANDING GEAR

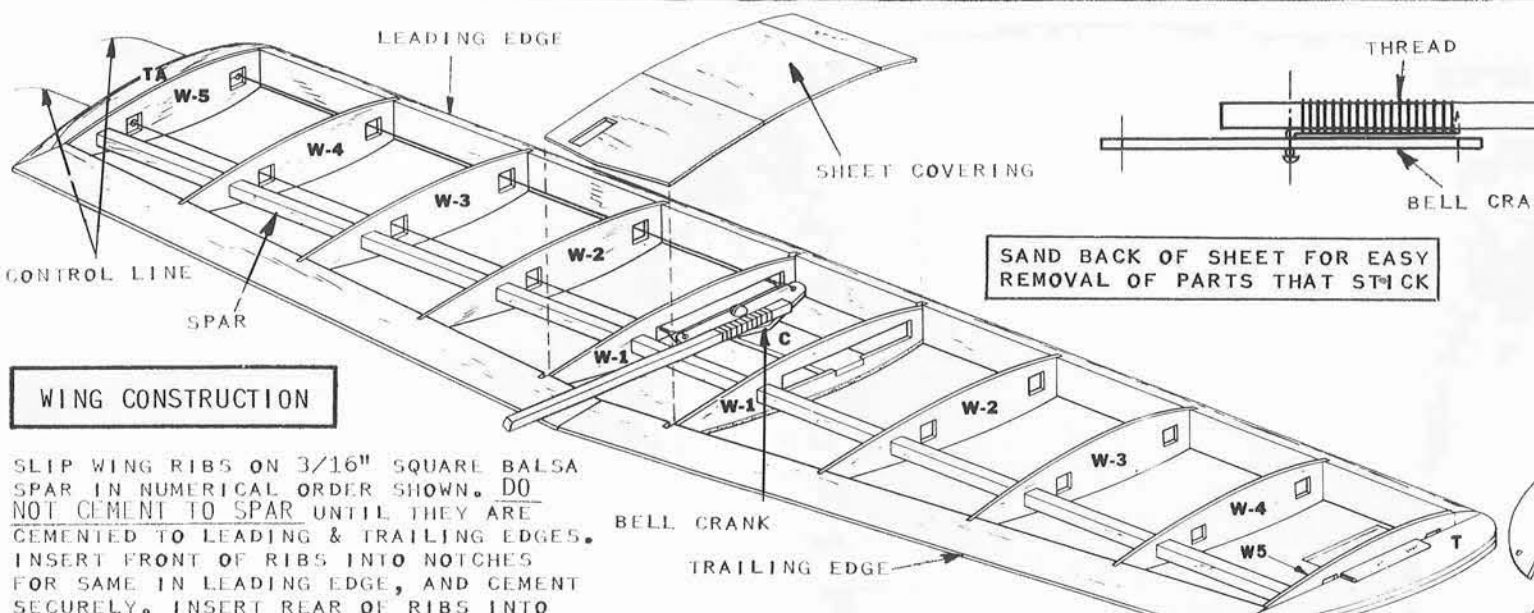


FUSELAGE SIDE VIEW

- NOTES**
- 1) WING AREA 98.3 SQ. IN.
  - 2) .049 TO .099 ENGINE
  - 3) ALL MATERIAL Balsa UNLESS NOTED
  - 4) SILKSPAN COVERING FURNISHED IN KIT
  - 5) ORIGINAL MODEL WAS PAINTED NAVY BLUE WITH WHITE CANOPY AND WHITE 1/16" TAPE CONTROL SURFACE OUTLINES



TITLE	PAGE
STERLING F4F WILDCAT KIT S21	1 OF 1
DRAWN BY	MARK GERBER
SCALE	DATE
1:1	5/12/22



**WING CONSTRUCTION**

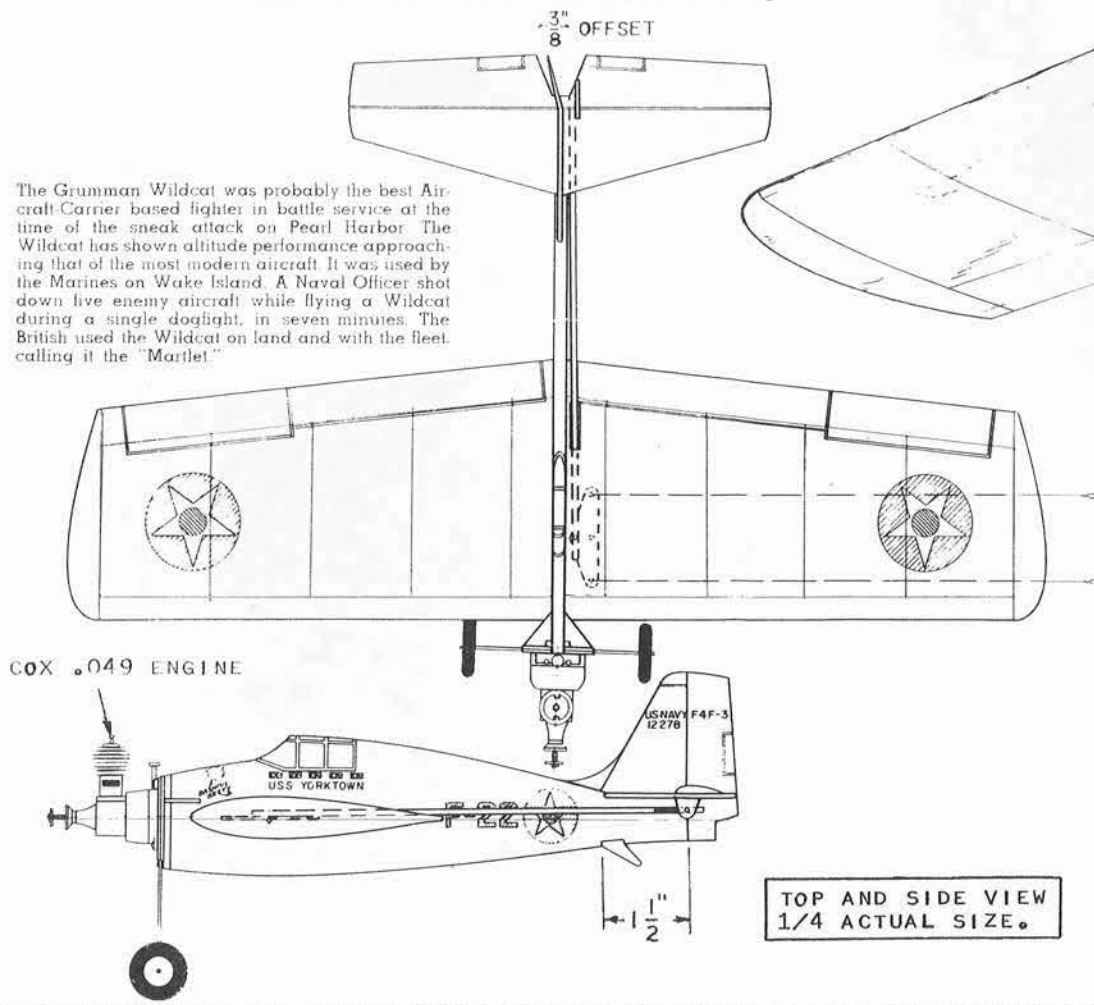
SLIP WING RIBS ON 3/16" SQUARE BALSA SPAR IN NUMERICAL ORDER SHOWN. DO NOT CEMENT TO SPAR UNTIL THEY ARE CEMENTED TO LEADING & TRAILING EDGES. INSERT FRONT OF RIBS INTO NOTCHES FOR SAME IN LEADING EDGE, AND CEMENT SECURELY. INSERT REAR OF RIBS INTO NOTCHES IN TRAILING EDGE AND CEMENT SECURELY; CEMENTING CENTER BUTT JOINT AT SAME TIME. JOINT MAY BE HELD WITH PINS UNTIL DRY. WHEN DRY, APPLY A SECOND COAT OF CEMENT. RIBS W1'S ARE CENTERED TO ALLOW FOR 1/16" COVER TO BE FLUSH TOP AND BOTTOM WHEN IT IS APPLIED. CEMENT THE TWO T'S AND THE TWO TA'S TOGETHER TO FORM WING TIPS. CEMENT TO TIP RIBS W5. WHEN DRY, ROUND OFF SO THAT TIPS BLEND SMOOTHLY INTO LEADING AND TRAILING EDGES. CEMENT C INTO NOTCHES IN W1'S USING TWO COATS FOR STRENGTH. USING 1/16" BALSA SHEET, COVER BOTTOM SECTION BETWEEN RIBS W1'S. USE SHEET AS IT COMES FOR

FIRST TWO PIECES, TRIM REAR PIECE TO FIT AS SHOWN. CEMENT ABOUT 1/4 OUNCE OF WEIGHT (COILED SOLDER OR SMALL EMPTY CEMENT TUBE) TO INSIDE OF W5 ON RIGHT WING TIP. INSTALL CONTROLS IN WING (SEE CONTROL INSTALLATION NOTE). COVER TOP OF WING SECTION BETWEEN W1'S IN SAME MANNER AS BOTTOM ALLOWING CONTROL ROD TO PROTRUDE THROUGH SLOT. SAND ENTIRE WING SMOOTH, THEN COVER 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.

SAND BACK OF SHEET FOR EASY REMOVAL OF PARTS THAT STICK

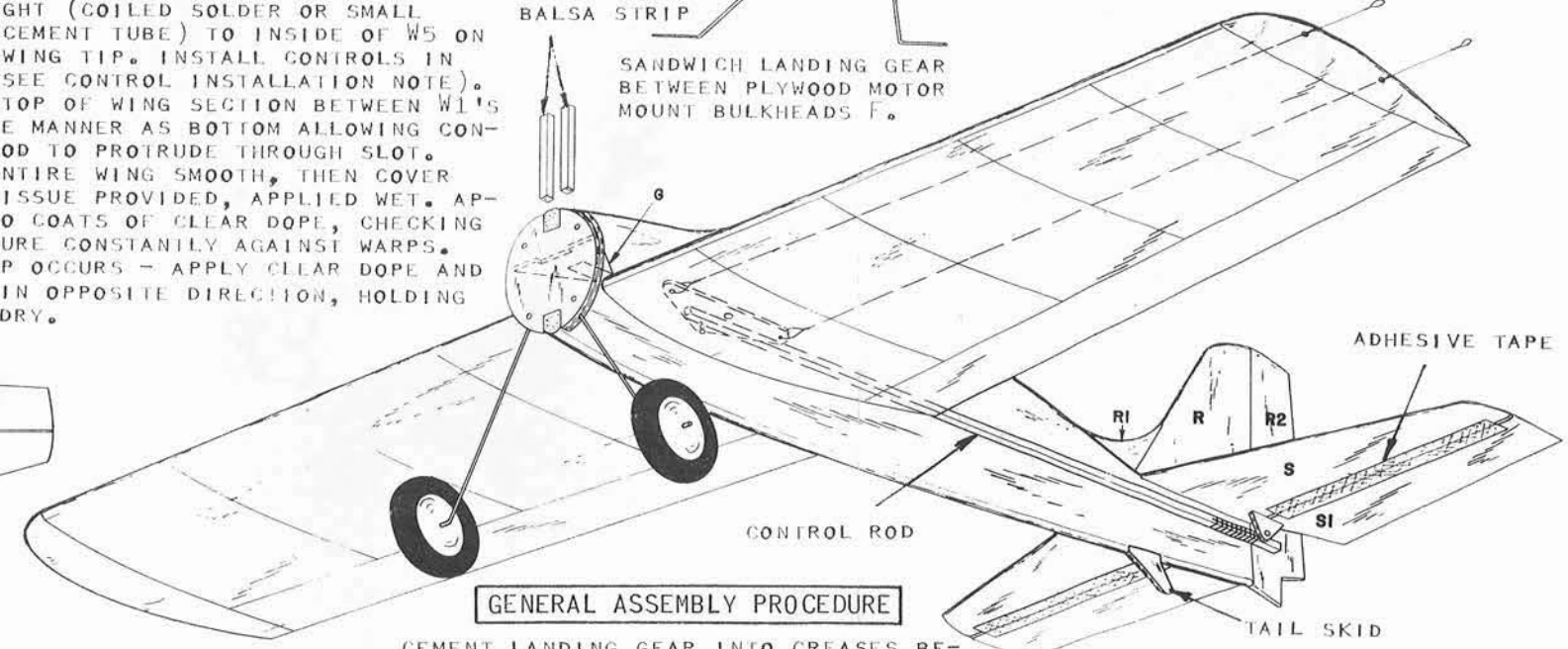
DRAWING SHOWS CONTROL SYSTEM FULL SIZE. CUT 1/8" SQUARE BALSA CONTROL ROD TO LENGTH. DRILL SMALL HOLES THROUGH PUNCH MARKS IN PLYWOOD BELL CRANK. CENTER HOLE SHOULD BE LARGE ENOUGH FOR A MACHINE SCREW (#2-56, NOT PROVIDED IN KIT. PURCHASE AT HOBBY SHOP) WHICH ALLOWS BELL CRANK TO PIVOT FREELY. ATTACH CONTROL ROD TO BELL CRANK (HOLE OPPOSITE MACHINE SCREW) BY INSERTING STRAIGHT PIN THROUGH BELL CRANK AND ROD AS SHOWN. USING NEEDLE NOSE PLIERS BEND PIN OVER; THEN WRAP WITH THREAD AND CEMENT. THERE MUST BE CLEARANCE BETWEEN ROD AND BELL CRANK TO ALLOW FREE MOVEMENT. DRILL HOLE FOR MACHINE SCREW IN "C" AND SECURELY CEMENT UNIT TO W1'S. PLACE WASHER BETWEEN BELL CRANK AND "C". SLIP WASHER AND TWO NUTS ON PROTRUDING MACHINE SCREW. RUN NUTS CLOSE TO "C" (SO THAT BELL CRANK PIVOTS

FREELY) AND TIGHTEN TOWARDS EACH OTHER. A COAT OF CEMENT OR DROP OF SOLDER WILL PREVENT NUTS FROM LOOSENING. EXCESS PART OF SCREW PROTRUDING PAST NUTS MAY BE REMOVED. TOP AND BOTTOM OF WING CENTER SECTION IS NOW COVERED AS DESCRIBED IN WING NOTE, ALLOWING CONTROL ROD TO PROTRUDE THROUGH SLOT MADE IN TOP REAR SKIN (SEE WING SKETCH). AFTER WING HAS BEEN INSTALLED IN FUSELAGE ATTACH REAR OF ROD TO CONTROL HORN BY INSERTING PIN THROUGH CONTROL HORN AND 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 CORD (OR STRONG THREAD) LINES TO HOLES ON BOTH SIDES OF BELL CRANK. SLIP LINES THROUGH HOLES IN RIBS AND WING TIP AS SHOWN IN WING SKETCH. TIE SECURE LOOPS IN END OF LINES 3" PAST WING TIP. BOTH LINES SHOULD BE SAME LENGTH.



TOP AND SIDE VIEW  
1/4 ACTUAL SIZE.

The Grumman Wildcat was probably the best Aircraft Carrier based fighter in battle service at the time of the sneak attack on Pearl Harbor. The Wildcat has shown altitude performance approaching that of the most modern aircraft. It was used by the Marines on Wake Island. A Naval Officer shot down five enemy aircraft while flying a Wildcat during a single dogfight, in seven minutes. The British used the Wildcat on land and with the fleet, calling it the "Martlet."



**GENERAL ASSEMBLY PROCEDURE**

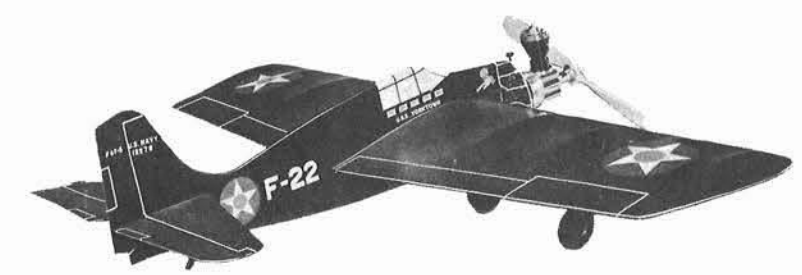
CEMENT LANDING GEAR INTO CREASES BETWEEN BOTH PLYWOOD MOTOR MOUNT BULKHEAD F'S AS SHOWN IN SKETCH. CEMENT TRIANGULAR GUSSET G INTO FRONT FUSELAGE NOTCH WITH PRINTED LETTER ON TOP. LANDING GEAR AND BULKHEAD ASSEMBLY IS NOW CEMENTED TO FRONT OF FUSELAGE AS SHOWN. NOTE ANGLE IN G TILTS BULKHEAD SLIGHTLY TO RIGHT WHEN VIEWED FROM TOP. CUT TWO LENGTHS OF 1/8" SQ. STRIP AND CEMENT THROUGH NOTCHES IN G AGAINST CORNERS FORMED BY BULKHEAD AND FUSELAGE SIDES AS SHOWN. APPLY TWO OR THREE HEAVY COATS OF CEMENT TO THIS ENTIRE INSTALLATION FOR MAXIMUM STRENGTH. TEMPORARILY CEMENT TAIL UNITS R1, R & R2, ALSO S & S1'S TOGETHER ON FLAT SURFACE. SAND SMOOTH ROUNDING OUTER EDGES. BREAK APART AND SECURELY CEMENT R1 TO R IN POSITION SHOWN. R2 IS CEMENTED TO R ON ANGLE, 3/8" TOWARDS RIGHT (SEE TOP VIEW). DRILL SMALL HOLE THROUGH PUNCH MARK IN PLYWOOD CONTROL HORN. CEMENT HORN INTO NOTCH IN S1. ASSEMBLE S TO S1 WITH STRIPS OF ADHESIVE TAPE AS SHOWN, LEAVING 1/16" SPACE BETWEEN UNITS. CEMENT S INTO NOTCH IN REAR OF FUSELAGE. LOCATE AND NOTCH FUSELAGE

FOR TAIL SKID 1 1/2" FROM REAR, THEN CEMENT SECURELY IN PLACE USING TWO HEAVY COATS OF CEMENT. INSERT WING. CEMENT SECURELY USING THREE COATS FOR STRENGTH. CHECK THAT WING IS HORIZONTAL (IN LINE WITH STABILIZER) BEFORE CEMENTING IN PLACE. IF NECESSARY, TRIM CUT-OUT IN FUSELAGE TO ACHIEVE THIS. CEMENT RUDDER TO REAR OF FUSELAGE MAKING SURE IT IS VERTICAL. HOOK UP CONTROL SYSTEM THEN ALLOW MODEL TO DRY THOROUGHLY. SAND ENTIRE MODEL SMOOTH AND PAINT COLOR SCHEME OF YOUR CHOICE. IT IS ADVISABLE TO USE HOT FUEL PROOF PAINT; OR FINAL COAT SHOULD BE CLEAR HOT FUEL PROOFER. ORIGINAL MODEL WAS PAINTED ENTIRELY NAVY BLUE. CANOPY WHITE, CONTROL OUTLINES (RUDDER, AILERONS, ETC.) ARE THIN STRIPS OF (1/16") WHITE SCOTCH TAPE. DIP DECALS IN WARM WATER AND APPLY TO MODEL AS SHOWN IN TOP AND SIDE VIEW DRAWINGS AND PHOTO. DRILL HOLES AT PUNCH MARKS IN PLYWOOD BULKHEAD FOR .049 MOTOR AND BOLT IN PLACE. SLIP WHEELS ON AXLES SECURING SAME WITH DROP OF SOLDER. **GOOD LUCK!!! GOOD FLYING!!!**

Combat GRUMMAN F4F Stunt  
**WILDCAT**

KIT S-21

SPAN 21"



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