

TO BUILD IT—FOLLOW THESE STEPS

**1** BUILD THE FUSELAGE SIDE FRAMES ON THE SHAPED LAYOUT OF THE FUSELAGE SIDE VIEW. TOP BAK PAPER OVER THE LAYOUT TO KEEP THE GLUE FROM STICKING TO IT. USE STATIONARY PINS TO HOLD THE STRIPS.

**2** WHEN BOTH SIDE FRAMES ARE MADE, CE-MENT F7 WHERE IT BELONGS BETWEEN THE TWO SIDES AT THE NOSE. NOW GLUE THE BACK ENDS TOGETHER.

**3** WHILE THAT'S DRYING, YOU CAN CUT ALL THOSE CROSSBRACES YOU WILL NEED. SEE NOTE AT FUSELAGE TOP VIEW. THE FIRST CROSSBRACES TO GLUE IN ARE THE ONES AT F11. NOW GLUE IN ALL THE OTHERS.

**4** NOW CEMENT ALL THE FORMERS - F4 TO F13 IN THEIR PROPER PLACES. WORK CLOSELY WITH THE PLAN SO THAT YOU KNOW FOR SURE—WHAT GOES WHERE.

**5** COCKPIT COUPLING. CEMENT ALL OF THE STRINGERS IN PLACE. LOOK NEAR PART F14 TO SEE THE SIZE OF STRIP YOU SHOULD USE. GLUE PART F16 BETWEEN PARTS F14 AND F14R. SEE PIC- TURE 6. GLUE F15 ON TOP AND THEN TO TAIL OF FUSELAGE. GLUE WINDOW PARTS: F14L, F14R AND FORMER F4 WITH COCKPIT COUPLING—SEE NOTE. WHEN NOSE SECTION IS DONE (PICTURES 6 AND 7) GLUE IT LIGHTLY TO FUSELAGE AND SANDPAPER WHOLE FUSELAGE CAREFULLY.

**6** FIN DOWN F4 AFTER BEVELING THE FITTINGS (SEE NOTE) AND GLUE W1 TO IT WITH GUS- SET F20. GUSSET WILL LINE UP THESE PARTS AT THE PROPER ANGLE. NOW CEMENT W1 WITH F5. GLUE THE SIDES W1L AND W1R AND LET DRY WELL—CONS. JOINTS AGAIN WITH CEMENT.

**7** BEVEL THE EDGES OF W1, W2 AND W3L TO MATCH THE EDGES OF FORMERS F5 AND F6. DO THIS CAREFULLY WITH A RAZOR BLADE AND SANDPAPER BLOCK. NOW CEMENT SIDES W2L AND W2R. USE PINS TO HOLD CORNERS DOWN- STOPS. GLUE PARTS W1 TO F4 TOGETHER AND THEN TO NOSE SECTION. WHEN THOROUGHLY DRY, TRIM AND SAND AWAY THAT EXTRA WOOD, BUT GIVE IT A FINAL SANDING WHEN IT'S ON THE FUSELAGE. THE FINISHED NOSE SECTION CAN BE GLOUED TO STAY—DO NOT SPLIT LEFT OR RIGHT OR TOP AND BOTTOM FOR A GAS EN- GINE COUPLING.

**8** GLUE PARTS TOGETHER AS SHOWN ABOVE TO FORM LEADING EDGE STRAIGHT WHILE YOU ARE FINISHING IT DOWN ON YOUR BOARD. GET A SQUARE PIECE OF WOOD OR SOMETHING LIKE IT TO HOLD THE BACK AGAINST WHEN PUSHING IN THE PINS.

**9** THIS IS THE BEST WAY TO KEEP THE SHAR- PEST LEADING EDGE STRAIGHT WHILE YOU ARE FINISHING IT DOWN ON YOUR BOARD. GET A SQUARE PIECE OF WOOD OR SOMETHING LIKE IT TO HOLD THE BACK AGAINST WHEN PUSHING IN THE PINS.

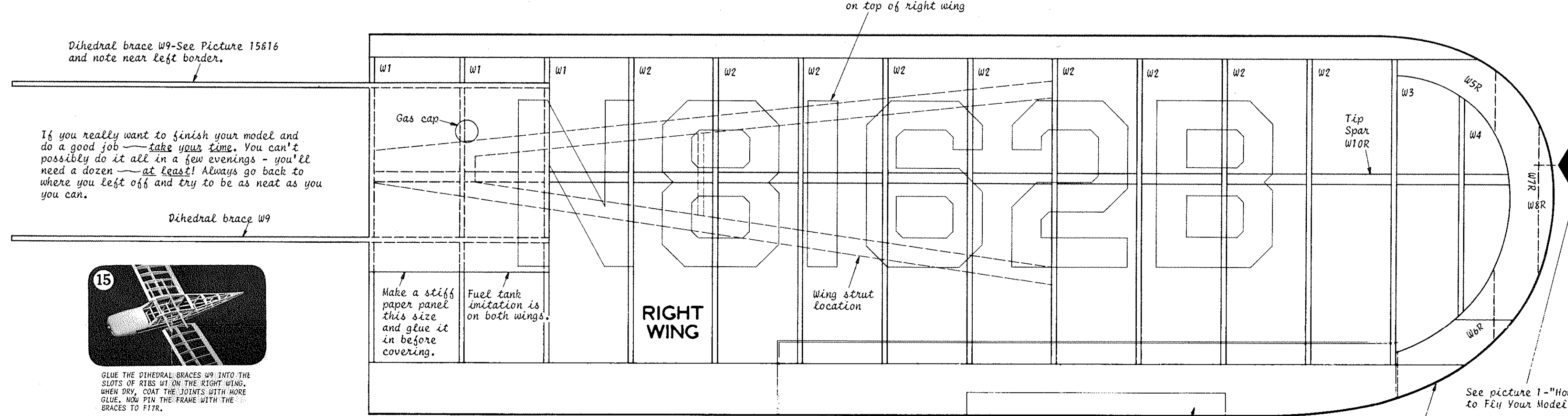
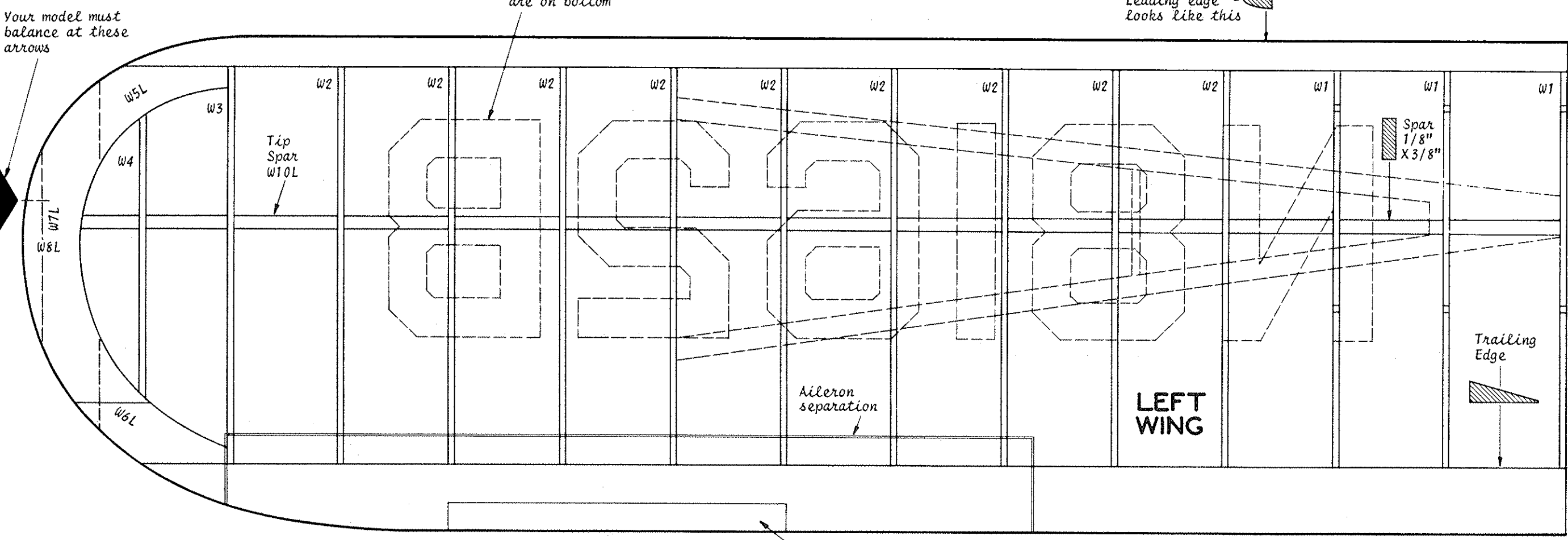
**10** BUILD THE LEFT AND RIGHT WING DIRECT- LY OVER THE LAYOUT. PUT WAX PAPER OVER IT. THEN FIN DOWN THE SHAPED LEADING EDGE (SEE PICTURE 11) AND TRAILING EDGE. CEMENT WING TIP PARTS W3R AND W3L IN PLACE FIRST—THEN W2L ON TOP OF THESE— AND W2R ON TOP OF THAT. NOW CEMENT TIP SPAR W102L IN PLACE AND THE WING SPAR AGAINST IT.

**11** NOW YOU CEMENT ALL THE RIBS IN THEIR PROPER PLACES OVER THE LAYOUT. EVEN THOUGH THESE ARE DIE CUT AS ALL THE OTHER PARTS, YOU MAY HAVE TO DO SOME TIGHTENING OF YOUR OWN FOR GOOD FITS.

**12** WHEN WING FRAMEWORK IS THOROUGHLY DRY, TRIM AWAY EXTRA BALSA WITH A RAZOR BLADE. SANDPAPER EACH WING WITH CARE AND A SANDPAPER BLOCK. IT SHOULD BE FREE OF ALL LOOPS, BUMPS AND SHARP EDGES—BECAUSE THEY WILL SHOW THROUGH THE TISSUE COVERING. THE WING TIPS ES- PECIALLY SHOULD BE TRIMMED CAREFULLY WITH A RAZOR BLADE AND SANDPAPER SO THAT THEY WILL HAVE AN UPSWEEP AS SHOWN.

**13** THE TWO FINISHED WING FRAMES ARE JOIN- ED TOGETHER WITH TWO DIHEDRAL BRACES - W9. SEE DIHEDRAL BRACE NOTES LEFT AND PICTURES 15 AND 16 FOR THE NECESSARY INFORMATION. WHEN YOU HAVE GONE THIS FAR WITH THE WING, COVER IT WITH TISSUE BEFORE YOU GLUE IT TO FUSELAGE. THE TOP FUSELAGE STRINGER BETWEEN THE BACK W9 BRACE AND F11 SHOULD BE GLOUED IN AFTER THE WING IS ON THE FUSELAGE.

**14** BUILD THE STABILIZER AND RUDDER OVER THE PLAN AS YOU FINISH THE WING AND FUSE- LAGE FRAMES. ALL OF YOUR AIRPLANE'S FRAMEWORK MUST BE SANDPAPERED THOR- OUGHLY BEFORE COVERING WITH TISSUE. THE WING, FUSELAGE AND TAIL PARTS ARE COVERED FIRST AND PUT TOGETHER AFTER COVERING. AFTER THE MODEL IS ASSEMBLED, THE TISSUE IS STROPPED WITH WATER FOR STRETCH- ING AND DOPED AFTERWARD. SEE TISSUE COVERING INSTRUCTIONS.



Your model must balance at these arrows

Left using license numbers are on bottom

Leading edge looks like this

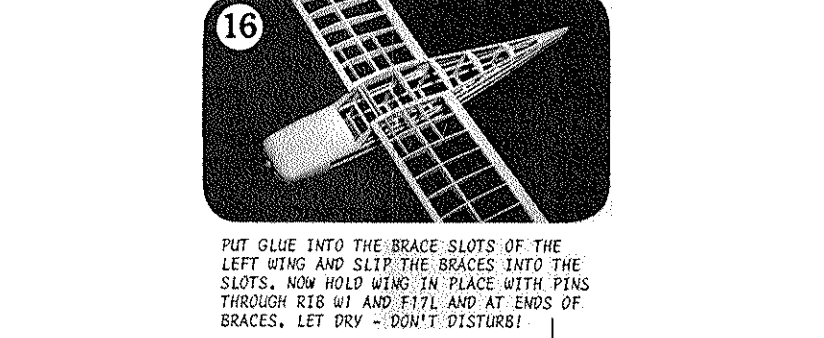
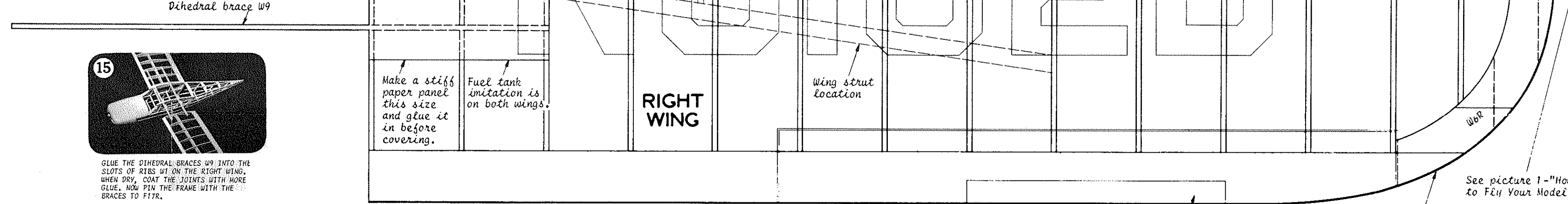
For a little more flying stability make 2 near W9s like this.

TRIM TAB Cut this through neatly and use it for flying adjustment - see "How to Fly Your Model"

Build the left and right wing frames on this layout. See pictures 9 to 13.

Dihedral brace W9-See Picture 15616 and note near left border.

If you really want to finish your model and do a good job - take your time. You can't possibly do it all in a few evenings - you'll need a dozen - at least! Always go back to where you left off and try to be as neat as you can.



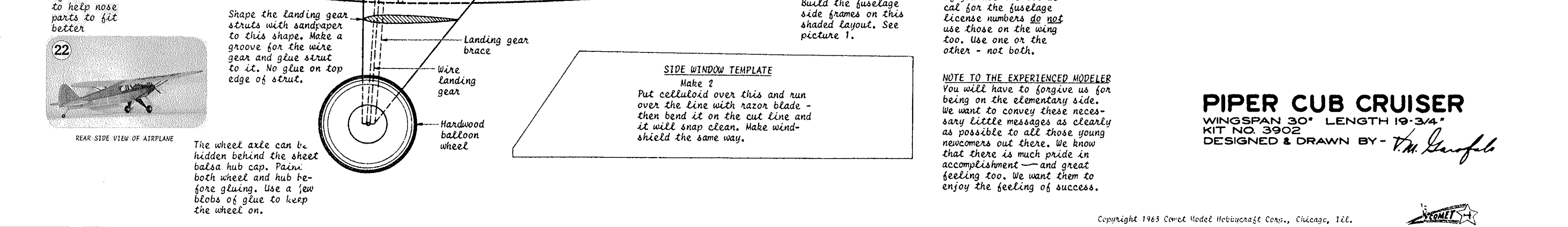
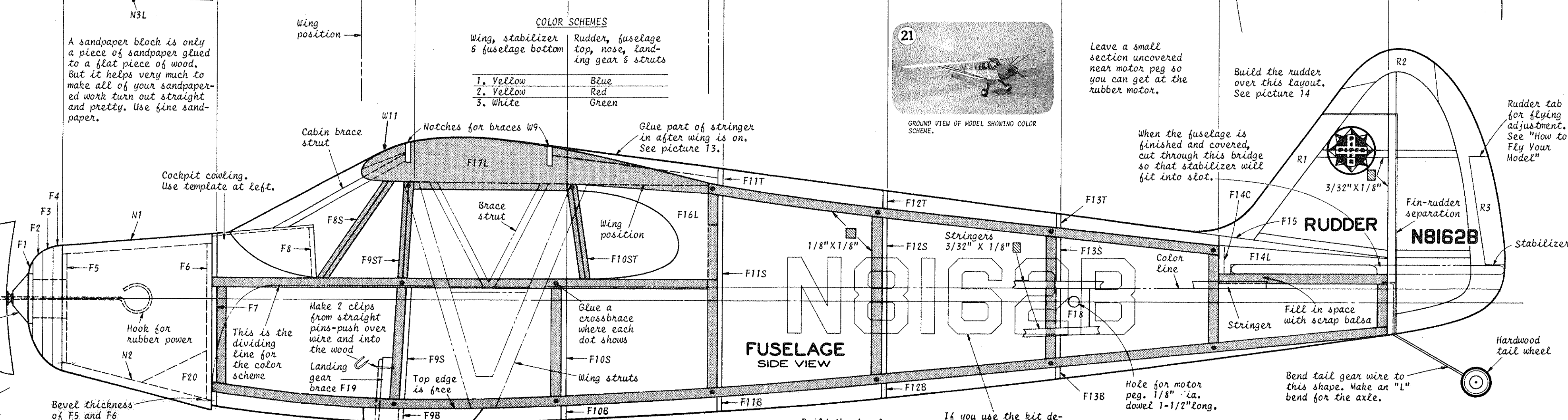
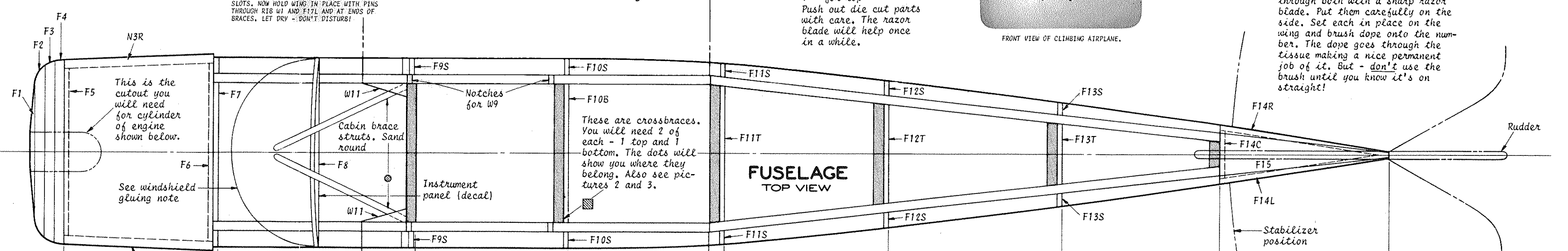
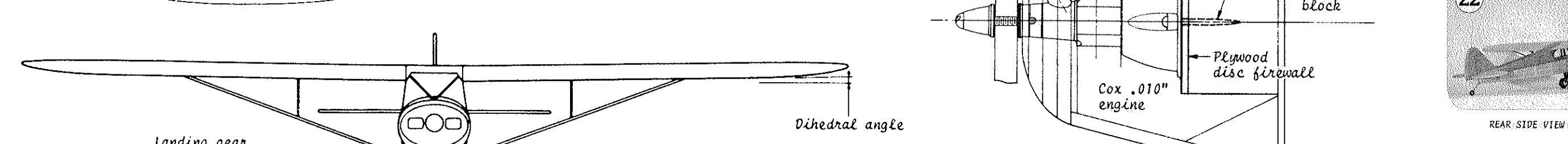
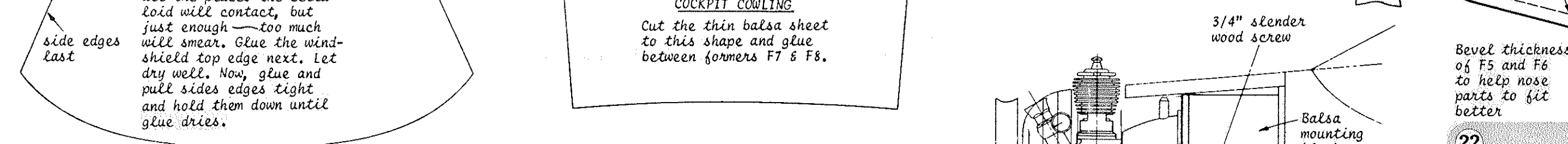
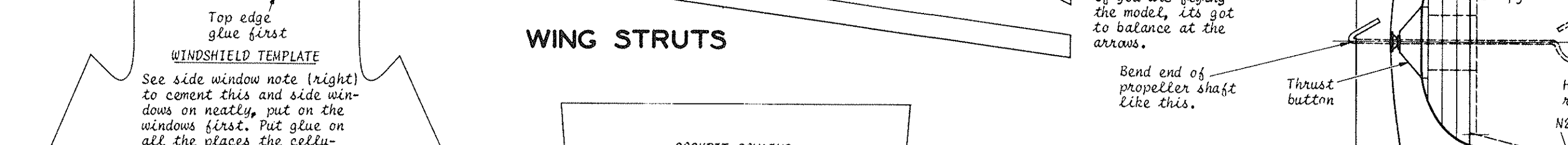
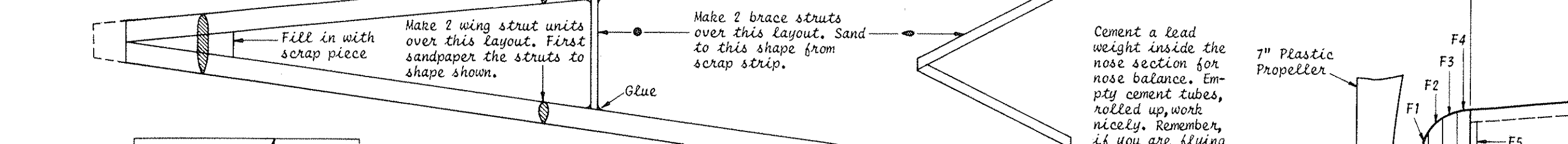
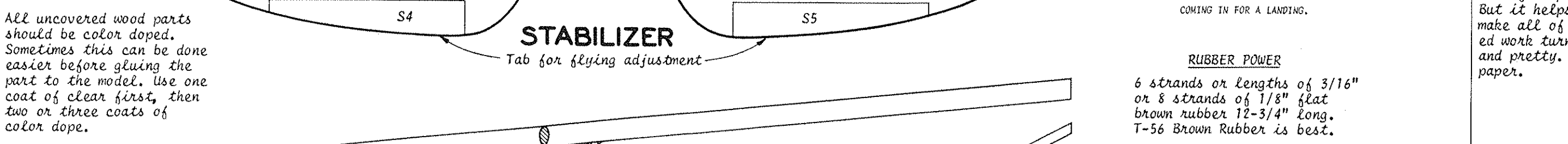
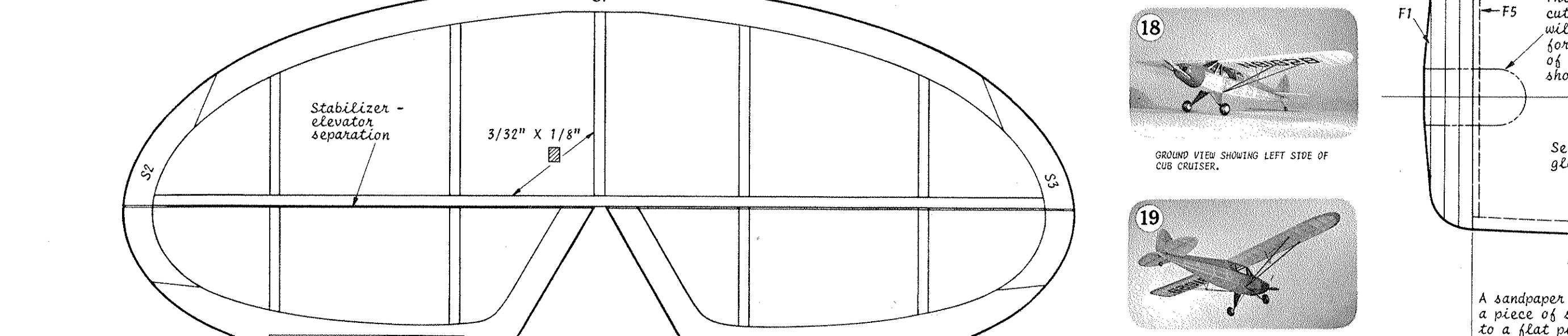
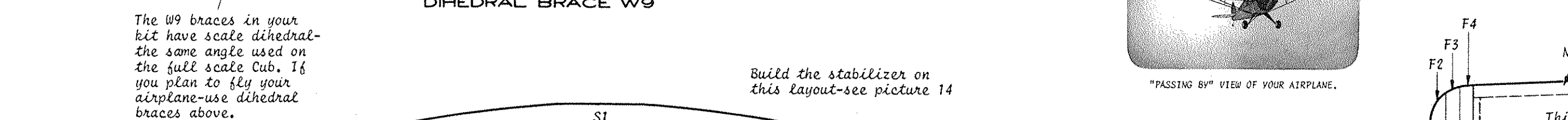
**YOU WILL NEED**  
Model airplane cement or glue-clear dope for the tissue, straight pins, wax paper and a razor blade for cutting---be careful! Also follow the photo instructions on tissue covering.

**TO IDENTIFY THE PARTS**  
W - is for wing  
F - is for fuselage  
S - is for stabilizer  
R - for rudder  
N - for nose  
L - for left  
R - for right  
T - for top

Push out die cut parts with care. The razor blade will help once in a while.

See picture 10 before you start on that wing tip.

You may need this trim tab too.



**PIPER CUB CRUISER**  
WINGSPAN 30" LENGTH 19-3/4"  
KIT NO. 3902  
DESIGNED & DRAWN BY - T.M. Gurfelt