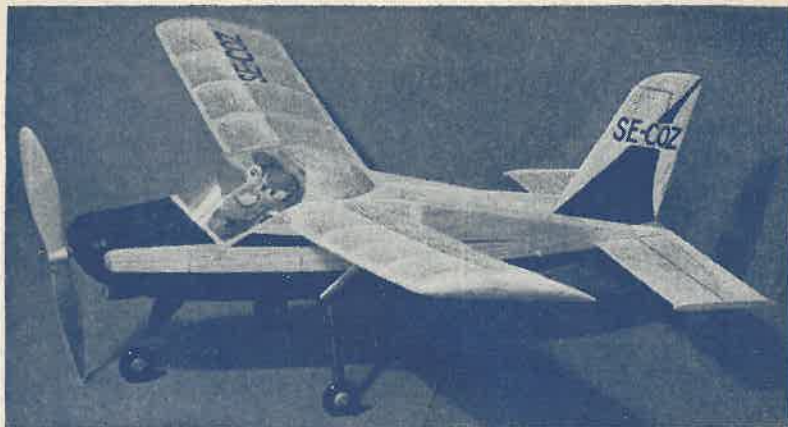


# Ray Malmström's BÖLKOW JUNIOR

Here's an easily built, tough little rubber powered scale job that really flies. The helpful sketches on this page clearly show the simplicity of the construction—the FULL SIZE BLUEPRINTS fold out overleaf.



## MATERIALS REQUIRED

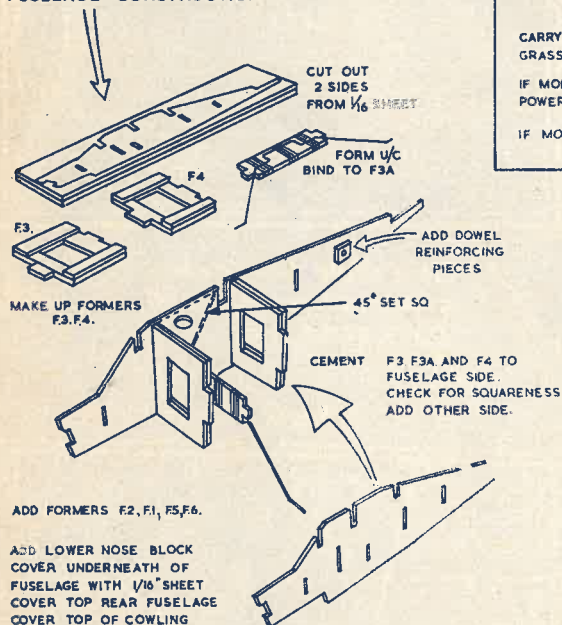
2 sheets of 1/16 x 3 x 36 in.  
1 sheet of 3/32 x 3 x 18 in.  
1 sheet of 1/8 x 3 x 18 in.  
1 strip of 3/32 x 1/8 x 36 in.  
1 strip of 1/16 x 3/8 x 36 in.

(All above is medium balsa)

Scraps of soft block balsa for rear cabin fairing, noseblock, radiator and wingtips.

3 ft. of 18 S.W.G. piano wire.  
Three 1 in. celluloid wheels.  
18 S.W.G. screwed brass prop shaft bush.  
7 1/2 in. diameter Keilkraft plastic propeller.  
1 sheet lightweight Modelspan.  
2 yards of 3/16 in. flat rubber.  
Thin acetate for cockpit canopy. Cement, clear dope.

### FUSELAGE CONSTRUCTION



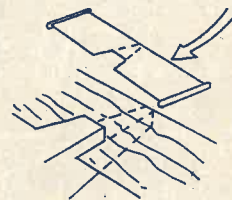
### TRIMMING NOTES

CARRY OUT ALL TEST FLYING OVER LONG GRASS ON A CALM DAY.

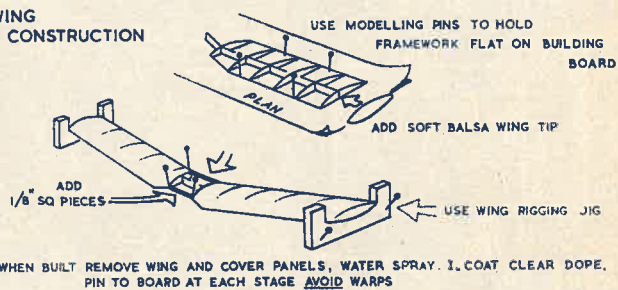
IF MODEL FLIES LEVEL OR DOWN UNDER POWER — REDUCE DOWNTHRUST.

IF MODEL CLIMBS UNDER POWER — INCREASE DOWNTHRUST.

### TAILPLANE



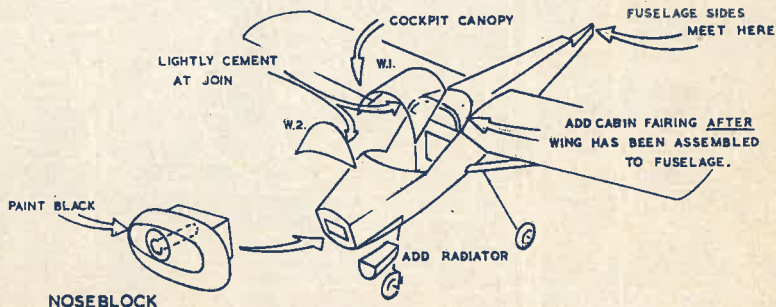
### WING CONSTRUCTION



### MOTORS

TESTS AND GENERAL FLYING  
2 LOOPS 3/16" — 18" LONG  
MAXIMUM TURNS — 650

FOR HIGH CLIMB SMALL FIELD FLYING  
ADD 1 LOOP 1/8" — 18" LONG  
MAXIMUM TURNS — 450

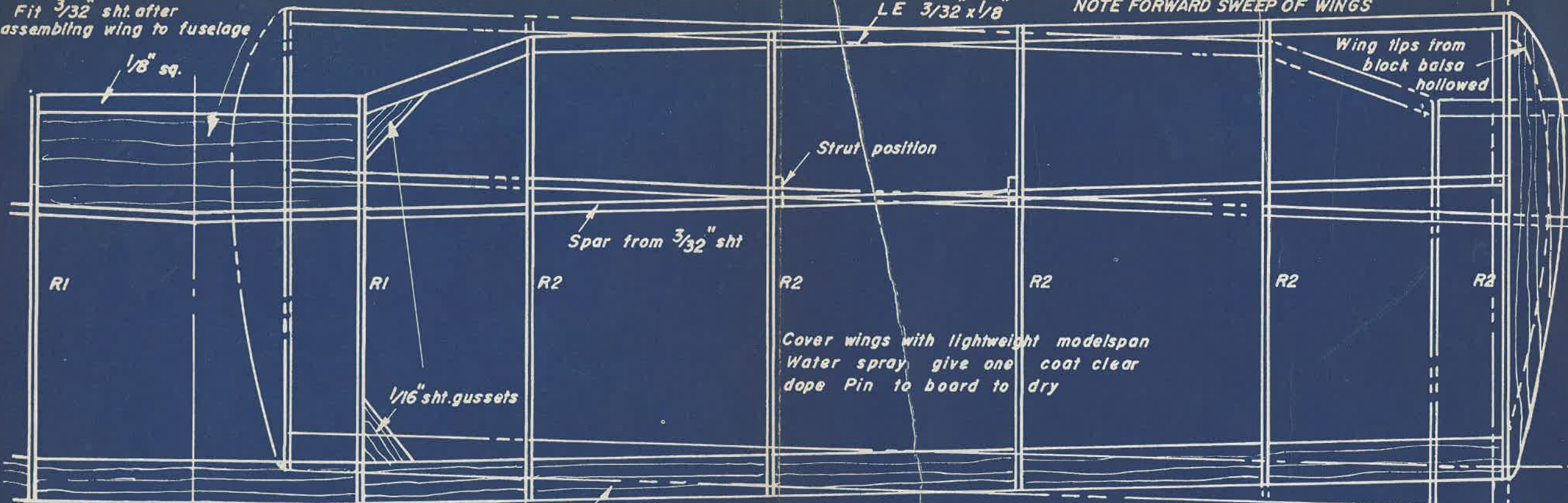




Fit  $\frac{3}{32}$ " sht. after assembling wing to fuselage

LE  $\frac{3}{32}$ " x  $\frac{1}{8}$ "

NOTE FORWARD SWEEP OF WINGS



$\frac{1}{8}$ " sq.

Wing tips from block balsa hollowed

Strut position

Spar from  $\frac{3}{32}$ " sht

R1

R1

R2

R2

R2

R2

R2

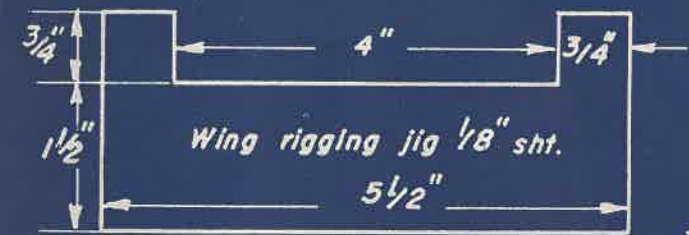
$\frac{1}{16}$ " sht. gussets

Cover wings with lightweight modelspan  
Water spray give one coat clear  
dope Pin to board to dry

TE  $\frac{3}{8}$ " x  $\frac{1}{16}$ "

Use rigging jig  
Main spar  $\frac{3}{32}$ " sht  
when joining wing  
halves

Wing struts chamfer  
ends to suit

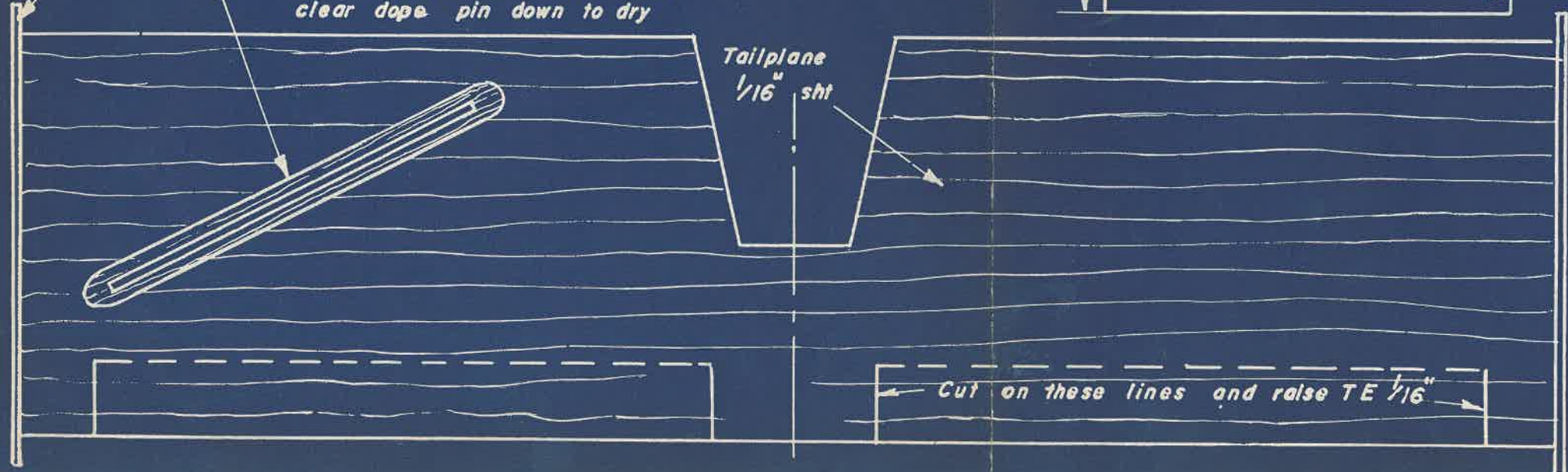


Position of wing  
rigging jig at  
90° to building  
board

TP end plates

Sand tailplane and give 1 coat  
clear dope pin down to dry

Tailplane  
 $\frac{1}{16}$ " sht



R1  
2 off

R2  
10 off

Wing  
strut  
2 off  
 $\frac{1}{4}$ " x  $\frac{1}{8}$ "

Ribs  
 $\frac{1}{16}$ " sht.

Cut on these lines and raise TE  $\frac{1}{16}$ "



