

Wing Instructions

1. Shim the Lower Main Spar with 1/16" shim
1. Shimming will allow the sheeting to be flush with the spar
2. Shim the Rear Spar and A1 with 3/32" shim
1. Do not glue A1 to the Rear Spar
3. Glue all Ribs in place
4. Add the Upper Main Spar, and Sheet the upper surfaces
5. Mark the notch positions on the 5/8" Ribs
6. Notch the 3/4" wide Trailing Edge spar
7. Glue the Leading and Trailing edge spar
8. Add the aileron riblets A2
9. Epoxy the Top Motor Pad parts into place
1. NOTE: Make sure each Pad is properly aligned. If not properly aligned, the motor struts will be bent
10. Glue the Wing Tip panel to the underside
11. Sheet the upper surfaces where shown
12. Unpin the assembly and epoxy the motor pads in place
13. Sheet the lower surfaces where shown
14. Join the wing halves and fiberglass the wing
15. Add a 1/8" Wing Pin

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D

Float Templates

○ **Upper, 2x--1/2" balsa**

○ **Lower, 2x--1/2" balsa**

○

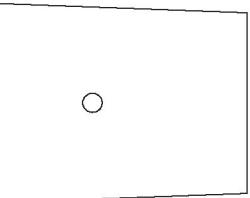
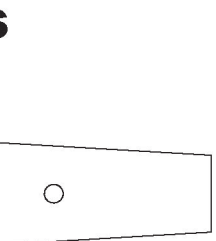
Float pads, 4x--1/2"

1/16" scrap and pin in place over the plan
 to cover the Lower Main Spar later
 1/32" scrap and pin in place over plan
 spar!

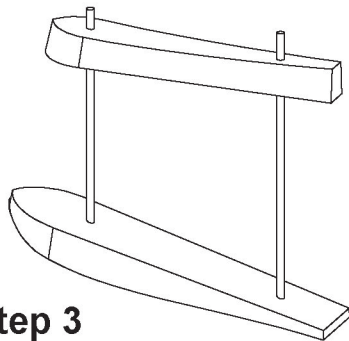
near Webs
 1/8" Leading Edge stock and cut in the
 stock
 the parts into place

to place
 is in the right position--if positioned
 be angled correctly
 underside of the wing assembly
 shown with 1/16" balsa
 the Bottom Motor Pads and Float Pads into

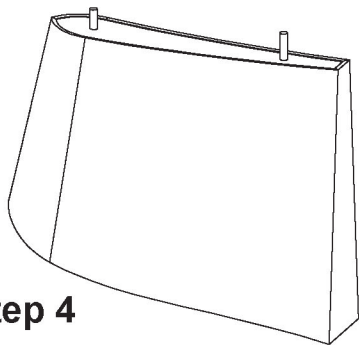
shown with 1/16" balsa
 the joint



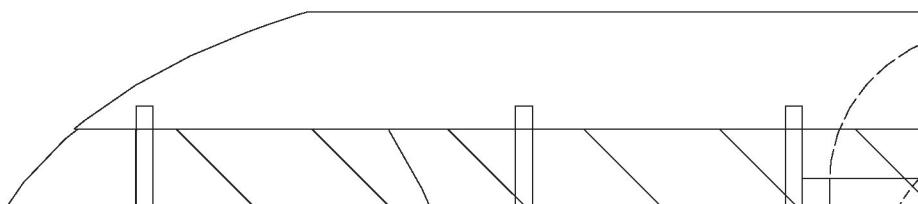
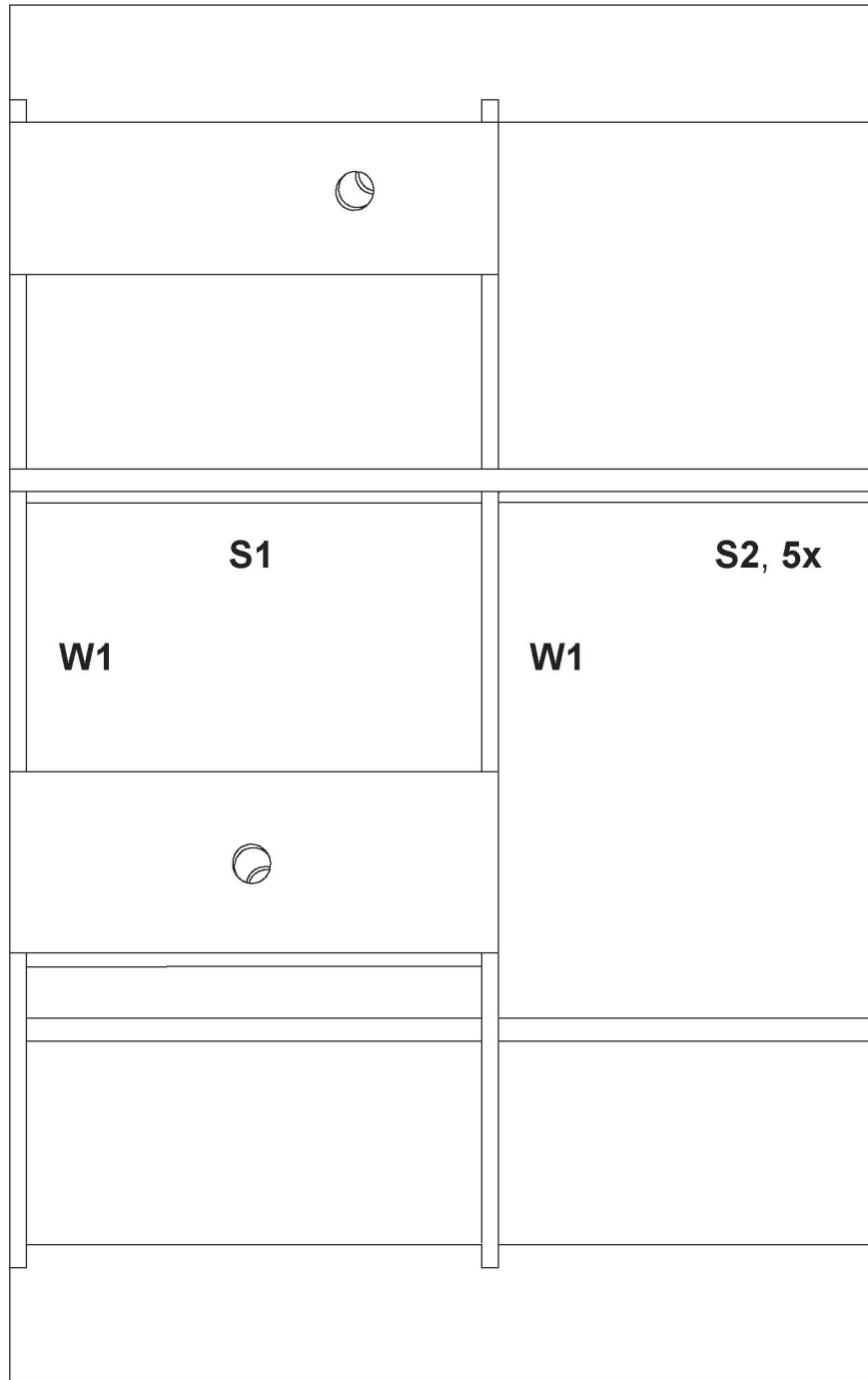
1/16" ply



Step 3

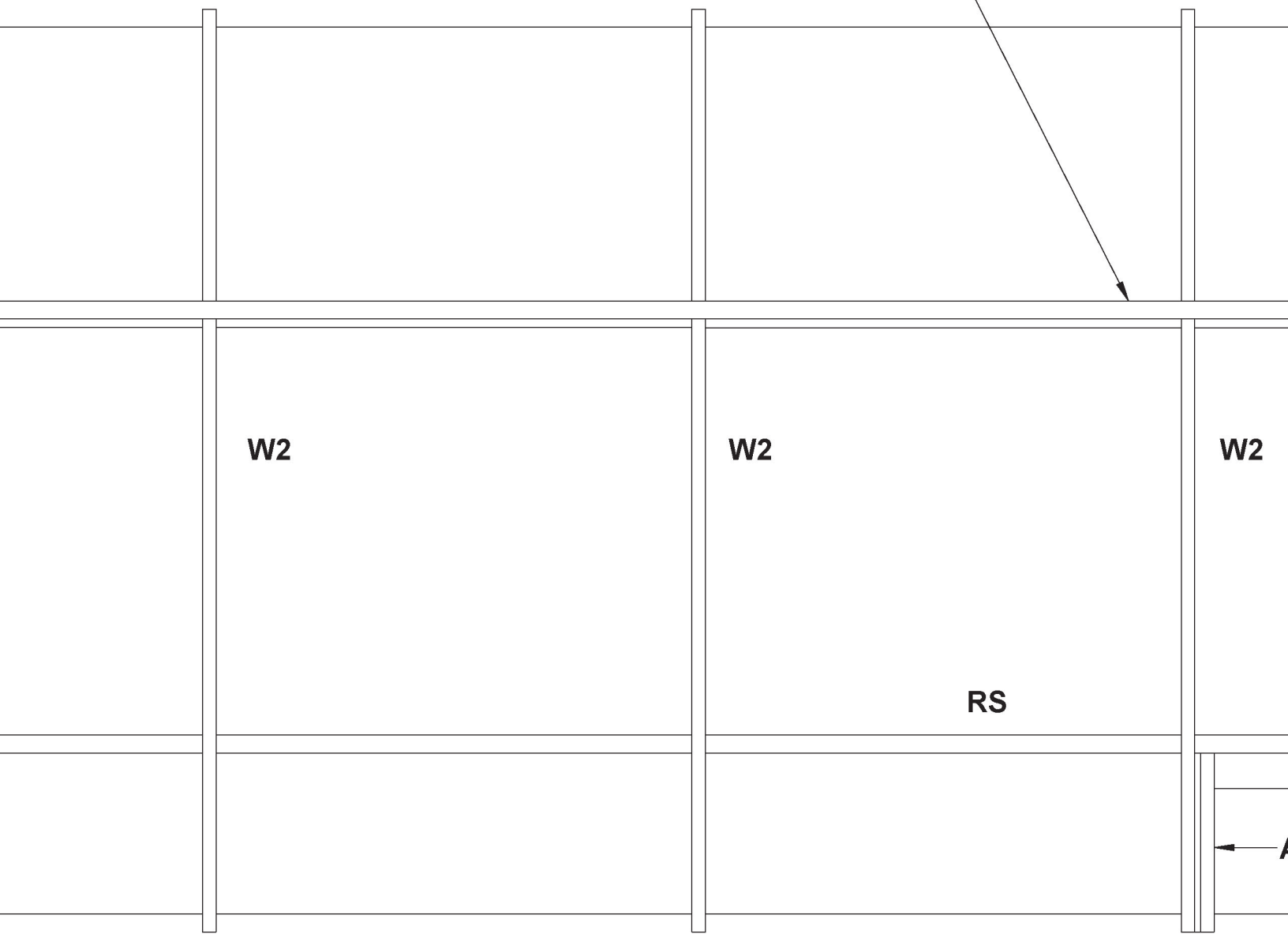
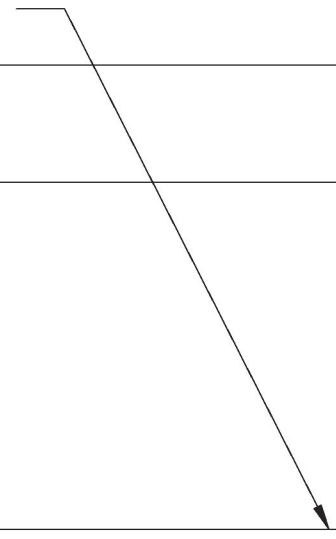


Step 4



1/8" x 3/16" upper and lower
main spars backed with
vertical grain shear webs

5/8" leading edge stock
were shown



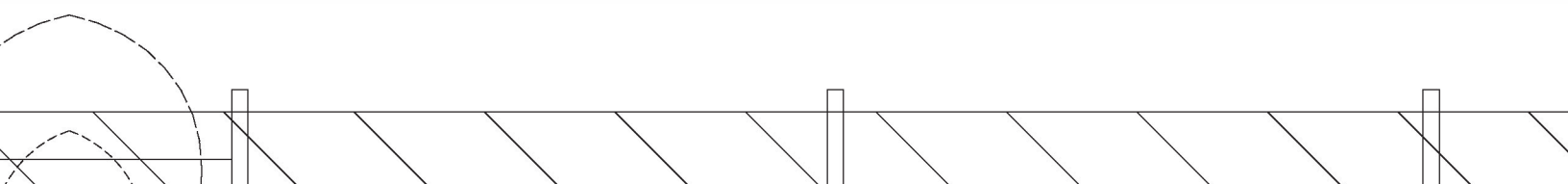
W2

W2

W2

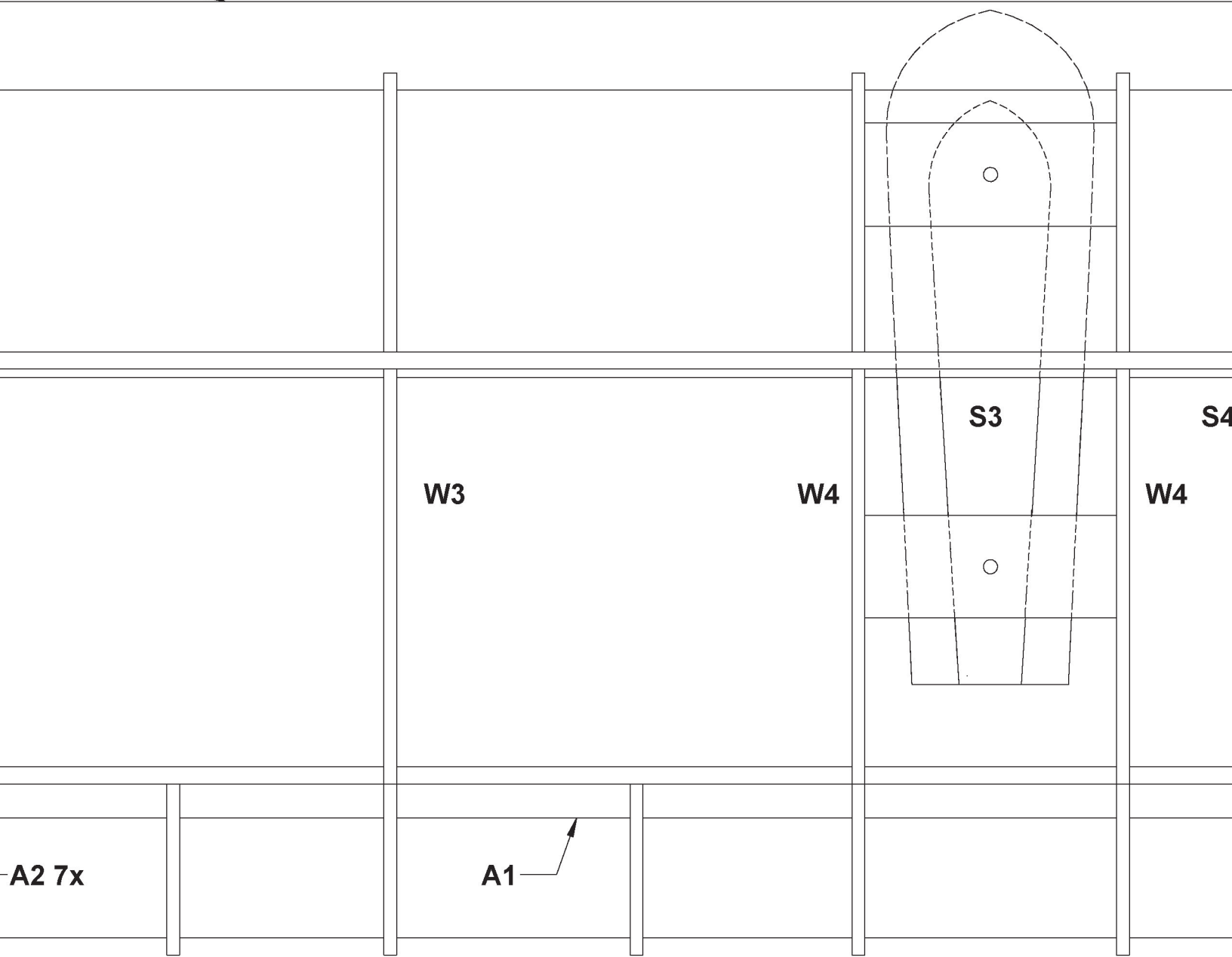
RS

3/4" trailing edge stock--notch where shown



lock--notch

The fullscale Volmer had ~1deg dihedral. Add dihedral root wing ribs with gauge below. Finished wing tip at bottom will be 0.45"/11mm above board with wing root flat against

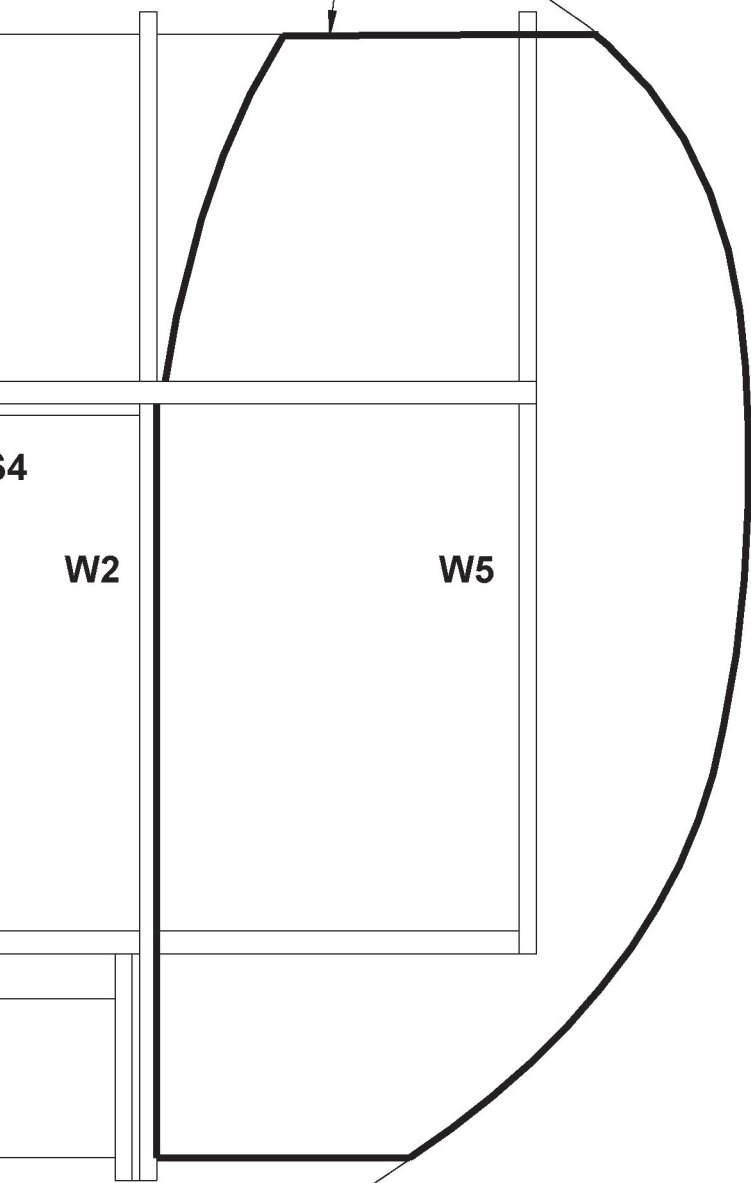


Sheet shaded area of top and bottom of wing with 1/16" balsa



l by tilting the
ottom of W5
inst board.

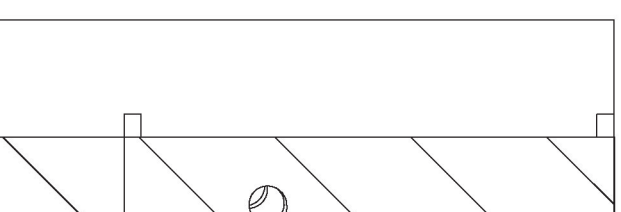
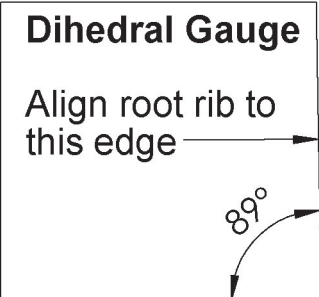
Wing Tip panel
outline--cut from
3/32" balsa, attach
below RS and W5



F

E

D



Float Instructions

1. Cut Upper and Lower formers from
2. Shape the top of the Upper and the bottom of the Lower as shown on the side view of the fuselage
3. Join the Upper and Lower formers with fiber rods
4. Sheet the floats with 1/16" balsa and

C

Wing Template

Tabs optional--these help align the ribs to the Leading Edge stock

B

4

3

2

A

1

W5, 2x

1

2

3

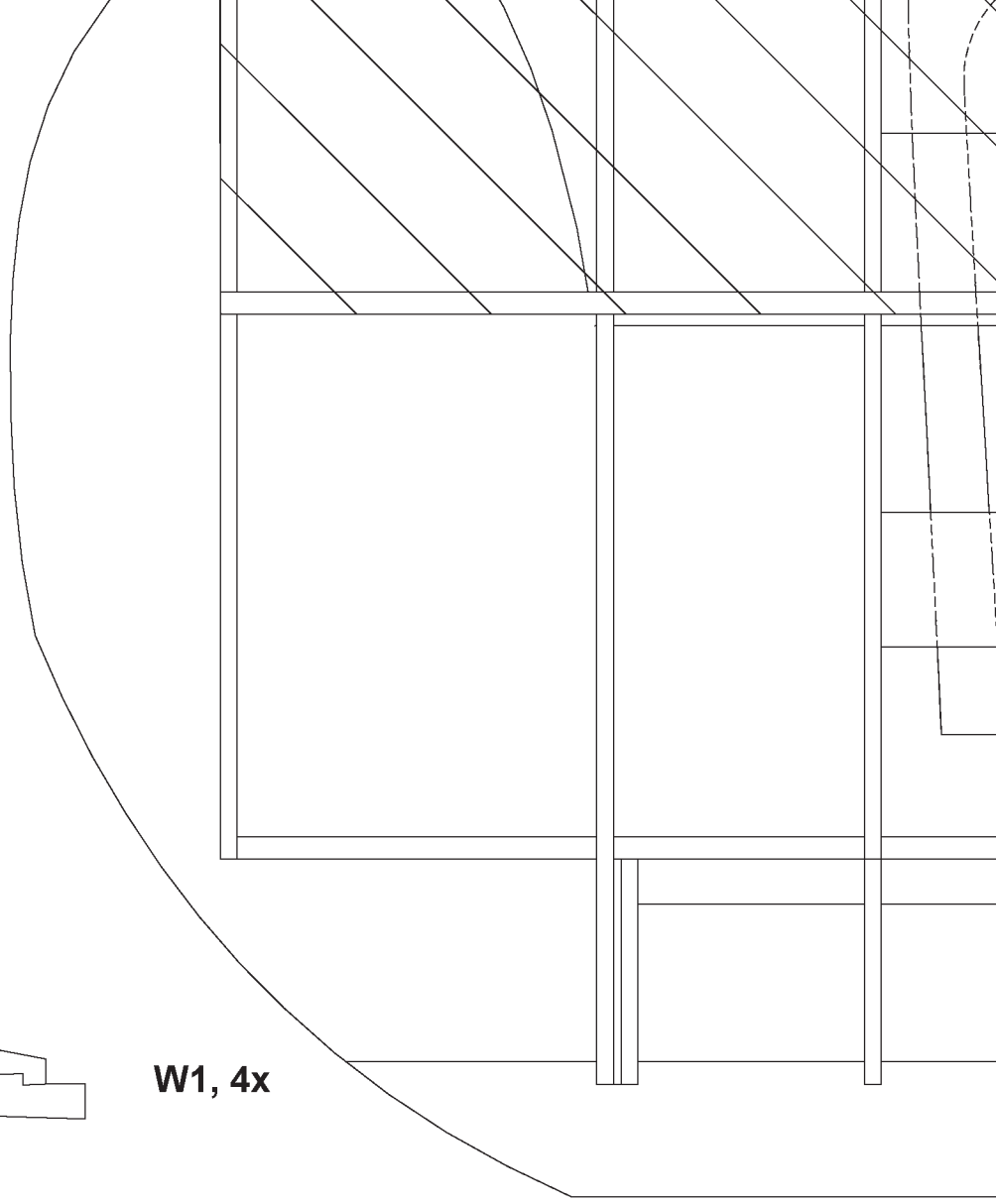
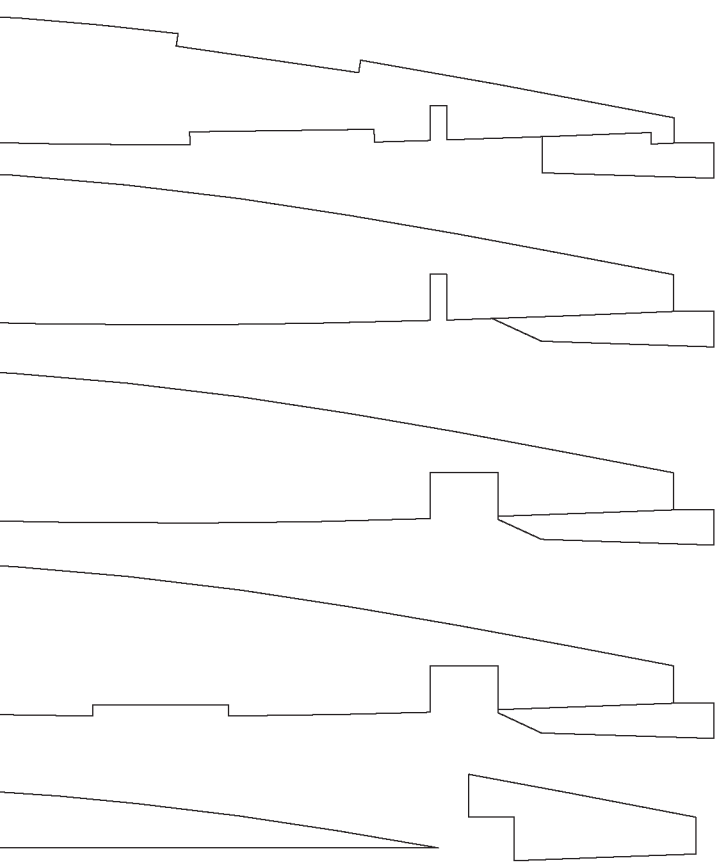
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Use templates above
 at the bottom of the Lower formers
 for usage
 with two 1/8" dowels or carbon
 formers will need to be angled
 and seal to make water tight

Templates

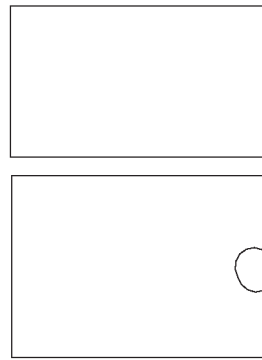
1/4" ply

Wing ribs, 3/32" balsa



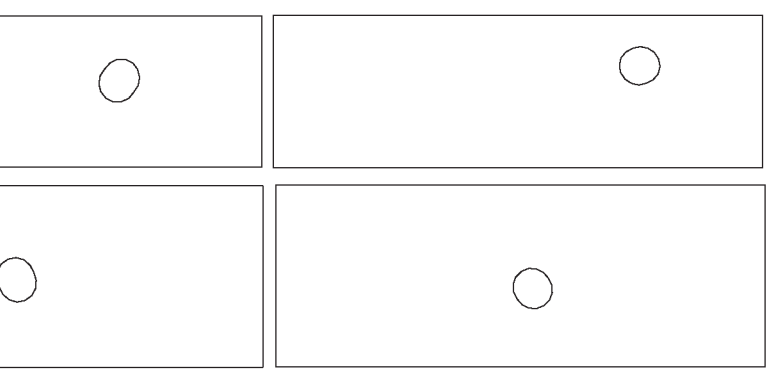
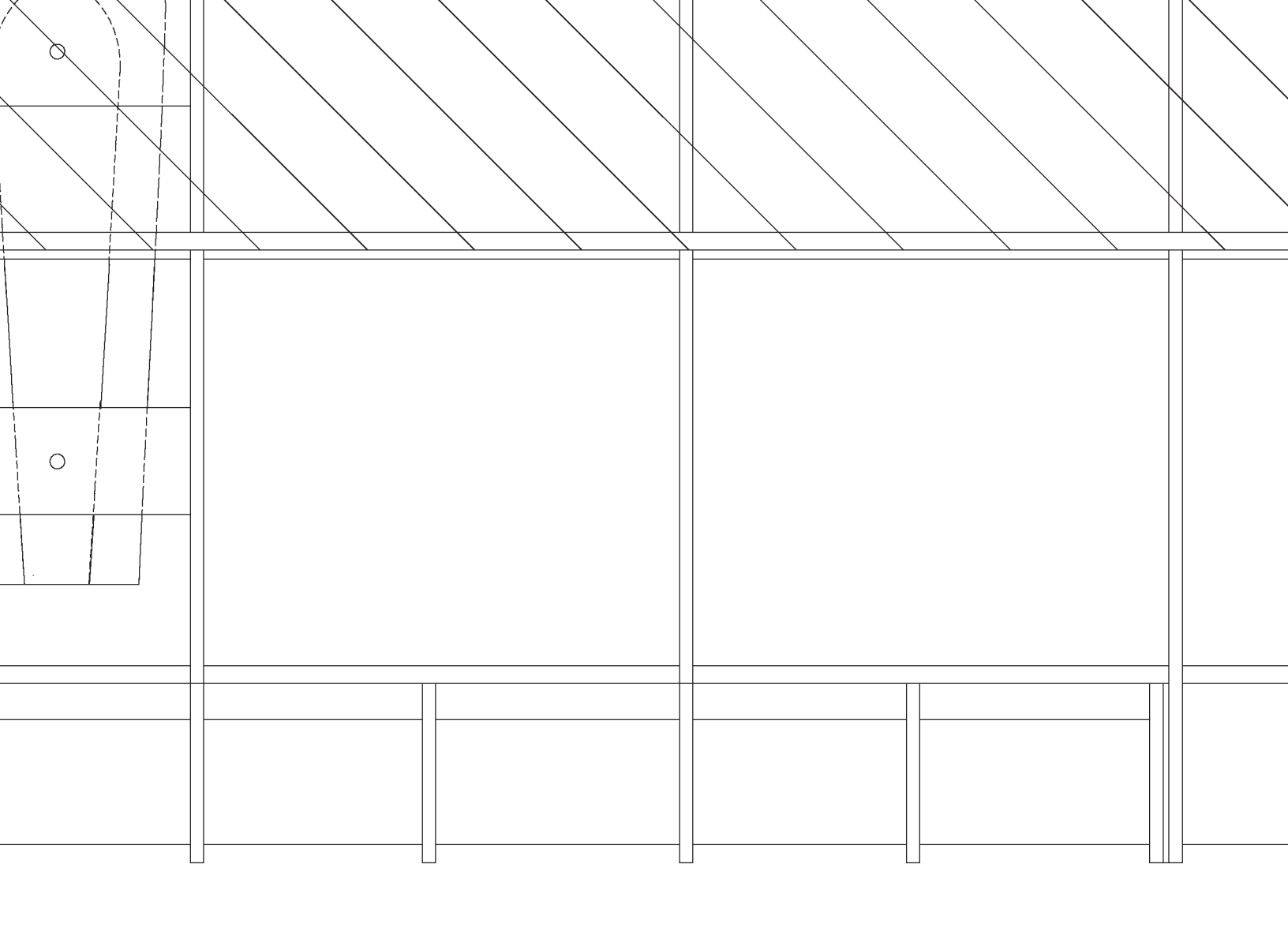
Top Front

Top Rear



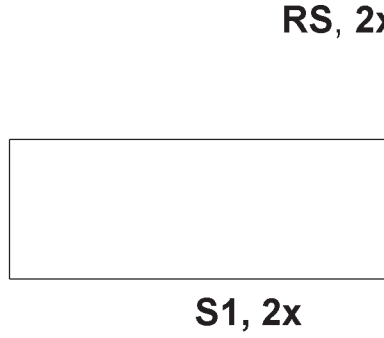
Motor

Note: the holes in the Motor Plate must be at the correct angles. They are



Bottom Front

Bottom Rear



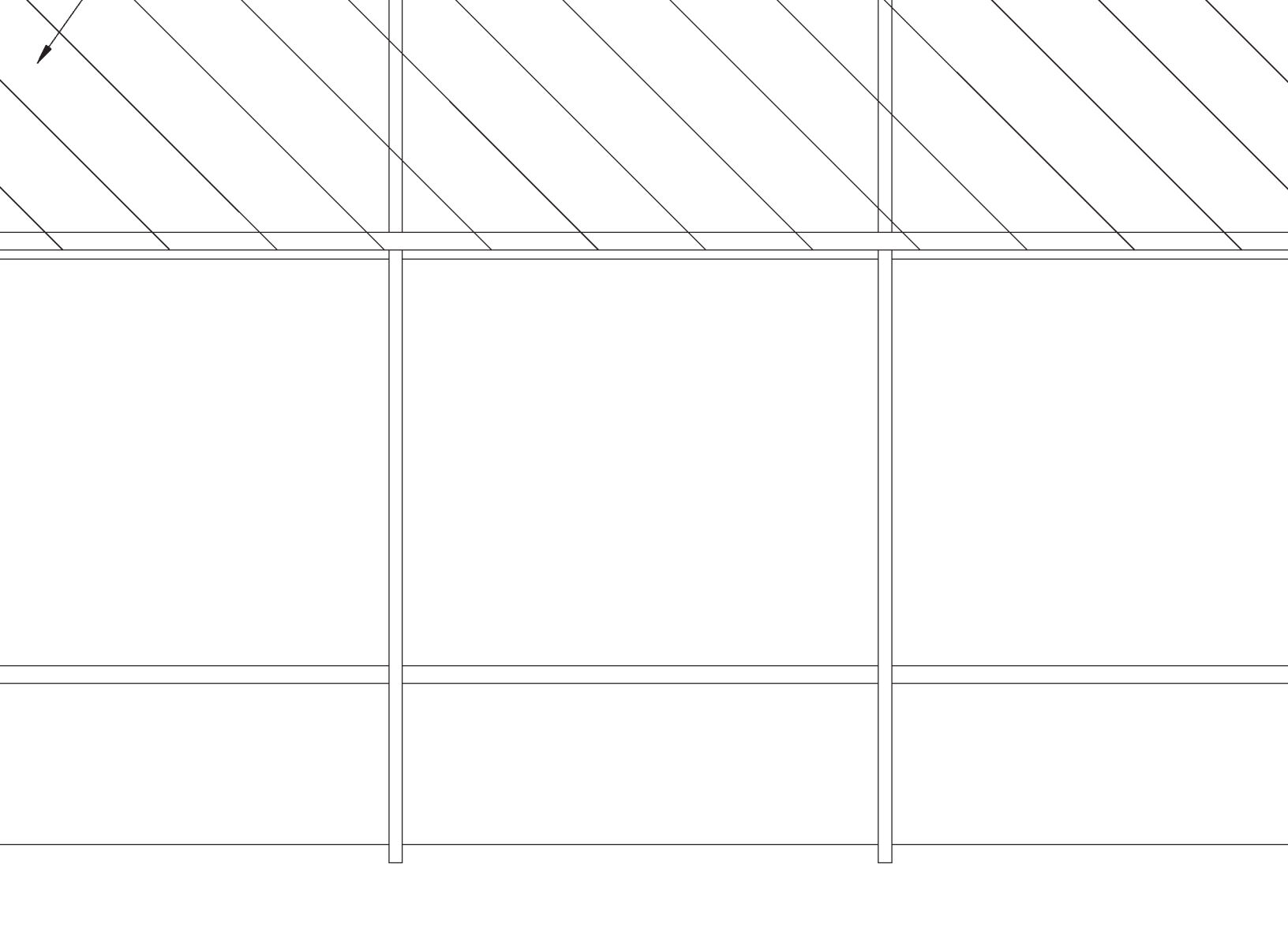
RS, 2x

S1, 2x

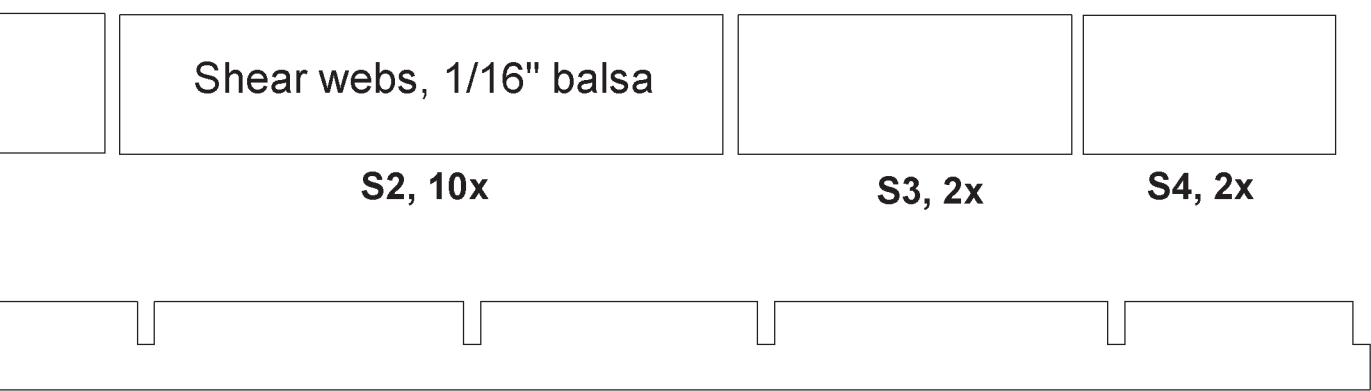
tor pod pads, 1/16" ply--2 each

**Pod Pads are oblong to help position the struts
are shown here in position for the Right Wing**





2x--3/32" balsa

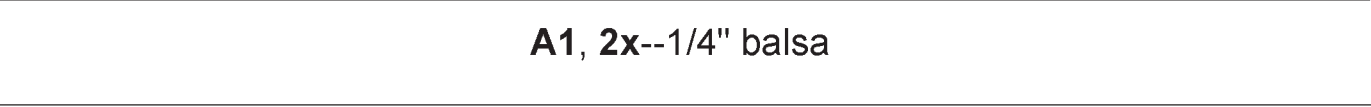


Shear webs, 1/16" balsa

S2, 10x

S3, 2x

S4, 2x



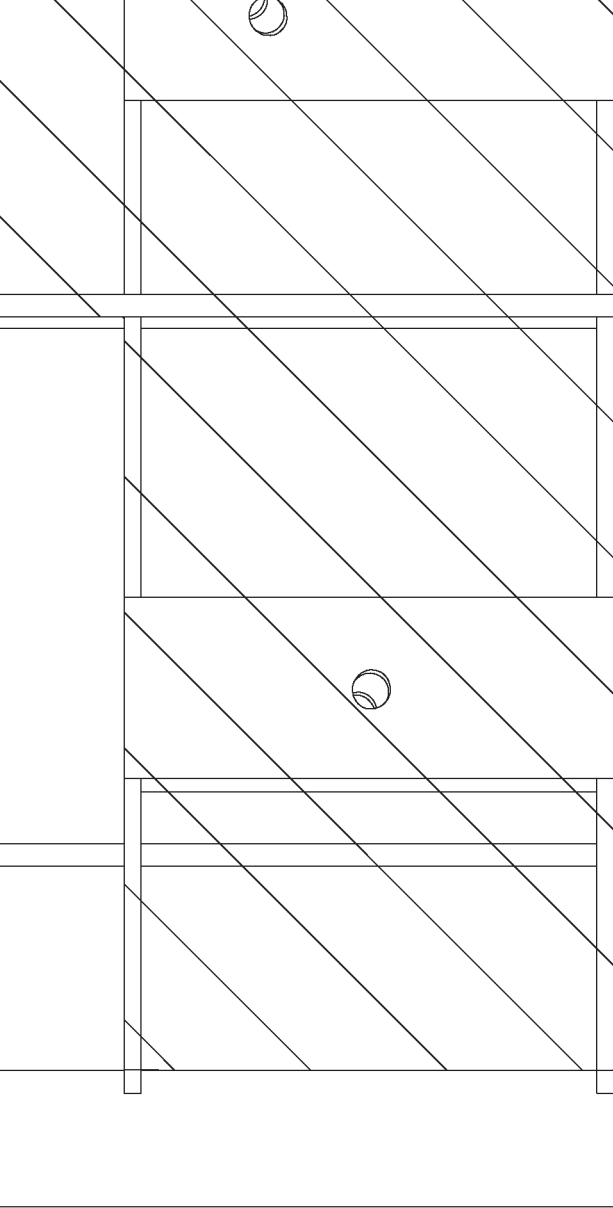
A1, 2x--1/4" balsa

3

2

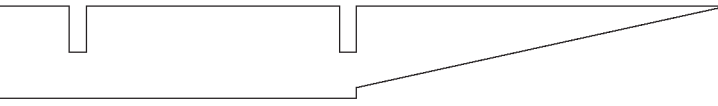
INFIE

Details and
be found at:
www.infie



C

B

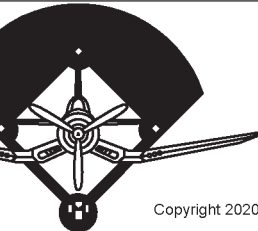


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FIELD ENGINEERINGtm by Paul Kohlmann

A



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and lasercut parts info can be found at:

fieldengineering.com

Title 50" Volmer VJ-22 Sportsman		
Size D	Dwg. No. Volmer VJ22	Rev A
Scale: 1:1	Weight: 28-32oz	Sheet 2 of 2 Plan No. 1121