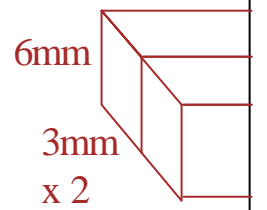
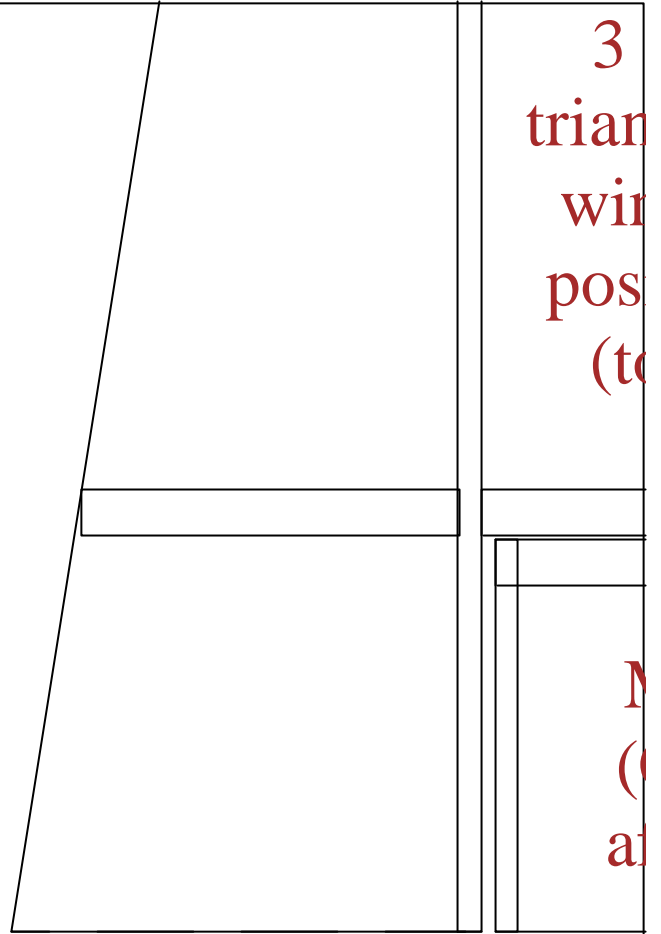

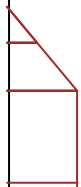


"Accuracy Measure" (line should be +/- 200 mm)



<p>or 6mm balsa angles at spar and ing trailing edge itions as shown op & bottom).</p>	<p>join. Do same with bottom spar but start from other side. This doubles spruce content across centre for max strength, least weight.</p>	<p>Tr cap with to (not</p>
<p>Mylar hinges CyA in place fter covering)</p>		
Balsa	Spruce	
Spruce		Balsa
<p>'Bubbles' name on wing done with 'Snap ITC' font in MS-Word 2000.</p>		

ailing edge of wing oped top and bottom 0.8x12mm soft balsa help secure to ribs considered essential).	take pressure from Solarfilm. All ribs same size. Can reduce number of ribs to save a litte more weight		
			
	Ailerons are sheeted top and bottom with 0.8mm soft balsa	3	a



Example of 1 assembled spar
full length of wing (not to scale).

Control Movements:

Ailerons - 15mm each way

www.

0.8mm = 1/32"

1.5mm = 1/16"

2.5mm = 3/32"

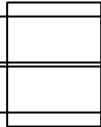
3mm = 1/8"

6mm = 1/4"

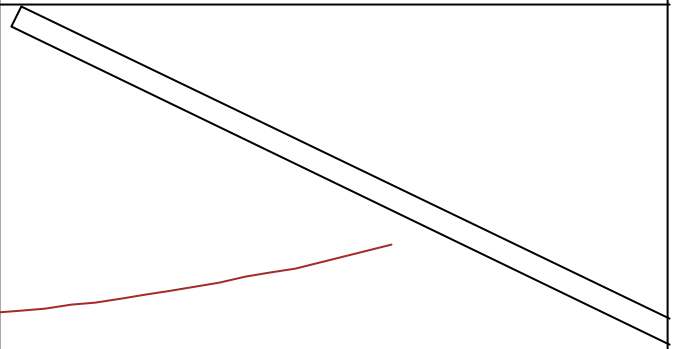
9mm = 3/8"

flying characteristics).

Mount 6x6mm spruce
bearers in bottom of
wing before sheeting



mm light balsa doublers
and diagonals to spread
load and stiffen root



Bubbles

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David Theunissen

November 2002

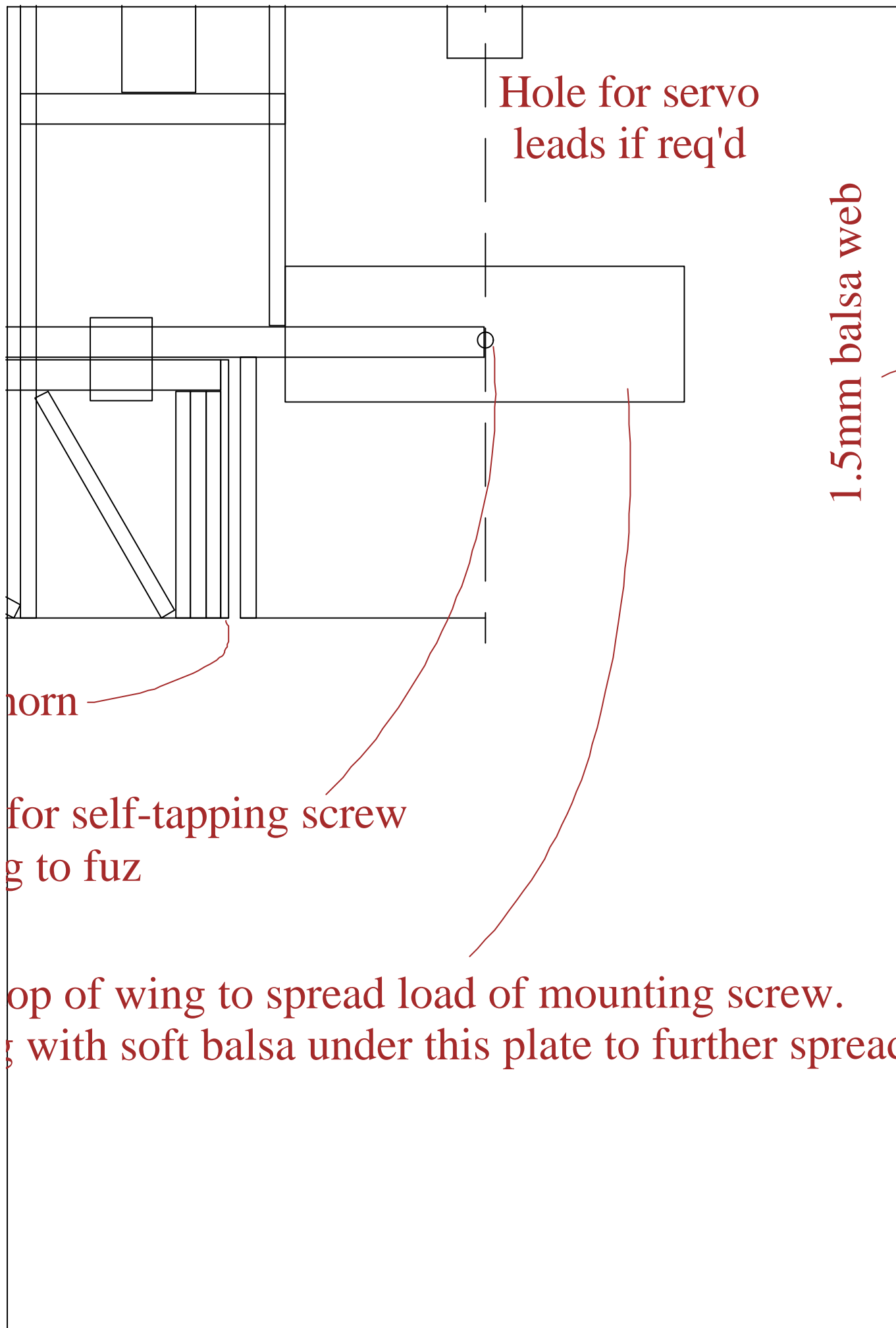
(Version: j)

flyelectric.ukgateway.net

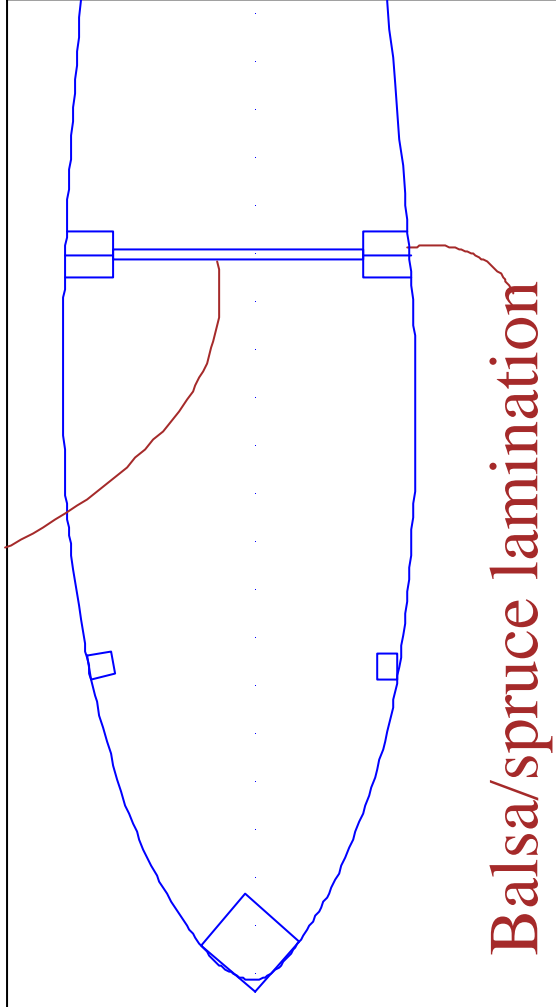
Servo h

Central hole
to retain wing

1.5mm ply on t
Fill inside wing



l load.



Win
but p
thi

We
ver
full

Win
bals

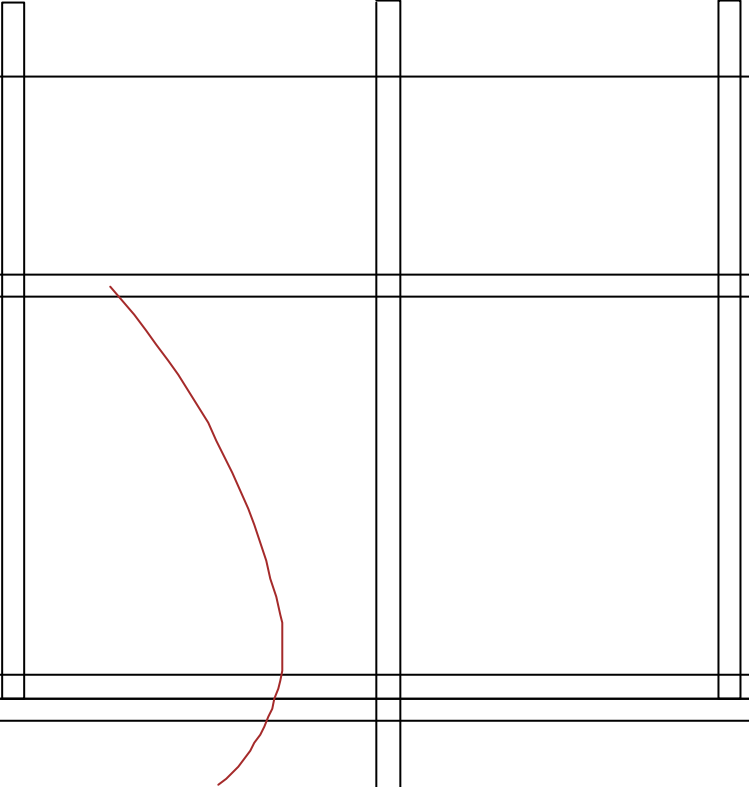
Leading edge
ribs at approx

Re: 9x9mm soft balsa set into
45'. Sand front edge round.

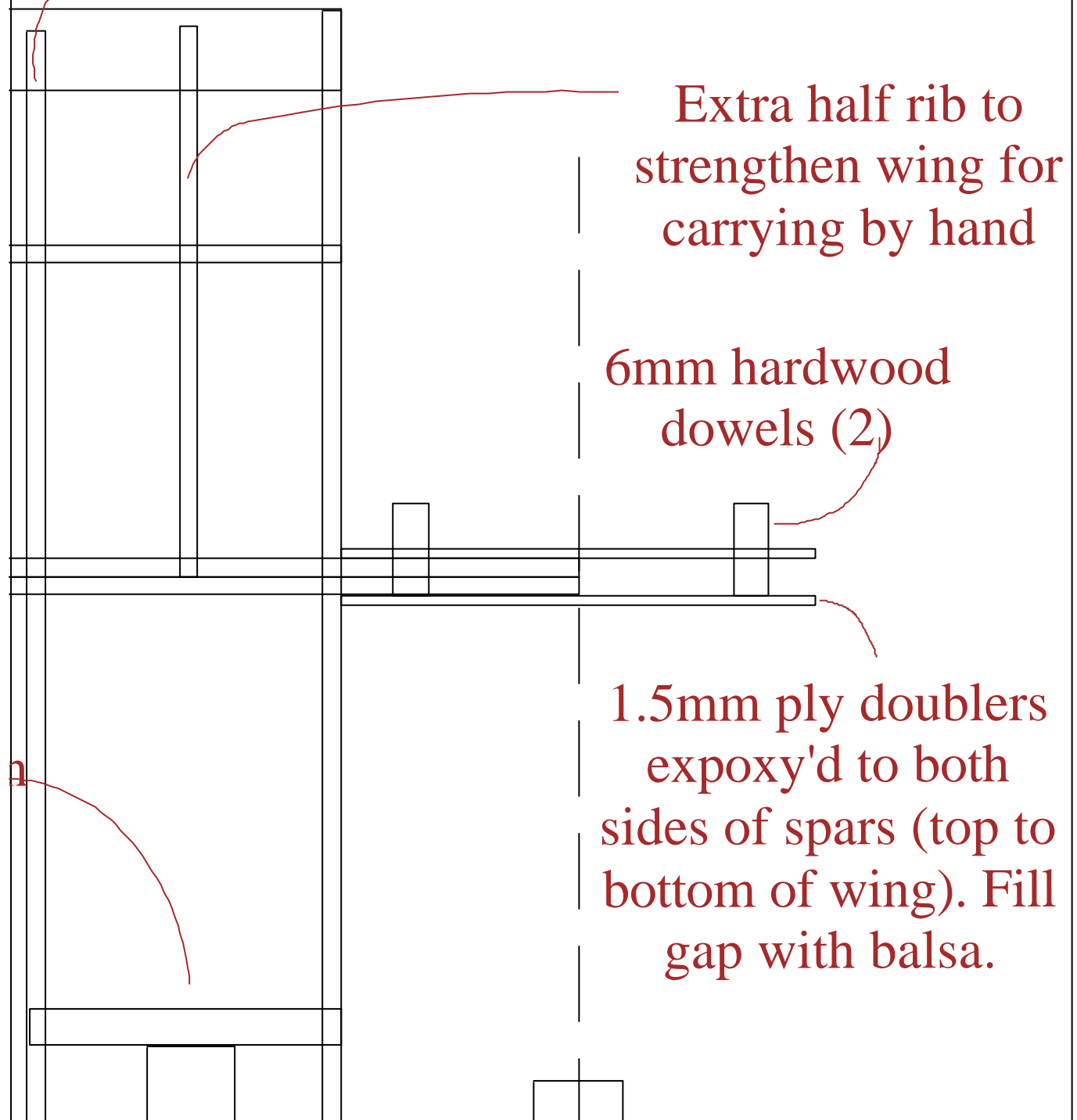
Prototype cover

ailing edge of wing
nd leading edge of
rons is 6mm medium
alsa. Angle to leave
gap at bottom for
leron movement, or
unt square and bevel
leron leading edge.

Ribs: 2.5mm balsa
is easiest and
reasonably light.
Can use 3mm Depron
but then need
compression spars
or cap strips to

<p>red in clear Solarfilm</p> <p>Sheet w (mainly to aid c</p>	
	
<p>Turbulators: 3mm hard balsa to give wing a little more torsional rigidity and to smooth airflow (req'd top and bottom).</p> <p>Approx sizes:</p>	<p>Servos: 2 separate show but 1 with torque rods would be OK (I wanted to try aileron/flap mixing but it adds nothing to the</p>

ing centre with 0.8mm soft balsa to this rib
arrying and to hide leads). Don't worry about wing
being thicker at centre.



ng

