Martin XB-51

flying scale model for twin Rapier L2 motors

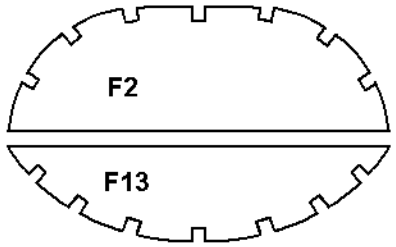
Designed and drawn by Mike Stuart - Sheet 1 of 5

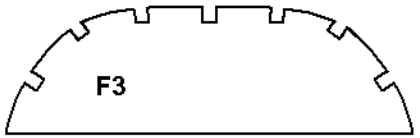
Prototype weighed 64 grams with two loaded Rapier L2 motors, 50.5 grams empty.

Model has been successfully flown on motors in the power range 80 to 100 mN

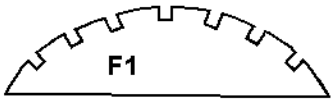
Join sheets

Formers 1/16" sheet

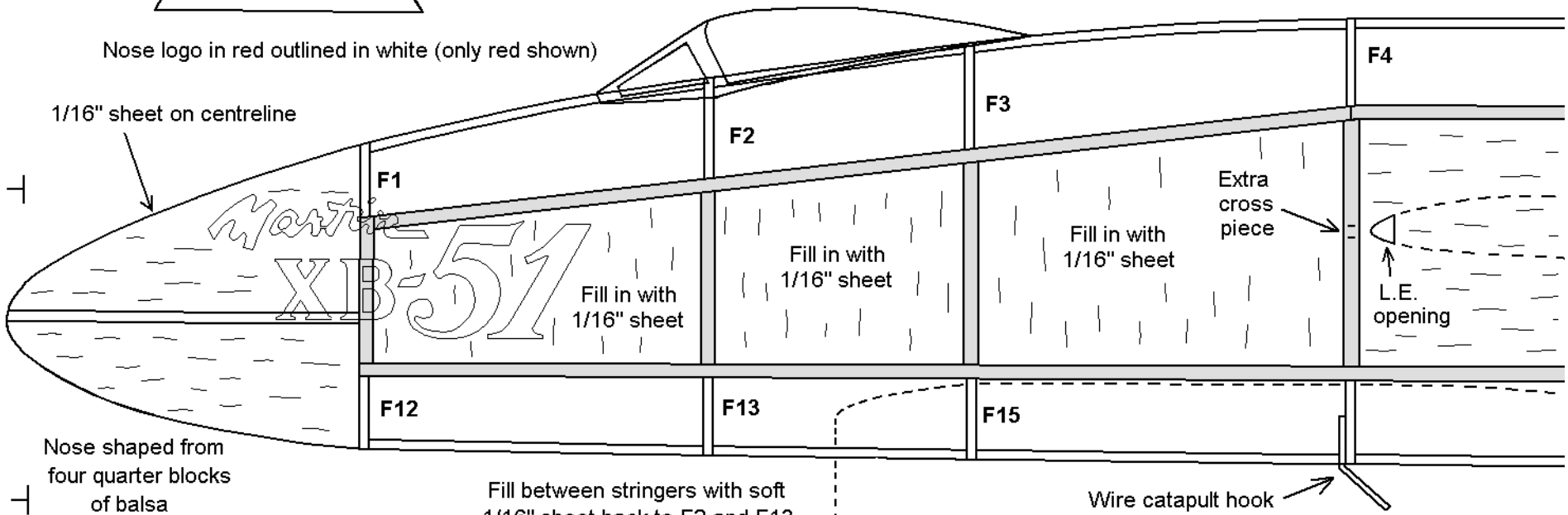


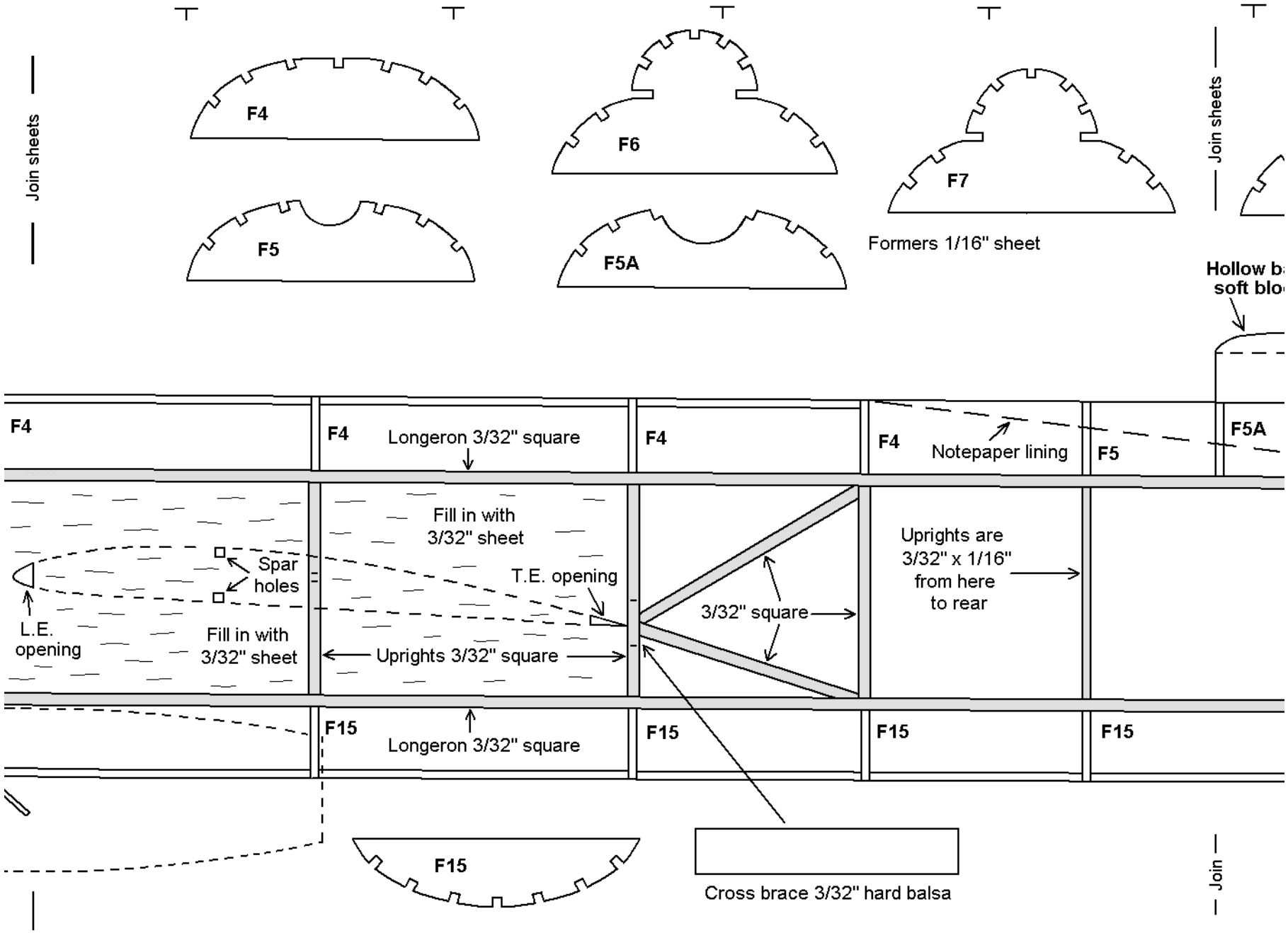


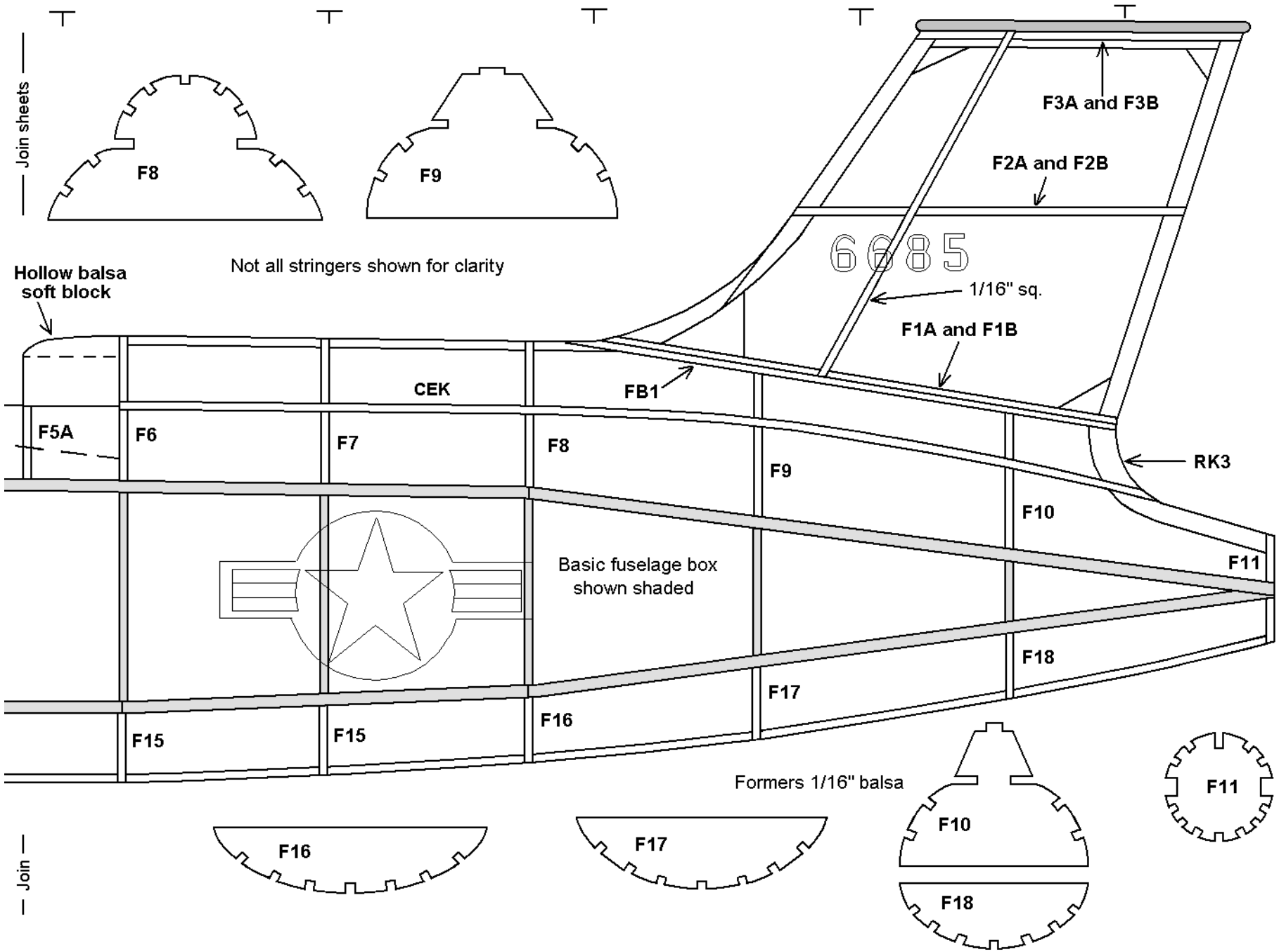
Add extra sheeting under canopy if desired

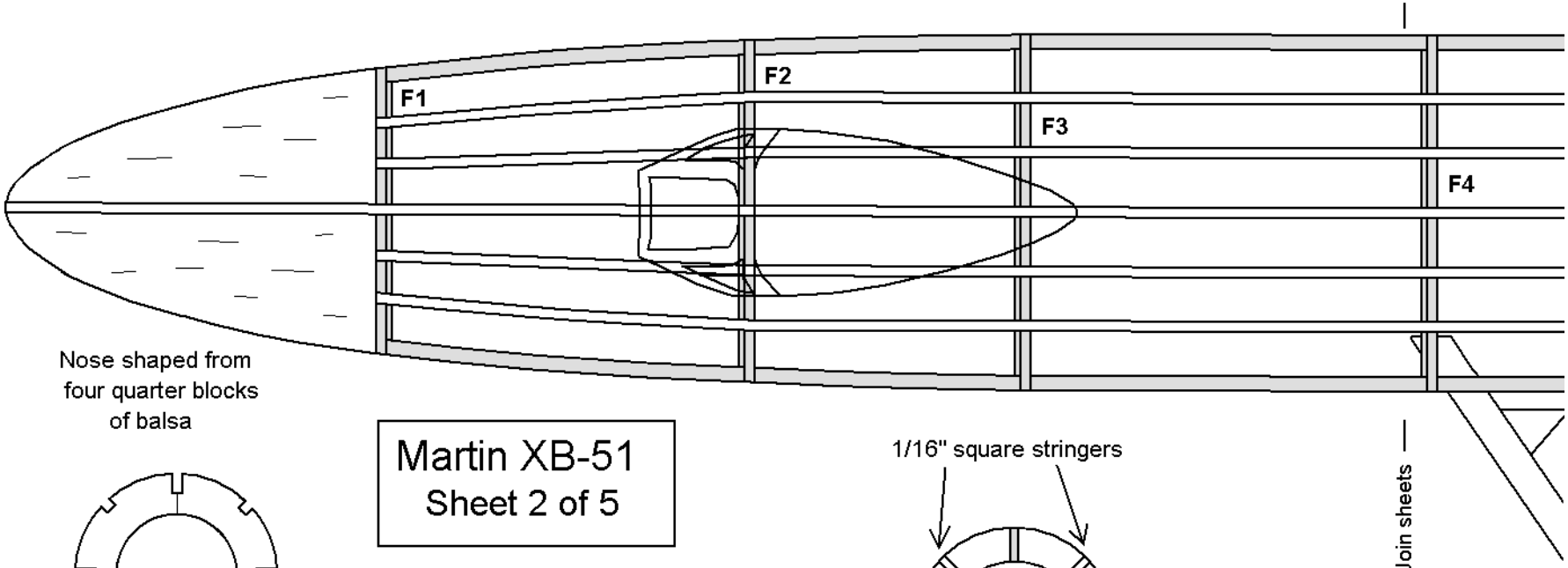


Nose logo in red outlined in white (only red shown)



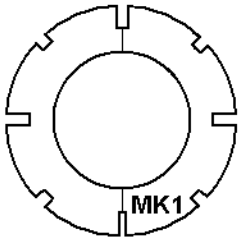

Join sheets
F4
F5
F6
F5A
F7
Formers 1/16" sheet
Join sheets
Hollow b
soft blo
F4
F4
Longeron 3/32" square
F4
F4
Notepaper lining
F5
F5A
Fill in with
3/32" sheet
Spar
holes
T.E. opening
Uprights are
3/32" x 1/16"
from here
to rear
L.E.
opening
Fill in with
3/32" sheet
Uprights 3/32" square
3/32" square
F15
Longeron 3/32" square
F15
F15
F15
F15
Cross brace 3/32" hard balsa
Join


Join sheets
F8
F9
F3A and F3B
F2A and F2B
6685
1/16" sq.
F1A and F1B
Hollow balsa soft block
Not all stringers shown for clarity
CEK
FB1
F5A
F6
F7
F8
F9
F10
F11
RK3
Basic fuselage box shown shaded
F18
F17
F16
F15
F15
Formers 1/16" balsa
F11
F10
F16
F17
F18
Join



Nose shaped from four quarter blocks of balsa

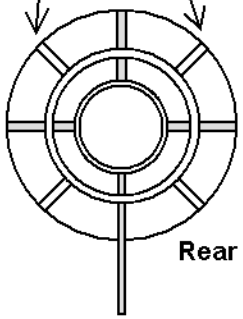
Martin XB-51
Sheet 2 of 5

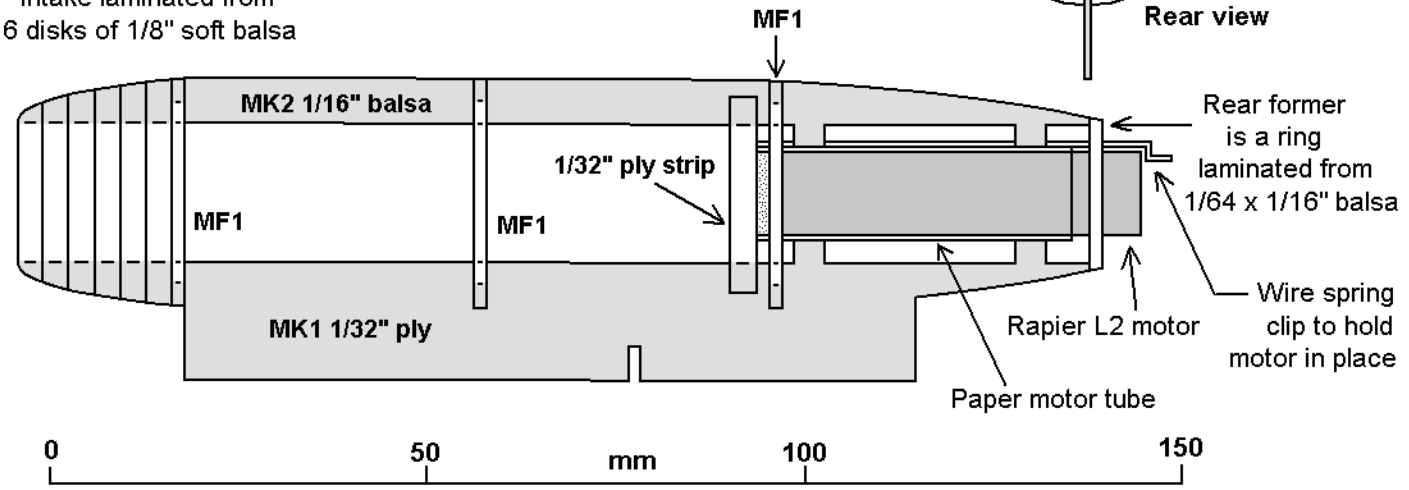


Nacelle formers 1/16" balsa

Each nacelle uses 3 keels MK2 and one keel MK1

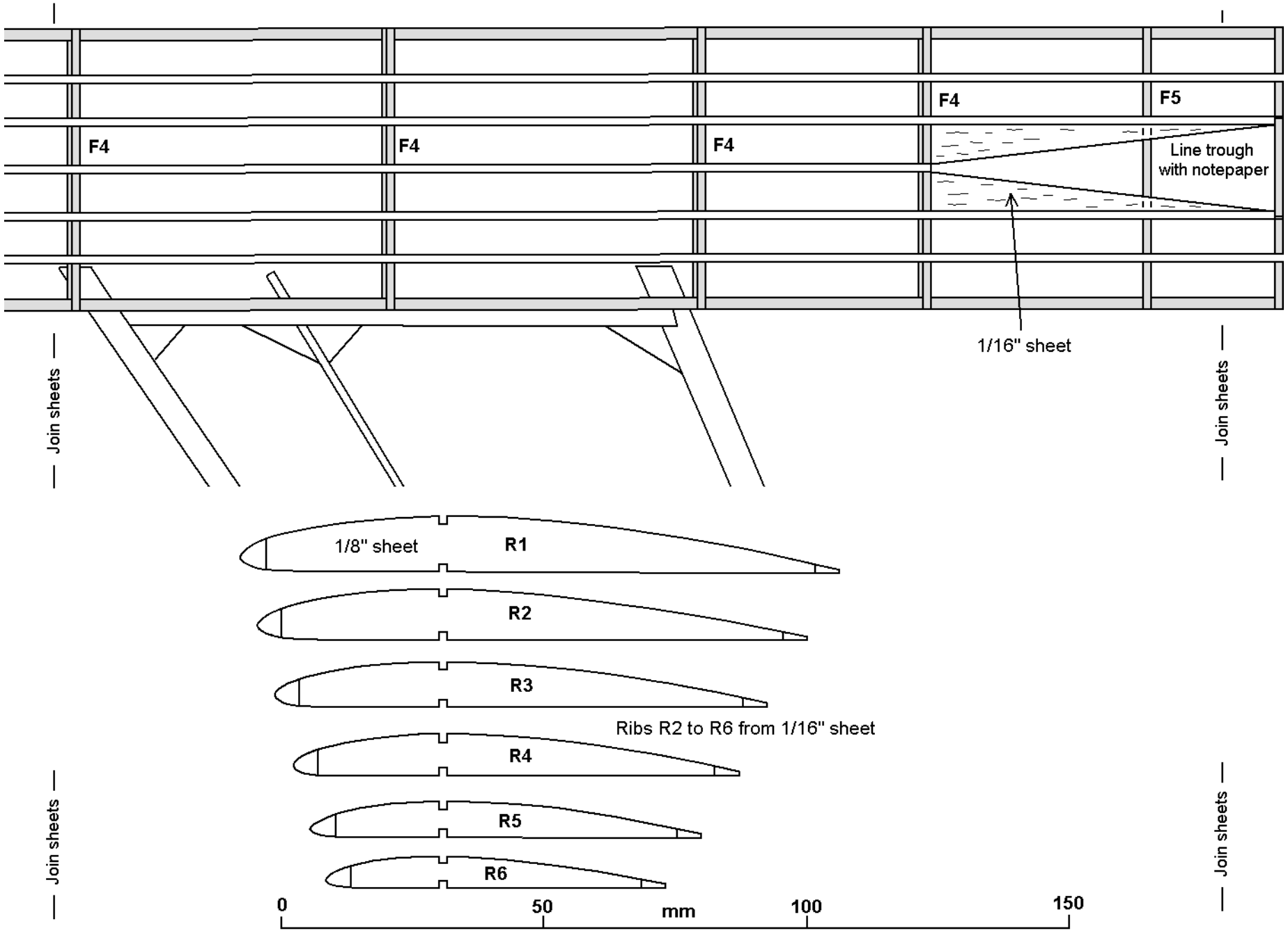
Intake laminated from 6 disks of 1/8" soft balsa

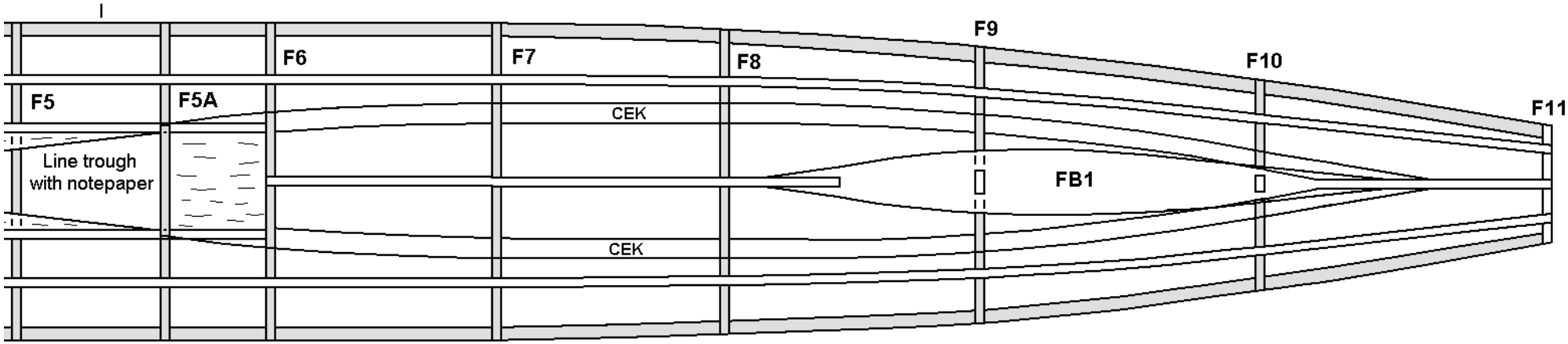




Join sheets

Join sheets


F4
F4
F4
F4
F5
Line trough
with notepaper
1/16" sheet
Join sheets
Join sheets
1/8" sheet
R1
R2
R3
Ribs R2 to R6 from 1/16" sheet
R4
R5
R6
Join sheets
Join sheets
0
50
mm
100
150

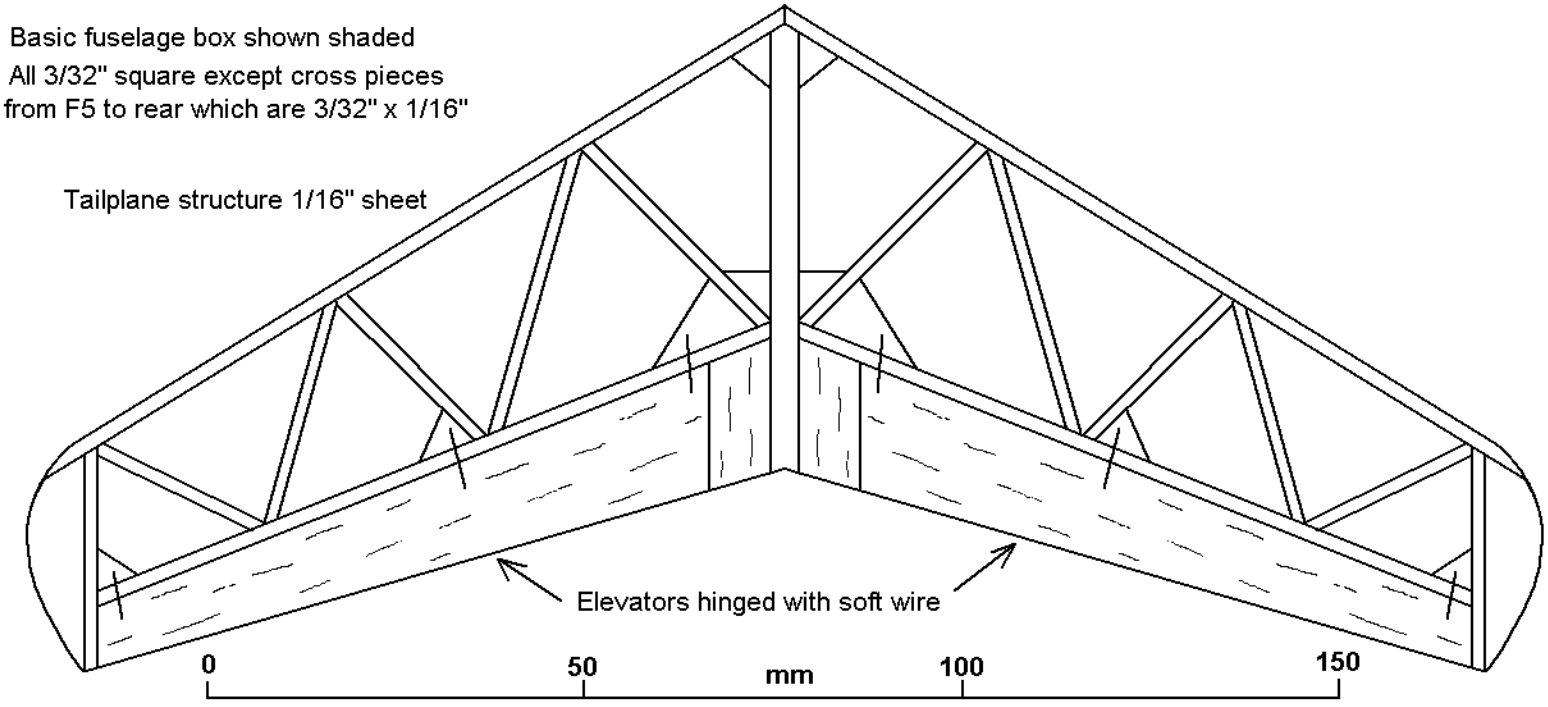


Join sheets

Join sheets

Basic fuselage box shown shaded
All 3/32" square except cross pieces
from F5 to rear which are 3/32" x 1/16"

Tailplane structure 1/16" sheet



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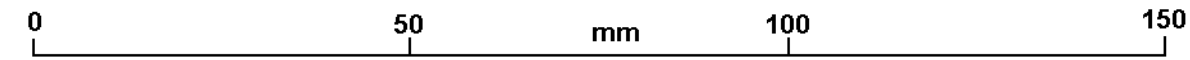
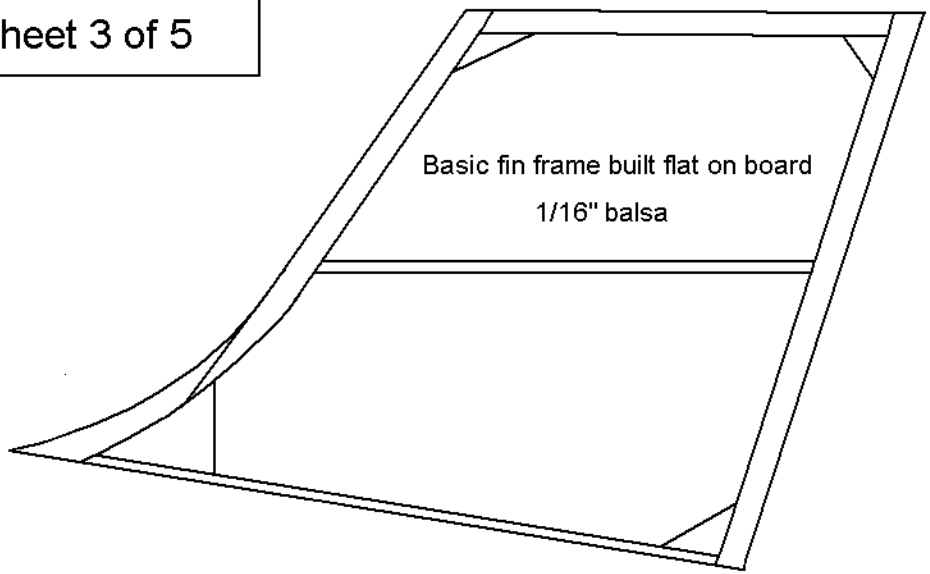
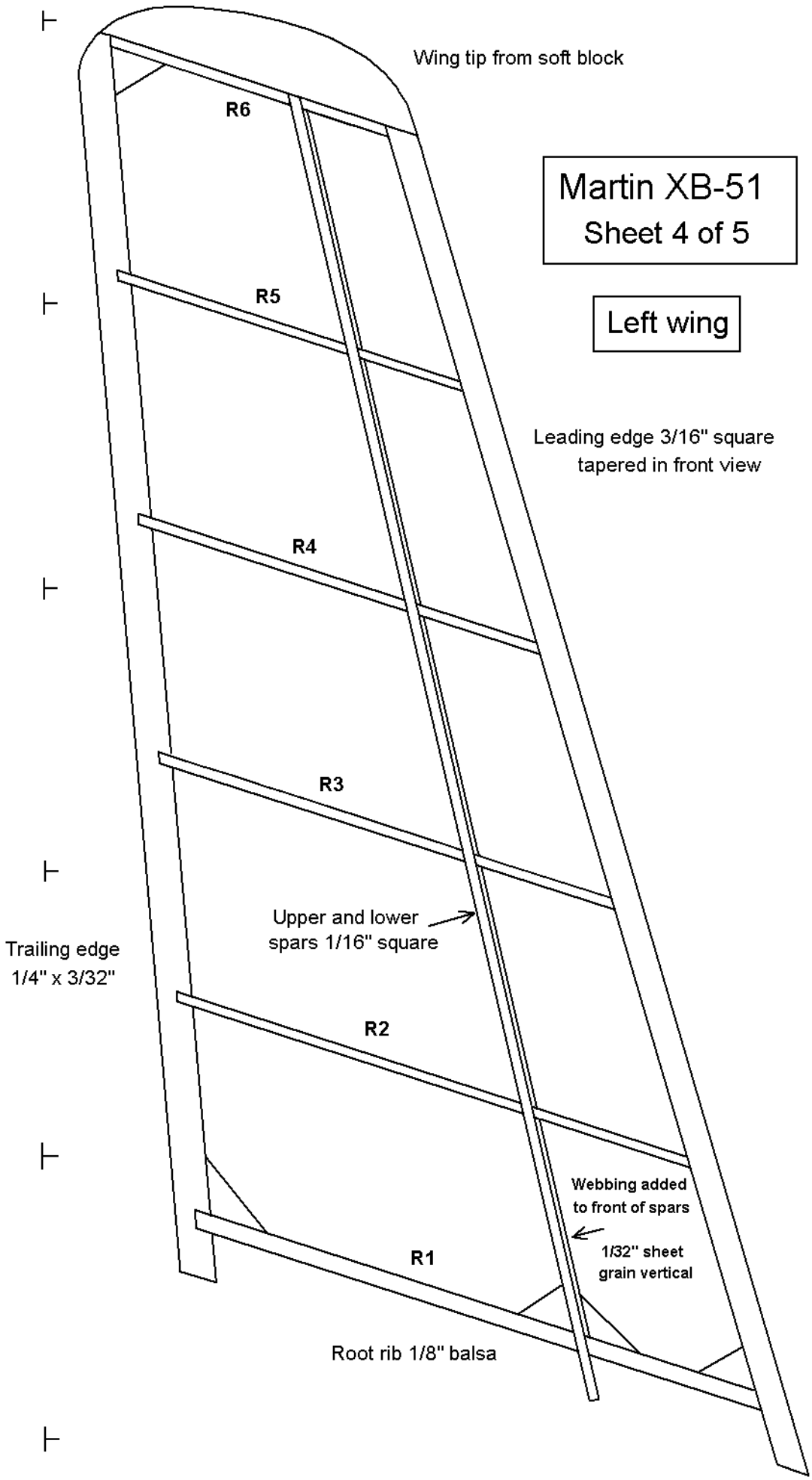
Sheet 3 of 5





Shape of laminated disks for nacelle intake
12 required, soft 1/8" balsa


Wing tip from soft block
R6
R5
R4
R3
R2
R1
Martin XB-51
Sheet 4 of 5
Left wing
Leading edge 3/16" square
tapered in front view
Upper and lower
spars 1/16" square
Trailing edge
1/4" x 3/32"
Webbing added
to front of spars
1/32" sheet
grain vertical
Root rib 1/8" balsa

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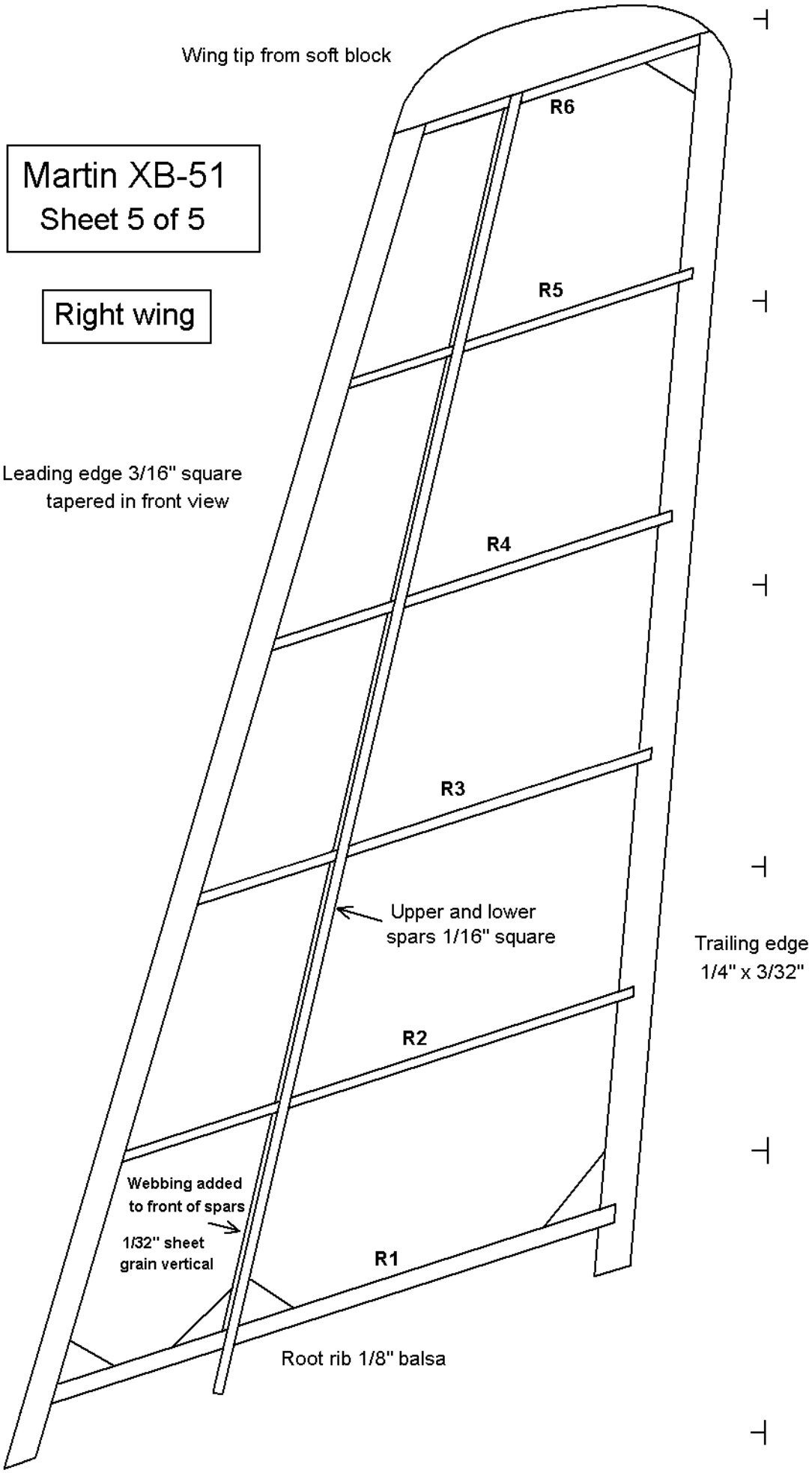
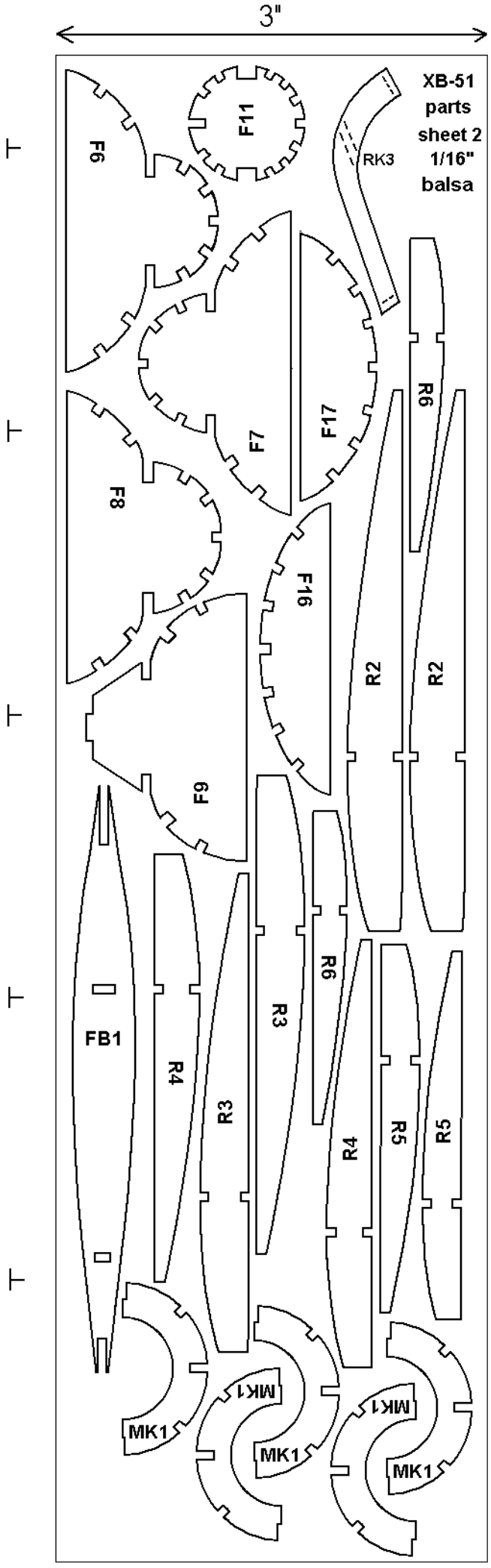
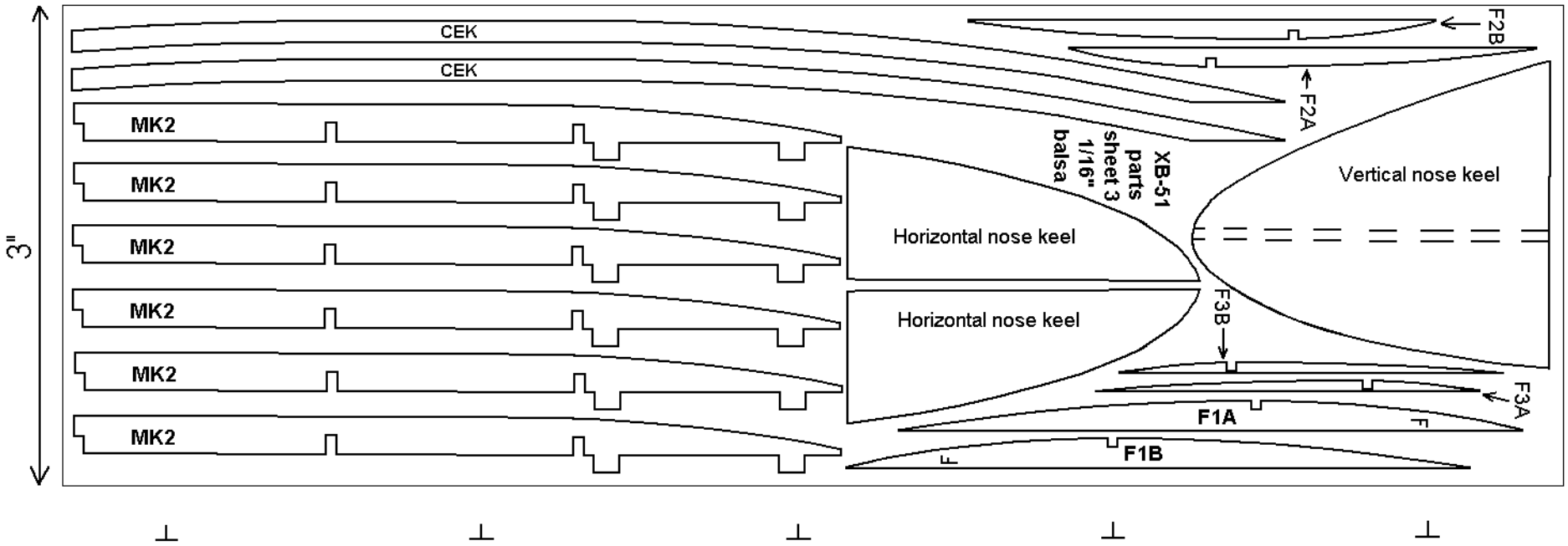
Sheet 5 of 5

Right wing



3"
F1
F12
F4
F4
F4
F13
F2
F4
F15
T/P
tips
F3
F4
F15
F15
F15
F15
F15
F5
F10
F15
F5A
F18
MK1
MK1
MK1
MK1
MK1
MK1
XB-51
parts
sheet 1
1/16" balsa


3"
XB-51
parts
sheet 2
1/16"
balsa
F6
F11
RK3
F7
F17
R6
F8
F16
R2
R2
F9
FB1
R4
R3
R3
R6
R4
R5
R5
MK1
MK1
MK1
MK1


3"
CEK
CEK
MK2
MK2
MK2
MK2
MK2
MK2
Horizontal nose keel
Horizontal nose keel
XB-51 parts sheet 3 1/16" balsa
Vertical nose keel
F2B
F2A
F3B
F3A
F1A
F1B
F
F