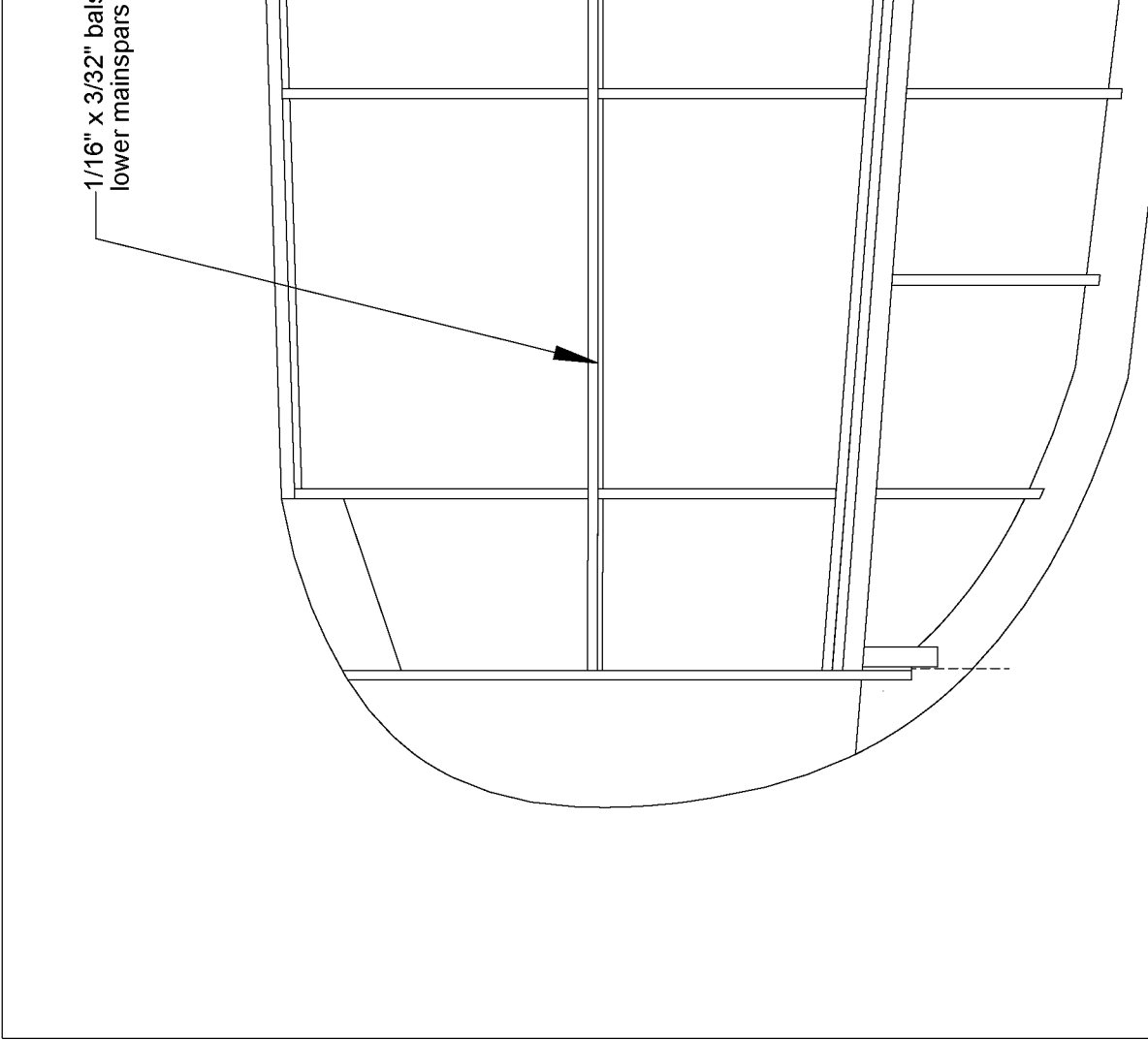


8

1/16" x 3/32" bal
lower mainspars

F

E



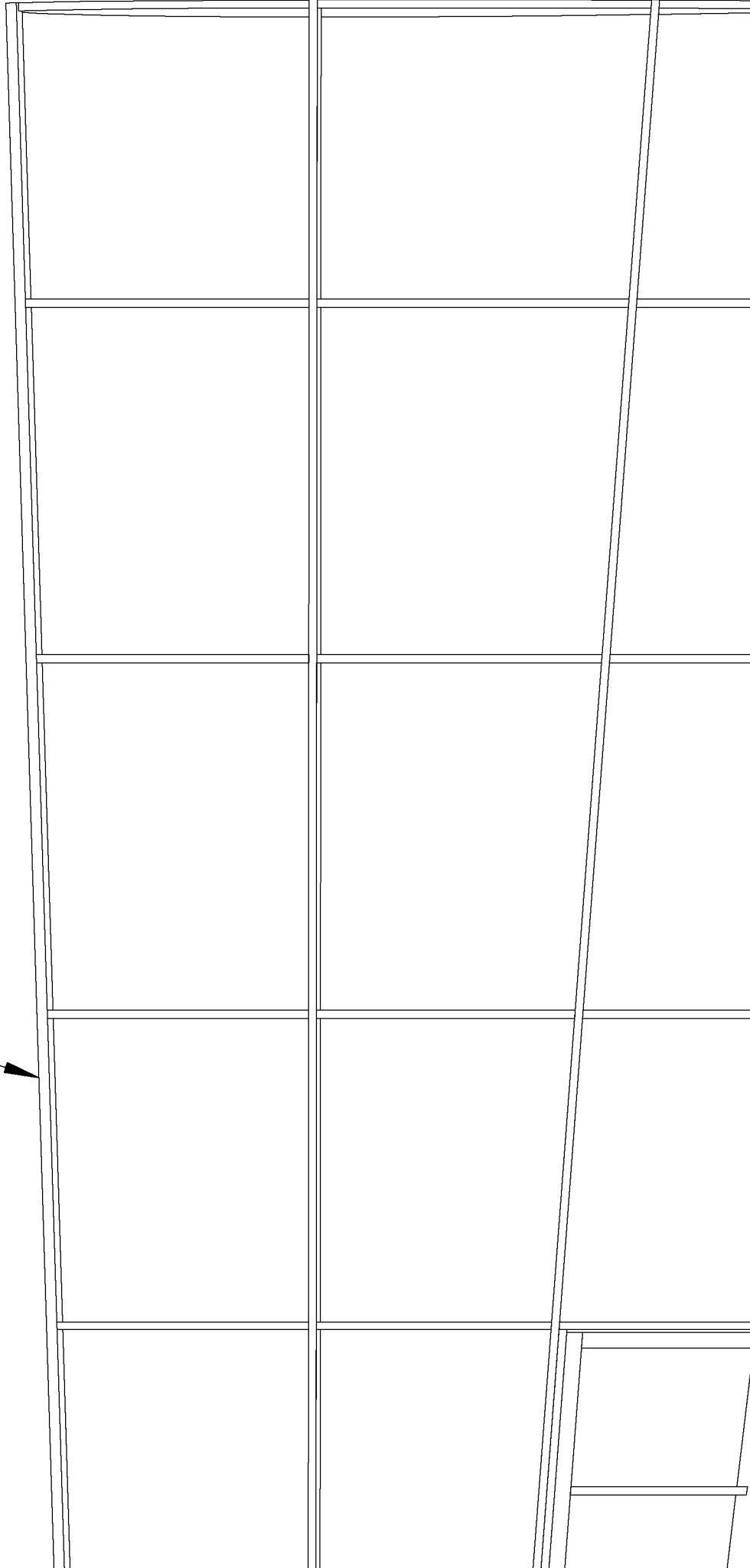
7

6

5

sa or basswood upper and
with 1/16" balsa shear webs

3/32" sq balsa or basswood LE



2

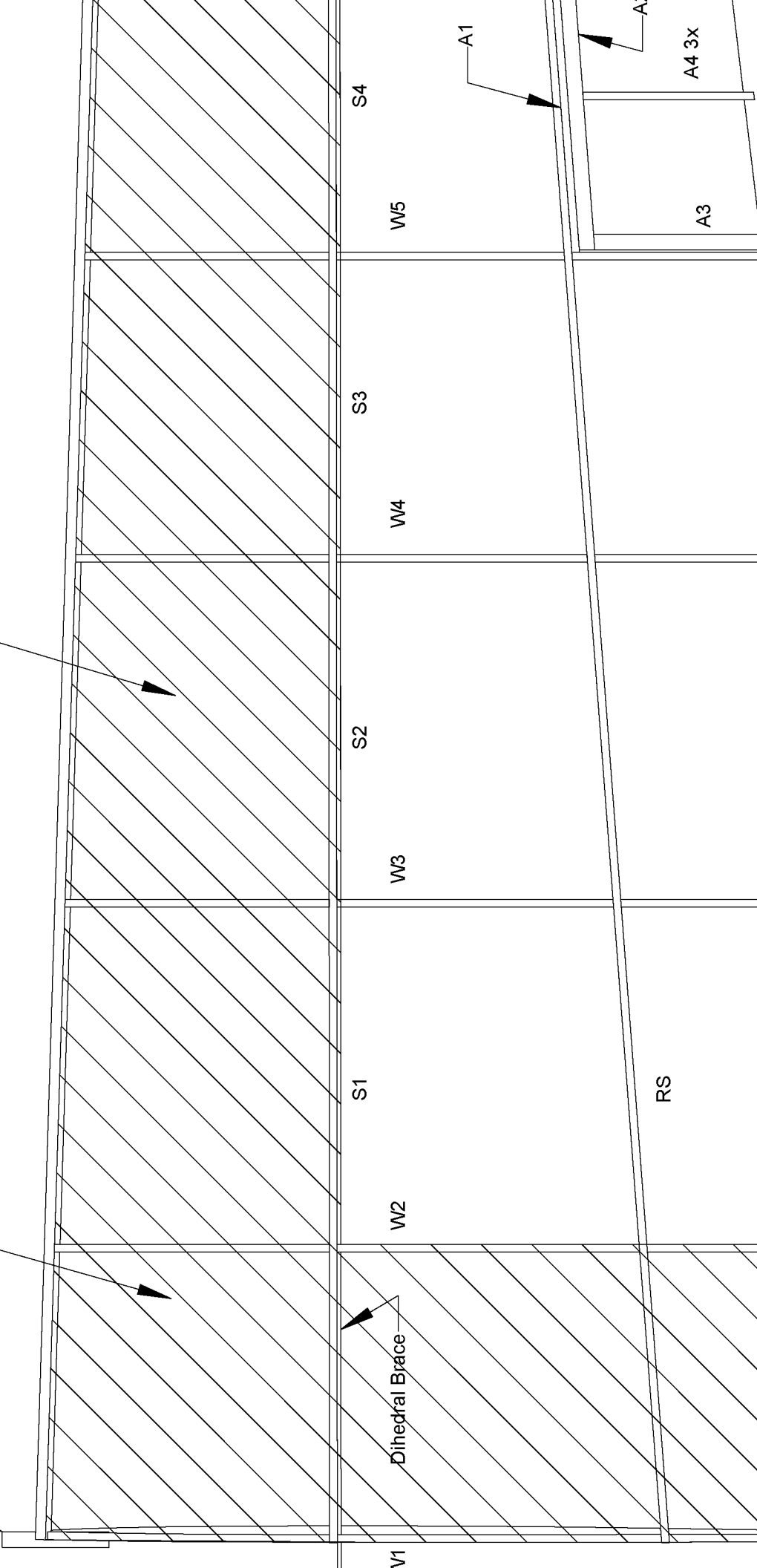
3

4

Wing pin from 1/8" dowel

Sheet center section top and bottom

Sheet only top of wing between W2 and W8



W1

W2

W3

W4

W5

S1

S2

S3

S4

RS

A3

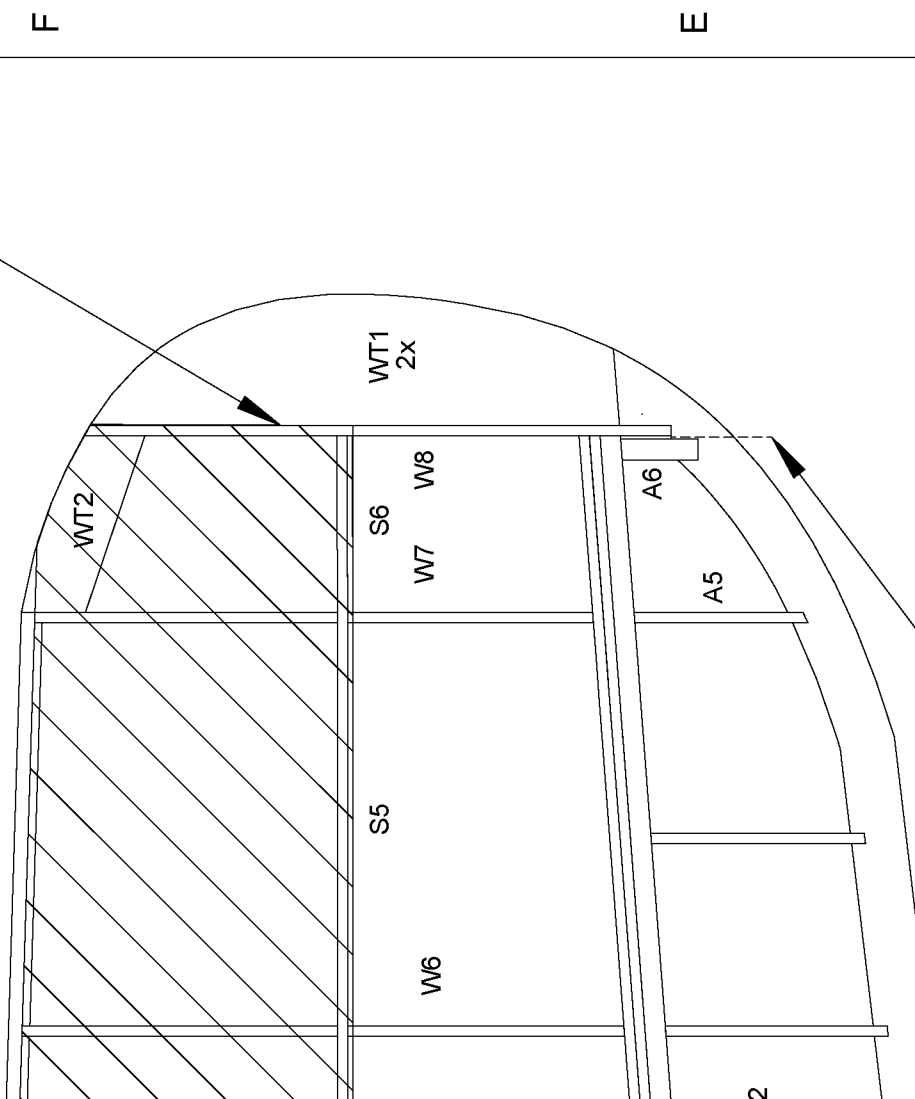
A4 3x

A1

A

1

Dihedral: use Dihedral Gauge to set angle of center rib W1. Resulting dihedral will be 1.77"/45mm at each tip of W8.



F

E

2

The Brewster Buffalo

Almost incomprehensively, the Brewster Buffalo has the irrefutable distinction of being both one of the worst and the best fighters introduced to the US Navy in 1939, Buffaloes were considered "sweet little ships" by no less than Pappy Boyington. But saccharine against the Mitsubishi Zero, the Buffalo was badly mauled and retired. British and Dutch experiences weren't much better. Equipment or inexperienced pilots? You be the judge.

In contrast, the same aircraft racked up a shocking 33/1 kill ratio by pilots in Finland. These pilots were well-seasoned when they joined their Buffaloes. They were also masters of deflection shooting. Buffaloes became aces in the Buffalo, and one single airframe achieved victories by itself!

D

General Build Notes:

- Fuselage Stringers are 1/16" x 3/32" balsa.
- Leave stringers proud from formers to avoid wrinkles in covering.
- Only at hatch formers and stringer ends are stringers sanded flush.
- Tail Group bracing is 1/8" x 1/16" balsa.
- Wing Sheeting is 1/32" balsa.
- See Parts ID Sheets for part numbers.

C

PROTOTYPE SPECIFICATIONS	
Wingspan	30"
Length	22.8"
Weight	10.9oz
Wing Area	157.6 sq in
Power	1700kV Blue Wonder
Propellor	7 x 6 APC
Battery	2S 1000mAh 3S 750mAh

CONTROL THROWS

Spinner and
files for 3D
on Thingiverse

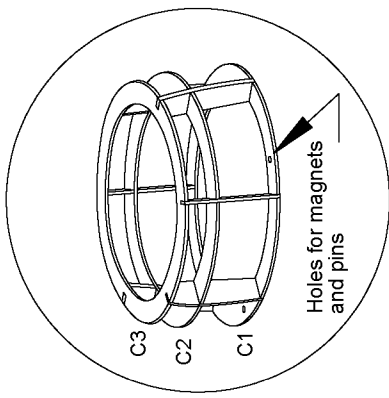
gnomious
rs of WW2.
ered "pretty
lly, in early battles
nd then promptly
Obsolete

l ratio when flown
they received
ng. 36 of these
chieved 42.5

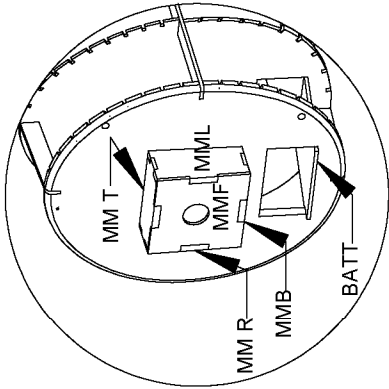


After wing is fully framed, cut the ailerons free. Bevel A2 as shown to enable aileron to deflect. A1 can be relieved also for extra travel.

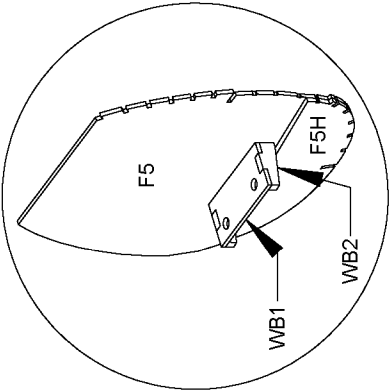
Through Hole
Fill the gap b
sheeting with



Cowling Detail
Assembly at Step 2 shown.



Motor Mount Detail
1.5deg each down and right
thrust built in.
Box mount fits inside of F1A,
tabs fit thru ply firewall F1B.



Wing Mounting Boss Detail
Epoxy WB1 and two parts WB2
together.
Epoxy this assembly to former F5.
Epoxy two 10-32 nuts to the top of
WB1 to capture wing screws.

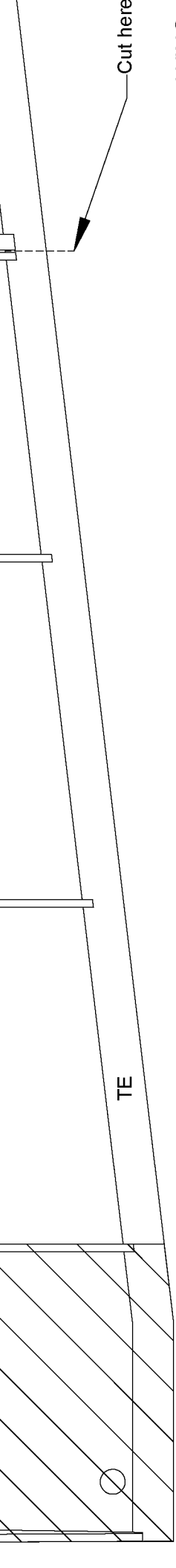
Vacuum formed
from Park Flyer

dummy wheel STL
printing can be found
@arse.com

F1A

C8

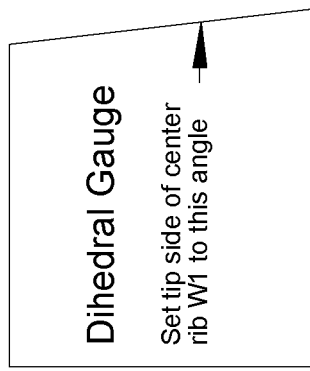
K1



WING--

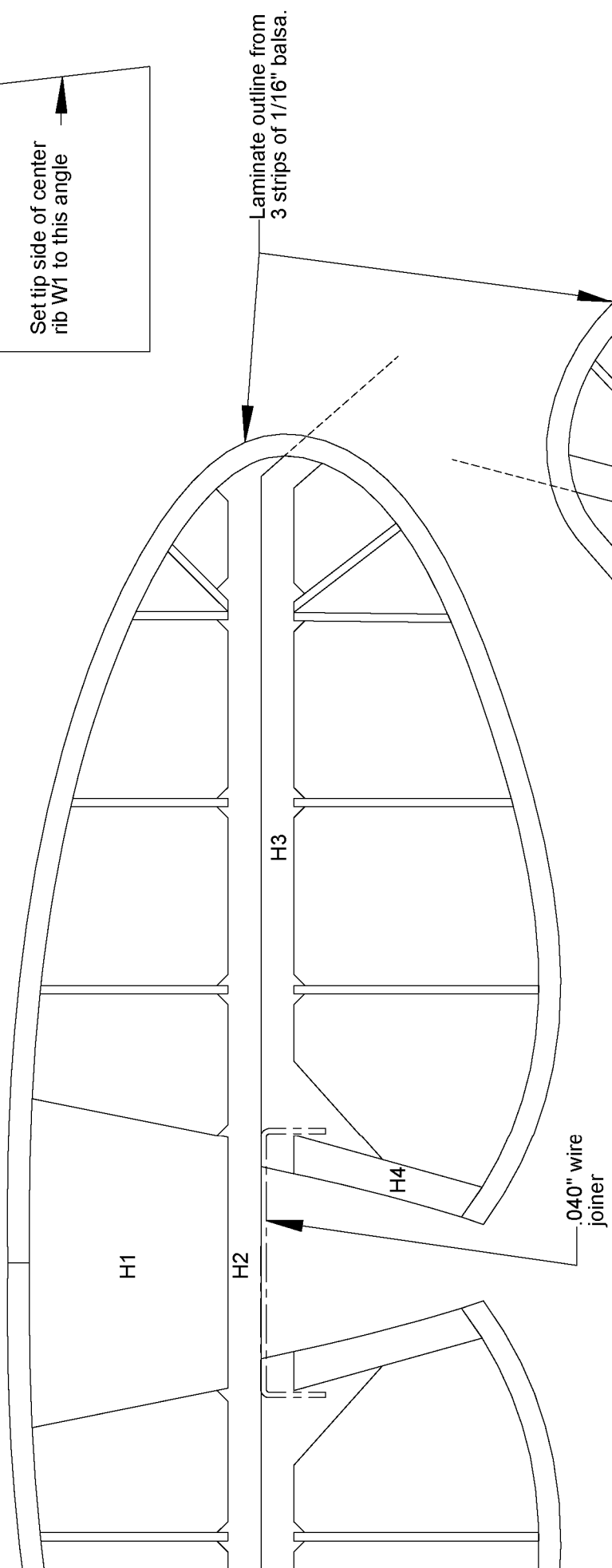
1. Lo
2. Ri
3. Ri
4. Up
5. Tr
6. Le
7. W
8. Ai

Use for Wing Bolt 3/16" in dia.
between the upper and lower
scrap balsa for strength



Dihedral Gauge

Set tip side of center
rib W1 to this angle

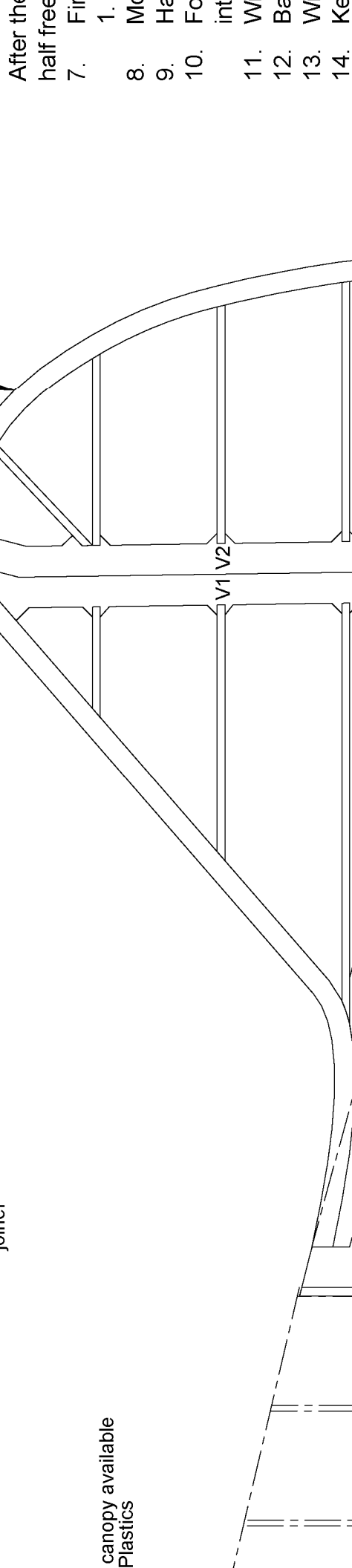


Laminate outline from
3 strips of 1/16" balsa.

.040" wire
joiner

FUSELAGE

- Build the
1. Ke
 2. Fc
 3. Ke
 4. Co
 5. W
 6. St



canopy available
Plastics

- After the
- half free
7. Fir
 1. M
 8. Ha
 9. Ha
 10. Fo
 11. int
 11. W
 12. Ba
 13. W
 14. Ke

to free aileron

ASSEMBLY ORDER:

Lower main spar and Rear Spar RS--pin to the board.
Booms W2 thru W8 perpendicular to board.
Web W1--set angle with Dihedral Gauge.

Upper main spar, and Shear Webs S1 thru S6.
ailing Edge TE.

Leading edge--3/32" balsa or basswood strip stock.
ing Tip parts WT1 and WT2.

Stack two WT1s and glue to W8.
eron parts in numerical order.

Glue A1 to RS only! A1 is a doubler to RS.

Do not glue A1 and A2 together! They form the aileron
parting line.

Upper sheeting--1/32" balsa.

in wings with Dihedral Brace.

Install a wing pin from 1/8" dowel where marked on ribs W1.

WING--ASSEMBLY ORDER:

Left side directly over the plan.

Keels--pin keels K1 thru K4 to the board.

Formers F2L thru F10L.

Keel K5.

Cockpit Deck--join to formers F5L thru F7L.

Wing Saddle--dampen the outer side and glue to formers F2L

to F5L.

Formers--add just a few to stiffen the assembly.

The assembly has cured completely, unpin and build the right
side from the plan.

Firewall--preassemble F1A and F1B, then join to front Keels.

Note: long motor mount slot goes on left side of fuselage.
Motor Mount--see inset to left.

Attach Formers--glue F2H thru F5H to K4 and left Wing Saddle.

Formers F2R thru F10R--align each to its left mate and glue
in place.

Wing Pin Boss--reinforce pin hole with part WP.

Battery Tray--glue to Firewall and F2.

Wing Bolt Boss--preassemble and attach per inset to left.

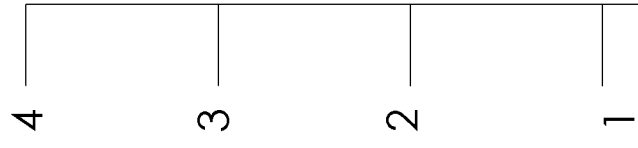
Keel K5 and Cockpit Deck.

D

C

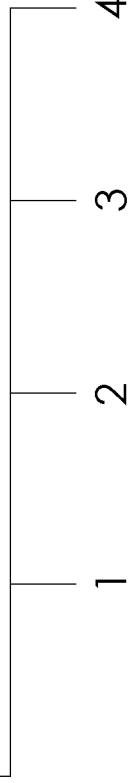
Ailerons	1/4"
Elevator	1/4"
Rudder	3/8"

B

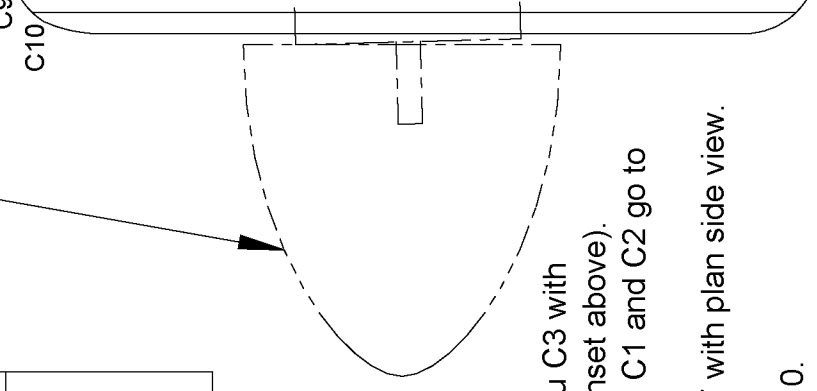


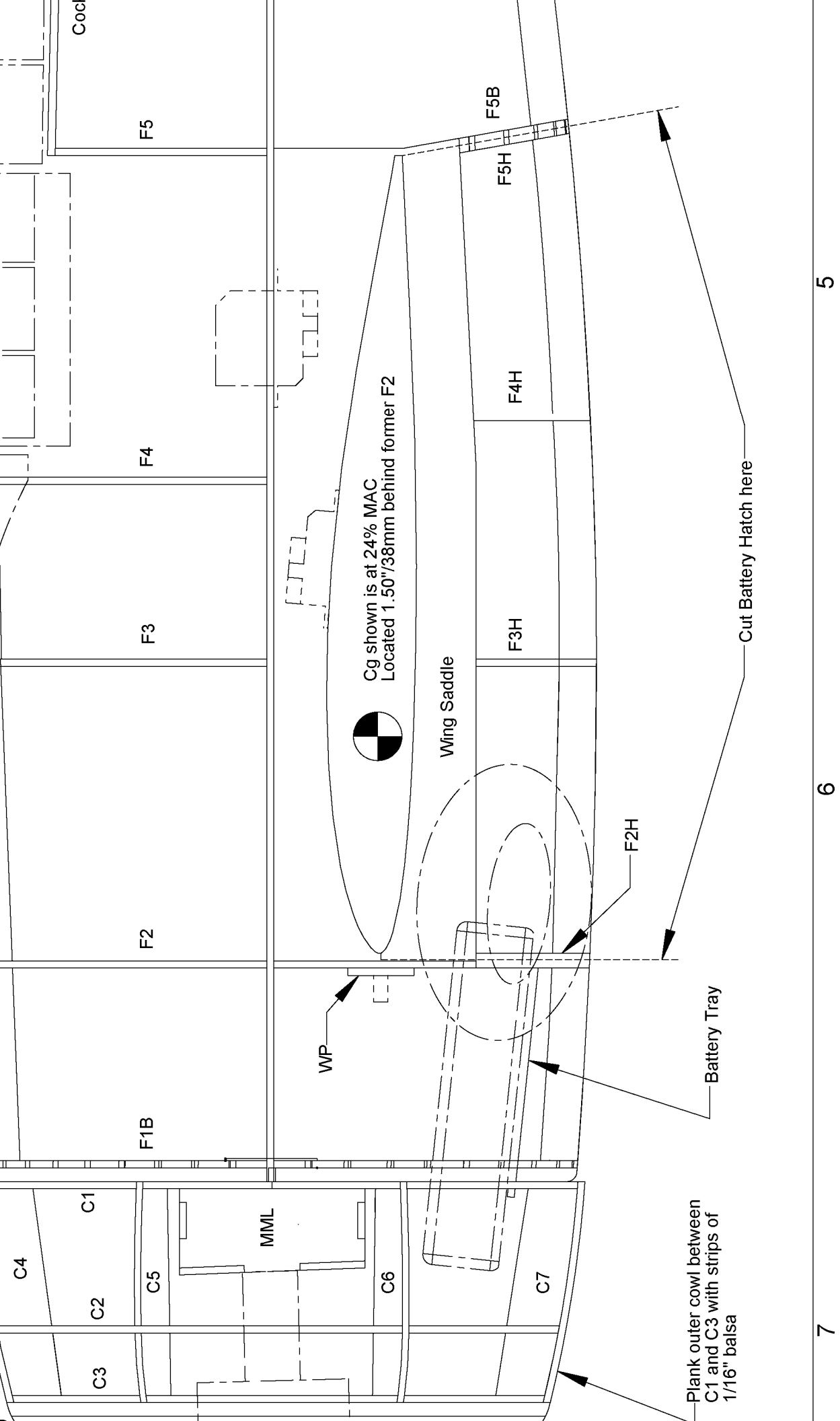
COWL ASSEMBLY

1. Preassemble Cowl Former rings C2 and C3.
2. Join the Cowl Formers C1 thru C3 with Cowl Keels C4 thru C7 (see inset above).
 1. Small alignment holes in C1 and C2 go to top.
 2. Set angles of C4 and C7 with plan side view.
3. Cowl Opening Rings
 1. Preassemble C8 thru C10.
 2. Glue C8 thru C10 together with scoop openings aligned.
 3. Glue this assembly to the front of C3.
4. Plank from C1 to C3 with 1/16" balsa.
5. Add 1/8" dia magnets to C1 and Firewall F1A, and alignment pins to Firewall to attach cowling.



8

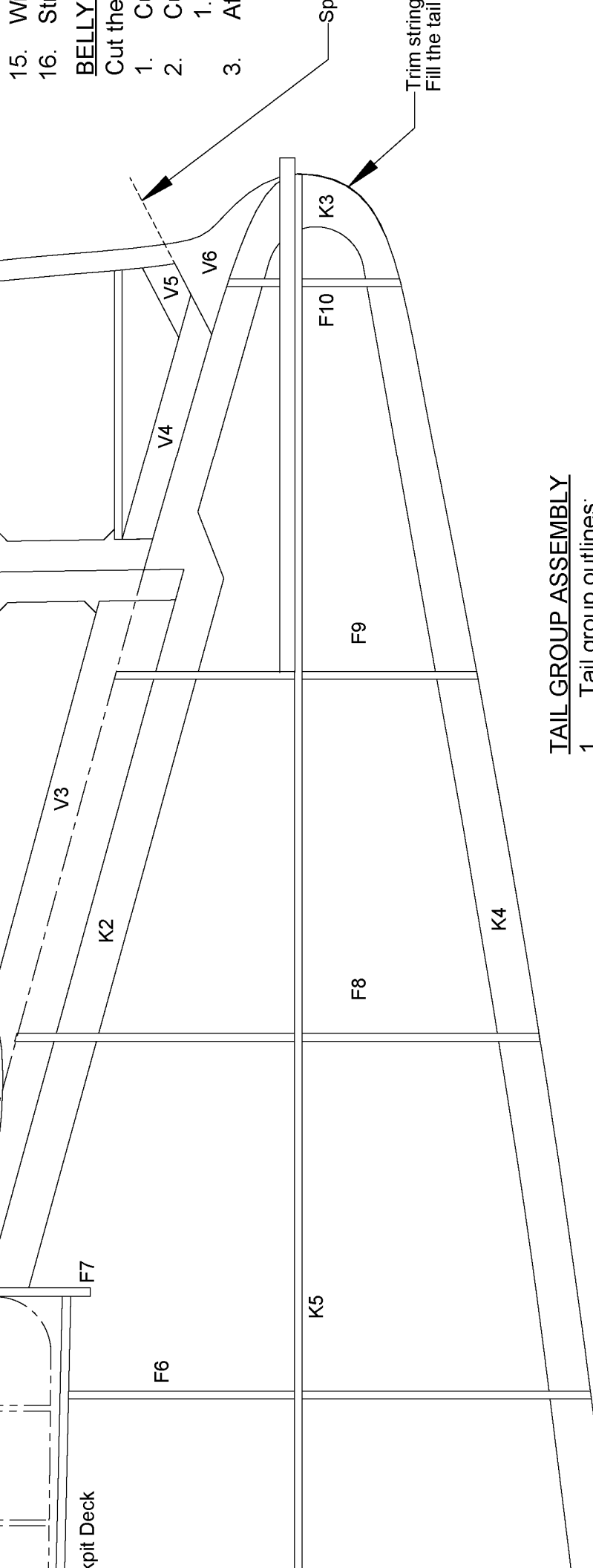




5

6

7



TAIL GROUP ASSEMBLY

1. Tail group outlines:
 1. Trace and transfer the outline shapes from plan and make for
 2. Laminate three strips of 1/16" x 1/8" balsa around forms.
2. Pin the cured outlines into place over the plan.
3. Install the tail framework parts in numerical order.
4. Add 1/16" x 1/8" bracing where shown.
5. Unpin, sand tail group parts to shape.
6. Separate the Rudder and the Elevators by cutting through the outlini where shown.



Copyright 2021

and **ModelAviation**

Copying for resale of this drawing without the written approval or consent of AMA is expressly prohibited.

ing Saddle--dampen and attach the right saddle.
ringers--alternate from side to side to avoid warpage.

HATCH:

belly hatch free after the fuselage is fully assembled.
ut out the wing airfoil marked on the Wing Saddle.
ut through the stringers at Formers F2/F2H and F5/F5H.

Extend these cuts into the Wing Saddle as shown.

fter wing is fitted, attach the belly hatch to the wing with magnets

litt here for functional rudder

ers to the back of F10;
cone with scrap balsa or foam

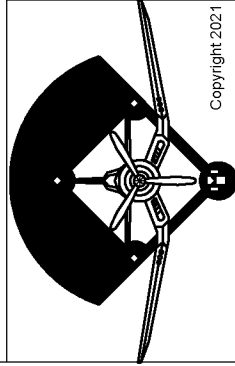
B

Plan No. 1 129

ms.

INFIELD ENGINEERINGtm by Paul Kohlmann

A



Title

30" Brewster
F2A Buffalo

Copyright 2021

Size D

Dwg. No. F2A-1 Buffalo 30 plan

Rev A

Laser cut kit available!

www.infieldengineering.com

Scale: 1:1 Weight: 10-12oz

Sheet 1 of 2