



FOAM, GLUE, TAPE AND A LITTLE IMAGINATION....



(RC Model Airplane Construction Plans)

rcFoamFighters

FF-NovaJet

(Original Design by Paul Petty - Nov. 2008)

(CAD Drawing by Paul Petty - Nov. 2011)

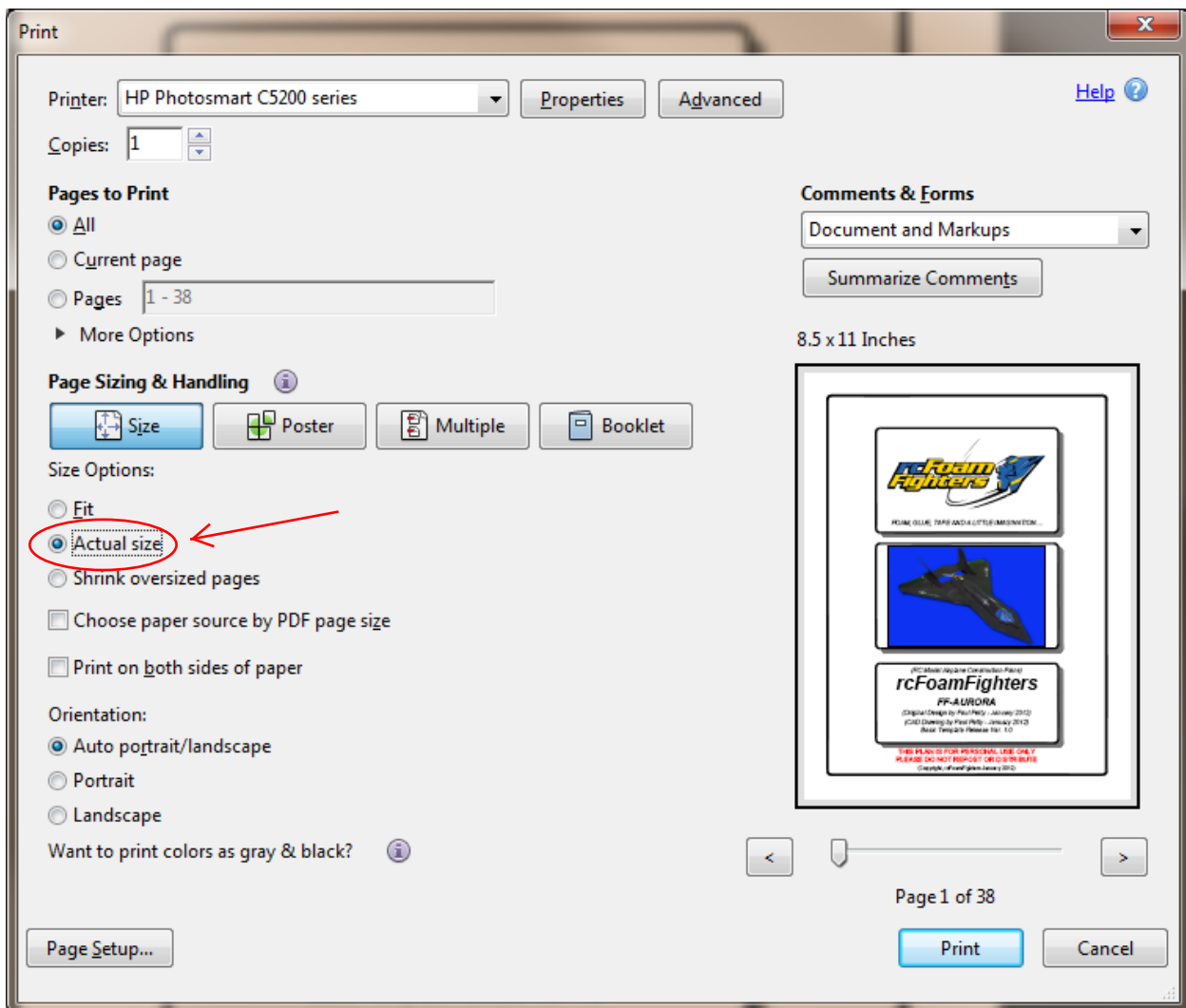
Basic Template Release Ver. 1.0

FREE PLAN - NOT TO BE SOLD

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Very Important Printing Instructions!!!!

Make sure you print to "Actual Size" or your plan may come out the wrong scale. Do not use "Fit" or "Shrink oversized pages". Older Acrobat versions may also list "Fit to Printable Area" or similar as the default. Make sure you Select "Actual Size" or "Scaling to None" or similar setting to print your plans correctly. See example below.



rcFoamFighters

FF-SuperNova Basic Template

(Design by Paul Petty -Nov. 2008 - Rev 1.0)

(CAD Drawing by Paul Petty - Nov. 2011)

(Basic Template Release 1.0 - Copyright rcFoamFighters)

(Contact rcFoamFighters at: admin@rcfoamfighters.com)

(Please Visit Our Blog at: <http://rcfoamfighters.com/blog/>)

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Basic Specs as built by rcFoamFighters:

Wingspan: 28 Inches (71.12cm)

Length: 29.4 Inches (74.68cm)

All Up Weight (AUW): 28.3oz. (880.23gms)

Best Recorded Top Speed: 111mph (178.64kph)

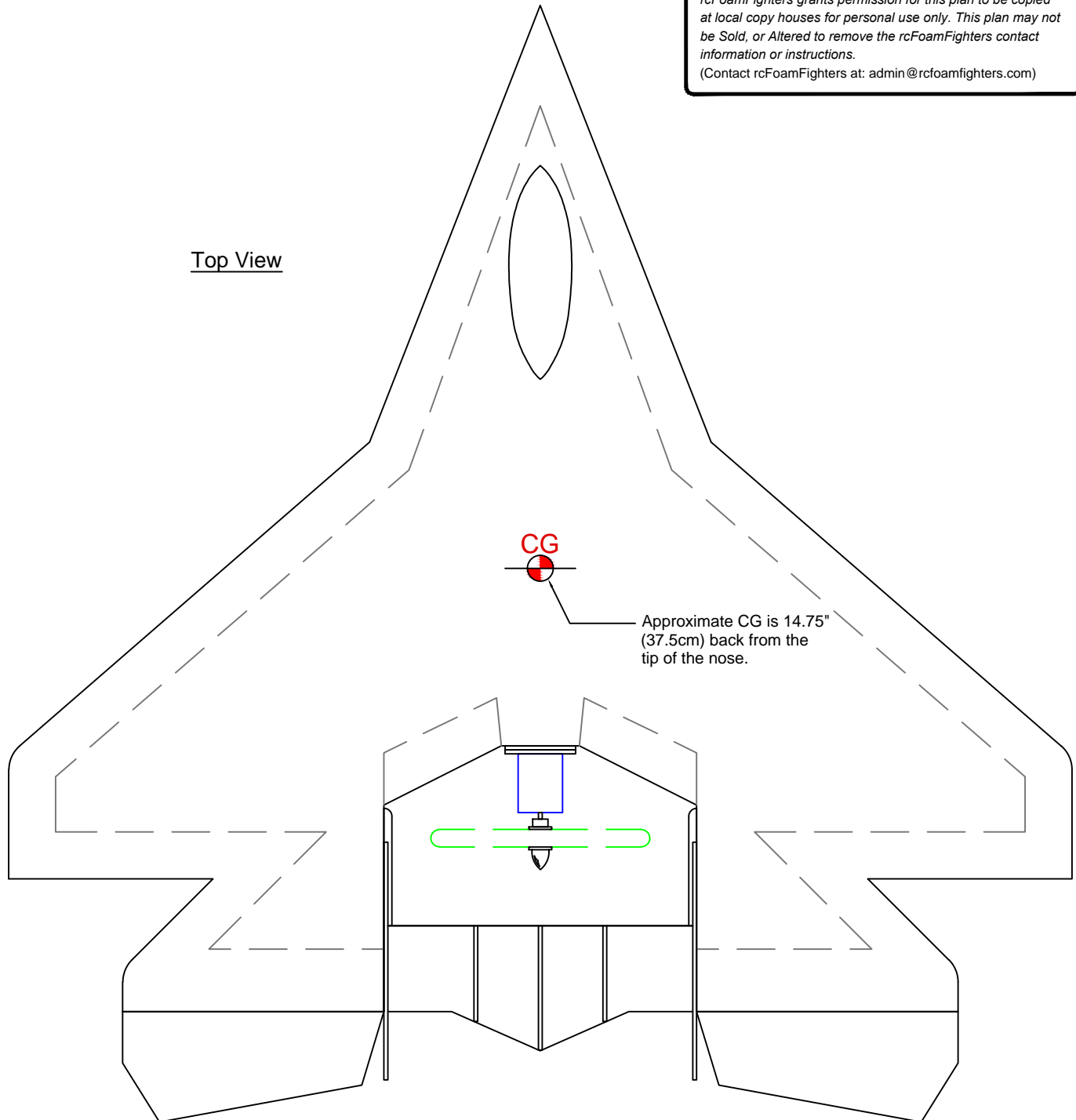
Note, weight and top speed may vary depending on materials, motor, battery and electronics used. The weight given here is based on the model rcFoamFighters made using 1.9 EPP Foam covered in colored packing/sealing tape.

Copy Disclaimer

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Top View



Recommend Parts:

BASIC SETUP (75+mph)

Motor: Suppo A2212/6 2200kV Brushless Motor
ESC: Suppo 30A Brushless ESC
Prop: APC 6x4
Battery: 2200mA (30C or better recommended)
Servos: 2 Each Micro Metal Gear
Tx & Rx: Any 4-ch With Delta mixing (2.4ghz preferred)

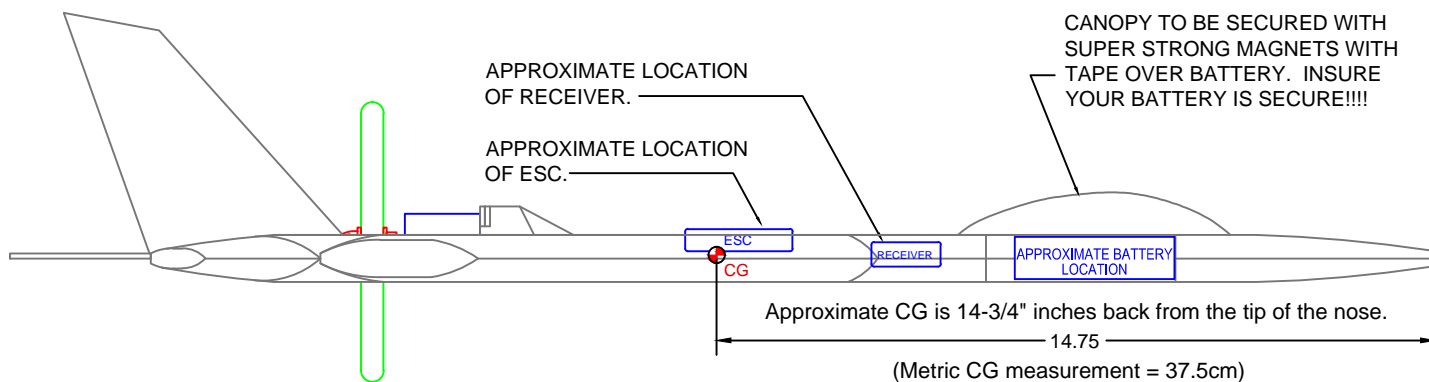
PERFORMANCE SETUP (100+mph)

Motor: Grayson Hobbies "Super Mega Jet" 2550kV Motor
ESC: 50A Brushless ESC
Prop: APC 6x5.5
Battery: 2200mA (40C or better recommended)
Servos: 2 Each Micro Metal Gear
Tx & Rx: Any 4-ch With Delta mixing (2.4ghz preferred)

Plane was originally designed to be made from 1ea 24x36 Sheet of 30mm 1.9 EPP Foam. No spars were required. Other materials than EPP may be used, but carbon fiber or wood spars will be required.

Disclaimer (Please Read):

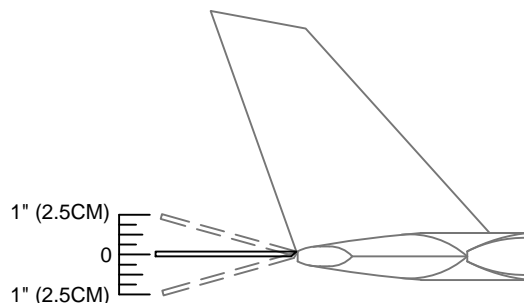
- This is a design template for a high performance, high speed RC aircraft. This plane should only be built and flown by experienced pilots with adequate skill to fly fast, maneuverable planes.
- **DO NOT fly this plane where it can endanger people, livestock or property.**
- **ANY PERSONS DECIDING TO BUILD AND FLY THIS PLANE DOES SO AT HIS/HER OWN RISK AND LIABILITY. RCFOAMFIGHTERS ASSUMES NO RESPONSIBILITY FOR THE PERFORMANCE OF THIS PLANE.**
- This plane should only be launched via the side launch method. Do not attempt to launch from the top or bottom of the fuselage. Doing so can cause **EXTREME BODILY HARM** if any hand or body part comes into contact with the fast spinning propeller.
- All minors should fly under the supervision of an adult or guardian.



VERY IMPORTANT!!!

RECOMMEND AILERON THROWS:

MAKE SURE YOU SET YOUR AILERON THROWS TO NO MORE THAN 1 INCH (2.5CM), UP AND DOWN. 3/4 INCH (1.9CM) RECOMMENDED FOR BEGINNERS.

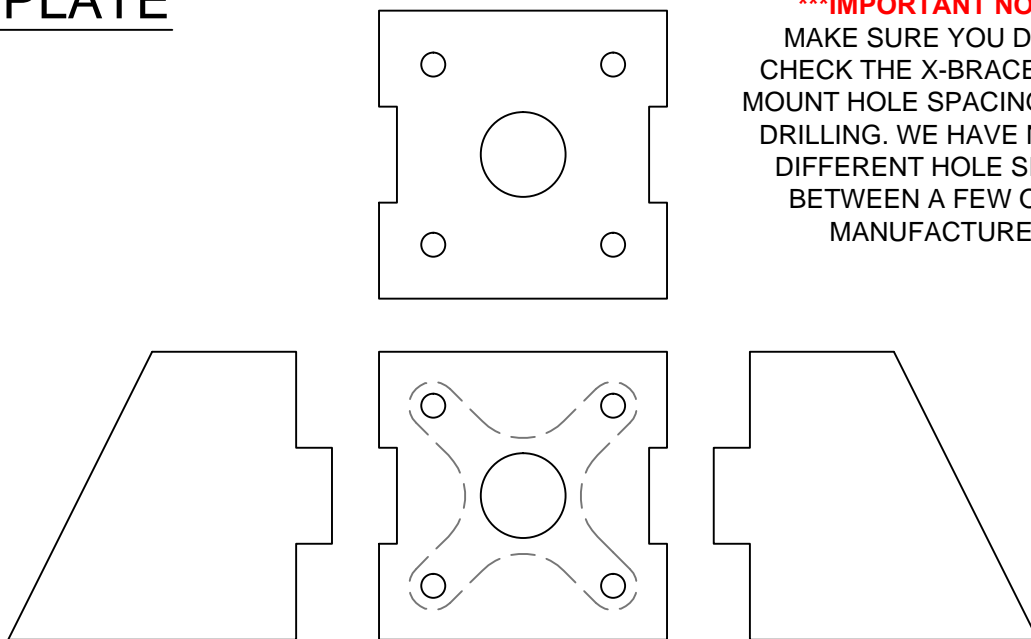


ELEVATOR NOTE:

IN ELEVATOR MODE, THE THROWS CAN BE GREATER THAN 1 INCH FOR FASTER PITCH RESPONSE UP AND DOWN.

SCRATCH BUILT MOTOR MOUNT TEMPLATES (MADE FROM 3/32" BASSWOOD SHEETS)

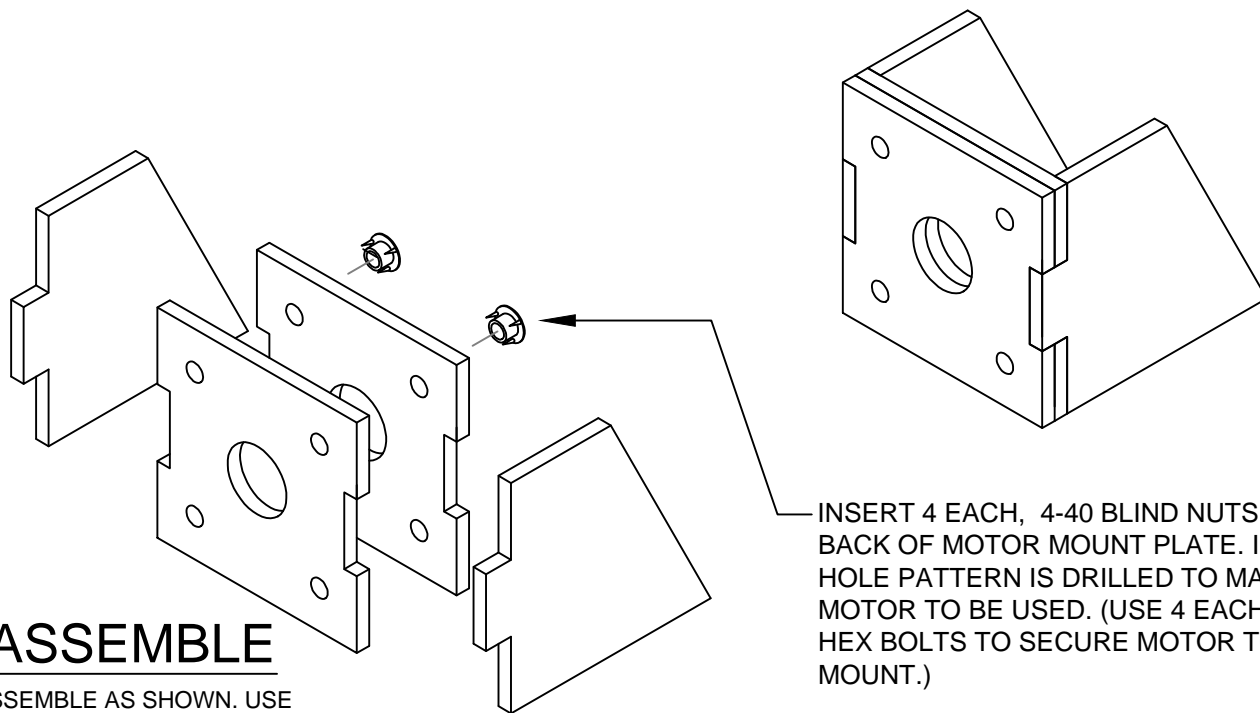
TEMPLATE



*****IMPORTANT NOTE:*****

MAKE SURE YOU DOUBLE CHECK THE X-BRACE MOTOR MOUNT HOLE SPACING BEFORE DRILLING. WE HAVE NOTICED DIFFERENT HOLE SPACING BETWEEN A FEW OF THE MANUFACTURERS.

MOUNT



ASSEMBLE

ASSEMBLE AS SHOWN. USE EPOXY OR OTHER ADHESIVE TO GLUE TOGETHER.

TEMPLATE ASSEMBLY KEY PLAN

rcFoamFighters

FF-Nova Jet

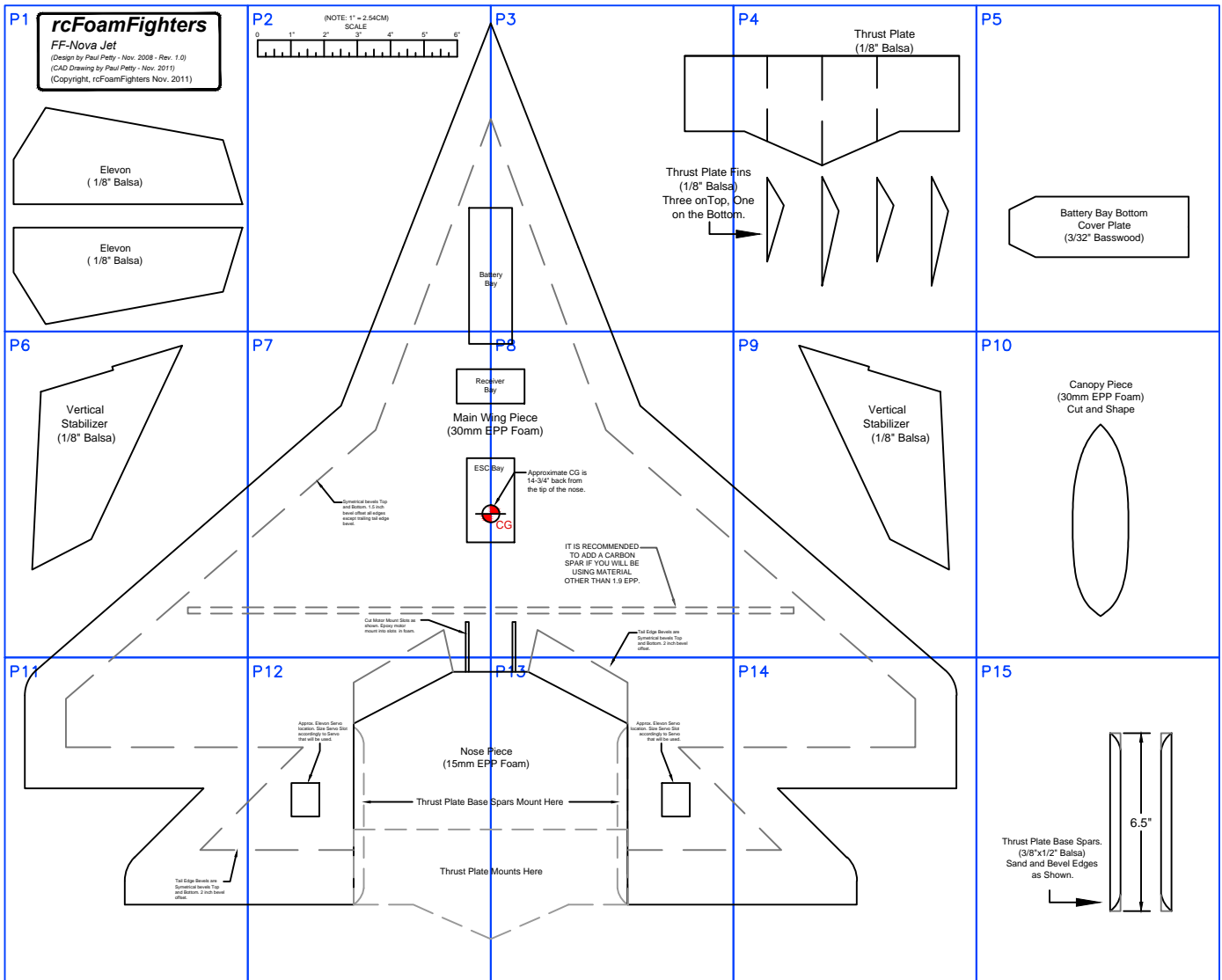
(Design by Paul Petty - Nov. 2008 - Rev. 1.0)

(CAD Drawing by Paul Petty - Nov. 2011)

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INSTRUCTIONS:

PRINT ALL TEMPLATE SHEETS. CUT AND ASSEMBLE AS SHOWN BELOW. USE SCOTCH TAPE TO SECURE SHEETS TOGETHER.



P1

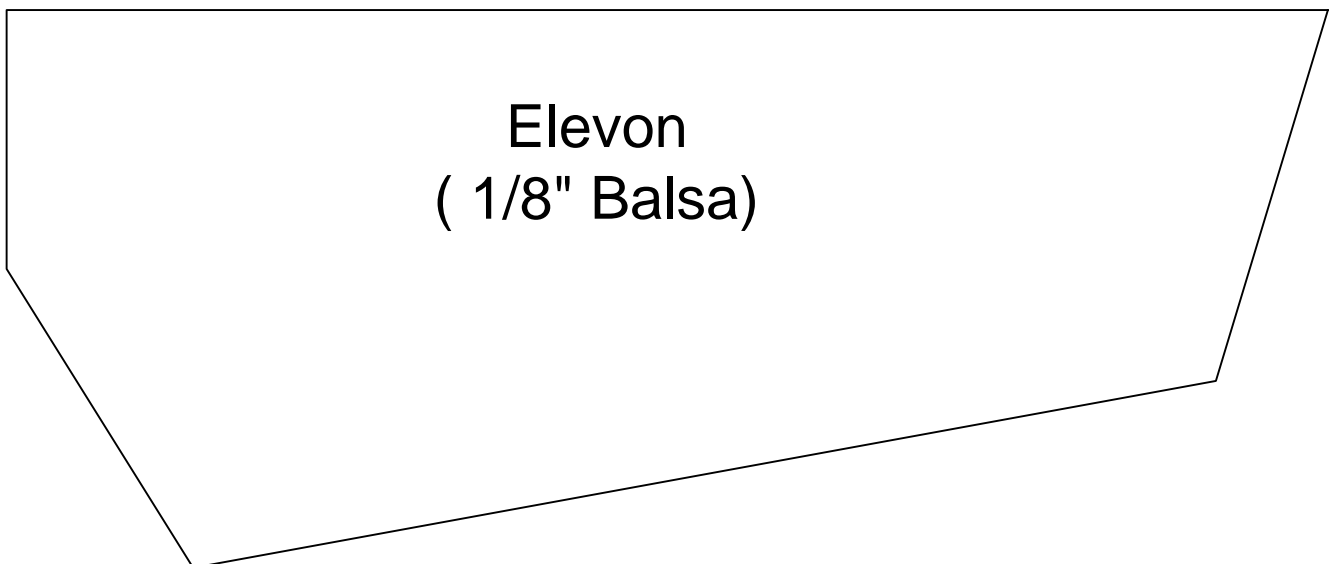
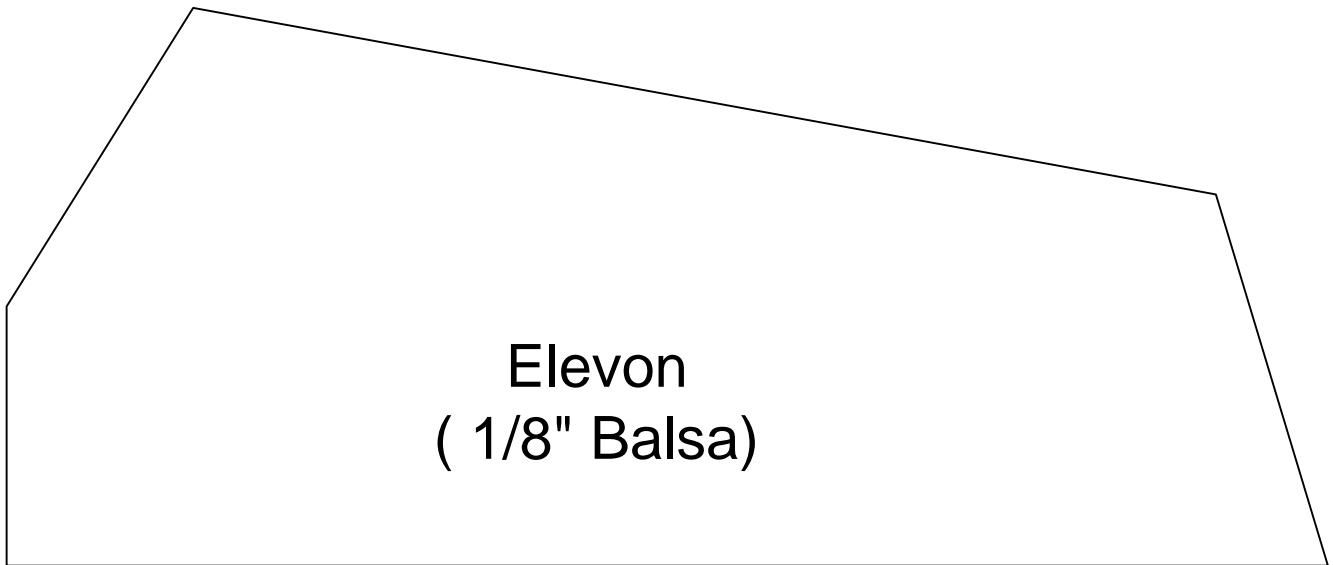
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FF-Nova Jet

(Design by Paul Petty - Nov. 2008 - Rev. 1.0)

(CAD Drawing by Paul Petty - Nov. 2011)

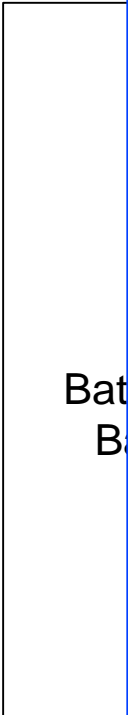
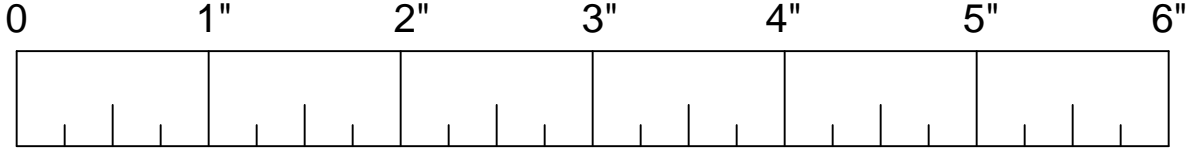
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P2

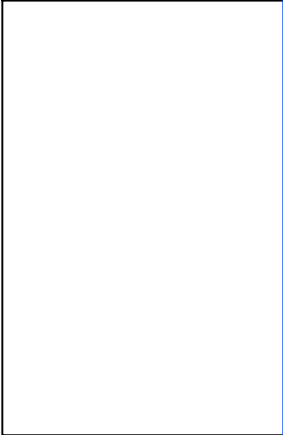
(NOTE: 1" = 2.54CM)

SCALE

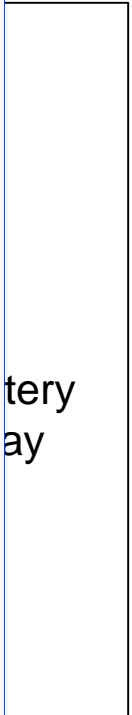


Bat
B

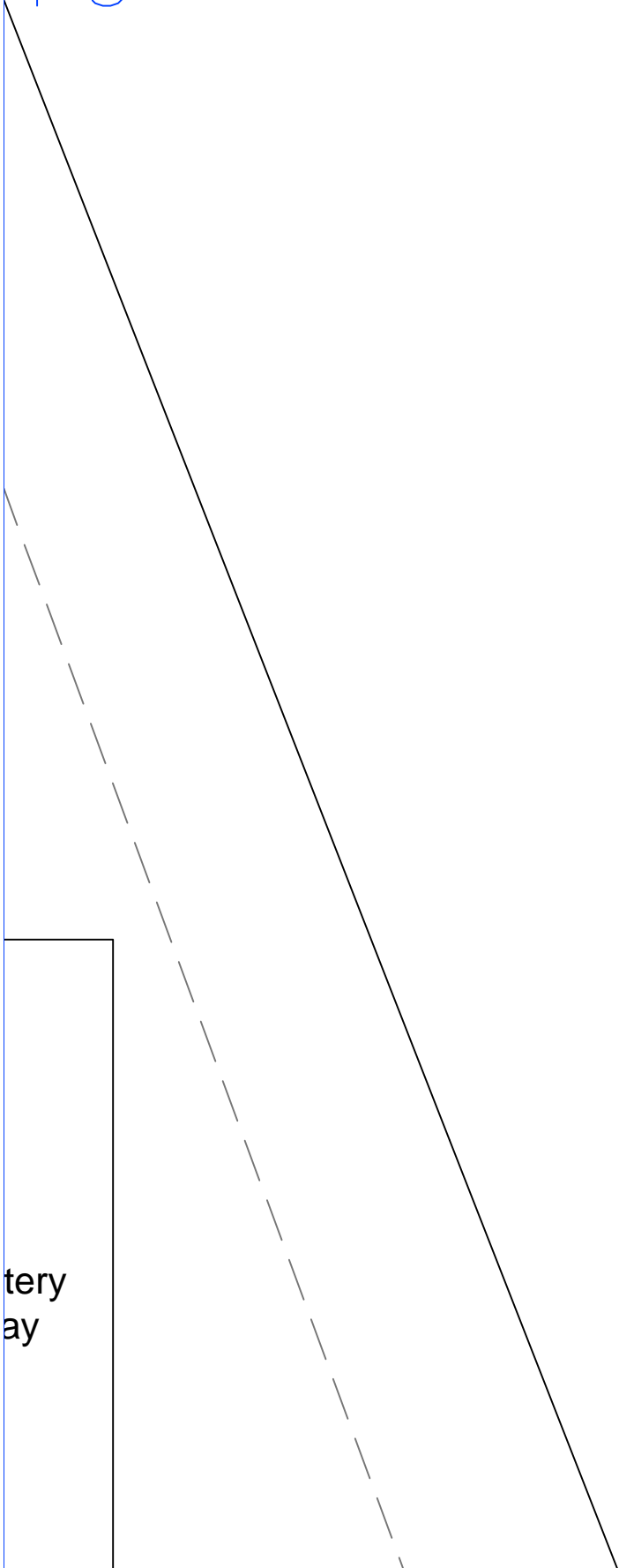
P3



Thrust Plate I
(1/8" Balsa
Three on Top,
on the Bottom

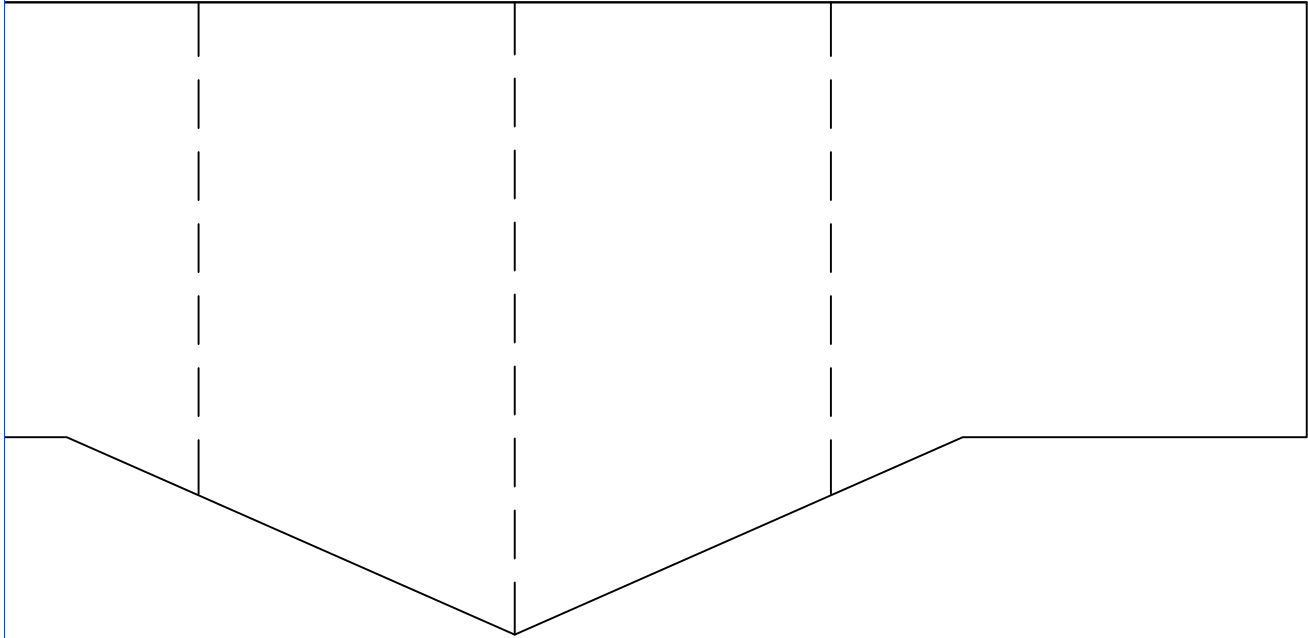


tery
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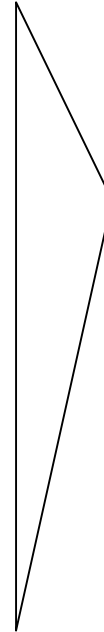
P4

Thrust Plate (1/8" Balsa)

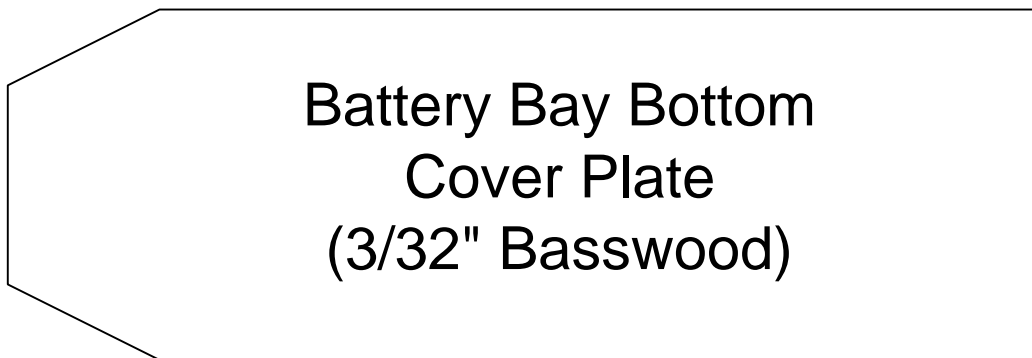


Fins

1)
One
m.

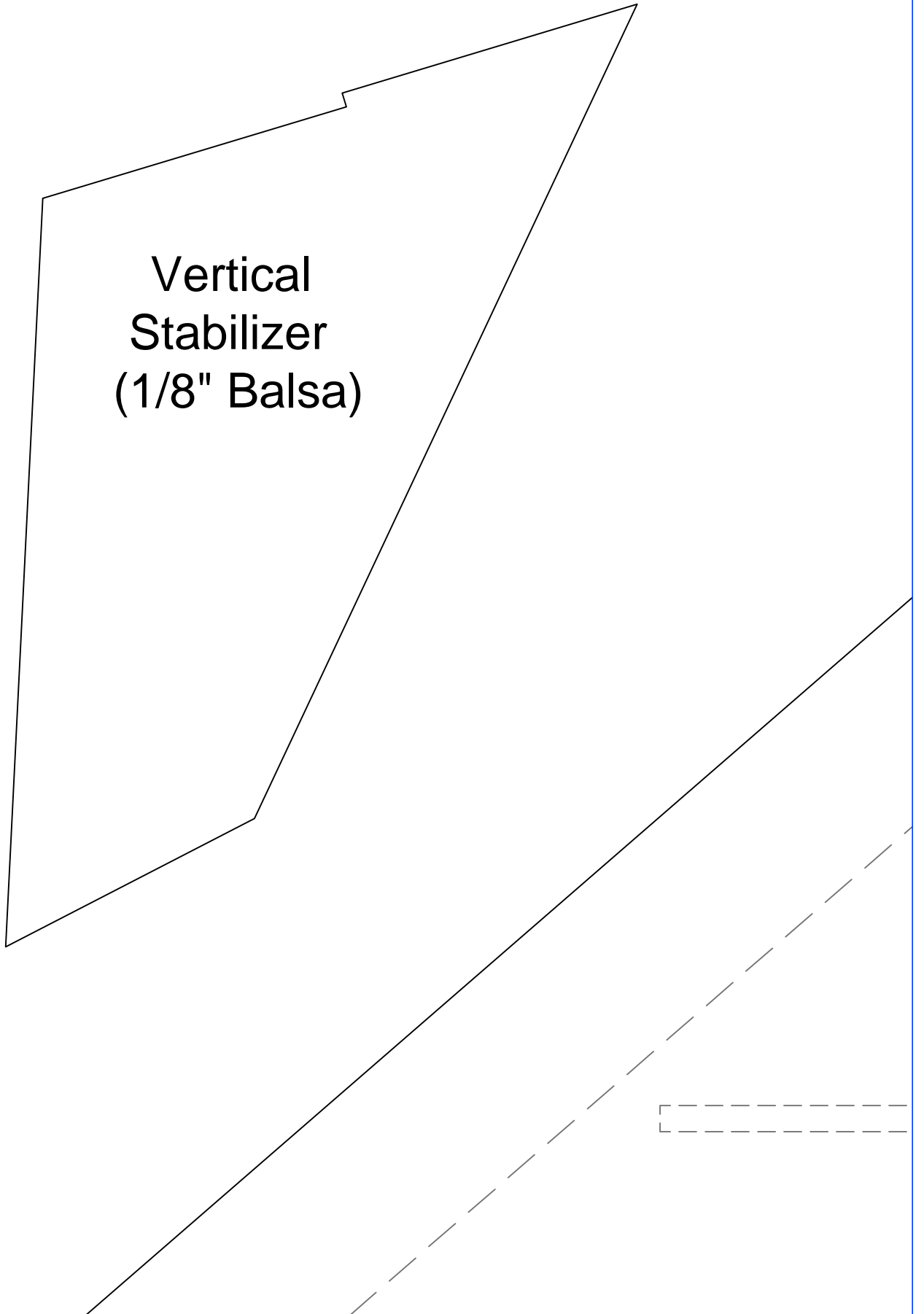


P5



P6

Vertical
Stabilizer
(1/8" Balsa)



P7

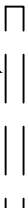
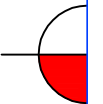
Rece
Ba

Main W
(30mm E

ESC

Symetrical bevels Top
and Bottom. 1.5 inch
bevel offset all edges
except trailing tail edge
bevel.

Cut Motor Mount Slots as
shown. Epoxy motor
mount into slots in foam.



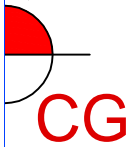
P8

Receiver
Bay

ing Piece
(EPP Foam)

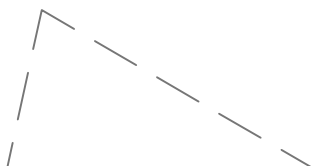
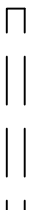
Bay

Approximate CG is
14-3/4" back from
the tip of the nose.



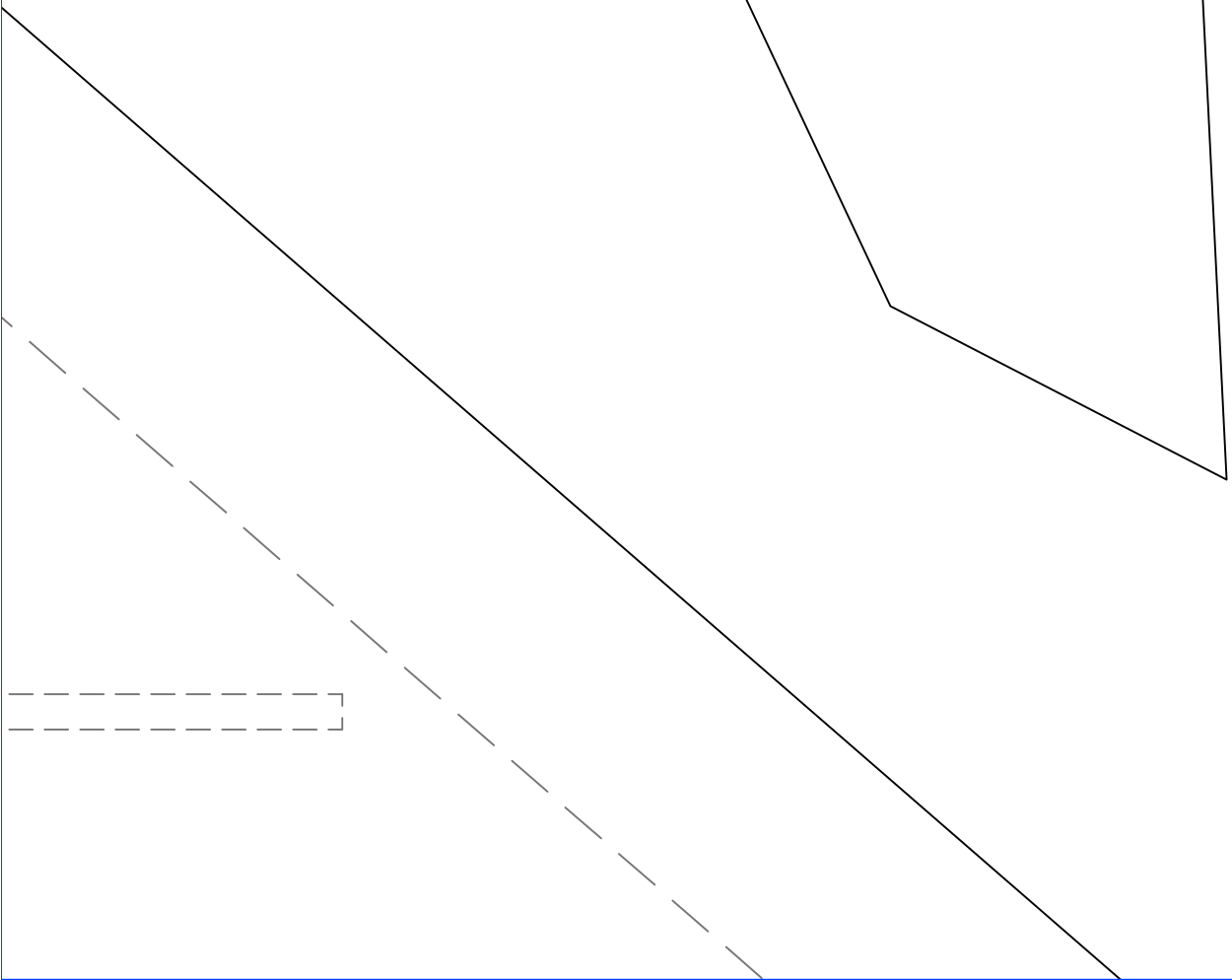
IT IS RECOMMENDED
TO ADD A CARBON
SPAR IF YOU WILL BE
USING MATERIAL
OTHER THAN 1.9 EPP.

Tail Edge Bevels are
Symetrical bevels Top
and Bottom. 2 inch
offset.



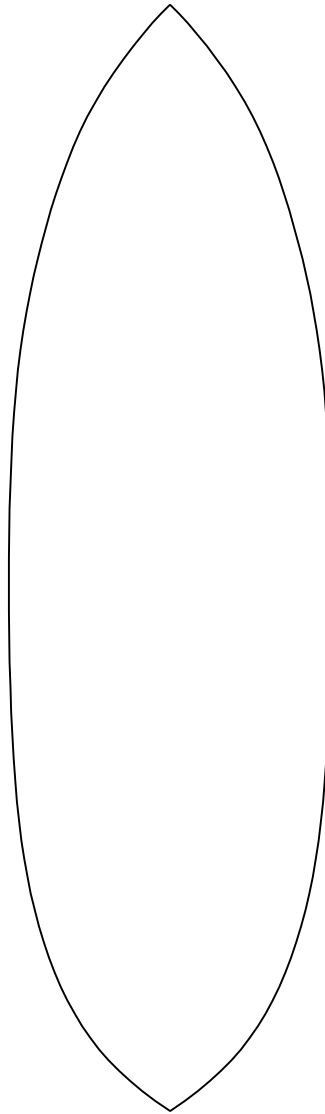
P9

Vertical
Stabilizer
(1/8" Balsa)

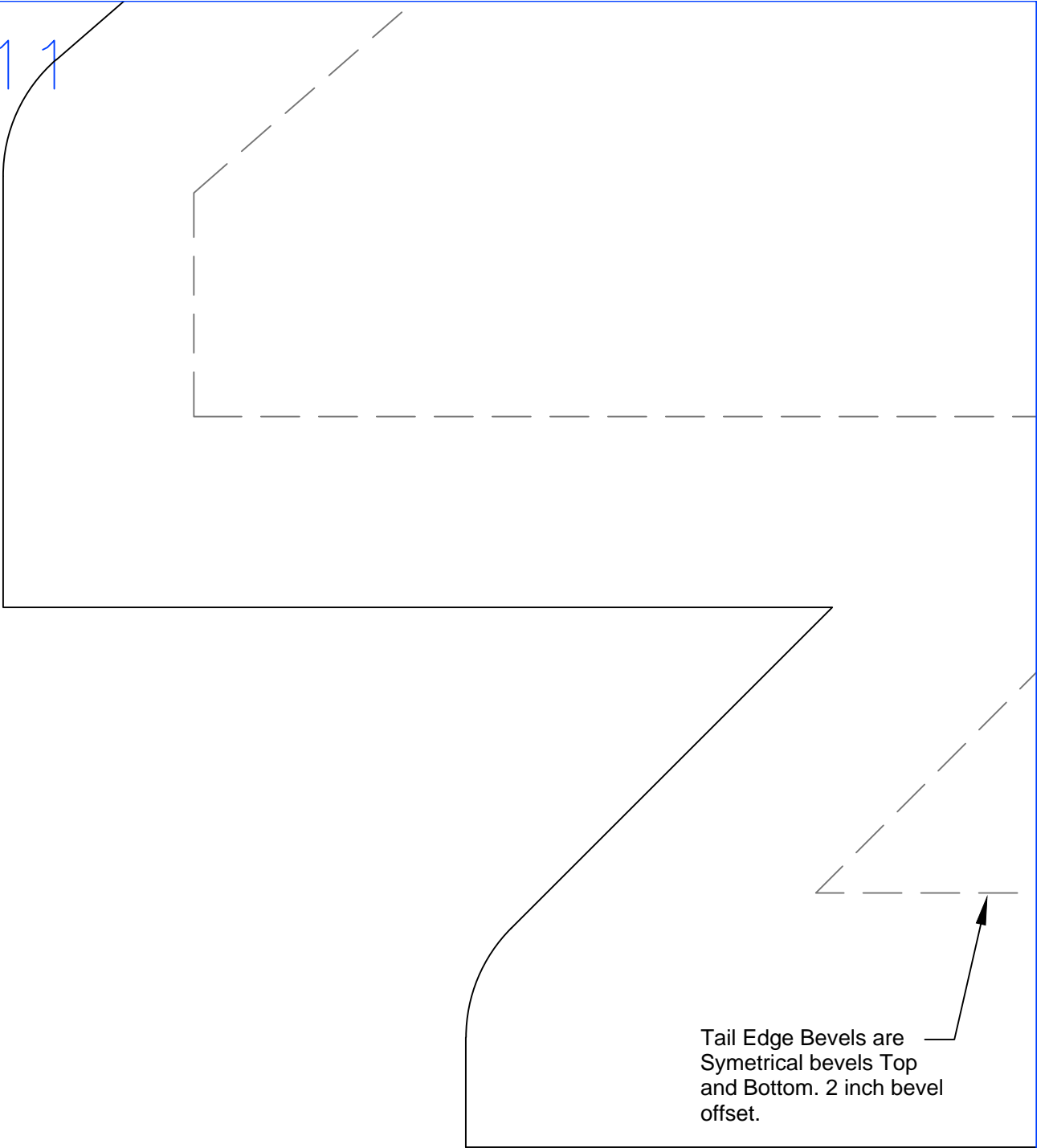


P10

Canopy Piece
(30mm EPP Foam)
Cut and Shape



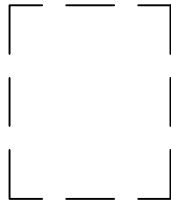
P 11



Tail Edge Bevels are
Symetrical bevels Top
and Bottom. 2 inch bevel
offset.

P12

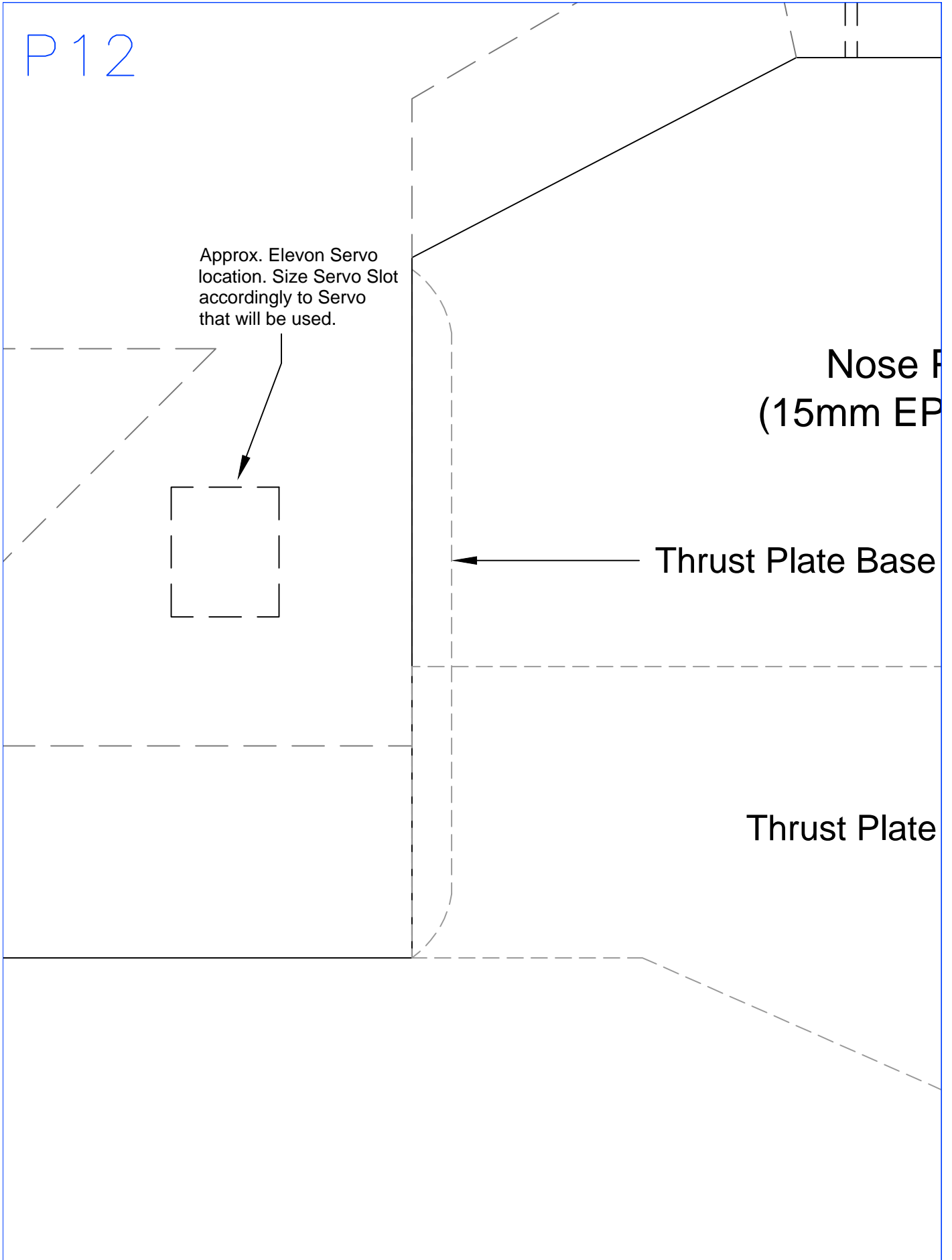
Approx. Elevon Servo location. Size Servo Slot accordingly to Servo that will be used.



Nose F
(15mm EP

Thrust Plate Base

Thrust Plate



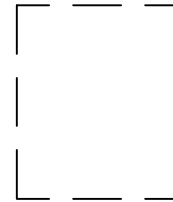
P13

Piece
(P Foam)

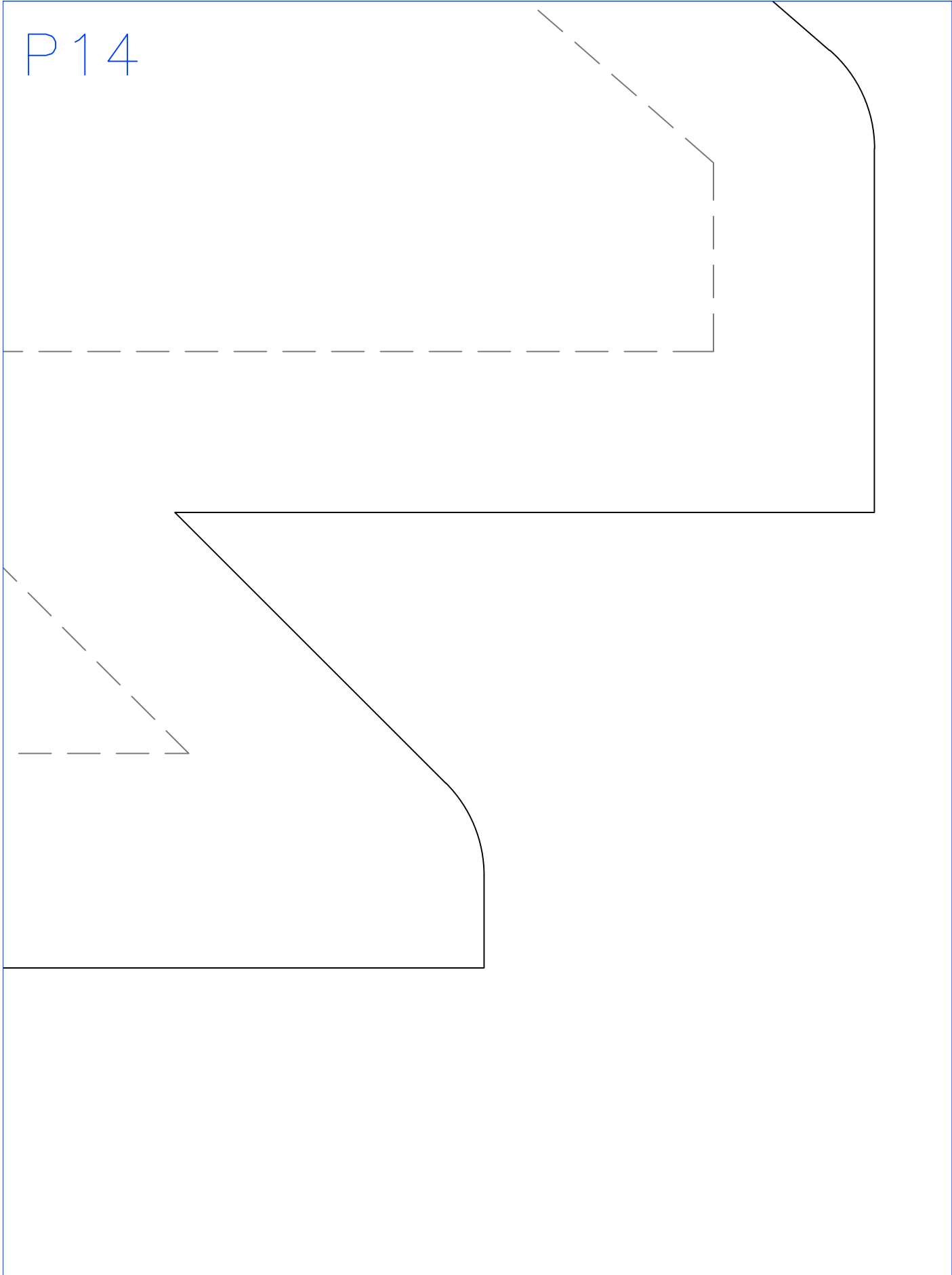
Spars Mount Here →

Mounts Here

Approx. Elevon Servo
location. Size Servo Slot
accordingly to Servo
that will be used.

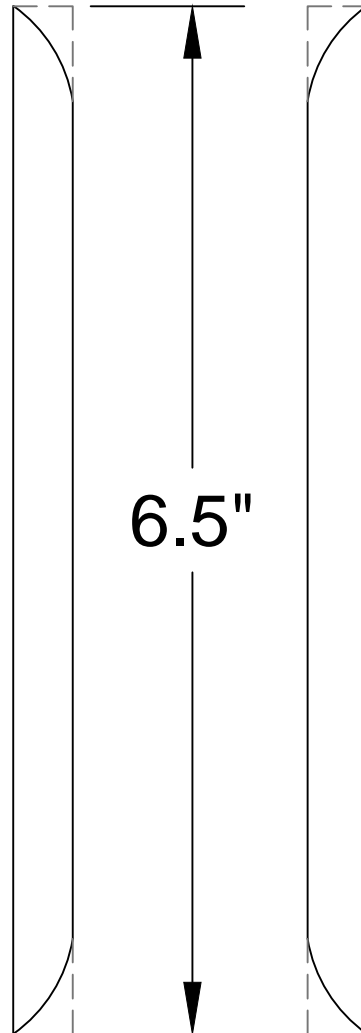
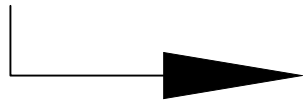


P14



P15

Thrust Plate Base Spars.
(3/8"x1/2" Balsa)
Sand and Bevel Edges
as Shown.



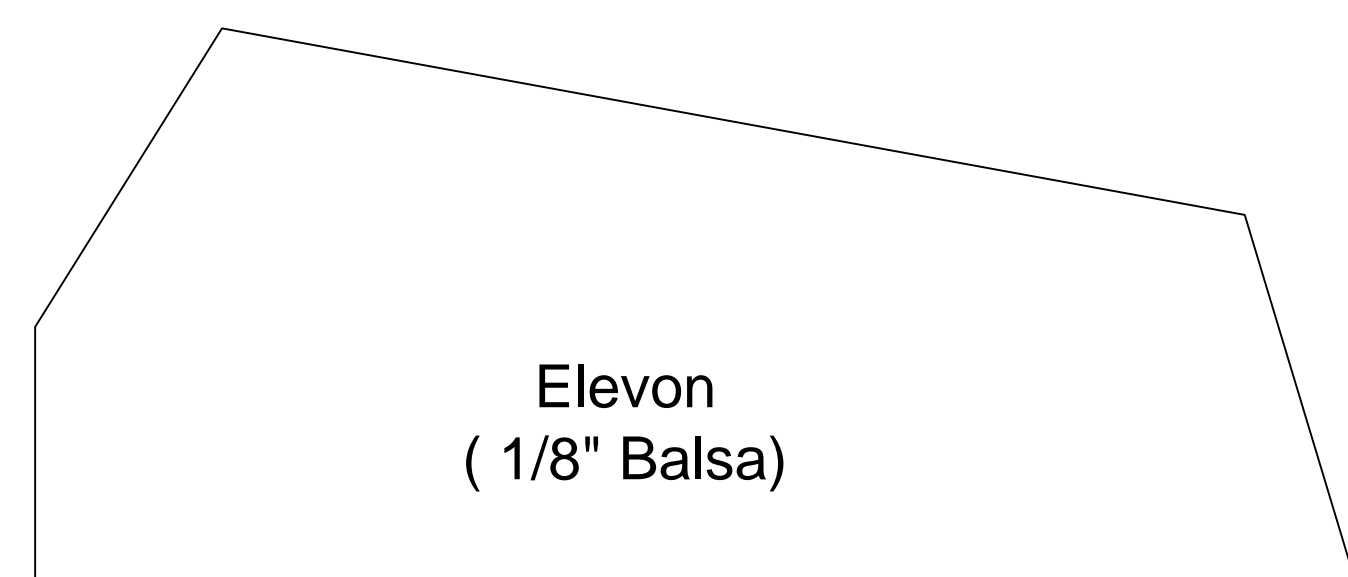
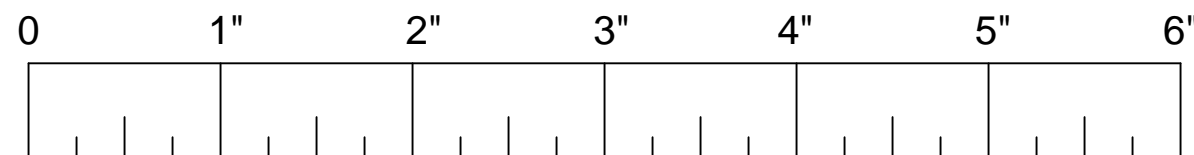
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FF-Nova Jet

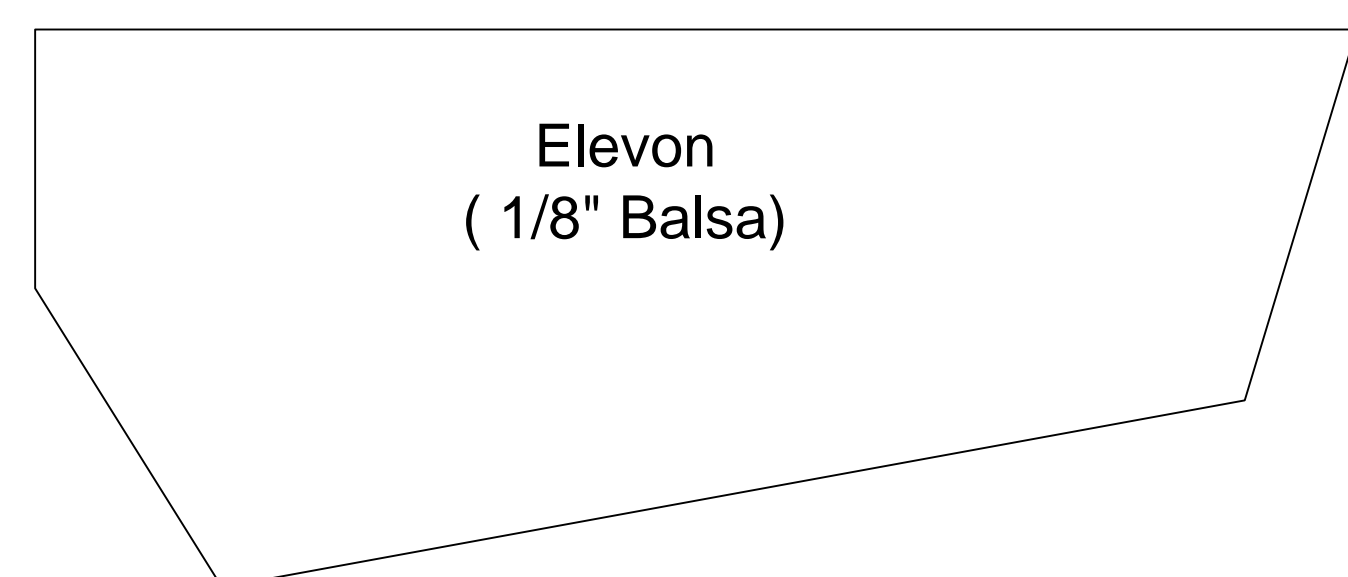
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(NOTE: 1" = 2.54CM)

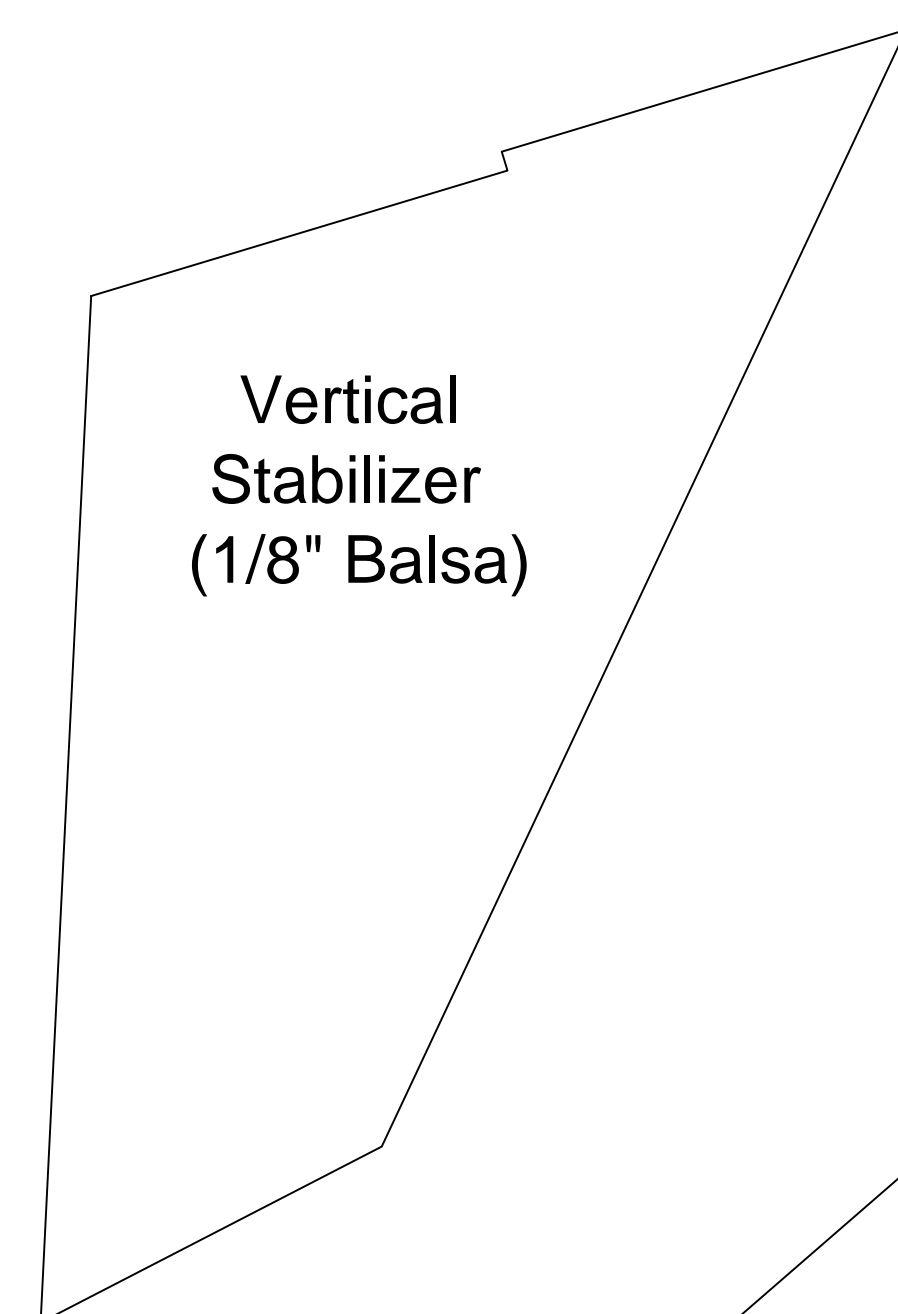
SCALE



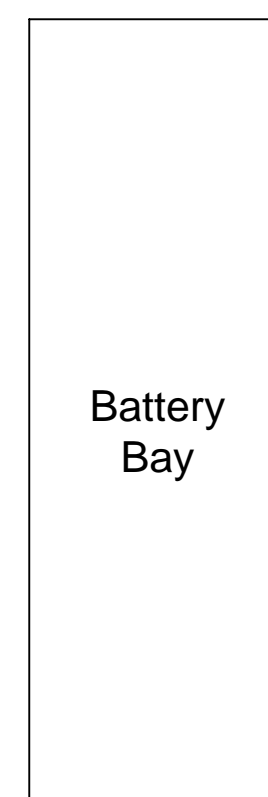
Elevon
(1/8" Balsa)



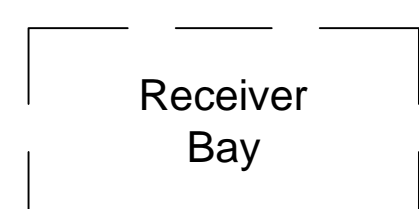
Elevon
(1/8" Balsa)



Vertical
Stabilizer
(1/8" Balsa)

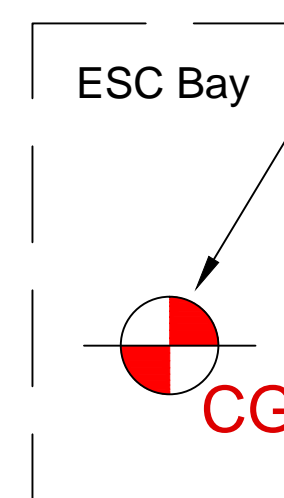


Battery
Bay



Receiver
Bay

Main Wing Piece
(30mm EPP Foam)



ESC Bay

Approximate CG is
14-3/4" back from
the tip of the nose.

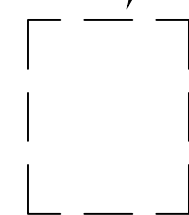
Symmetrical bevels Top
and Bottom. 1.5 inch
bevel offset all edges
except trailing tail edge
bevel.

IT IS RECOMMENDED
TO ADD A CARBON
SPAR IF YOU WILL BE
USING MATERIAL
OTHER THAN 1.9 EPP.

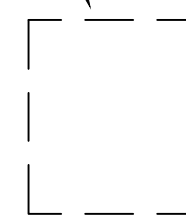
Cut Motor Mount Slots as
shown. Epoxy motor
mount into slots in foam.

Tail Edge Bevels are
Symmetrical bevels Top
and Bottom. 2 inch bevel
offset.

Approx. Elevon Servo
location. Size Servo Slot
accordingly to Servo
that will be used.



Approx. Elevon Servo
location. Size Servo Slot
accordingly to Servo
that will be used.



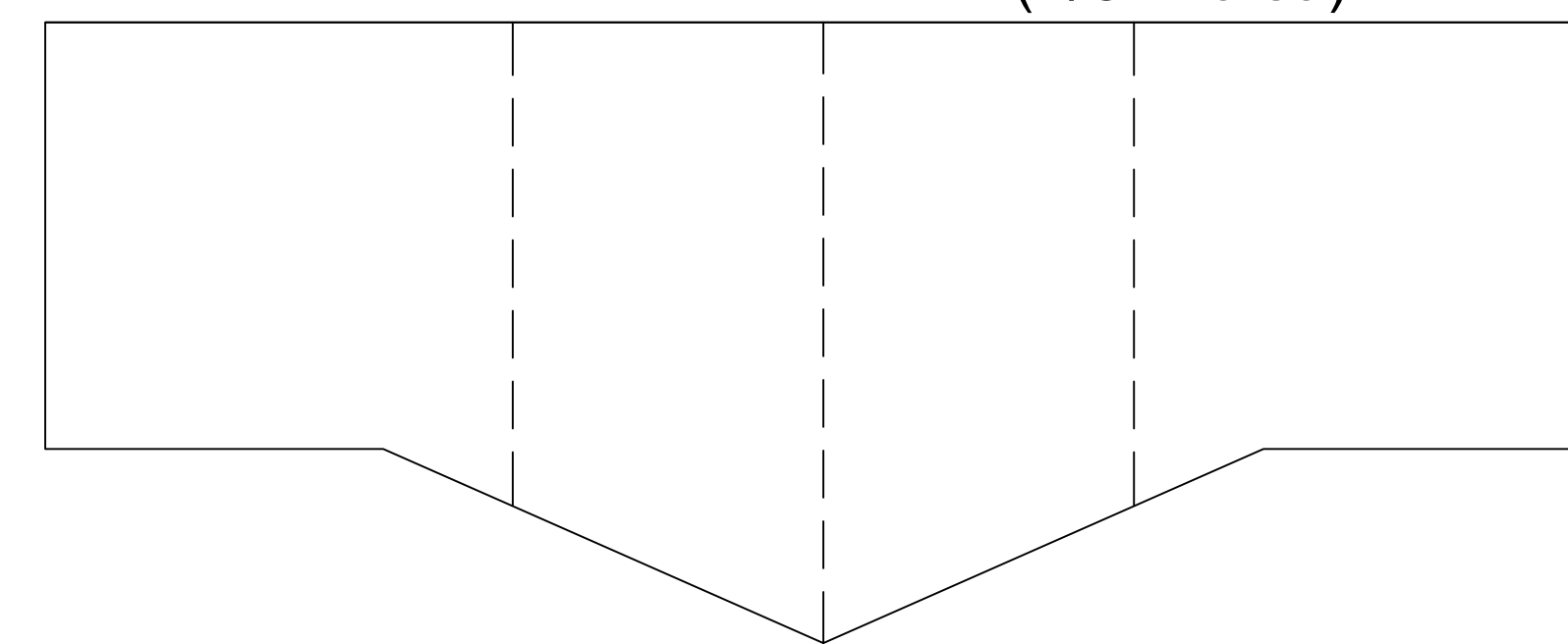
Nose Piece
(15mm EPP Foam)

Thrust Plate Base Spars Mount Here

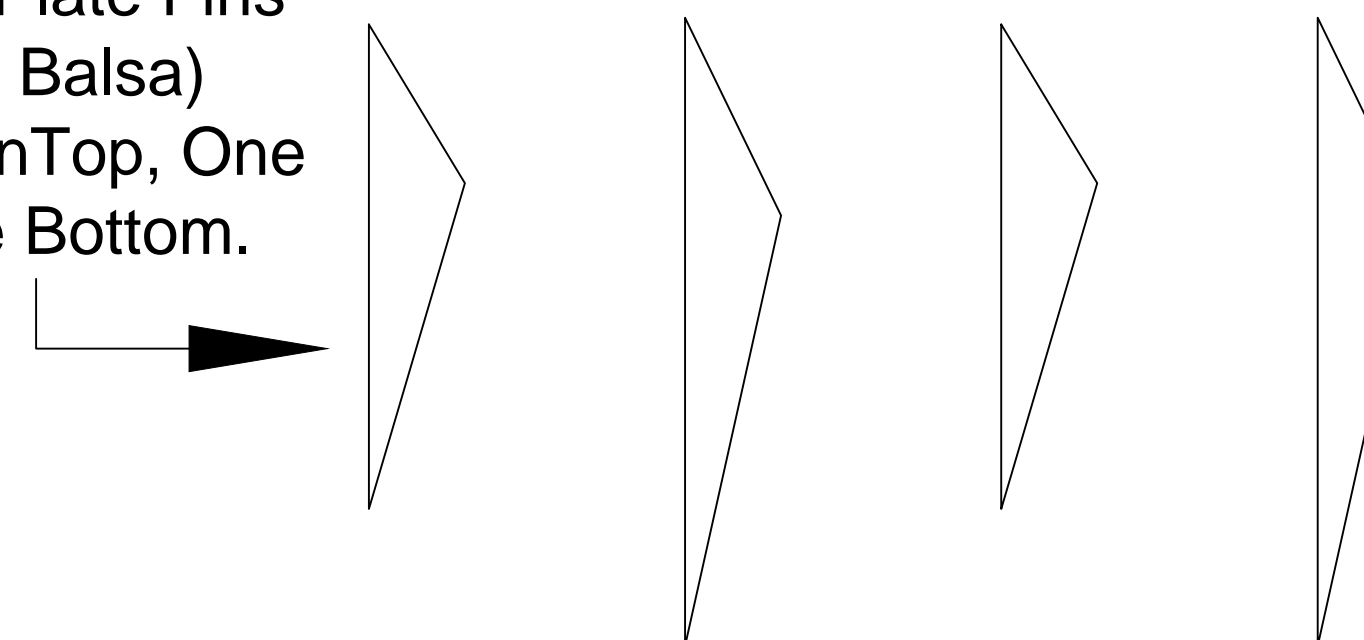
Thrust Plate Mounts Here

Tail Edge Bevels are
Symmetrical bevels Top
and Bottom. 2 inch bevel
offset.

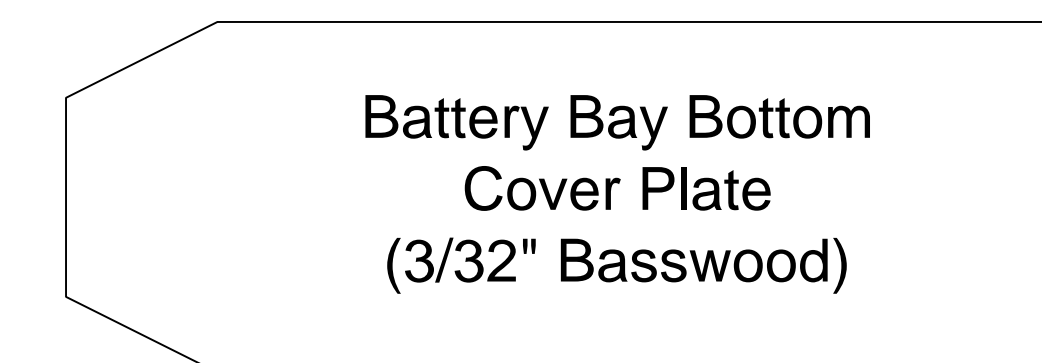
Thrust Plate
(1/8" Balsa)



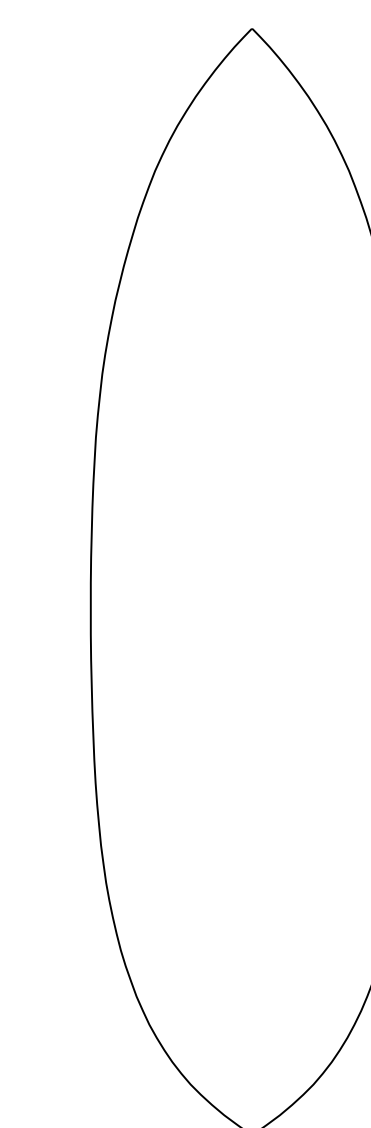
Thrust Plate Fins
(1/8" Balsa)
Three on Top, One
on the Bottom.



Battery Bay Bottom
Cover Plate
(3/32" Basswood)



Canopy Piece
(30mm EPP Foam)
Cut and Shape



6.5"

Thrust Plate Base Spars.
(3/8"x1/2" Balsa)
Sand and Bevel Edges
as Shown.

