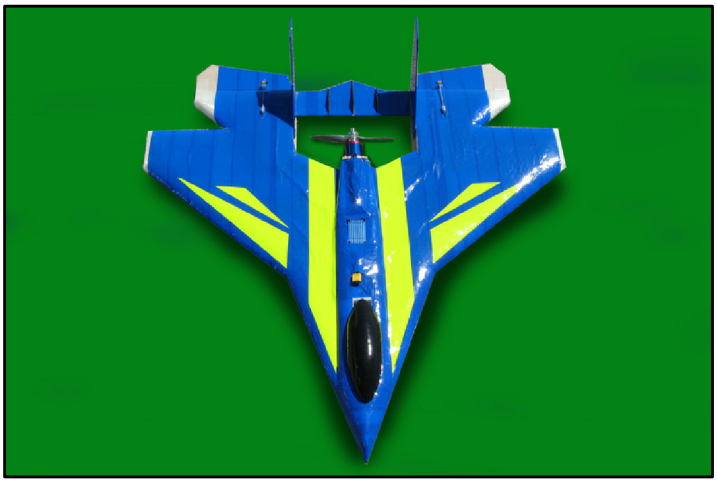
*FOAM, GLUE, TAPE AND A LITTLE IMAGINATION....*



*(RC Model Airplane Construction Plans)*

# rcFoamFighters

## FF-SuperNova

*(Original Design by Paul Petty - Feb. 2010)*

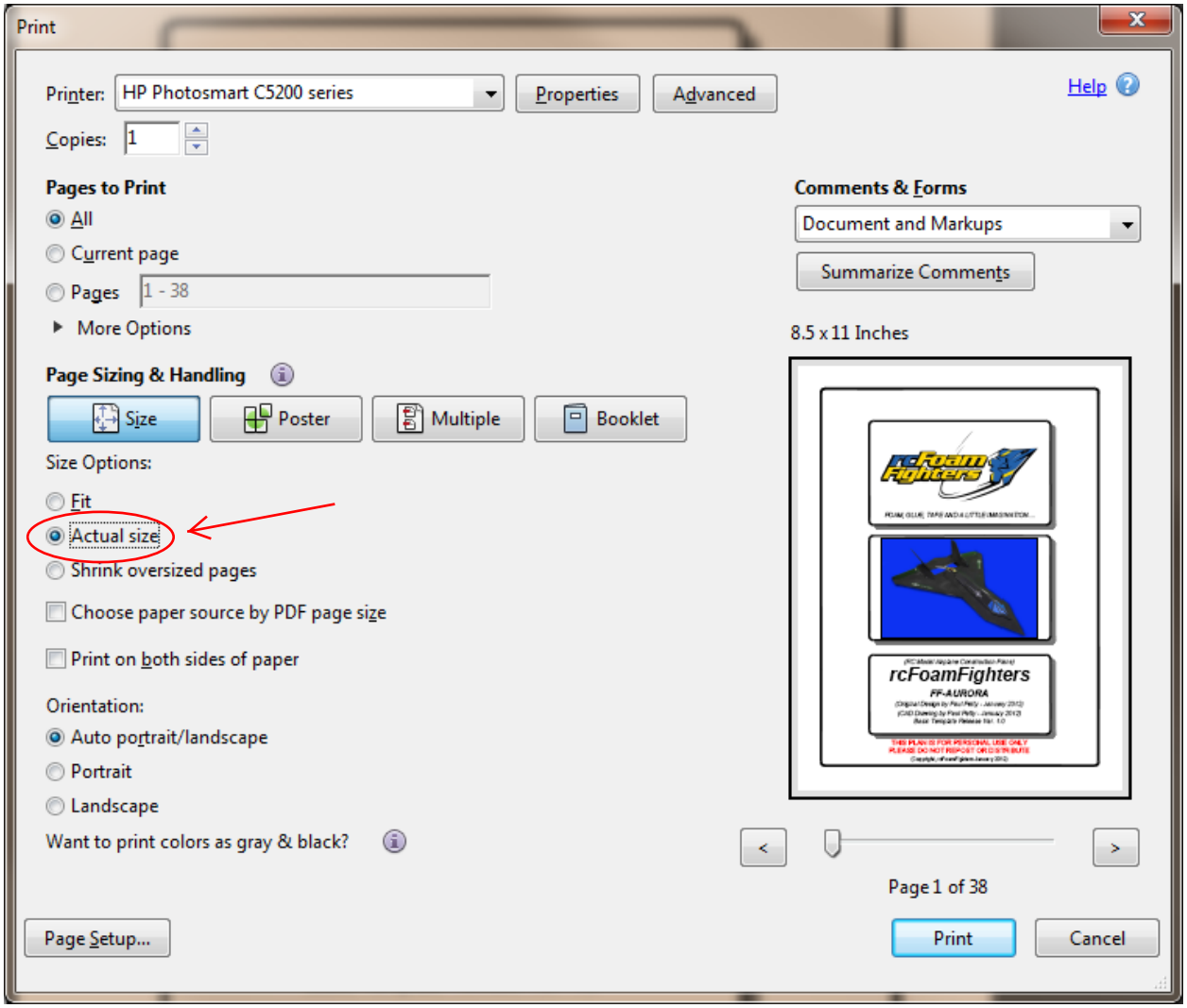
*(CAD Drawing by Paul Petty - Apr 2010)*

*Basic Template Release Ver. 1.0*

FREE PLAN - NOT TO BE SOLD

# 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 -Feb 2010 - Rev 1.0)*
*(CAD Drawing by Paul Petty - Apr 2010)*

(Contact rcFoamFighters at: admin@rcfoamfighters.com)
(Please Visit Our Blog at: http://rcfoamfighters.com/blog/)


Basic Specs as built by rcFoamFighters:

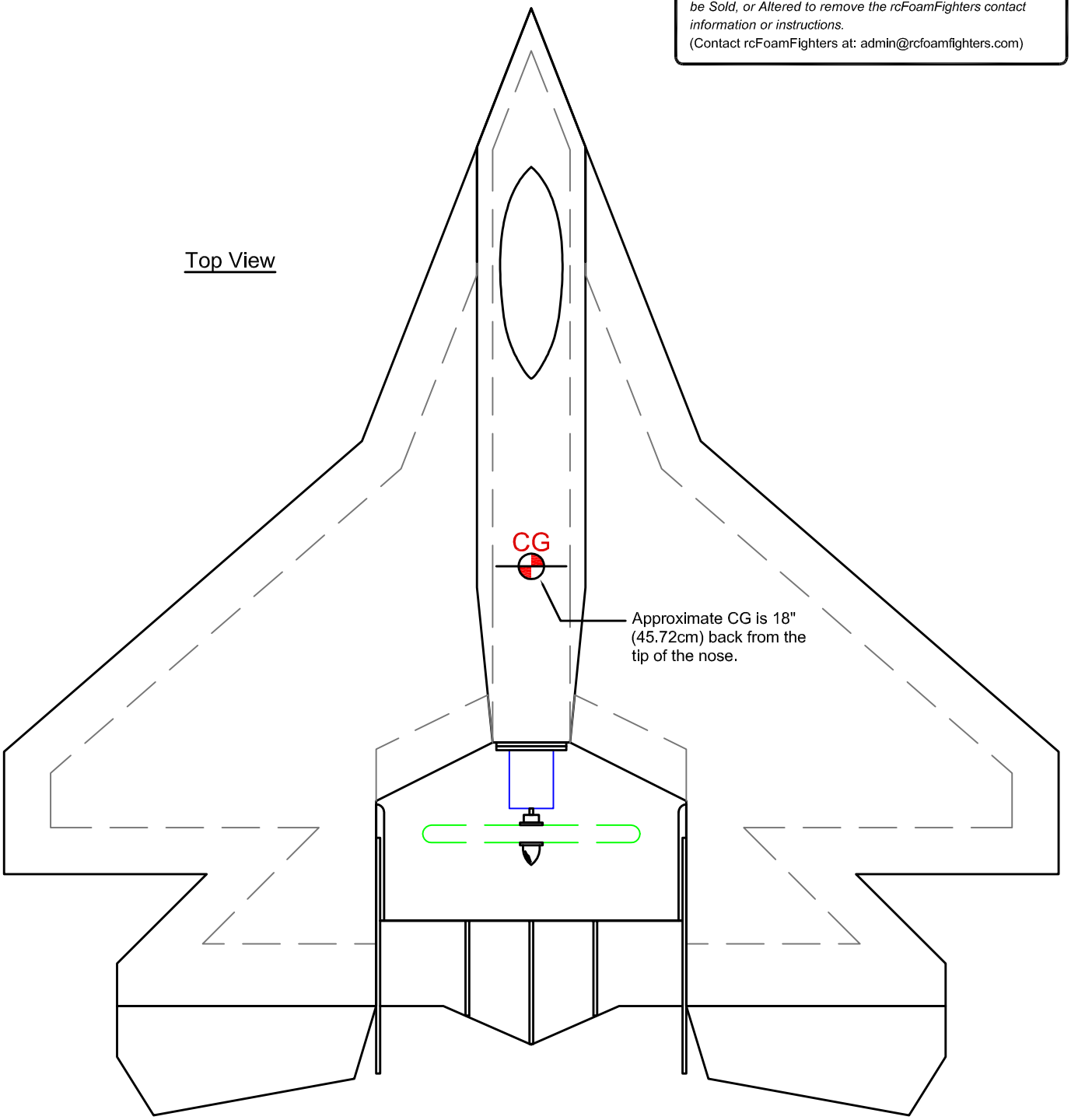
Wingspan: 34 Inches (86.36cm)
Length: 35.7 Inches (90.68cm)
All Up Weight (AUW): 48.6oz. (1377.81gms)
Tested Top Speed: 143mph (230.087kph)

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 fiberglass weave.

## Copy Disclaimer



Top View



## Recommend Parts:

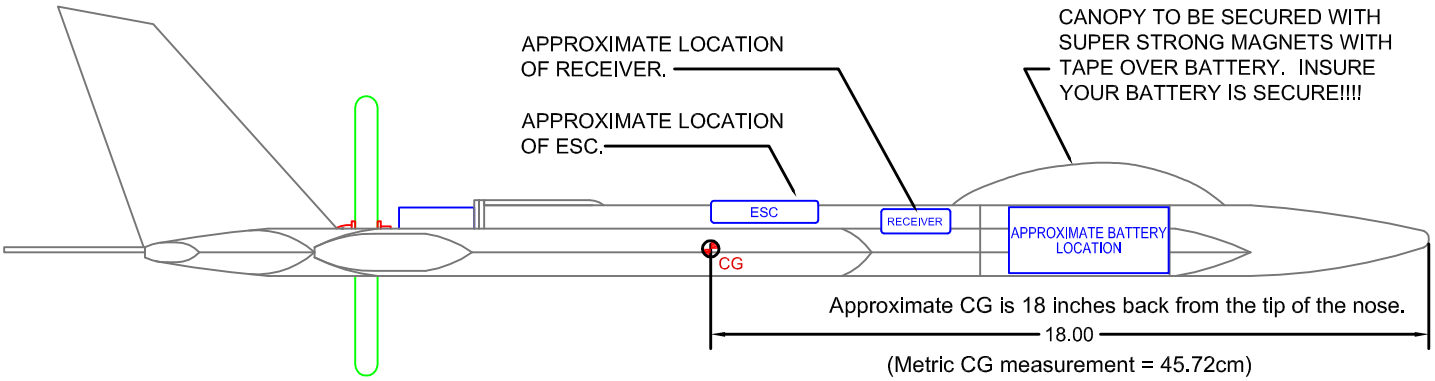
PERFORMANCE SETUP (130+mph)

Motor: TURNIGY 3648-1450 (1600 Watt Brushless Outrunner)
ESC: TURNIGY 100A Brushless ESC
Prop: APC 7X8 SPORTS PROP
Battery: 2650mA 5S (40C recommended)
Servos: 2 Each Metal Gear
Radio & Receiver: Any 4-channel or better (2.4ghz preferred)

Plane was originally designed to be made from 1ea 24x36 Sheet of 30mm 1.9 EPP Foam and 1ea 12x36 Sheet of 15mm 1.9 EPP Foam. Foam was then covered in Henry's style fiberglass weave and 3M 90 adhesive. No spars were required. Other materials than EPP may be used, but carbon fiber or wood spars will be required.

## Disclaimer (Please Read):

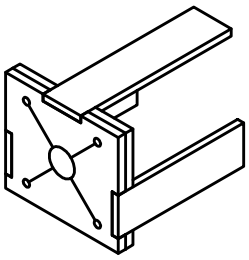
- This is a design template for a high performance, high speed RC aircraft. This plane should only be built and flown by experienced pilots with adequate skill to fly fast, maneuverable planes.
- DO NOT fly this plane where it can endanger people, livestock or property.
- ANY PERSONS DECIDING TO BUILD 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.



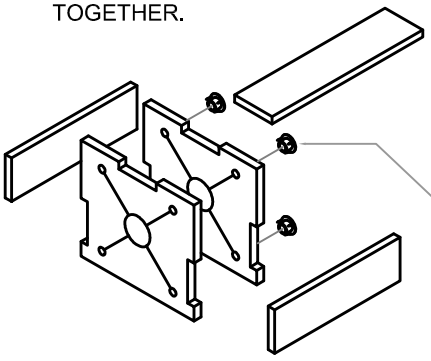

## SCRATCH BUILT BASSWOOD MOTOR MOUNT (MADE FROM 1/8" PLYWOOD SHEETS)

SEE NEXT SHEET FOR MOUNT TEMPLATES

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



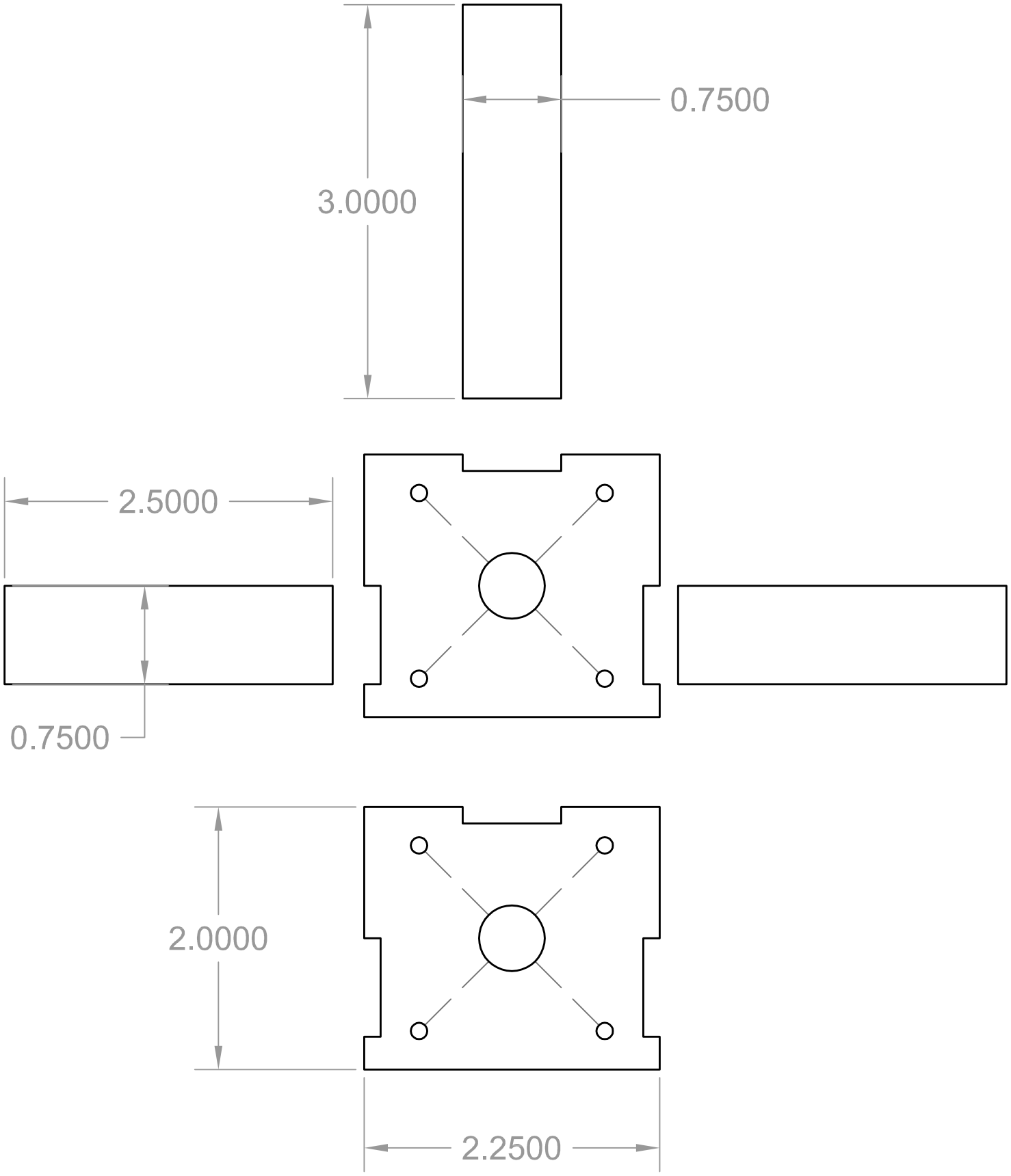
ASSEMBLED VIEW



EXPLODED VIEW

INSERT 4 EACH, 4-40 BLIND NUTS INTO BACK OF MOTOR MOUNT PLATE. INSURE HOLE PATTERN IS DRILLED TO MATCH MOTOR TO BE USED. (USE 4 EACH 4-40 HEX BOLTS TO SECURE MOTOR TO MOUNT.)

# SCRATCH BUILT PLYWOOD MOTOR MOUNT TEMPLATES (MADE FROM 1/8" PLYWOOD SHEETS)



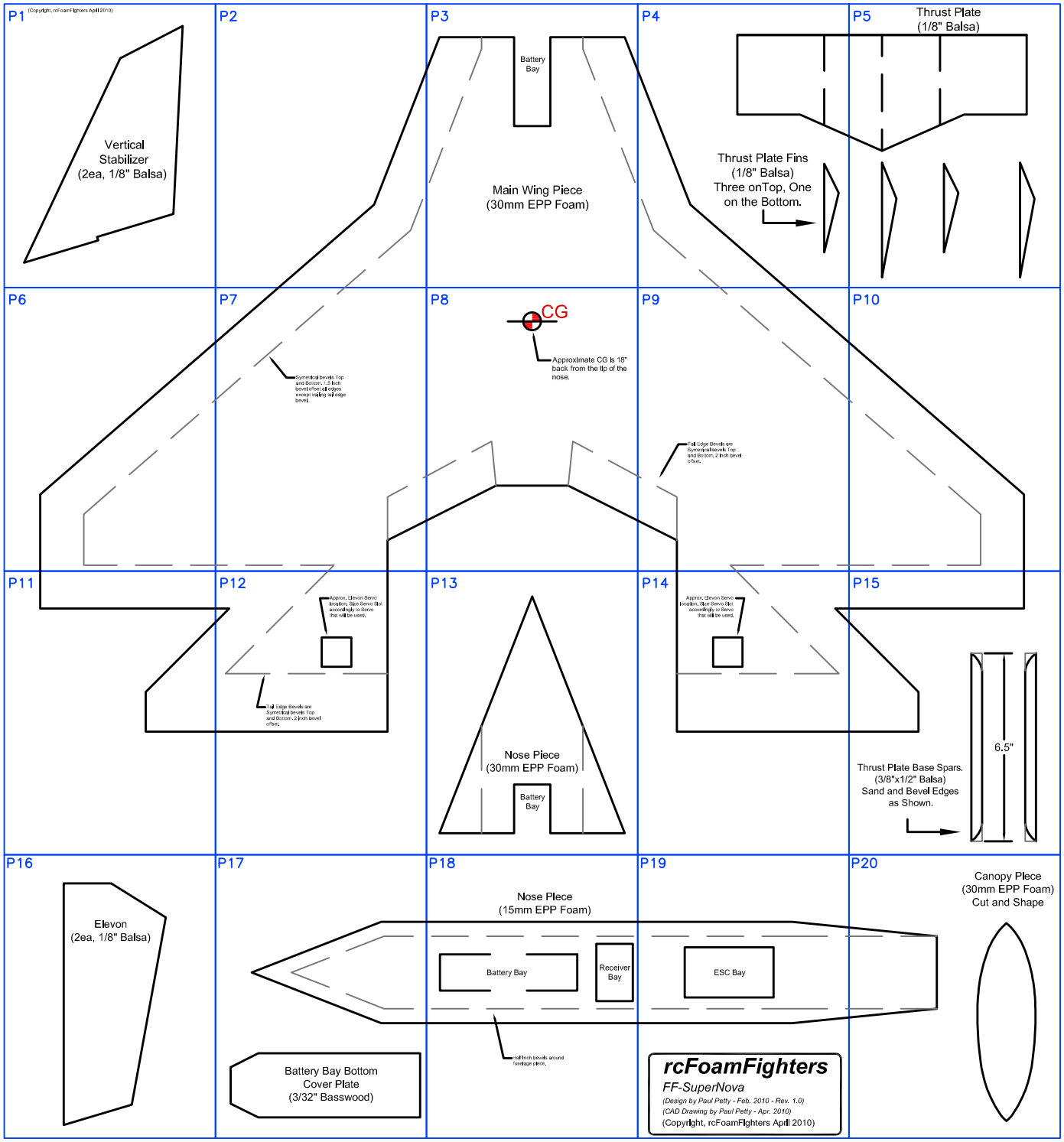
# TEMPLATE ASSEMBLY KEY PLAN

## rcFoamFighters

*FF-SuperNova*

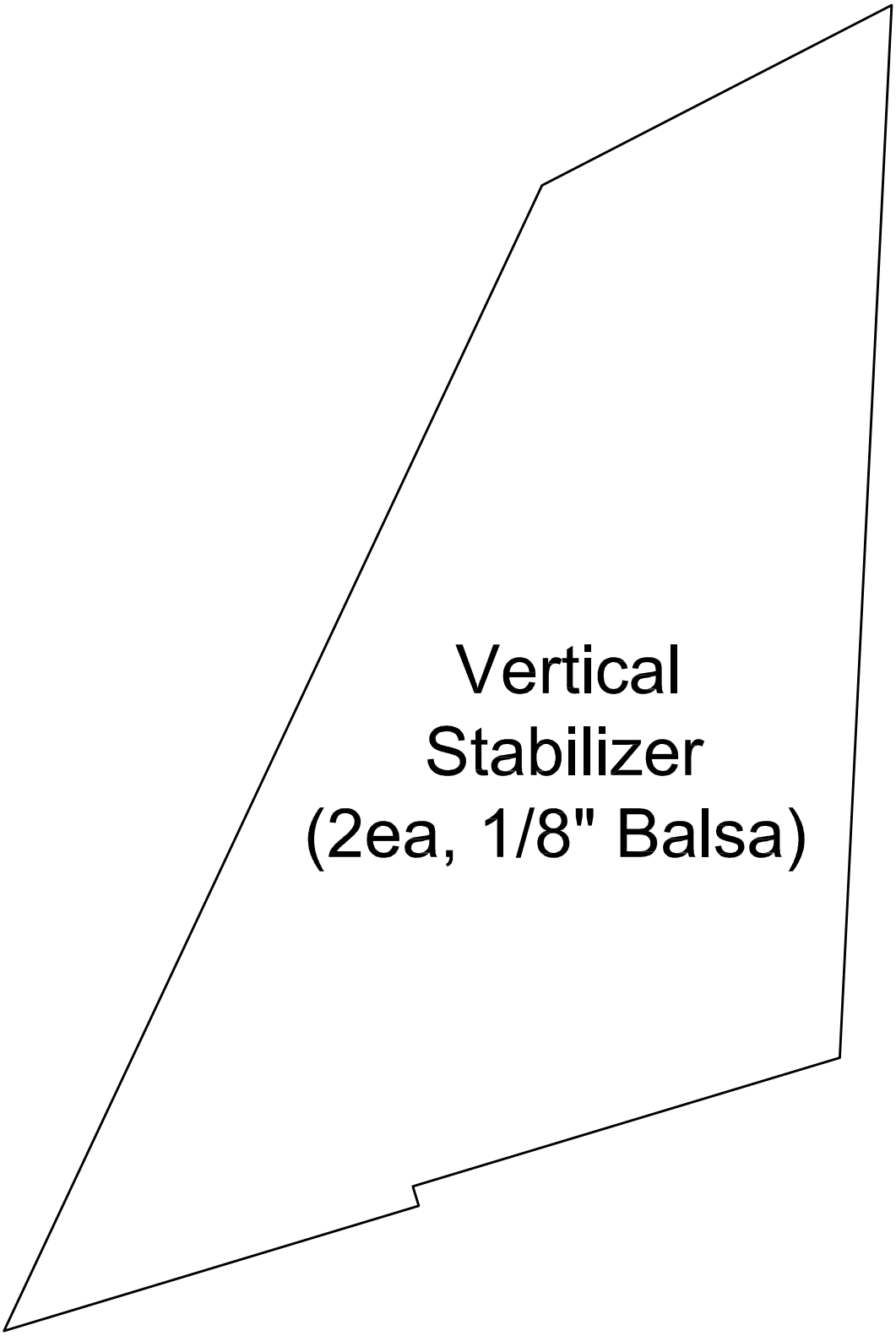
*(Design by Paul Petty - Feb. 2010 - Rev 1.0)*
*(CAD Drawing by Paul Petty - Apr. 2010)*


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

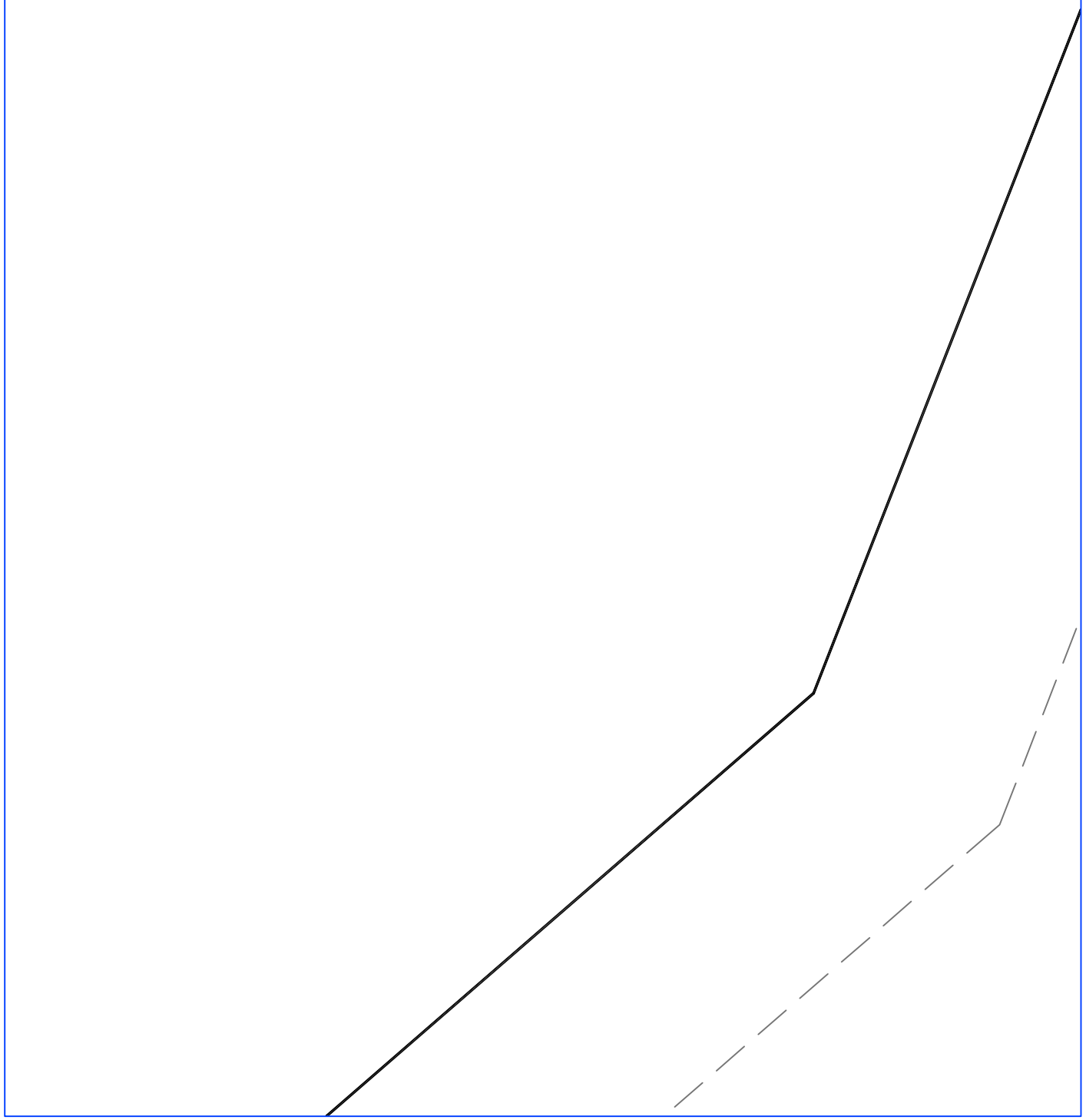


P 1

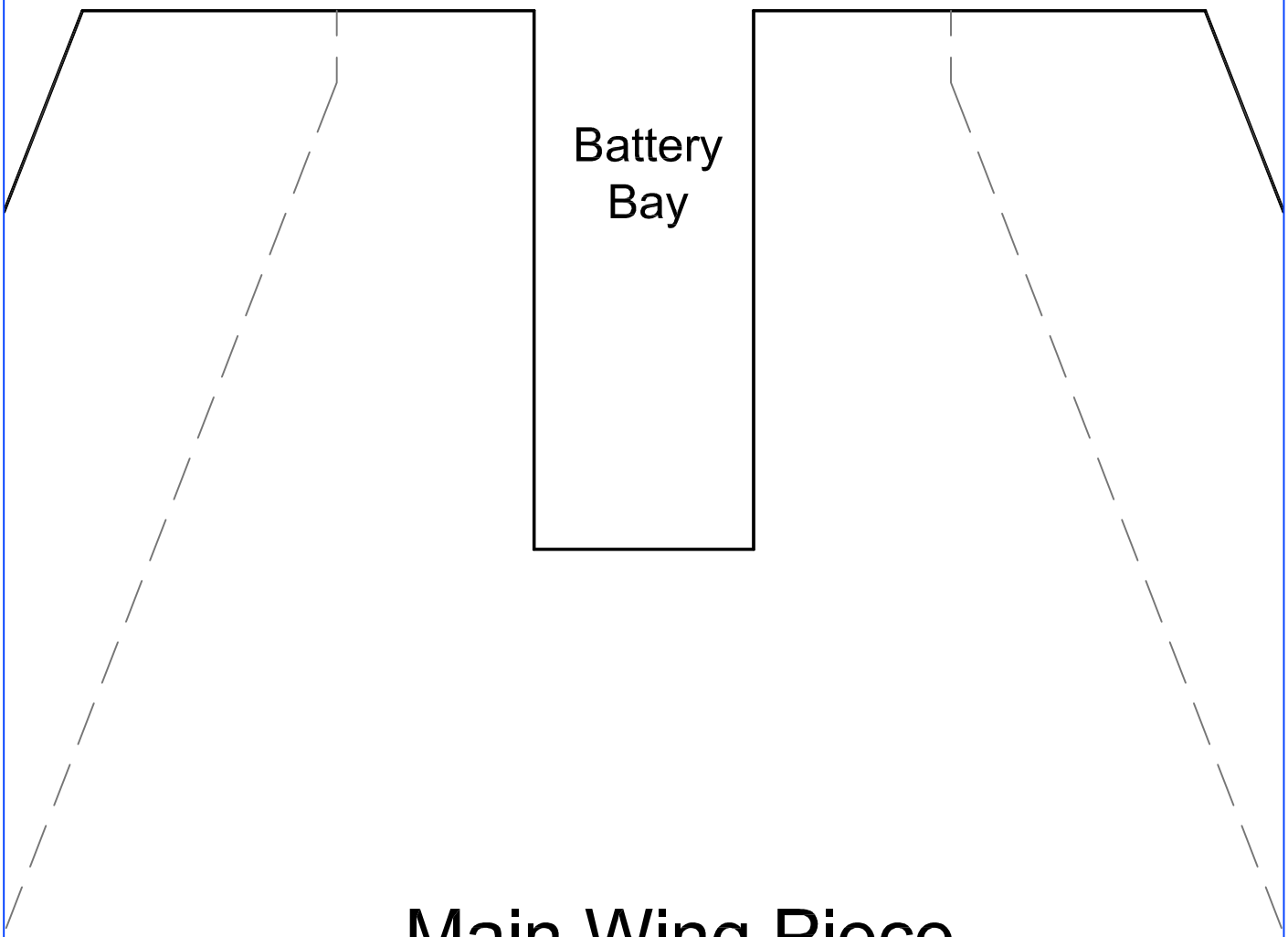




P 2

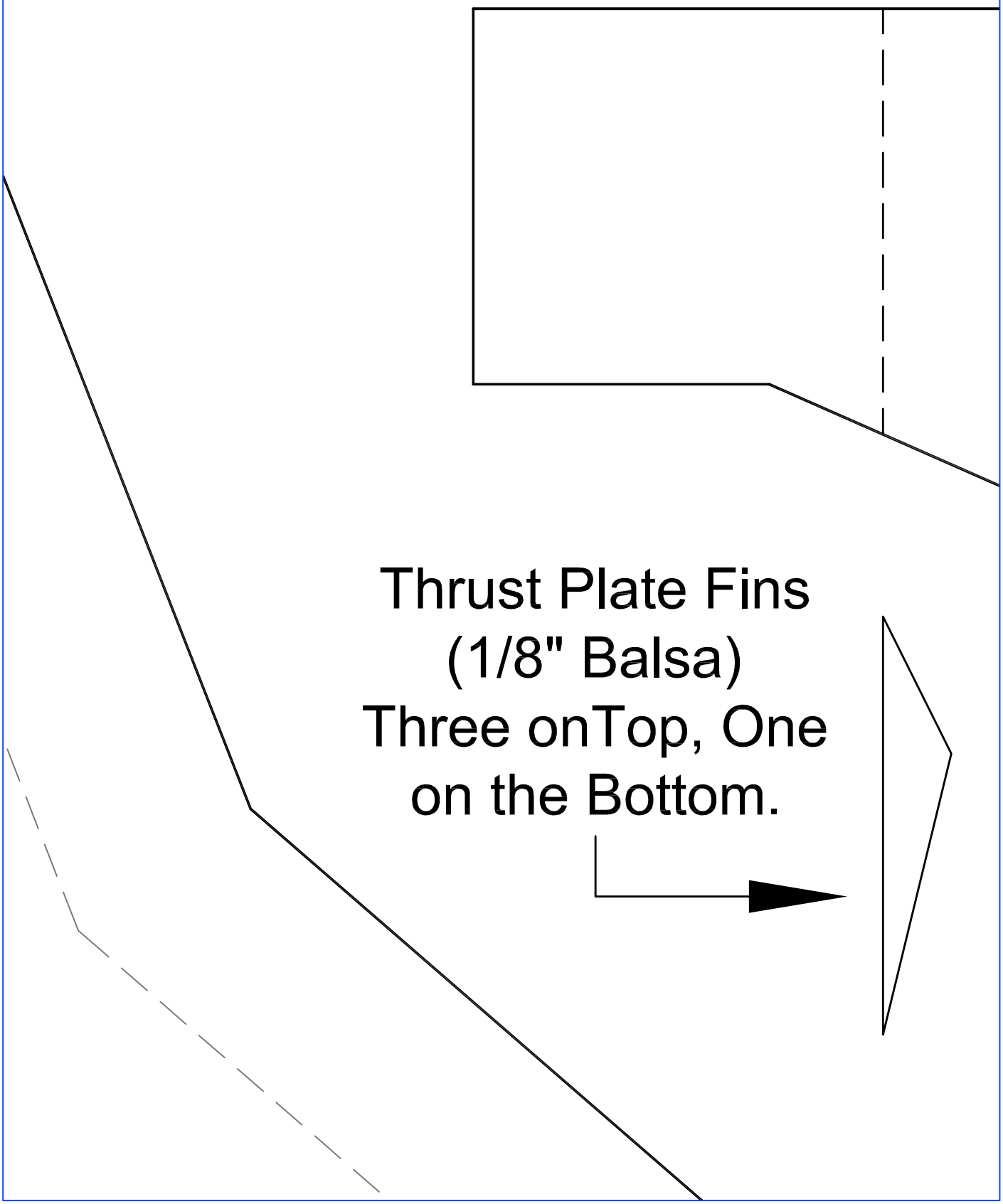


P3



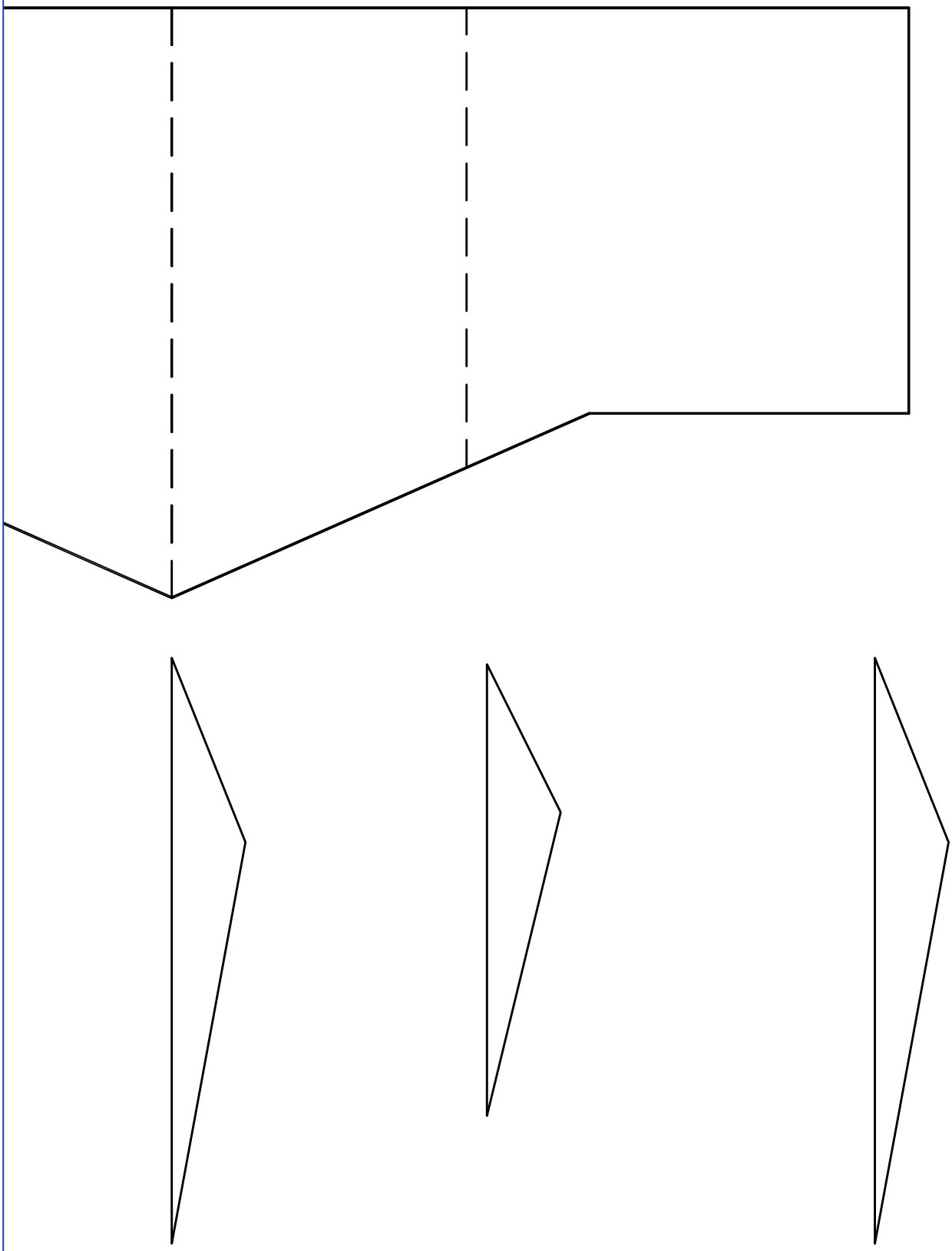

# Main Wing Piece
# (30mm EPP Foam)

P 4

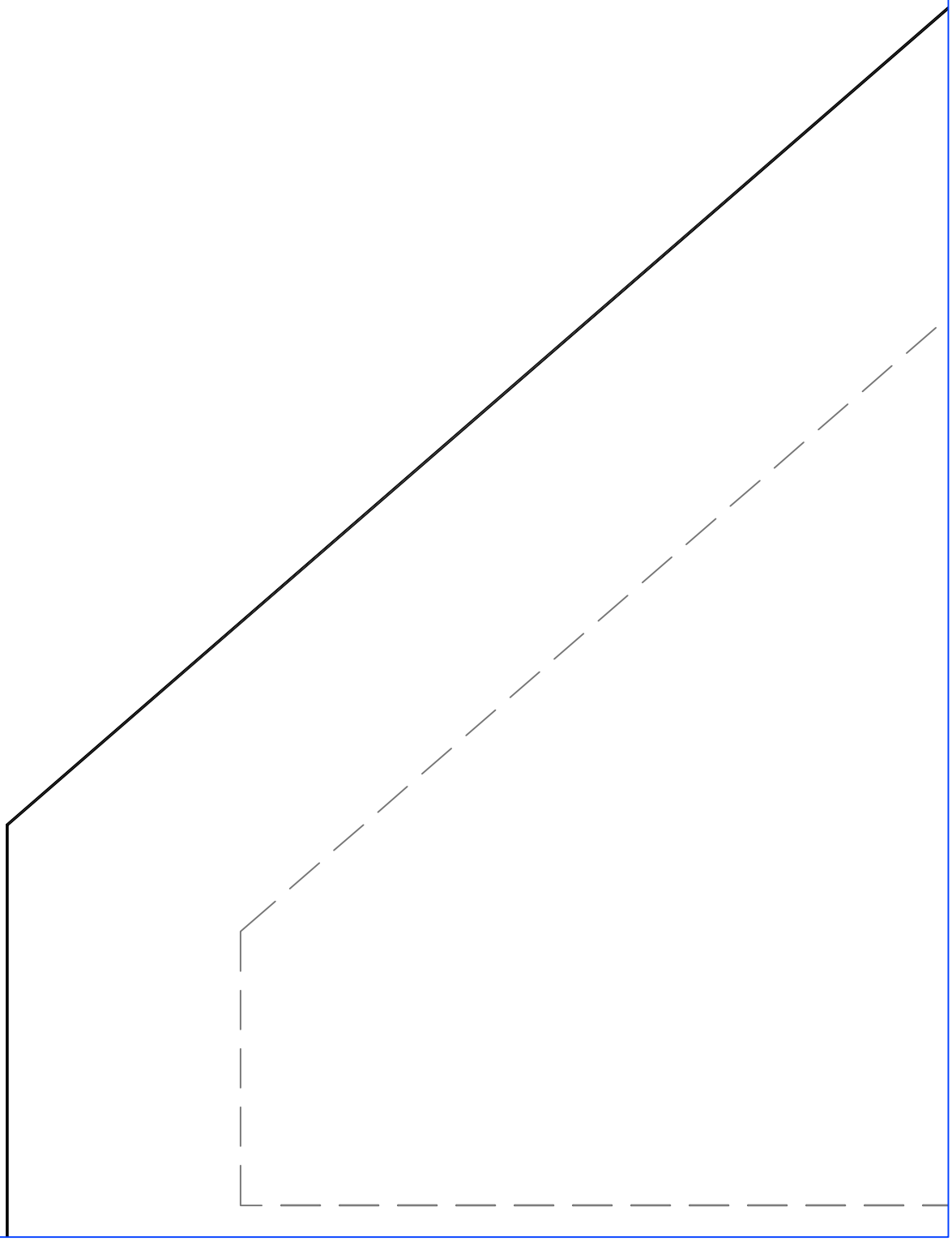


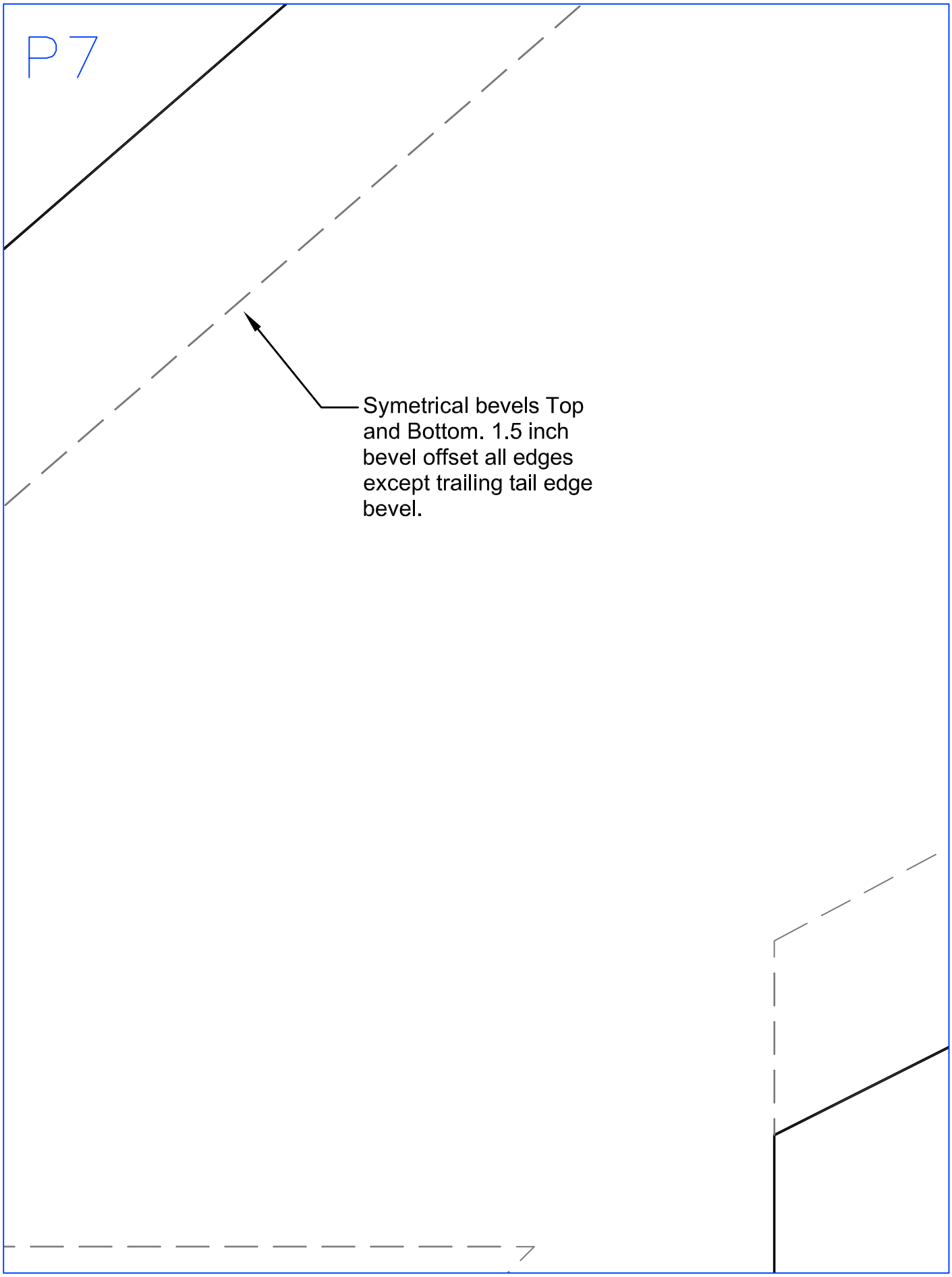
P5

# Thrust Plate
# (1/8" Balsa)

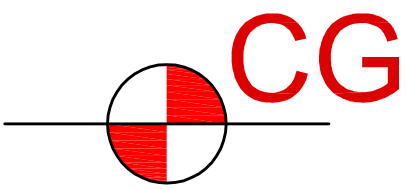


P6

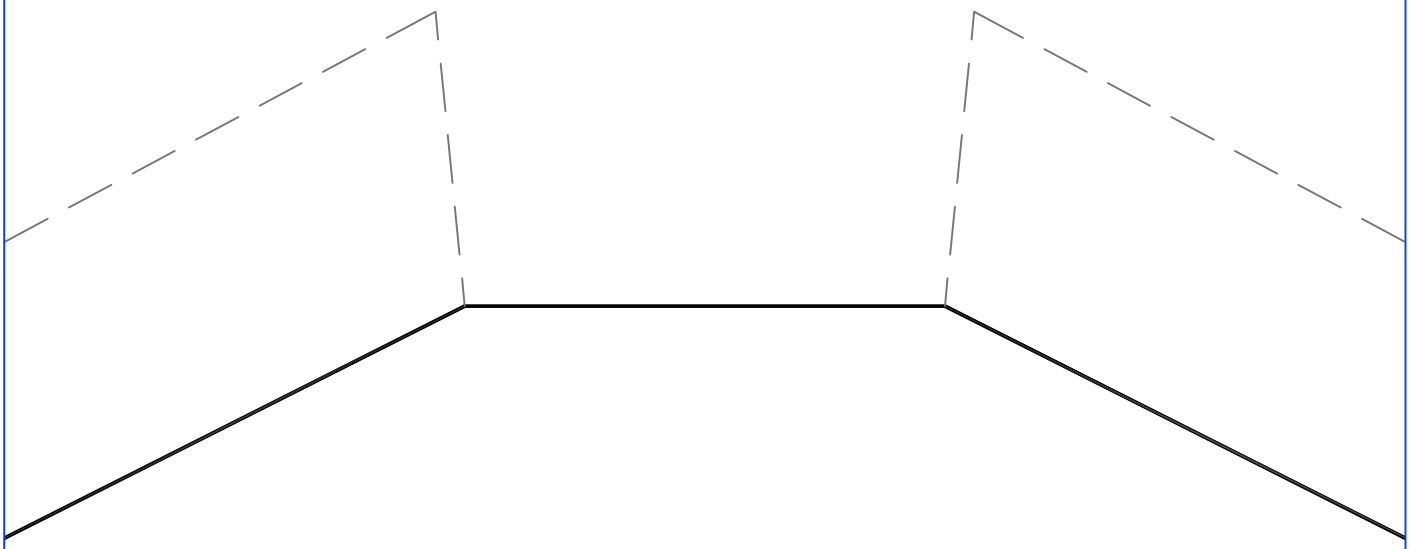



P7
Symetrical bevels Top and Bottom. 1.5 inch bevel offset all edges except trailing tail edge bevel.

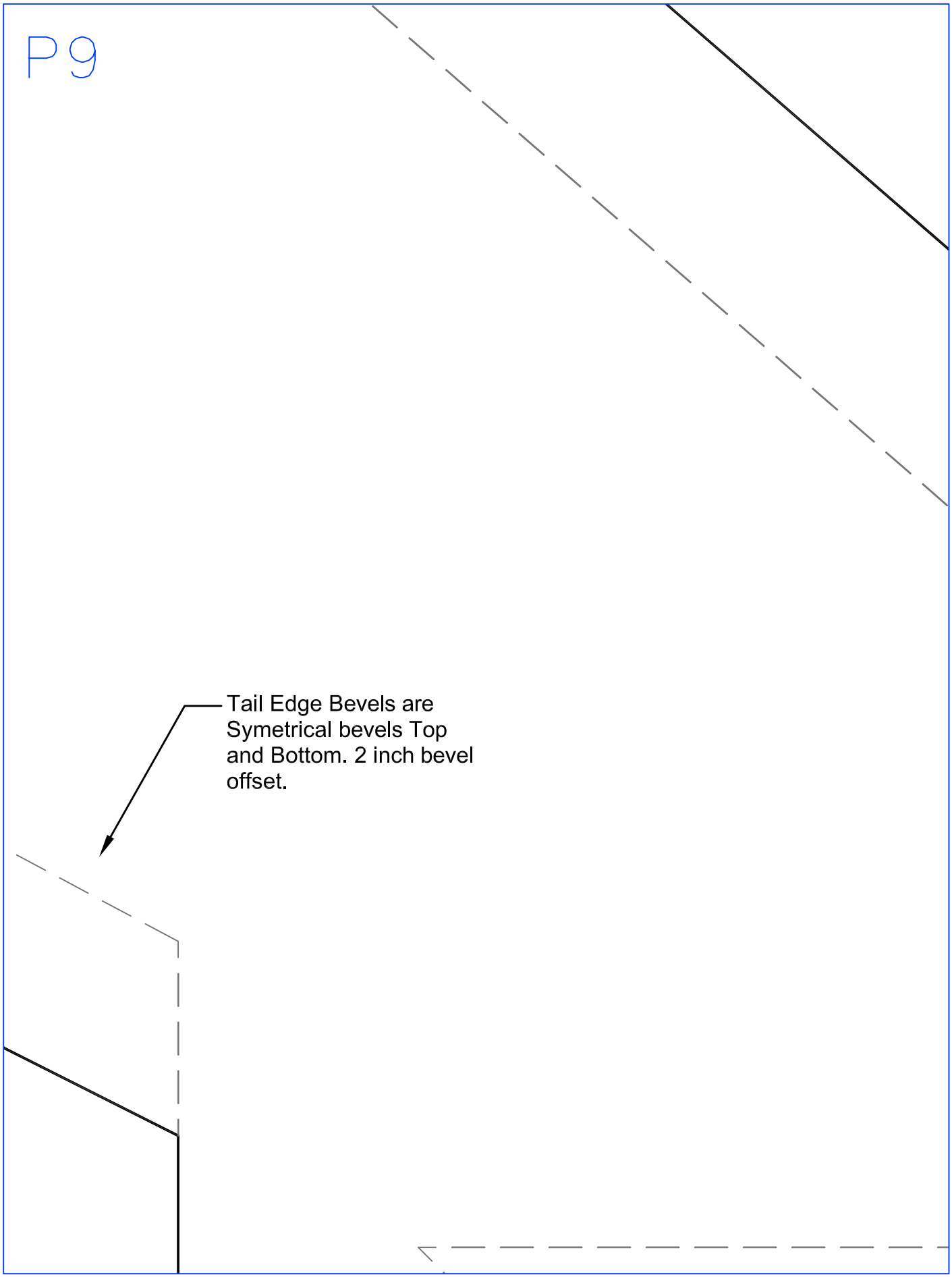
P8



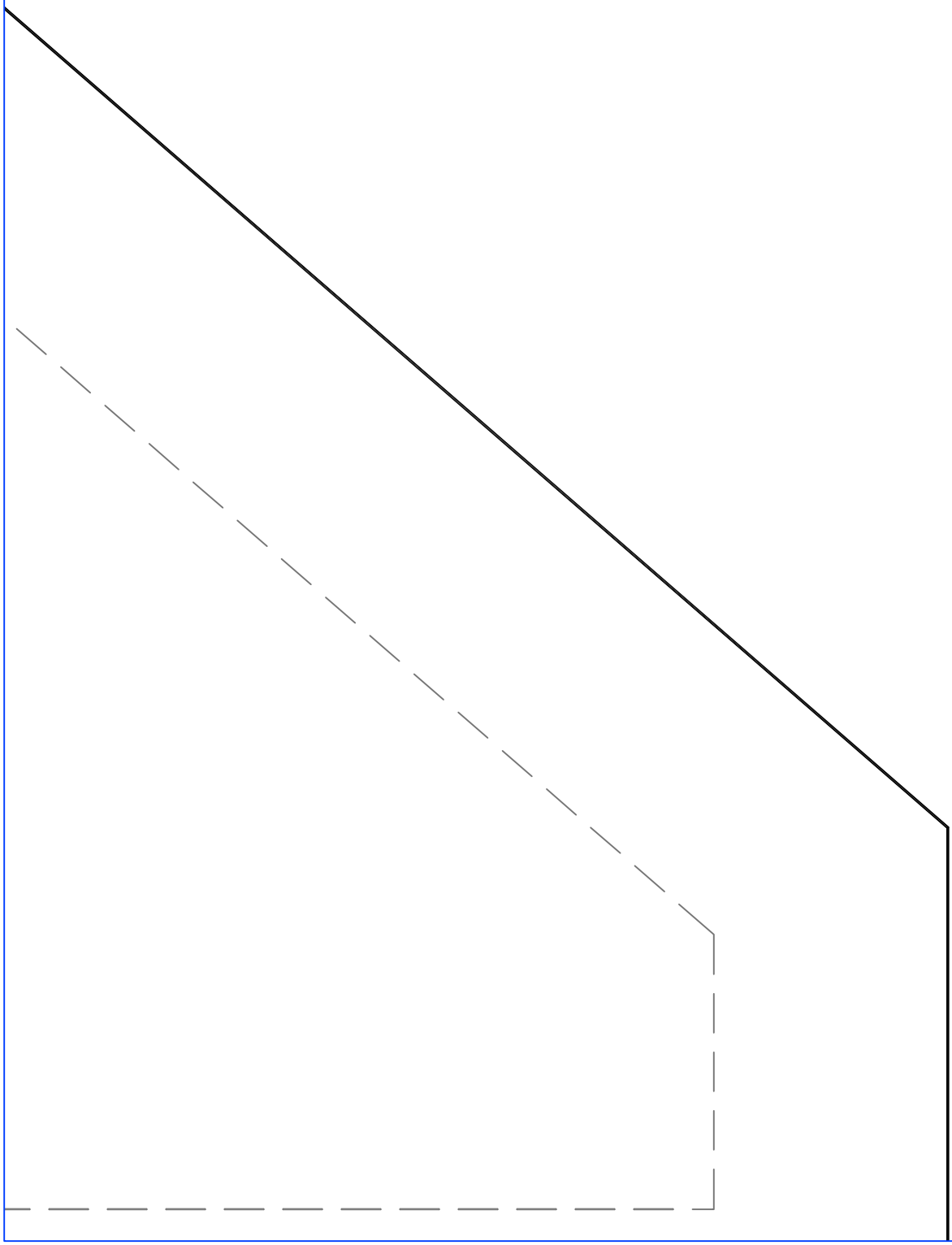

Approximate CG is 18" back from the tip of the nose.



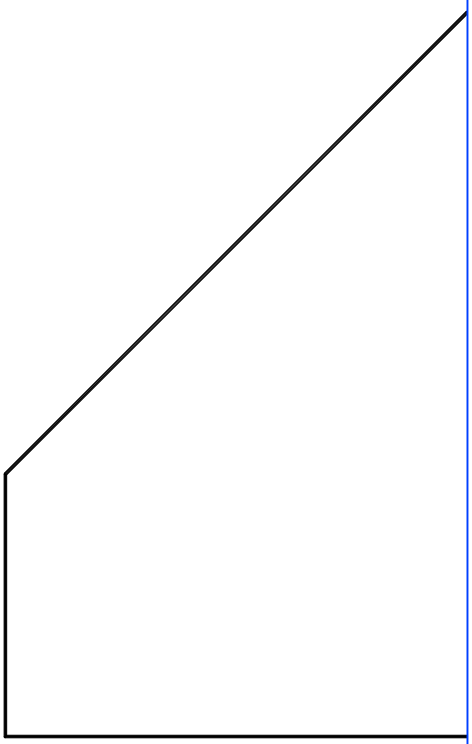
P9


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

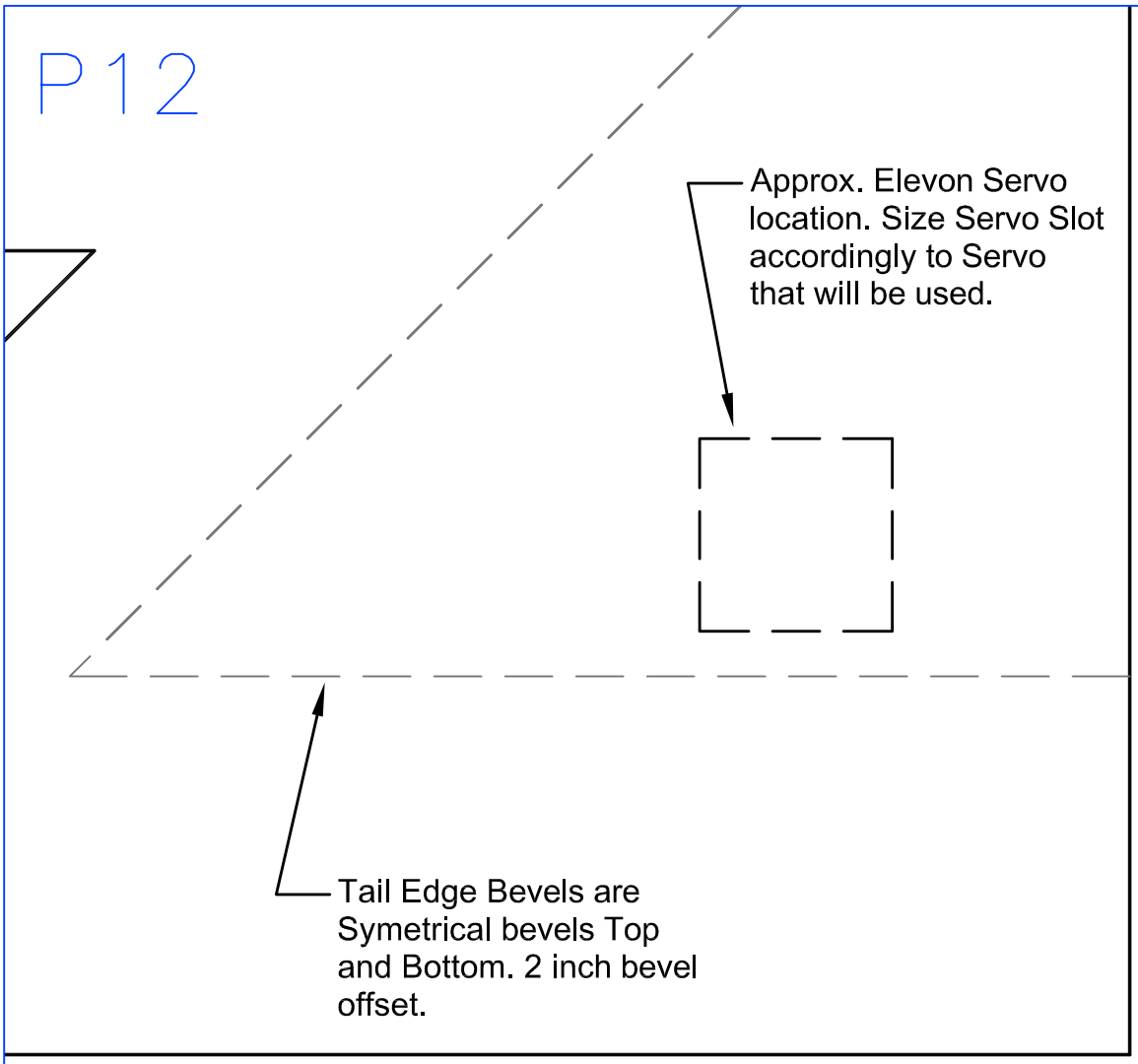
P10



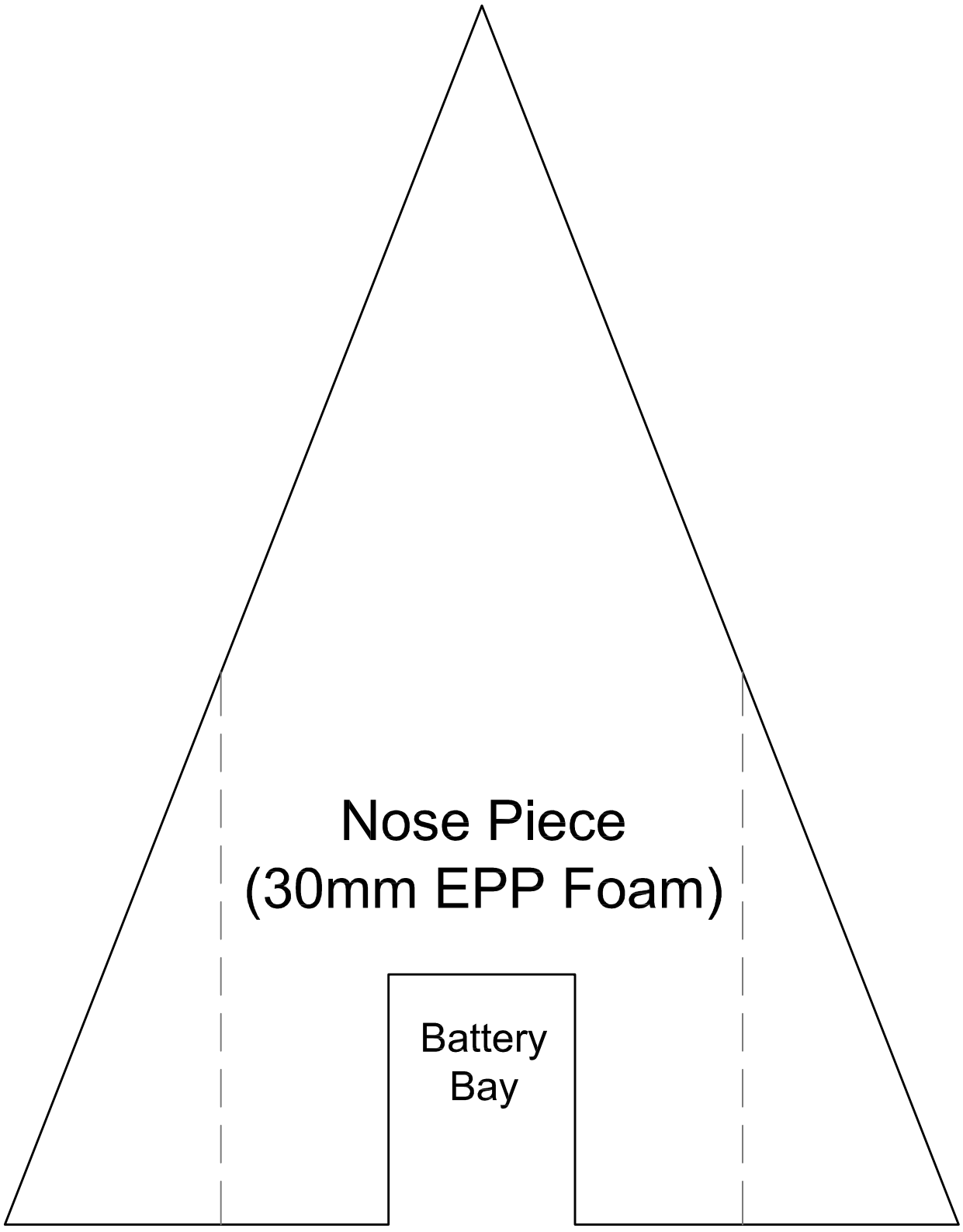
P11



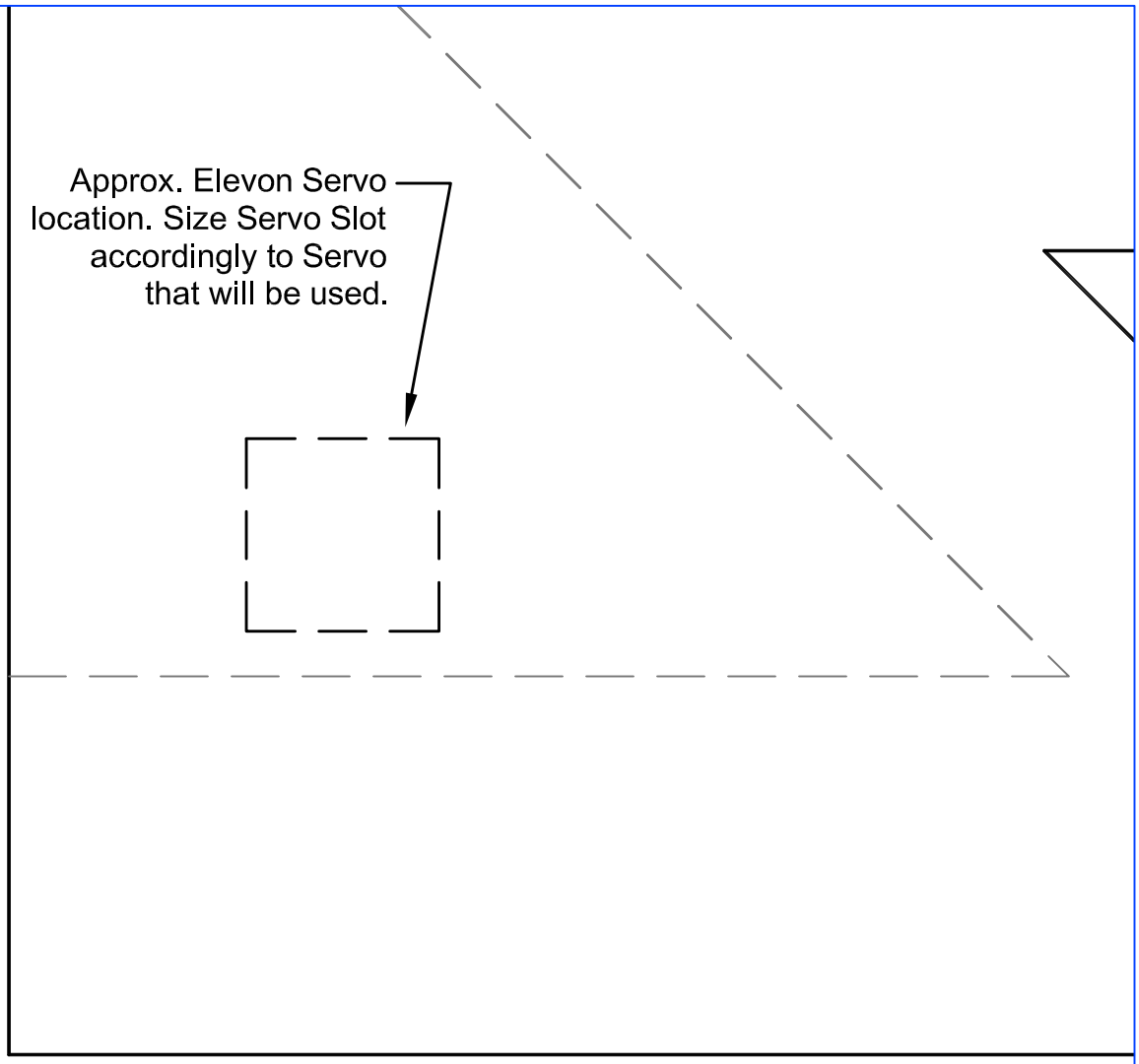
P12


Approx. Elevon Servo location. Size Servo Slot accordingly to Servo that will be used.
Tail Edge Bevels are Symetrical bevels Top and Bottom. 2 inch bevel offset.

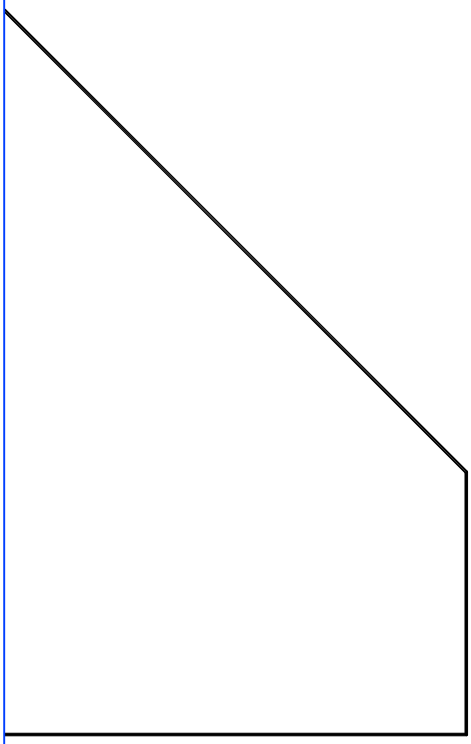
P13

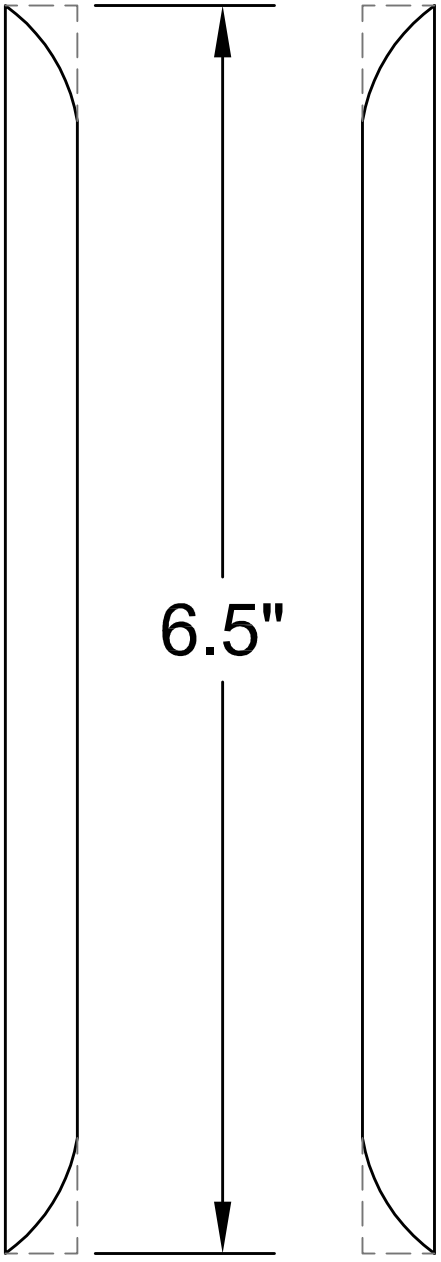


P14


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

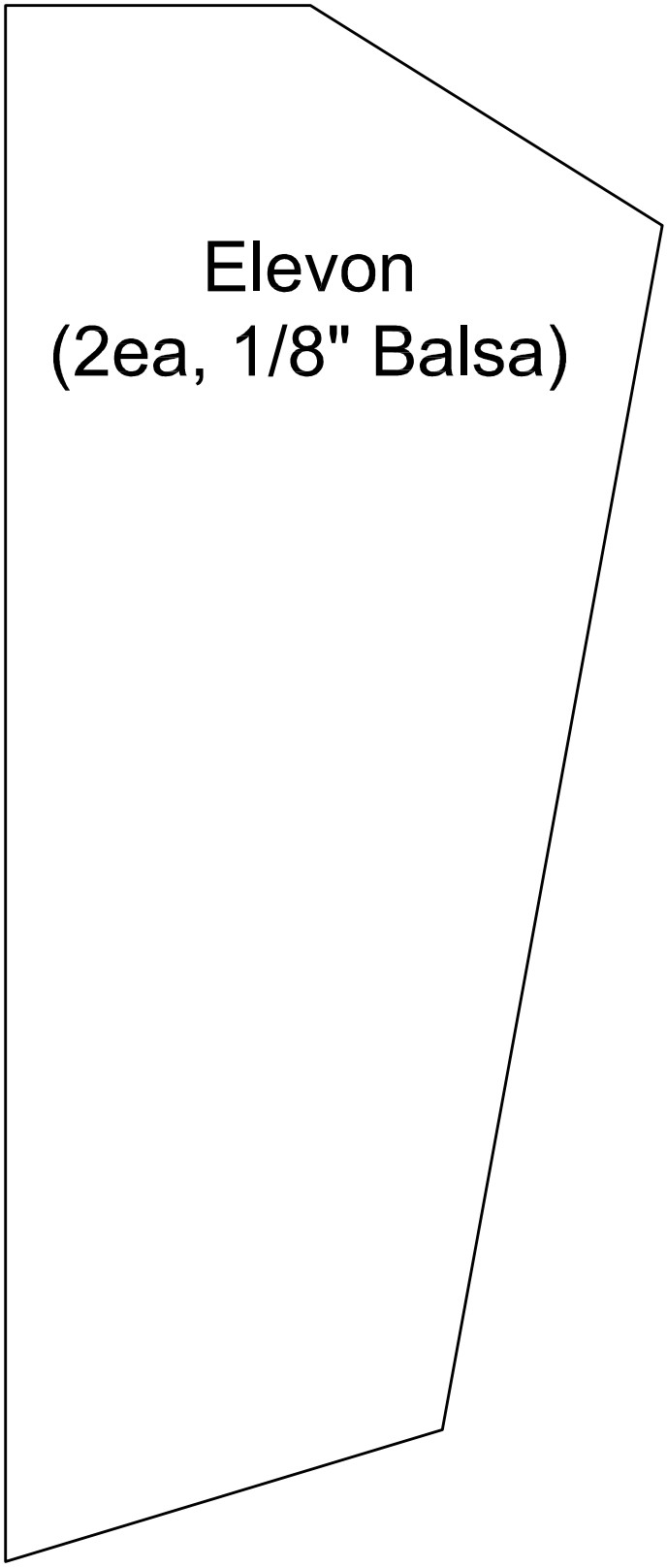
P15



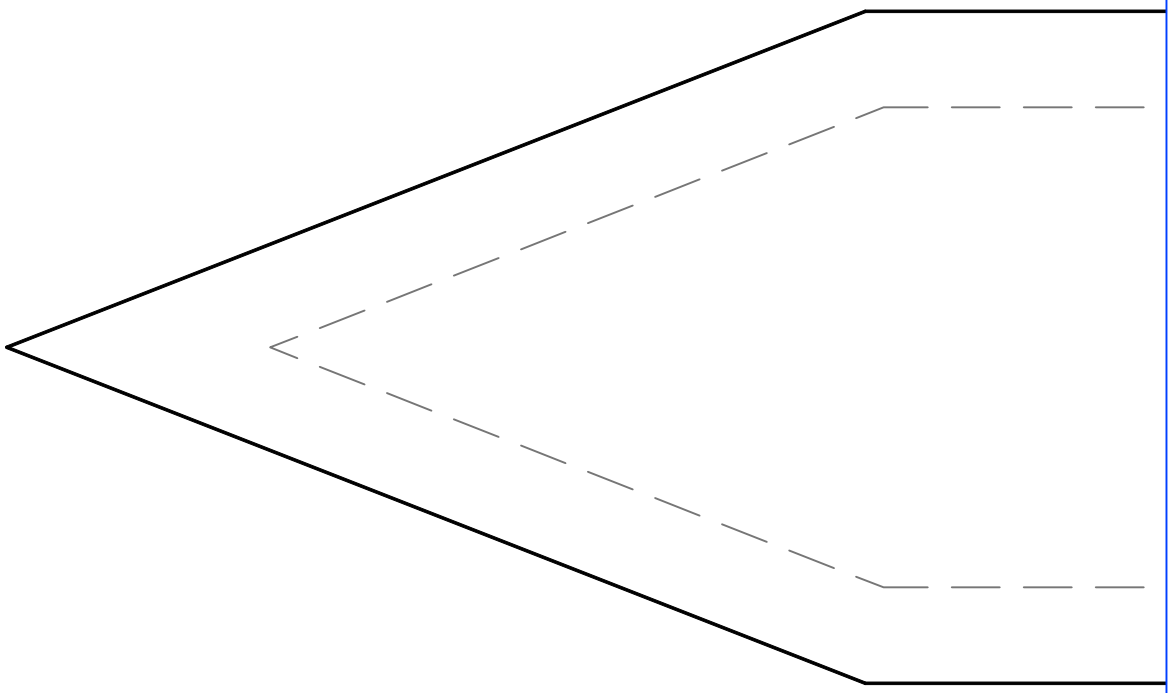



Thrust Plate Base Spars.
(3/8"x1/2" Balsa)
Sand and Bevel Edges
as Shown.

P16



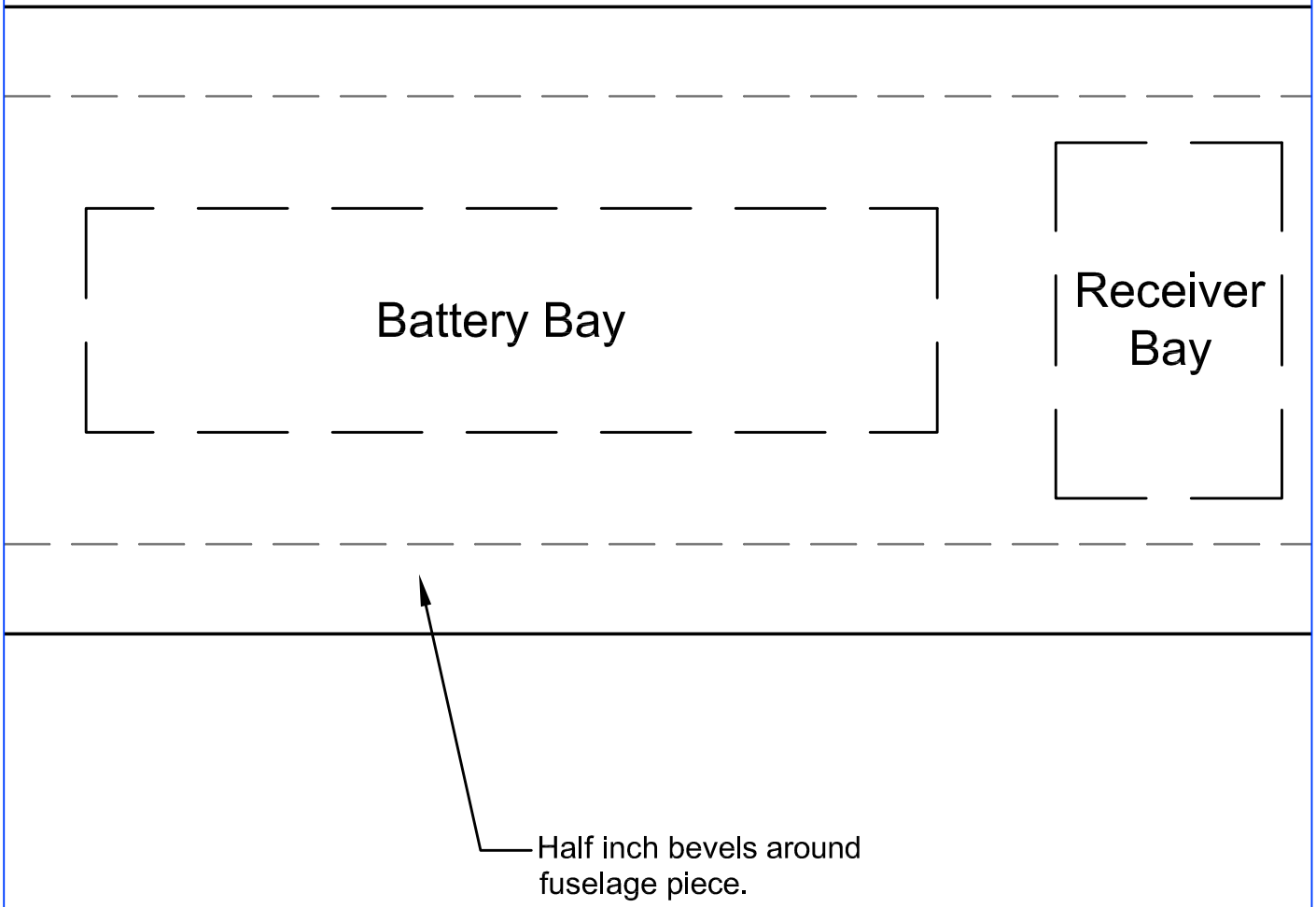
P17



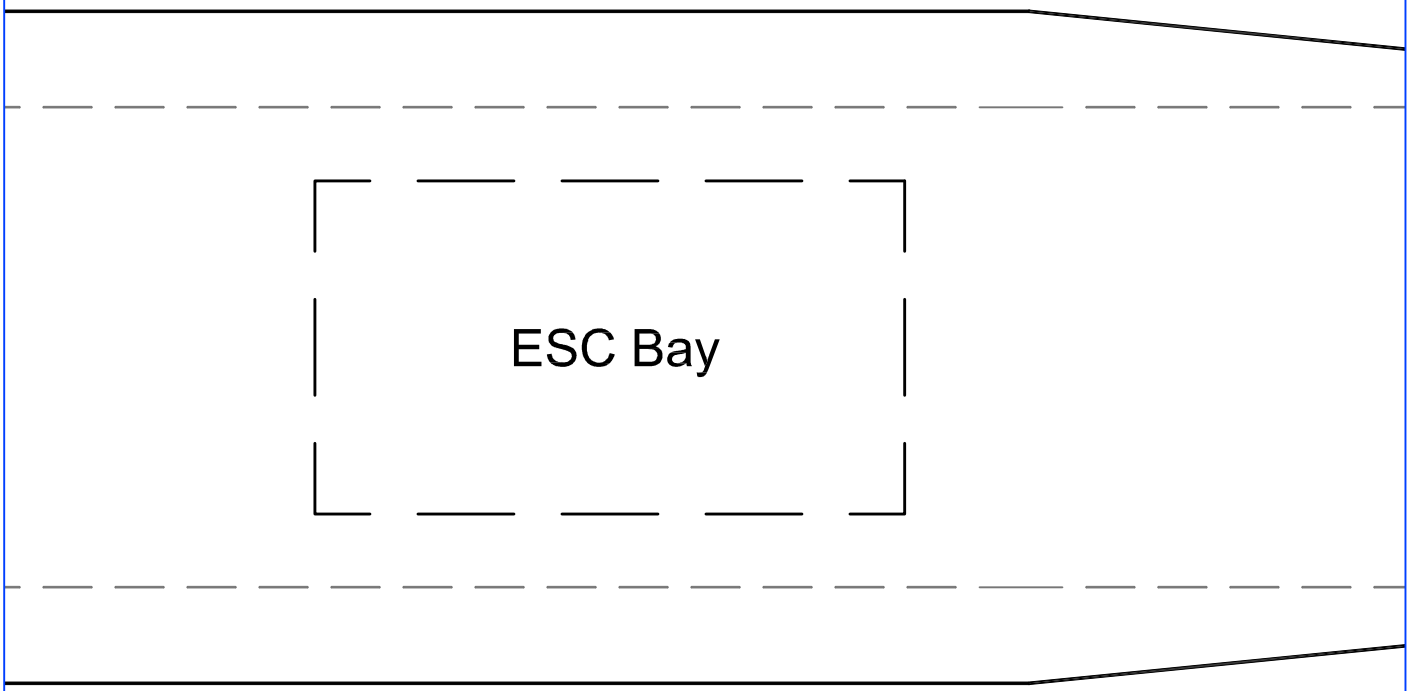
Battery Bay Bottom
Cover Plate
(3/32" Basswood)

P18

# Nose Piece
# (15mm EPP Foam)



P19




# rcFoamFighters

## *FF-SuperNova*

*(Design by Paul Petty - Feb. 2010 - Rev. 1.0)*

*(CAD Drawing by Paul Petty - Apr. 2010)*

P20

# Canopy Piece
# (30mm EPP Foam)
# Cut and Shape