



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



*(RC Model Airplane Construction Plans)*

# **rcFoamFighters**

## **FF-22 (Foam Fighter 22)**

*(Original Design by Paul Petty - Jan. 2009)*

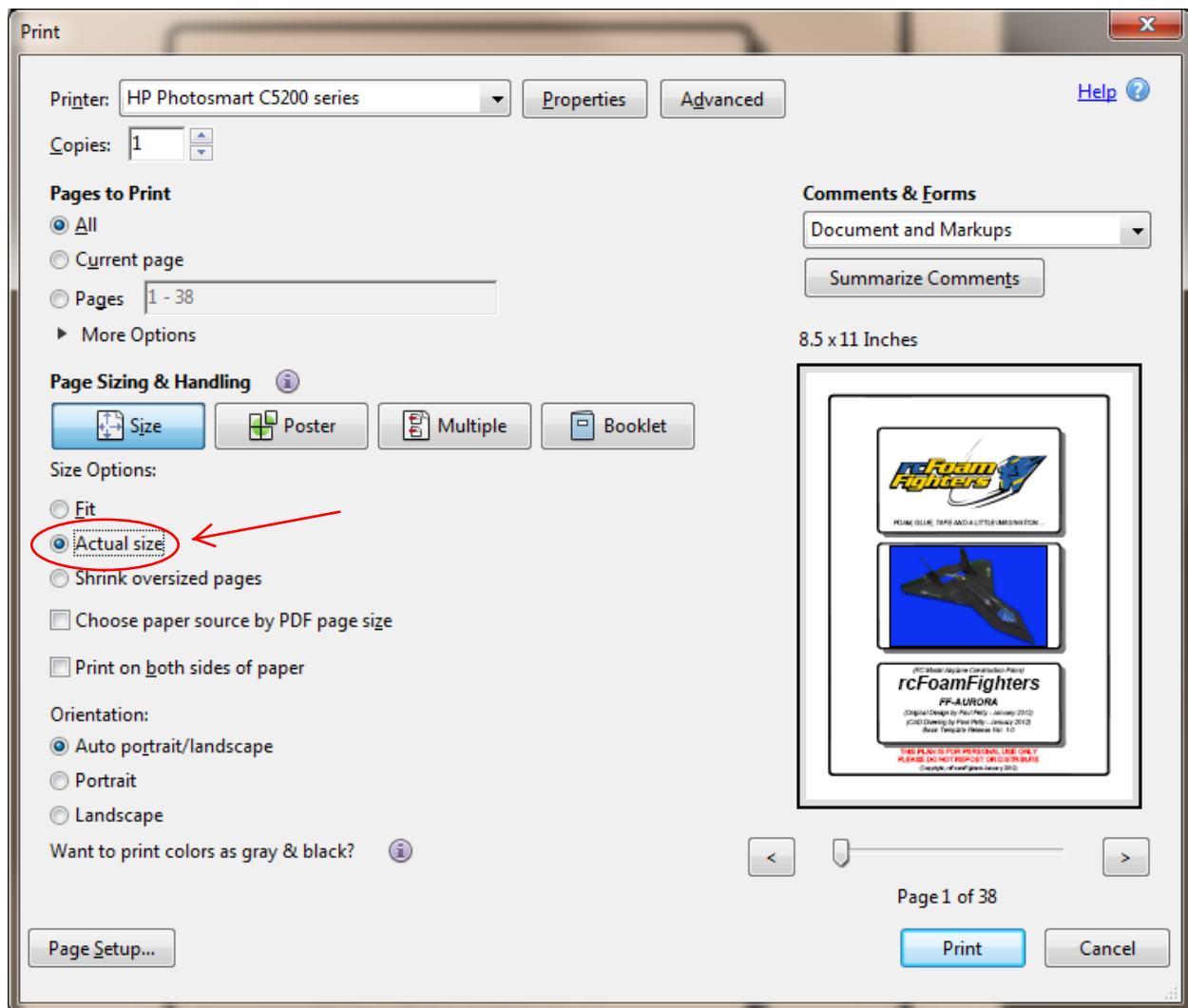
*(CAD Drawing by Paul Petty - July 2009)*

*Basic Template Release Ver. 1.2*

**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-22 (Foam Fighter 22)**

### **Basic Template**

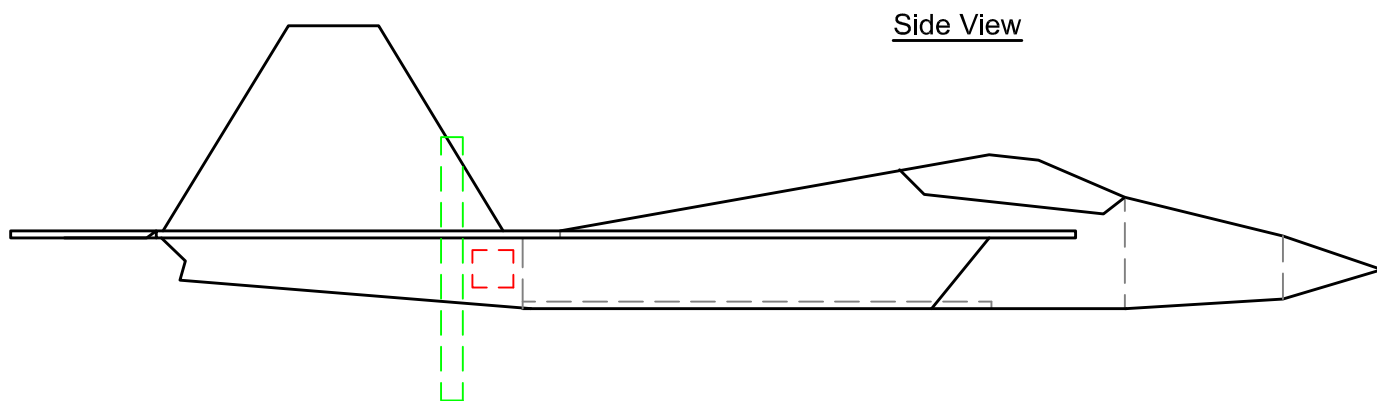
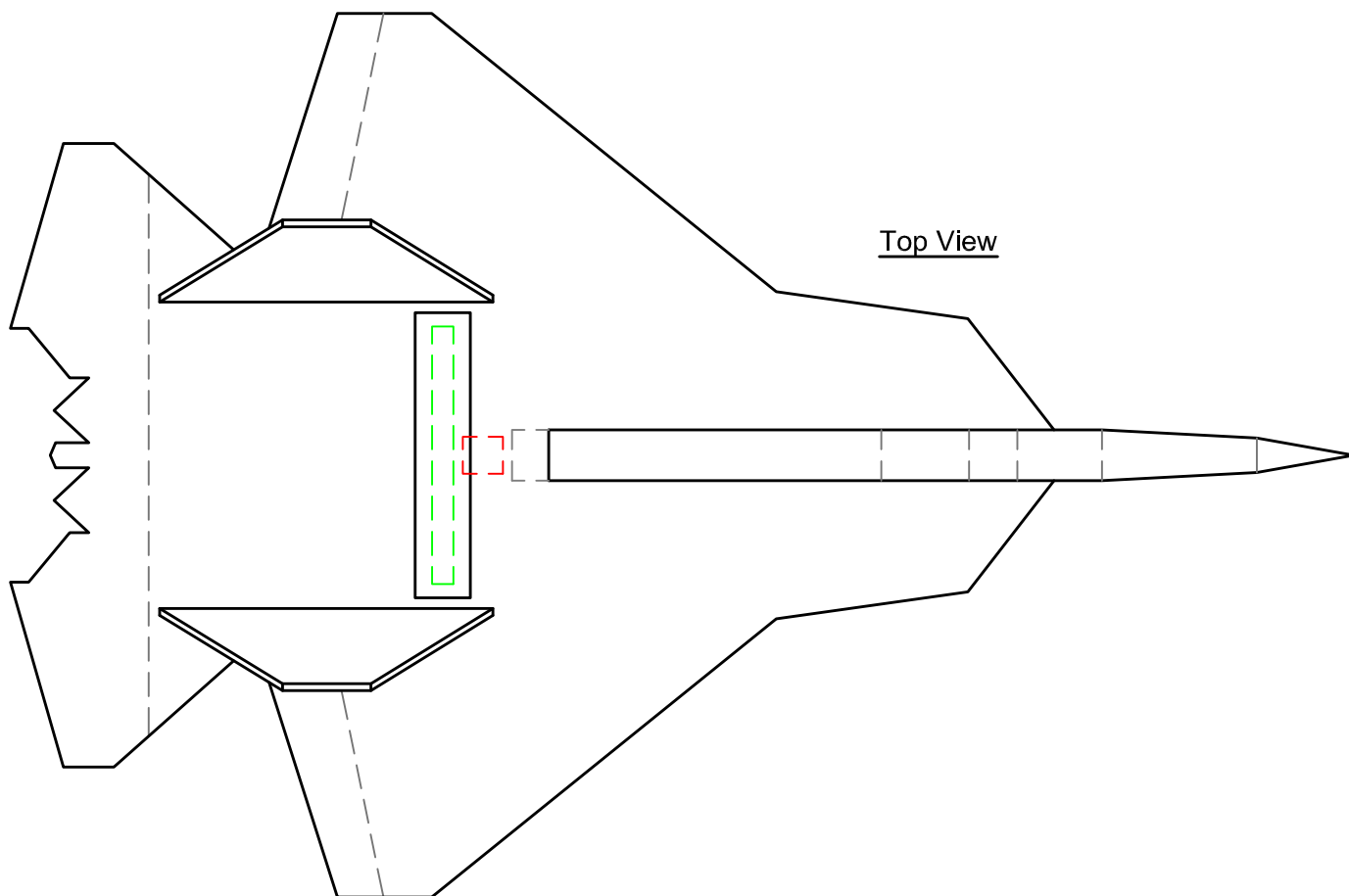
(Original Design by Paul Petty - Jan. 2009)

(CAD Drawing by Paul Petty - July 2009 Rev. 1.2)

(Basic Template Release 1.2 - Copyright rcFoamFighters)

(Contact rcFoamFighters at: [admin@rcfoamfighters.com](mailto:admin@rcfoamfighters.com))

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



## Recommend Parts:

### BASIC SETUP (60+mph)

Motor: Suppo A2212/6 2200kV Brushless Motor  
ESC: Suppo 30A Brushless ESC  
Prop: APC 6x4  
Battery: 2200mA (25C or better recommended)  
Servos: 3 Each Micro Metal Gear  
Radio & Receiver: Any 6-channel or better (2.4ghz preferred)

### PERFORMANCE SETUP (80+mph)

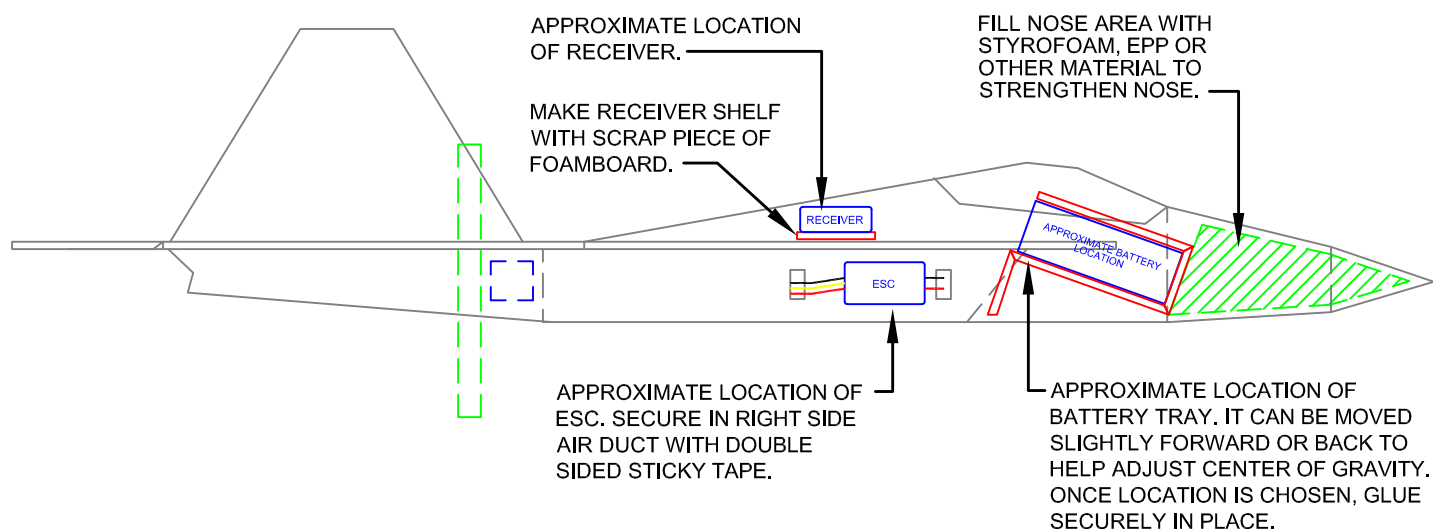
Motor: Grayson Hobbies "Super Mega Jet" 2550kV Motor  
ESC: 40A Brushless ESC  
Prop: APC 6x5.5  
Battery: 2200mA (30C recommended)  
Servos: 3 Each Micro Metal Gear  
Radio & Receiver: Any 6-channel or better (2.4ghz preferred)

Plane was originally designed to be made from 3 Sheets of 20x30 Foamboard.

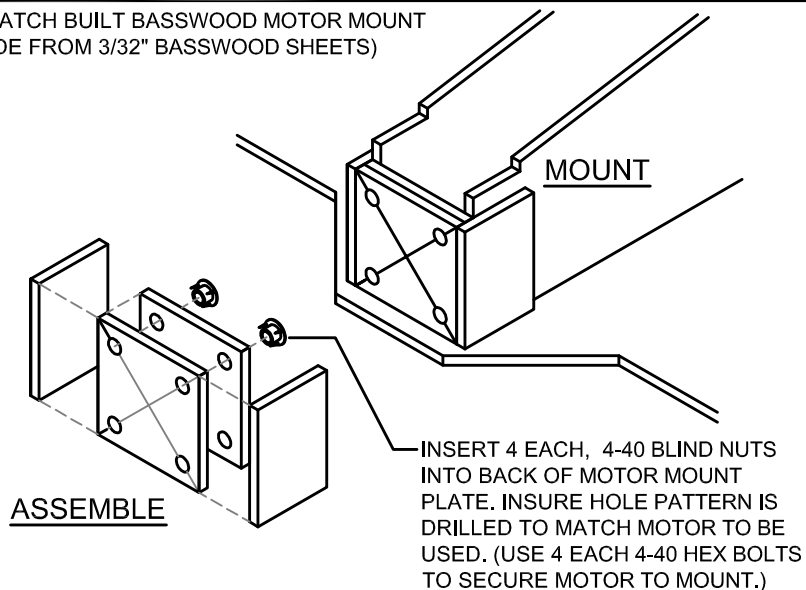
Depron or FanFold Foam can be used with improvised Carbon Spars where needed .

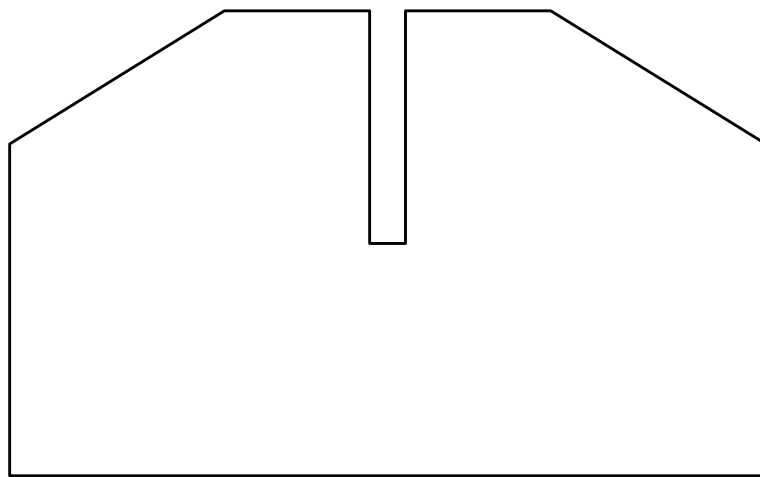
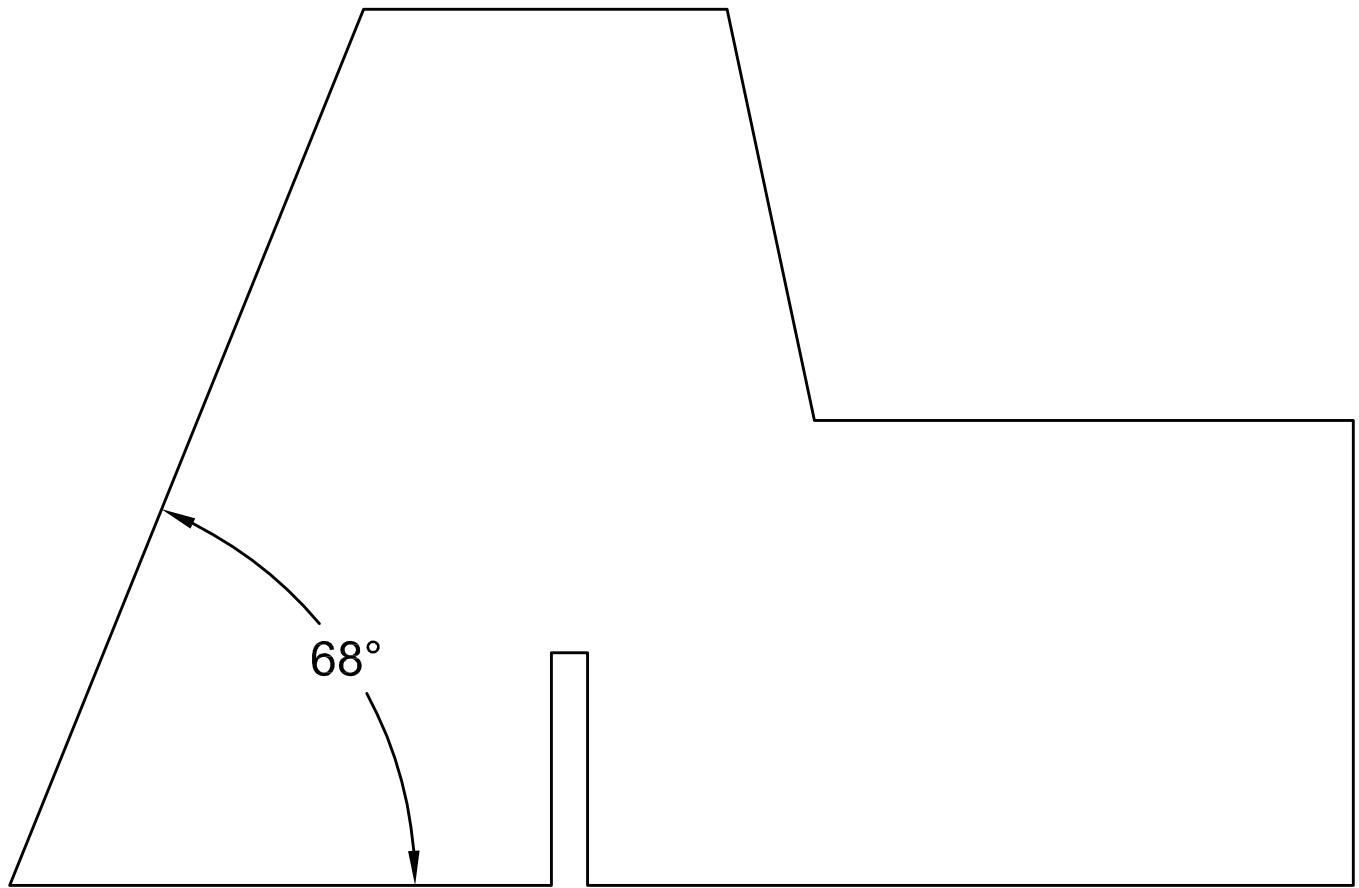
## Disclaimer (Please Read):

- 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. 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 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.

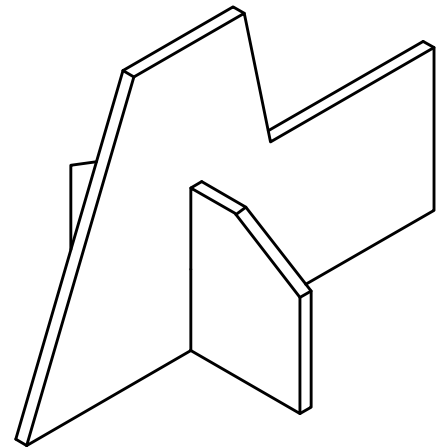


### SCRATCH BUILT BASSWOOD MOTOR MOUNT (MADE FROM 3/32" BASSWOOD SHEETS)



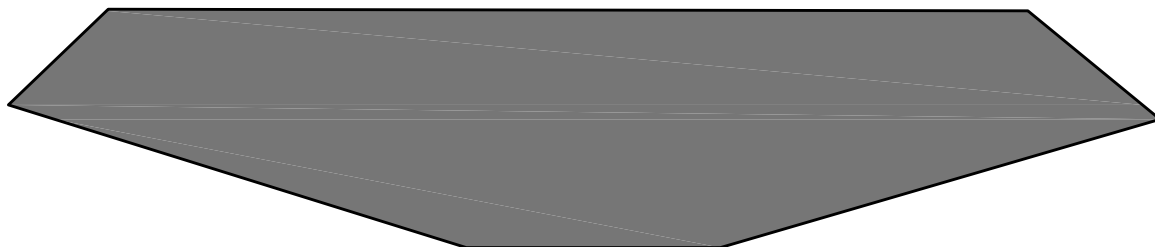


***Assembled Tool View***



## ***TAIL FIN ANGLE TEMPLATE TOOL***

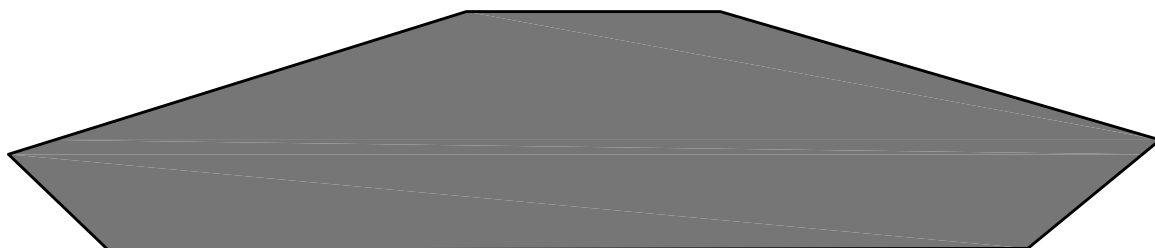
***These can be used as patterns to cut out the Tail Fin Angle Template Tool out of Foam Board or other material. Use this tool after assembled to hold the Tail Fins at the proper 68° while your adhesive dries.***



FRONT



BACK



## ***Cockpit Glass Templates***

*These can be used as patterns to cut the cockpit glass out of black tape or other material.*



## ***Tail Fin Decals***

***Best if printed to glossy paper.  
Print, Cut Out and Use clear tape  
to adhere to plane.***



## ***Wing Decals***

***Best if printed to glossy paper.***

***Print, Cut Out and Use clear tape  
to adhere to plane.***



# TEMPLATE ASSEMBLY KEY PLAN

## rcFoamFighters

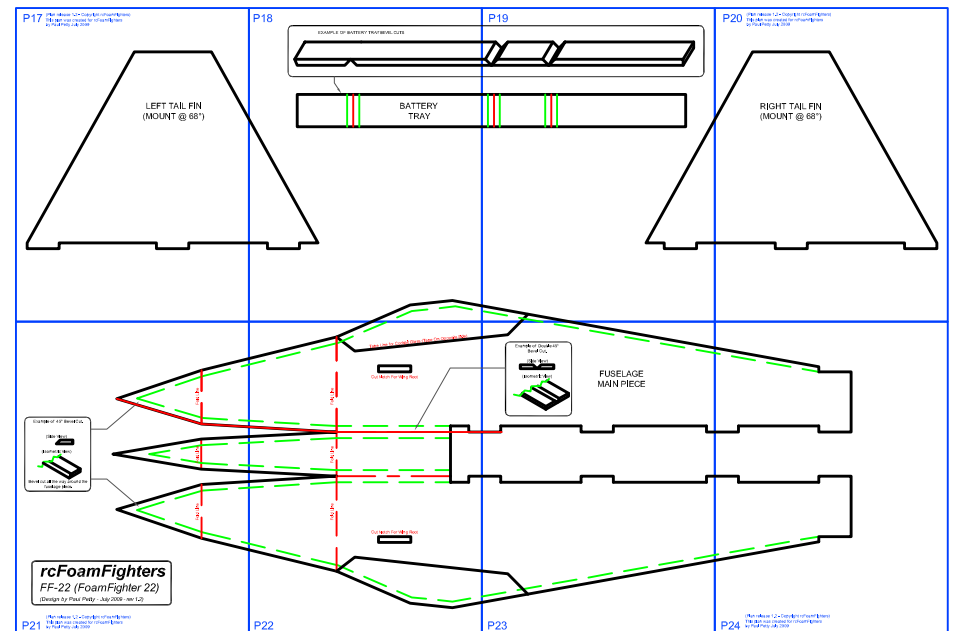
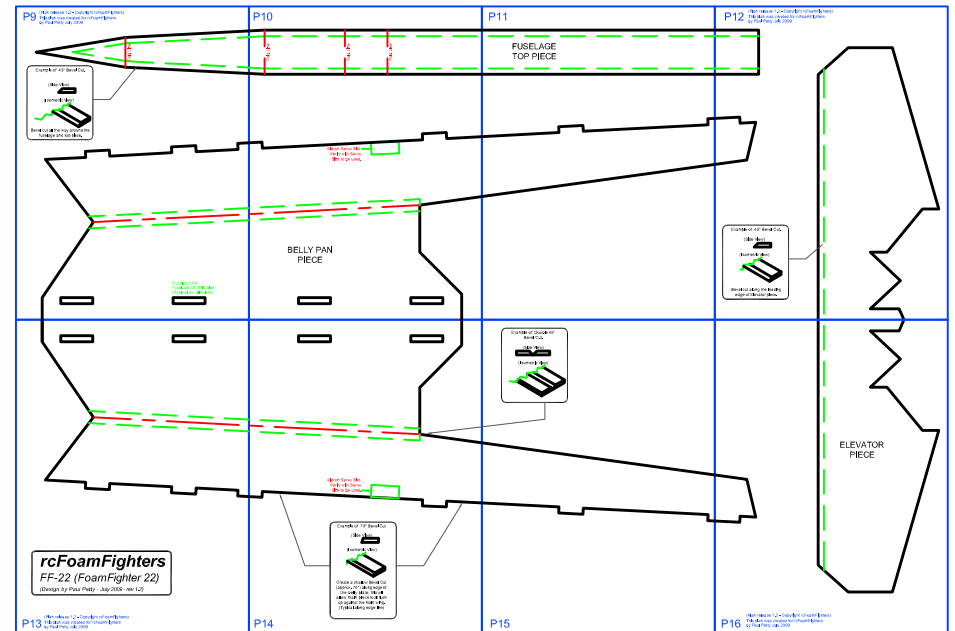
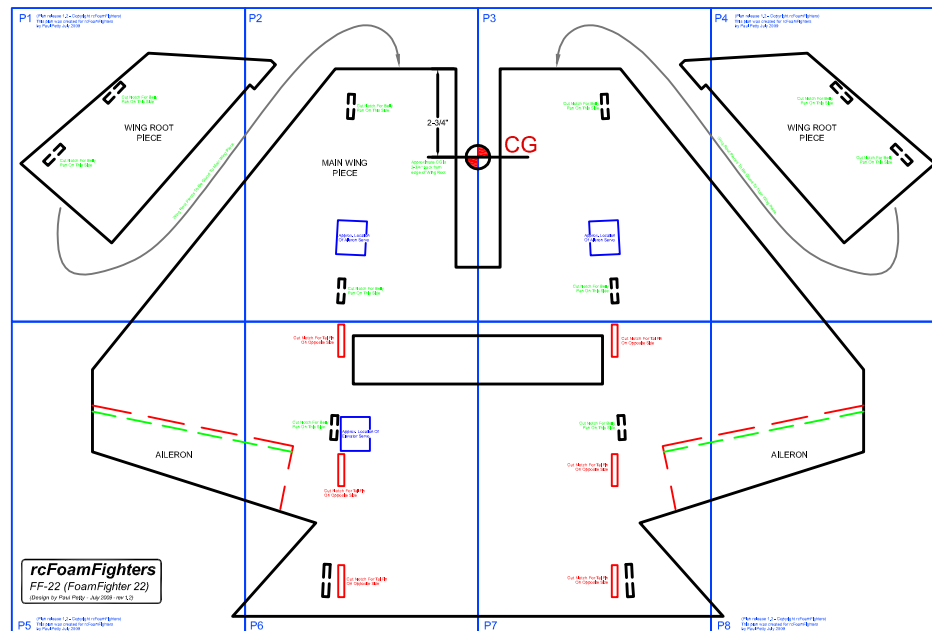
### FF-22 (Foam Fighter 22)

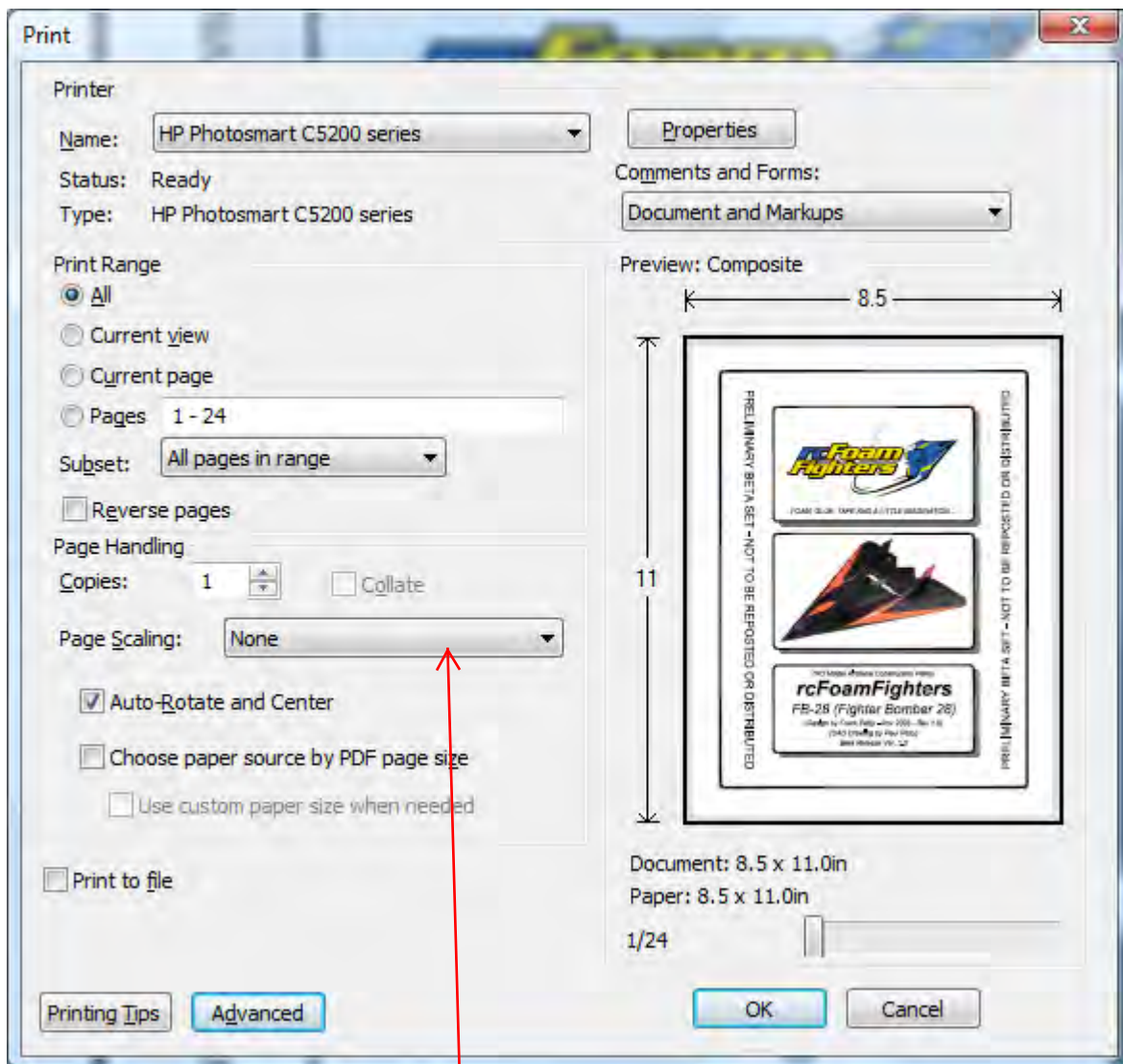
(Design by Paul Petty - Jan. 2009 - Rev 1.1)

(CAD Drawing by Paul Petty - Mar. 2009)

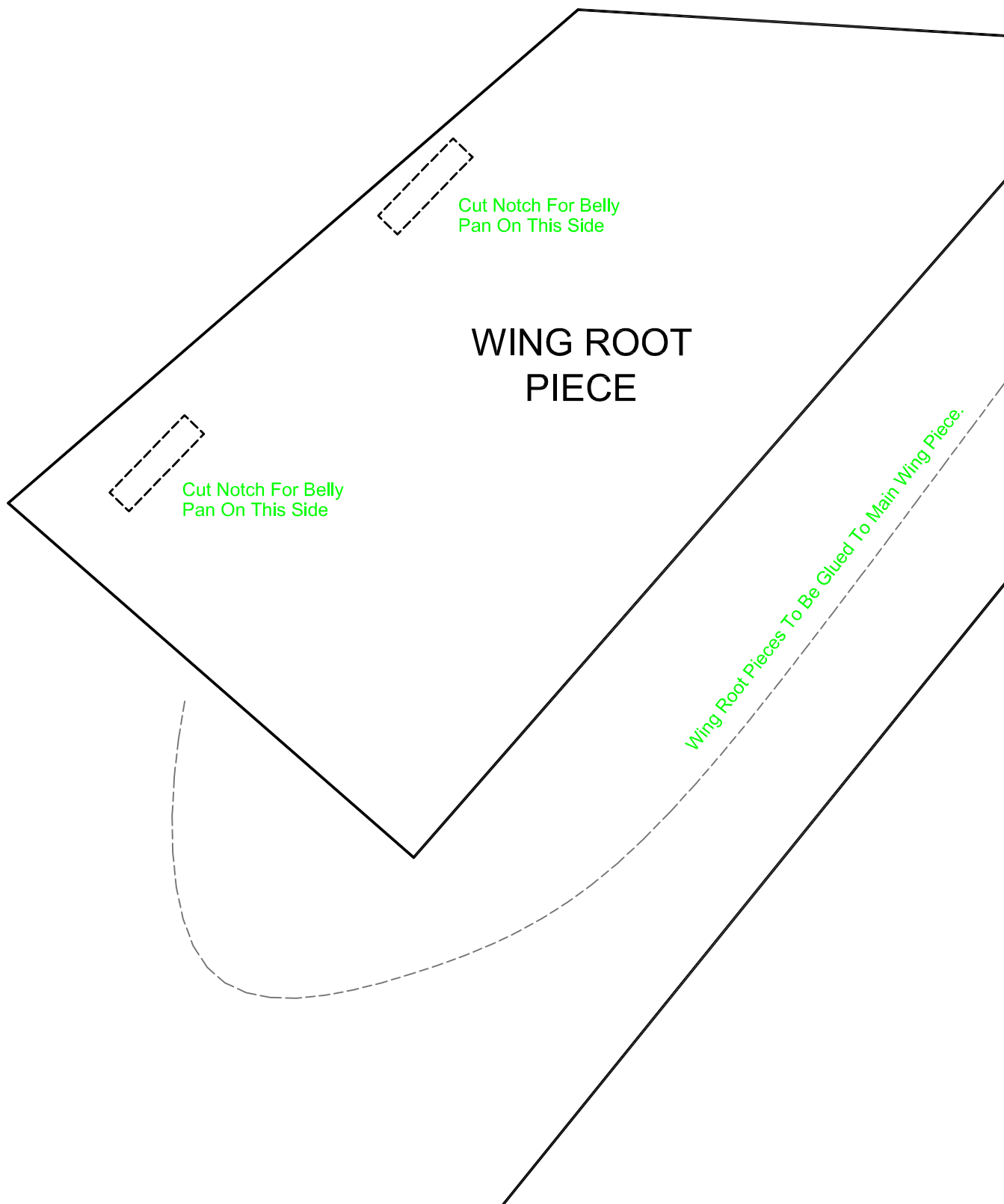
#### INSTRUCTIONS:

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

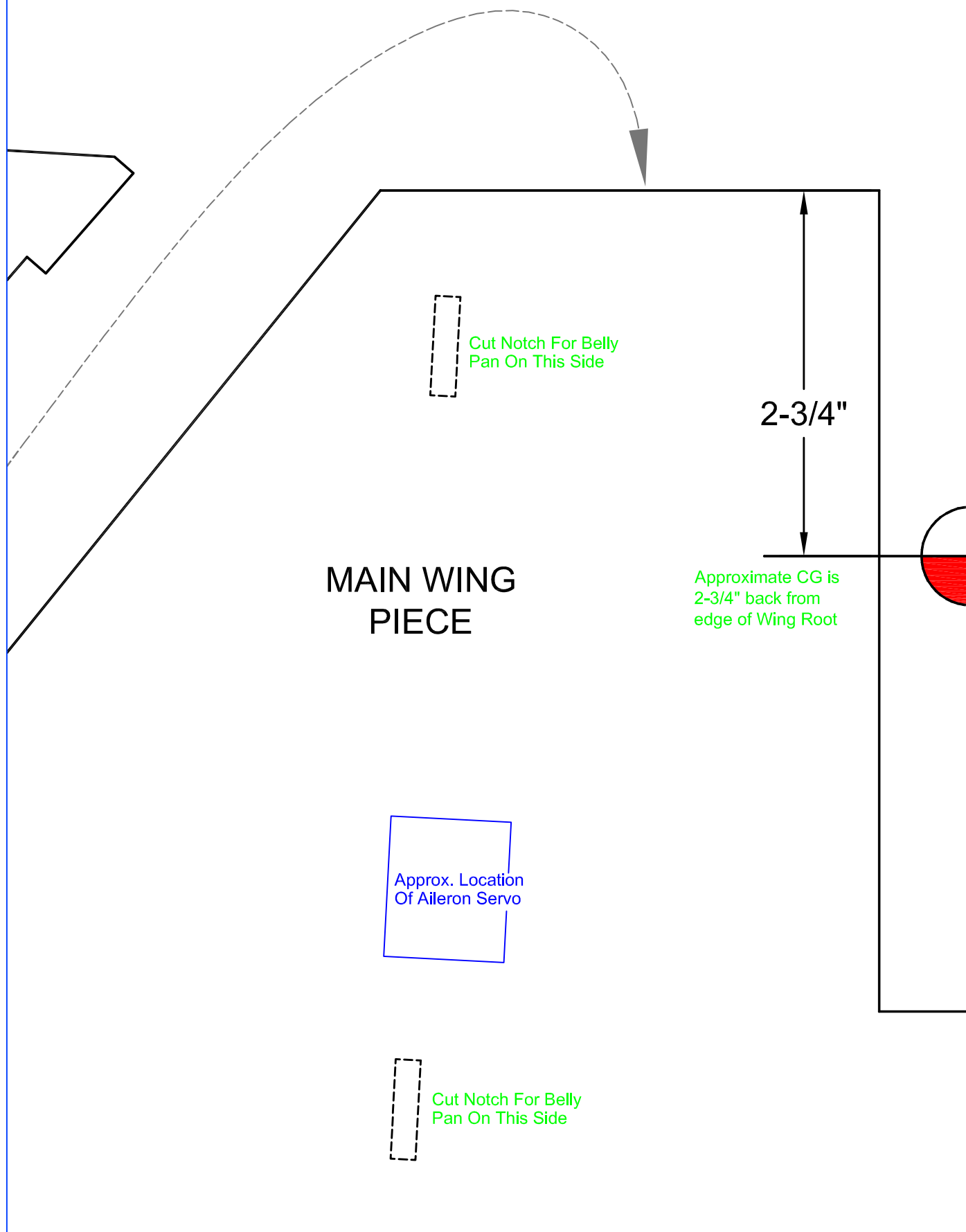




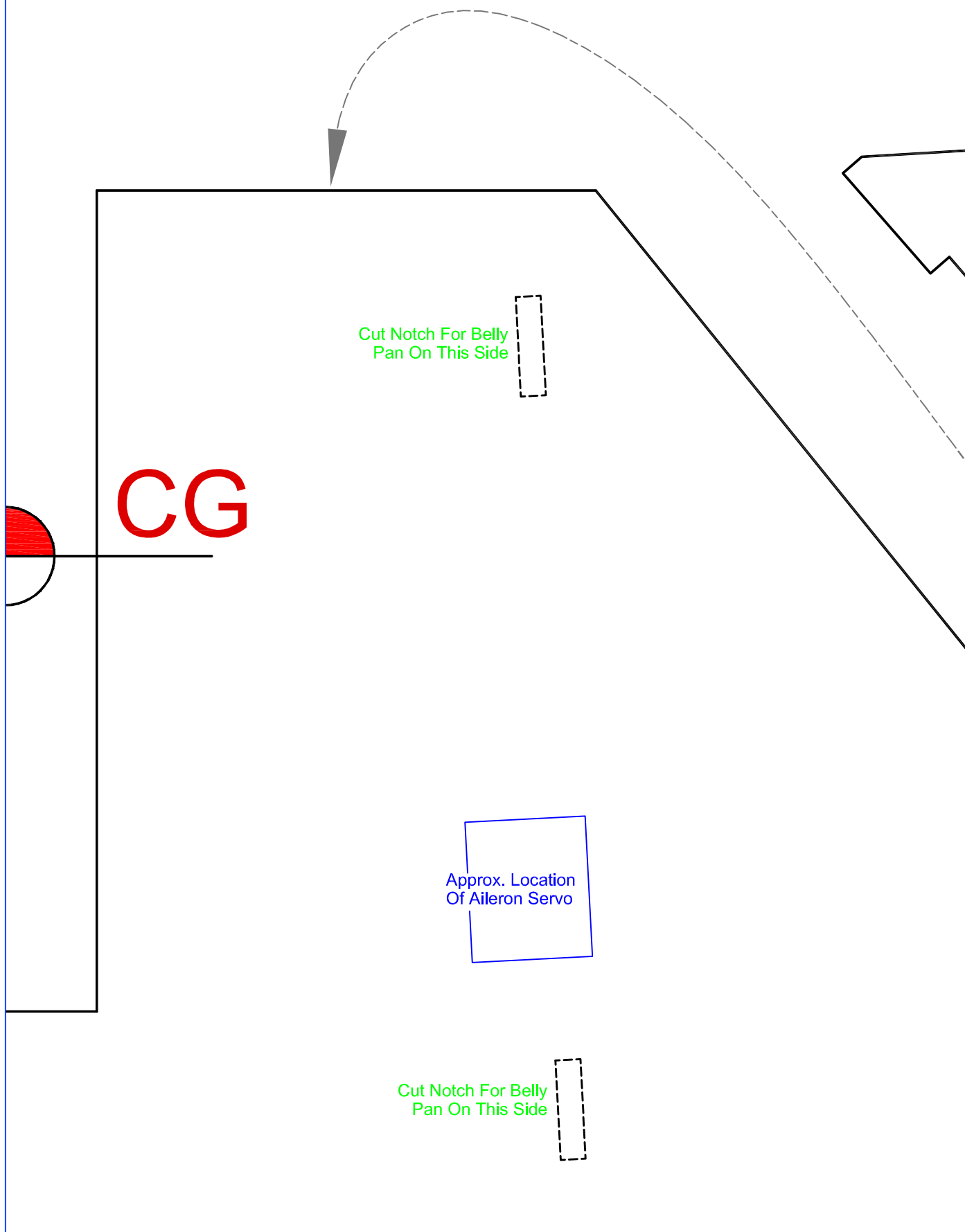
When you print the templates, Make sure you pick "None" for page scaling otherwise pages may not print to proper scale.



P2



P3



P4

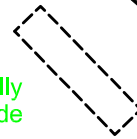
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by Paul Petty July 2009

WING ROOT  
PIECE

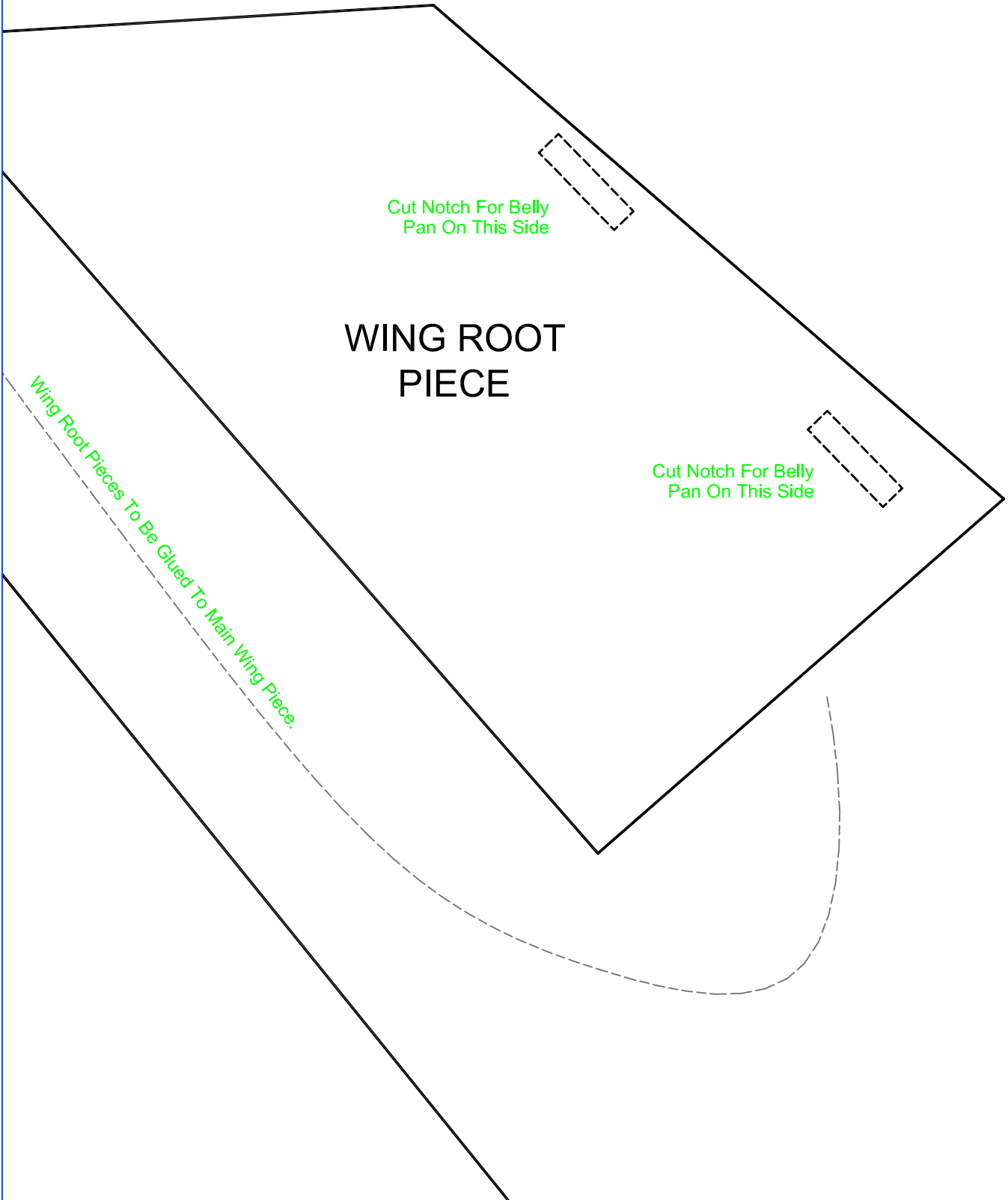
Cut Notch For Belly  
Pan On This Side

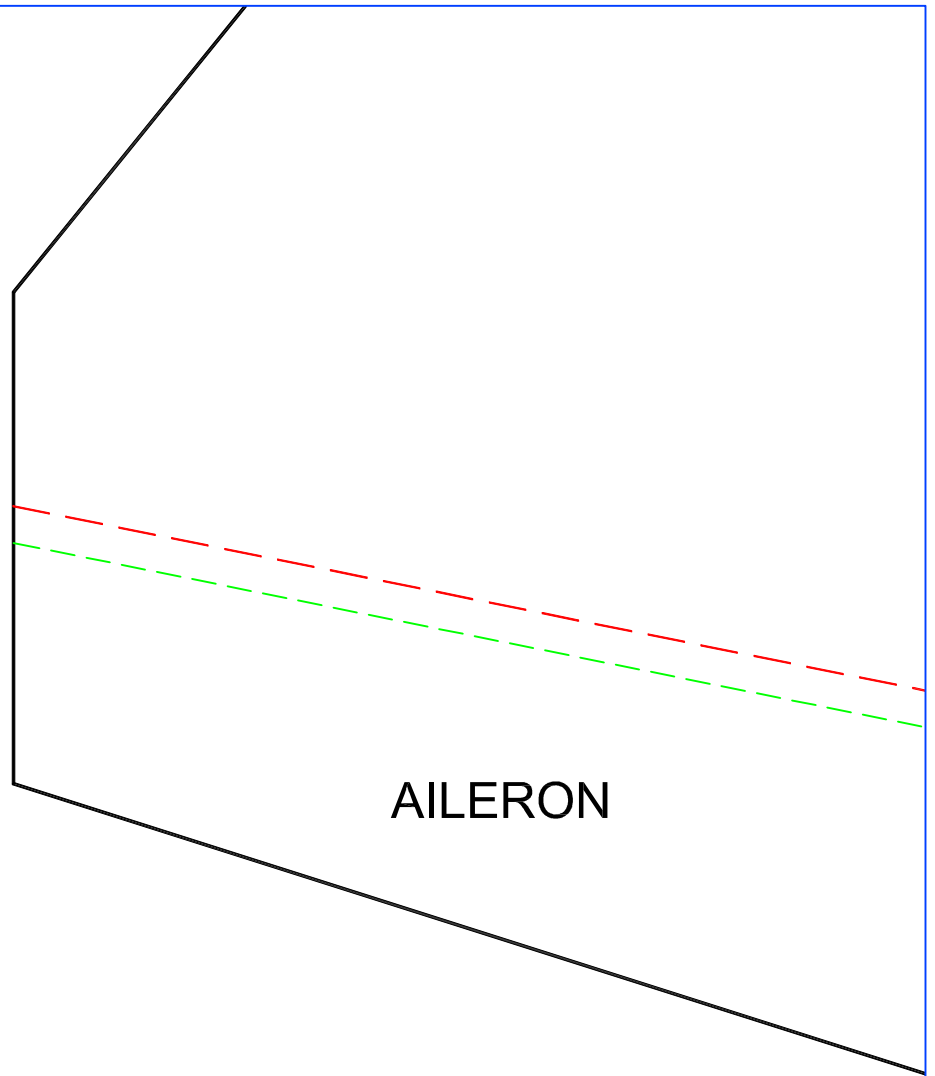


Cut Notch For Belly  
Pan On This Side



Wing Root Pieces To Be Glued To Main Wing Piece.





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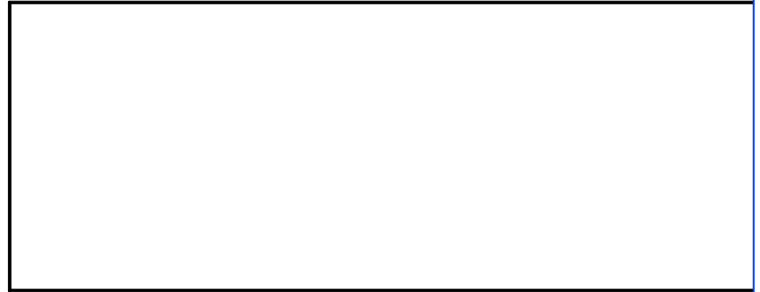
***FF-22 (FoamFighter 22)***

*(Design by Paul Petty - July 2009 - rev 1.2)*

**P5**

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Cut Notch For Tail Fin  
On Opposite Side



Cut Notch For Belly  
Pan On This Side



Approx. Location Of  
Elevator Servo



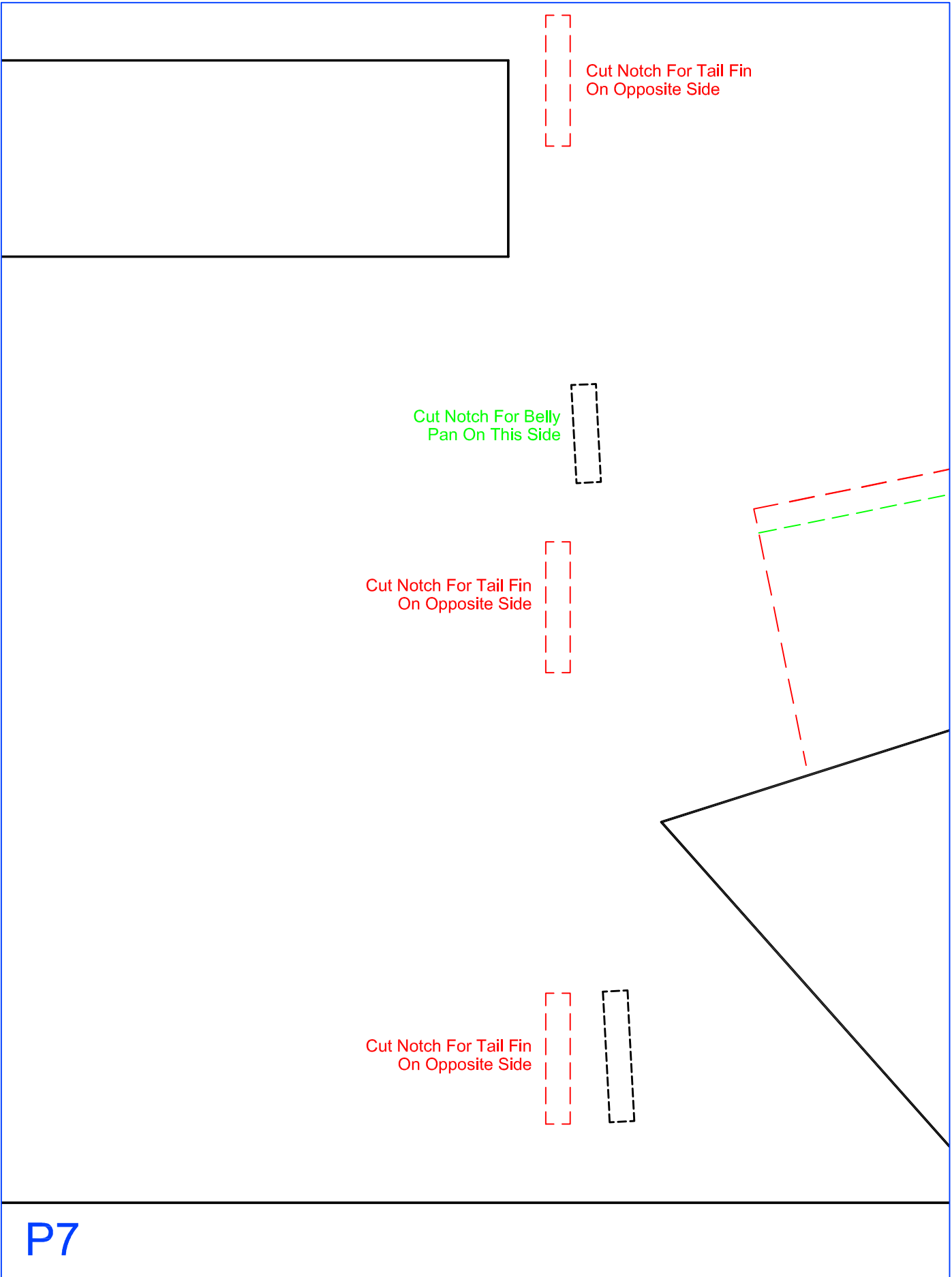
Cut Notch For Tail Fin  
On Opposite Side



Cut Notch For Tail Fin  
On Opposite Side









A diagram of an aileron plan view. It is a trapezoidal shape with a black outline. Inside, there are two dashed lines: a red one on top and a green one below it, both sloping upwards from left to right. The word "AILERON" is centered in the middle of the shape.

AILERON



A small black triangle icon pointing downwards, located to the left of the page number.

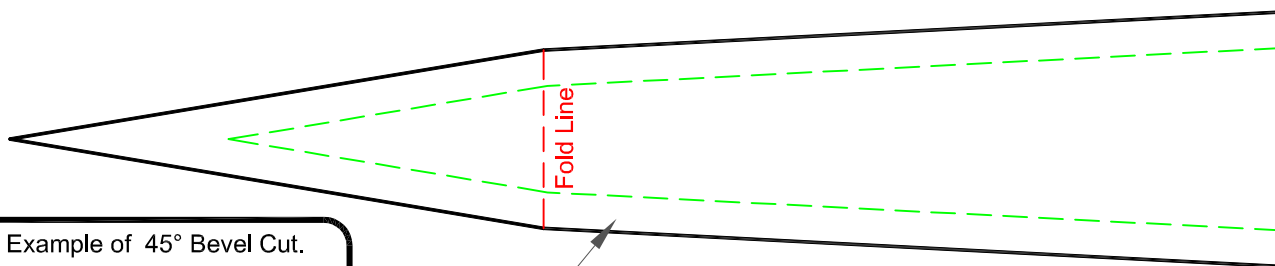
P8

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P9

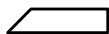
(Plan release 1.2 - Copyright rcFoamFighters)

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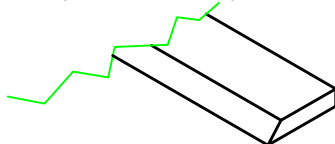


Example of 45° Bevel Cut.

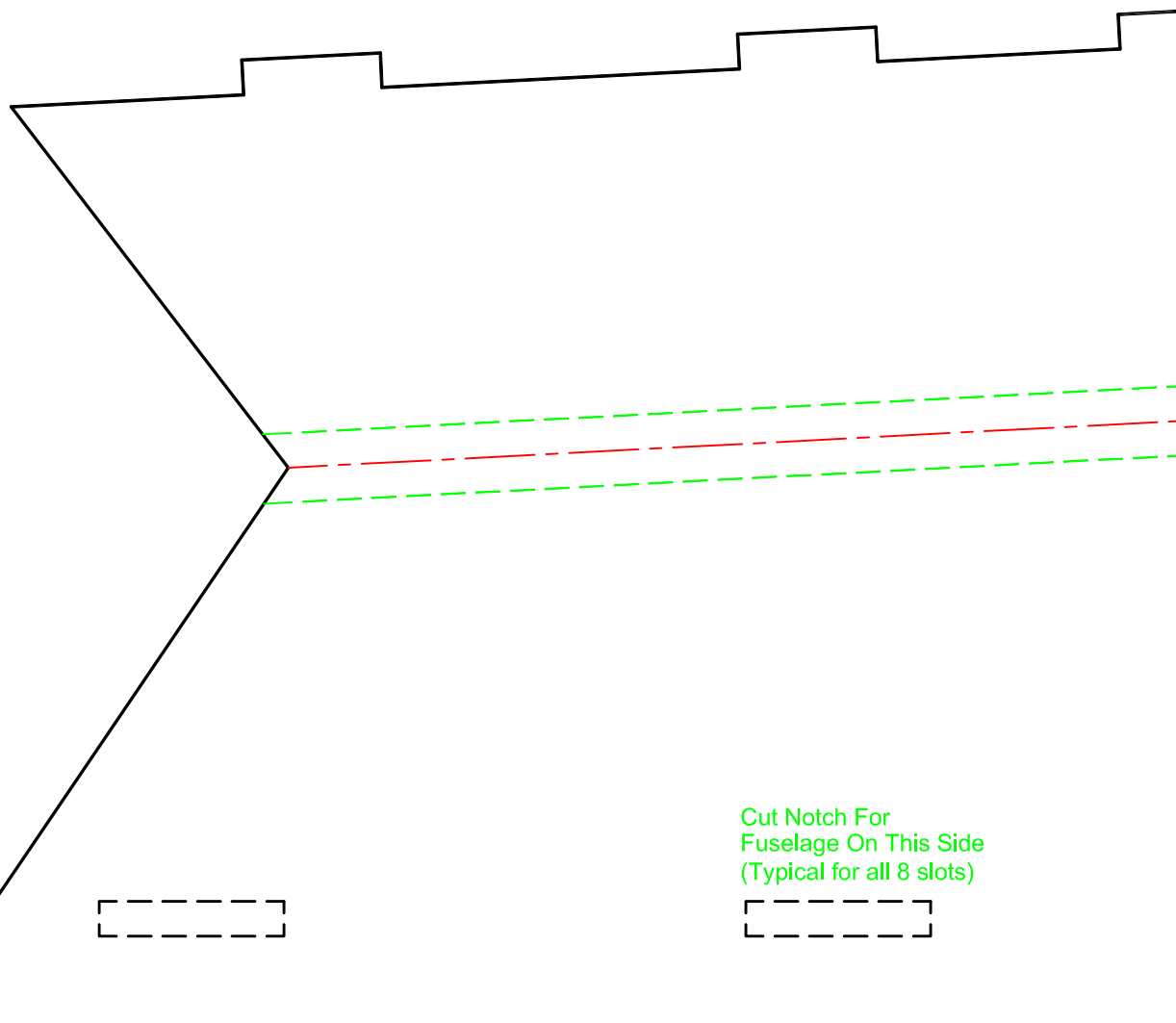
(Side View)



(Isometric View)



Bevel cut all the way around the  
fuselage and top piece.



P10

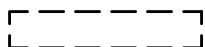
Fold Line

Fold Line

Fold Line

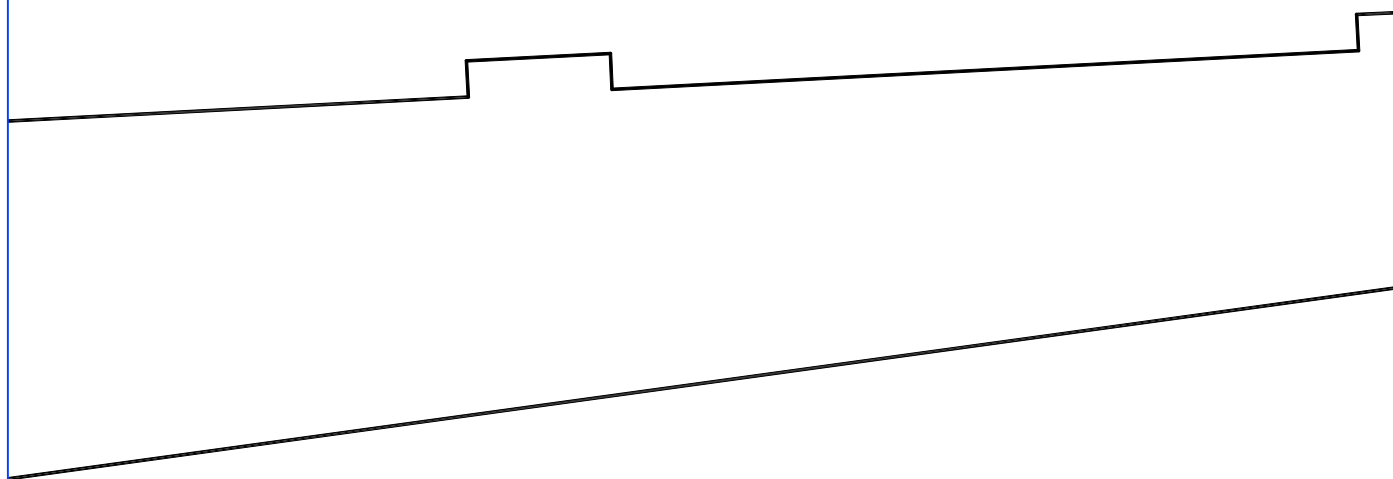
Aileron Servo Slot,  
Verify with Servo  
Size to be used.

BELLY PAN  
PIECE



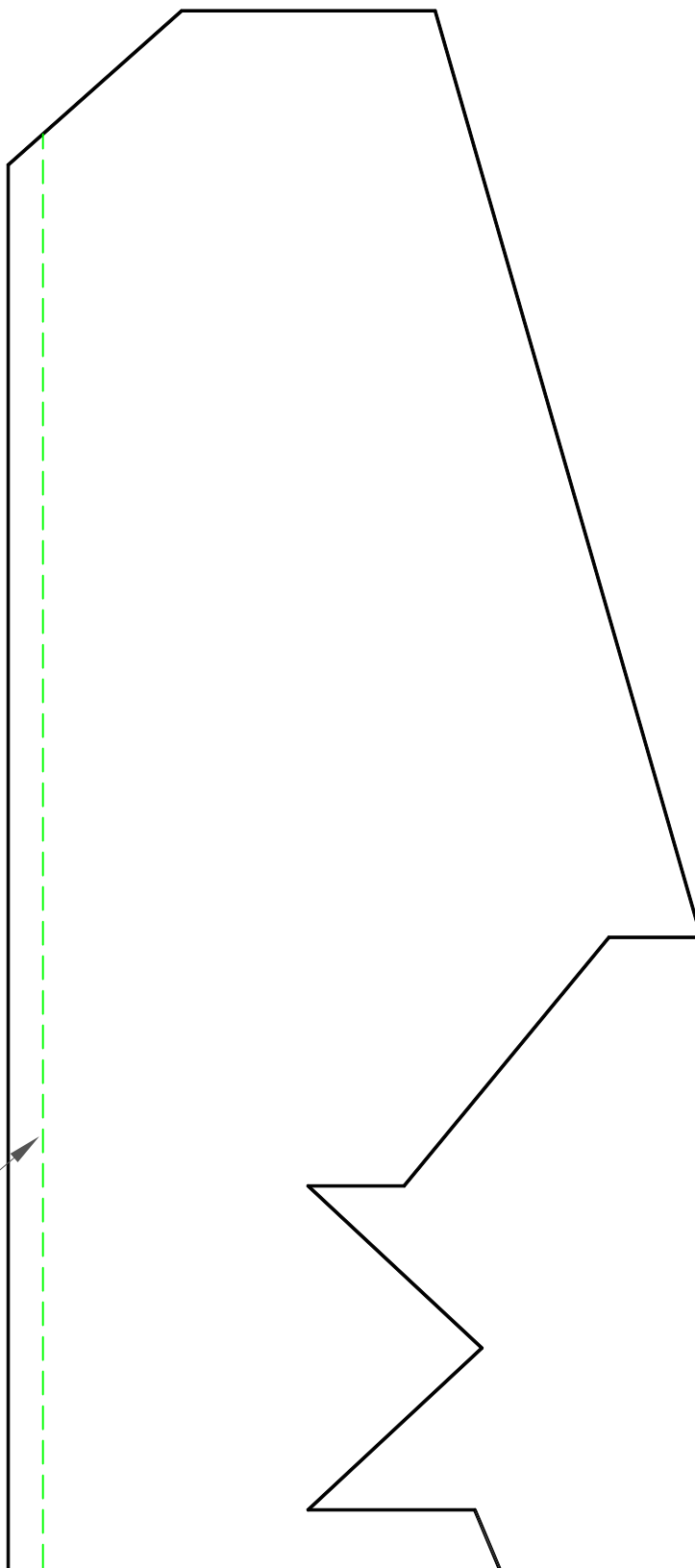
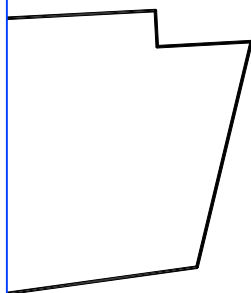
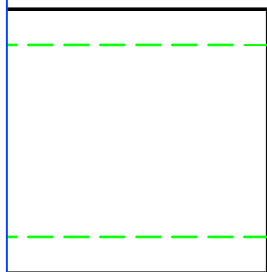
P11

FUSELAGE  
TOP PIECE



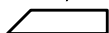
# P12

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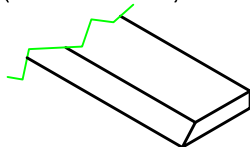


Example of 45° Bevel Cut.

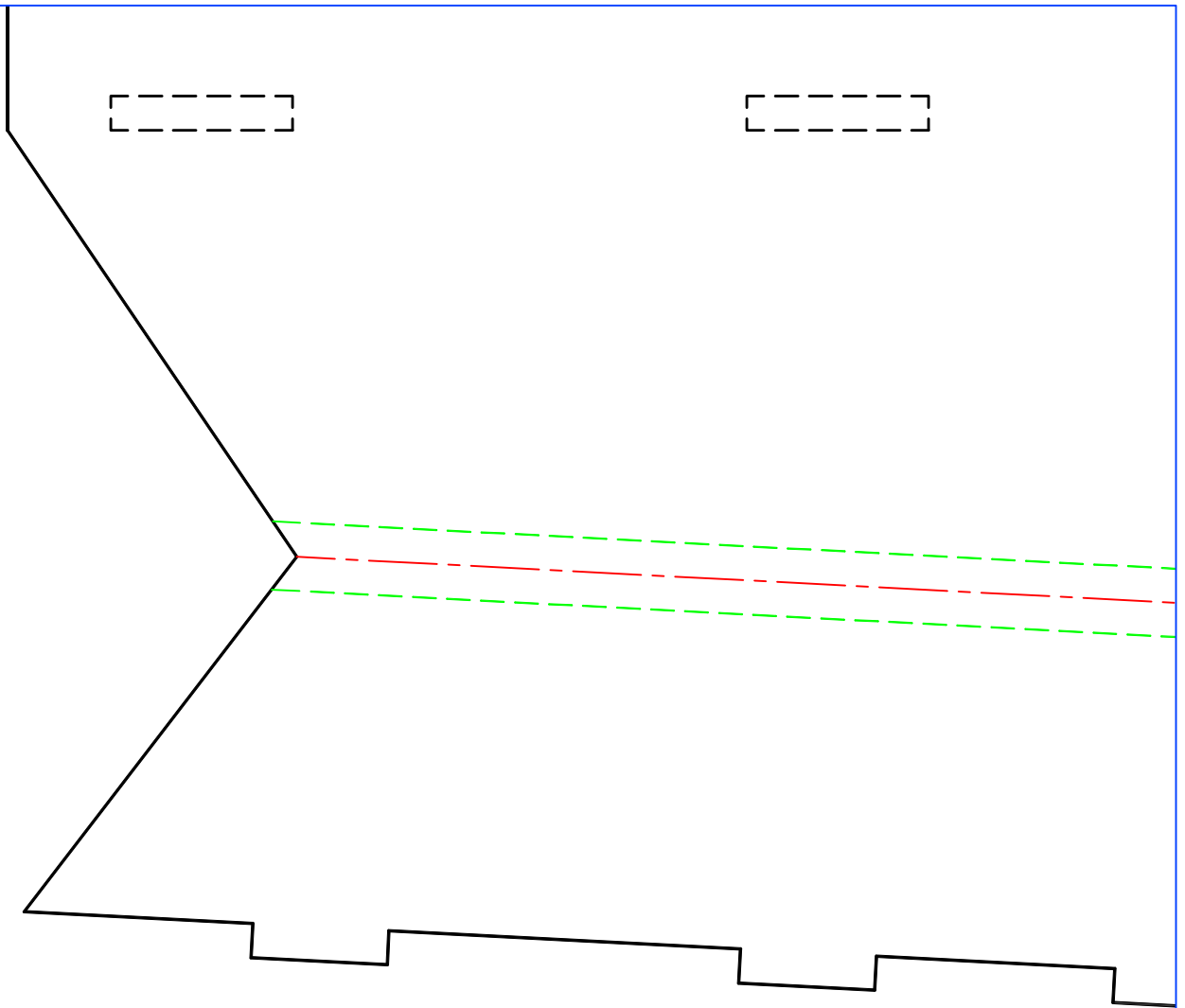
(Side View)



(Isometric View)



Bevel cut along the leading edge of Elevator piece.



***rcFoamFighters***

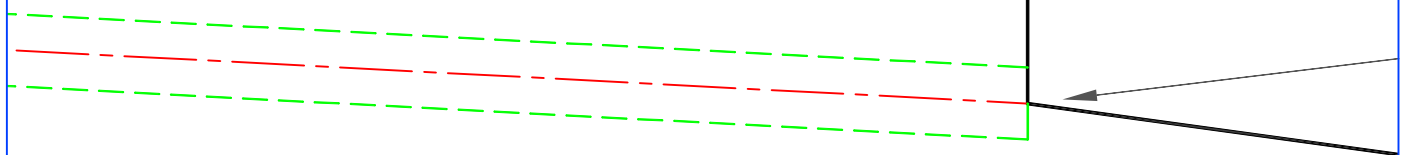
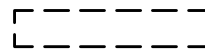
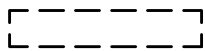
***FF-22 (FoamFighter 22)***

*(Design by Paul Petty - July 2009 - rev 1.2)*

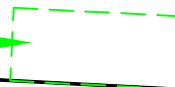
**P13**

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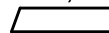


Aileron Servo Slot,  
Verify with Servo  
Size to be used.

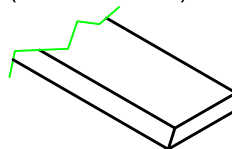


Example of 70° Bevel Cut

(Side View)



(Isometric View)



Create a shallow Bevel Cut  
(approx. 70°) along edge of  
the belly plate, this will  
allow main piece to sit flush  
up against the main wing.  
(Typical along edge line)

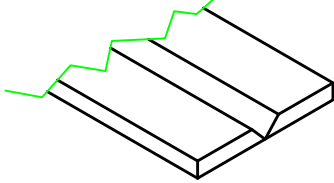


Example of Double 45°  
Bevel Cut.

(Side View)



(Isometric View)





ELEVATOR  
PIECE

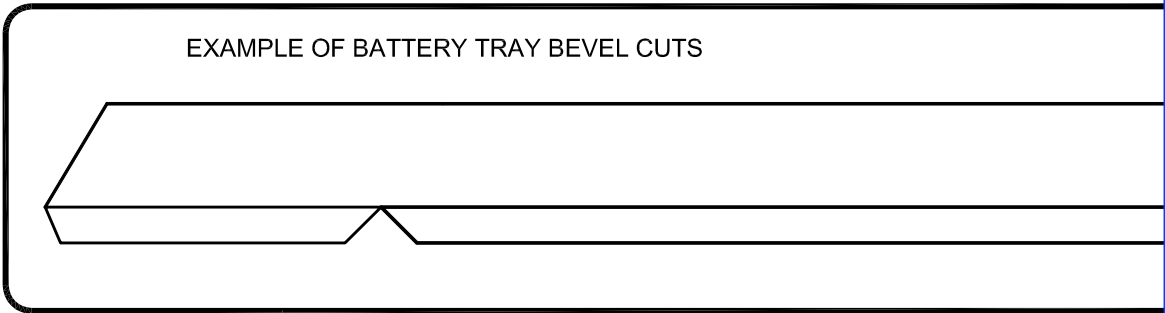
**P16**

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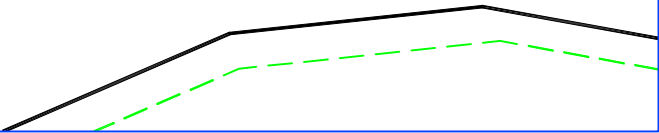
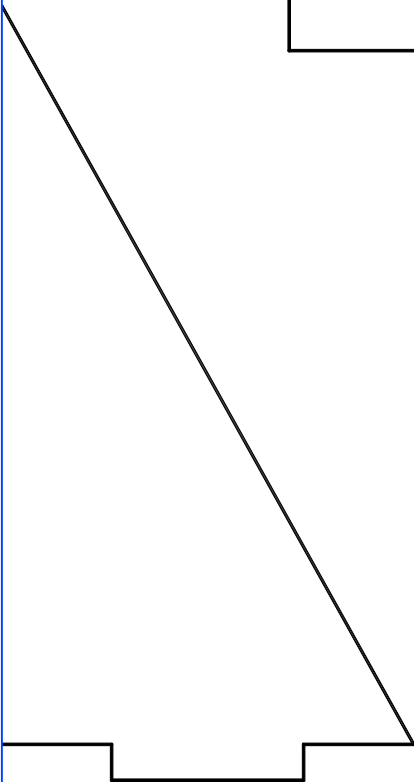


LEFT TAIL FIN  
(MOUNT @ 68°)

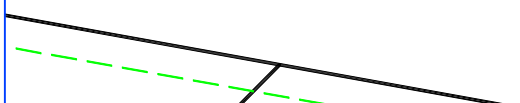
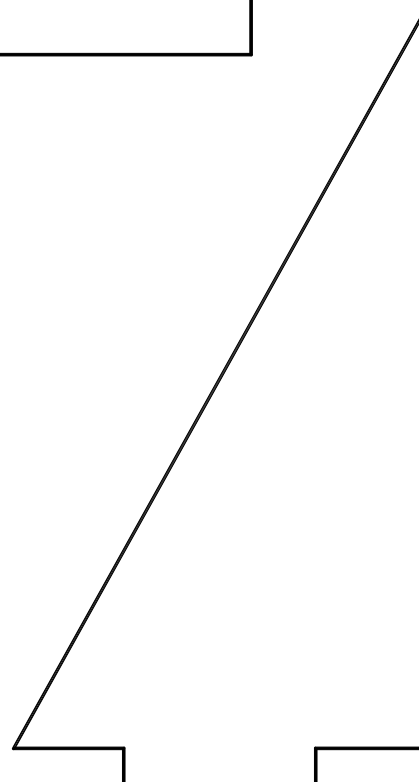
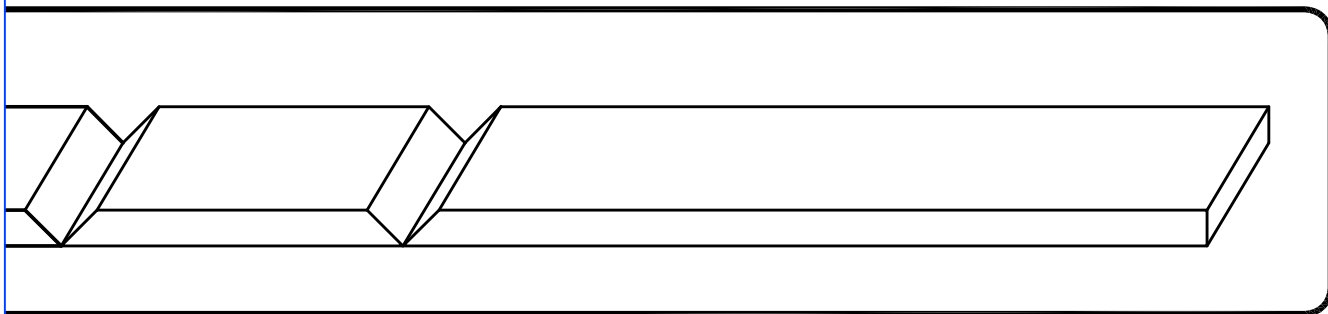
EXAMPLE OF BATTERY TRAY BEVEL CUTS



BATTERY  
TRAY



P19



P20

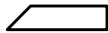
(Plan release 1.2 - Copyright rcFoamFighters)  
This plan was created for rcFoamFighters  
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RIGHT TAIL FIN  
(MOUNT @ 68°)

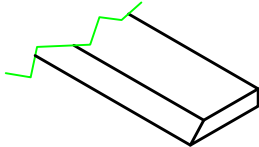


Example of 45° Bevel Cut.

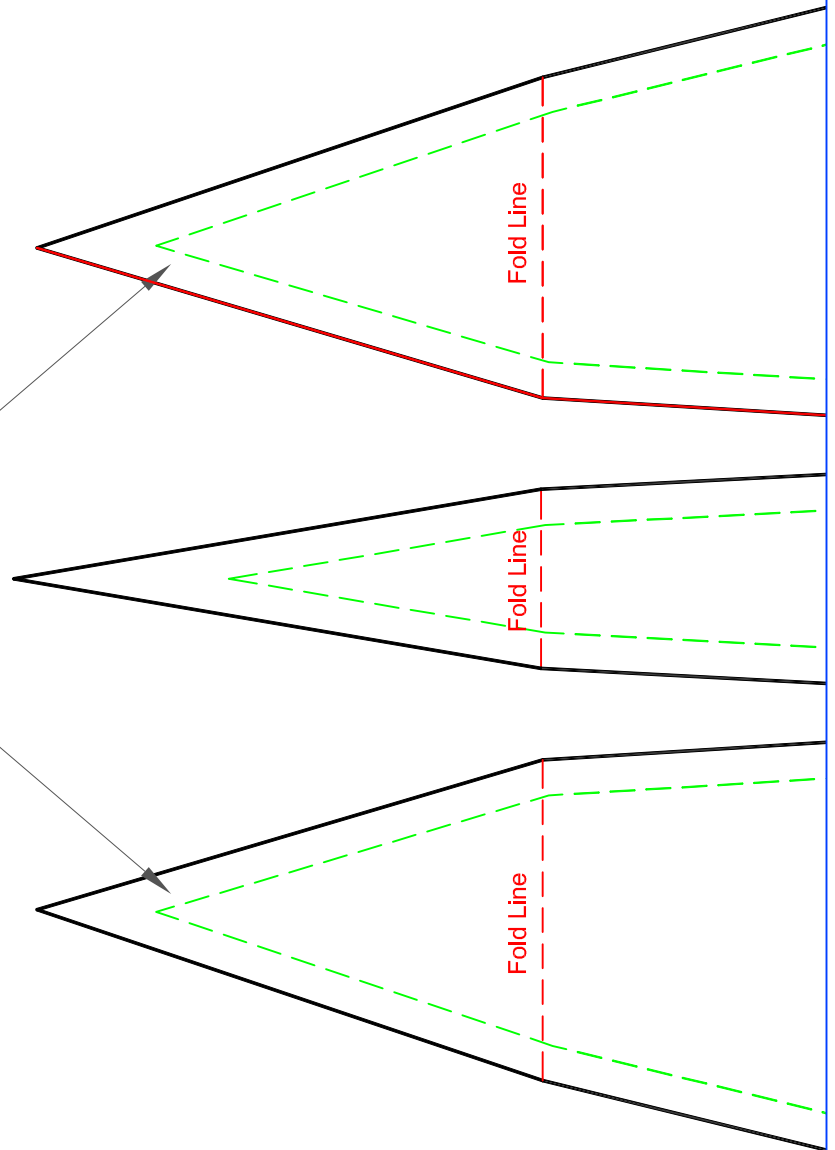
(Side View)



(Isometric View)



Bevel cut all the way around the fuselage piece.



# ***rcFoamFighters***

## ***FF-22 (FoamFighter 22)***

*(Design by Paul Petty - July 2009 - rev 1.2)*

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**P21**

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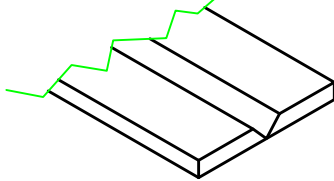


Example of Double 45°  
Bevel Cut.

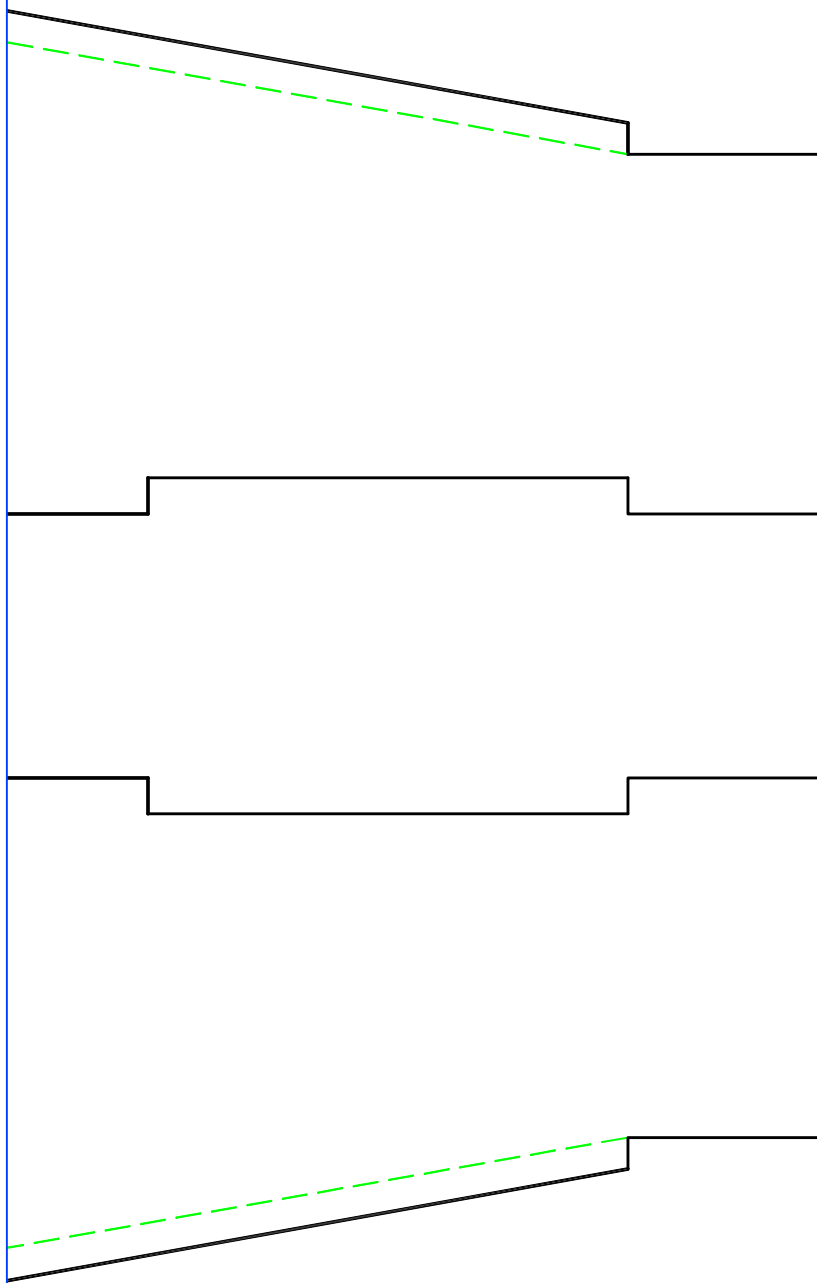
(Side View)



(Isometric View)



FUSELAGE  
MAIN PIECE



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by Paul Petty July 2009