



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



(Version 1.2 Shown In Picture)

(RC Model Airplane Construction Plans)

rcFoamFighters

FF-23 (Foam Fighter 23)

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

(CAD Drawing by Paul Petty - July 2009)

Basic Template Release Ver. 1.3

FREE PLAN - NOT TO BE SOLD

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FF-23 (Foam Fighter 23)

Basic Template

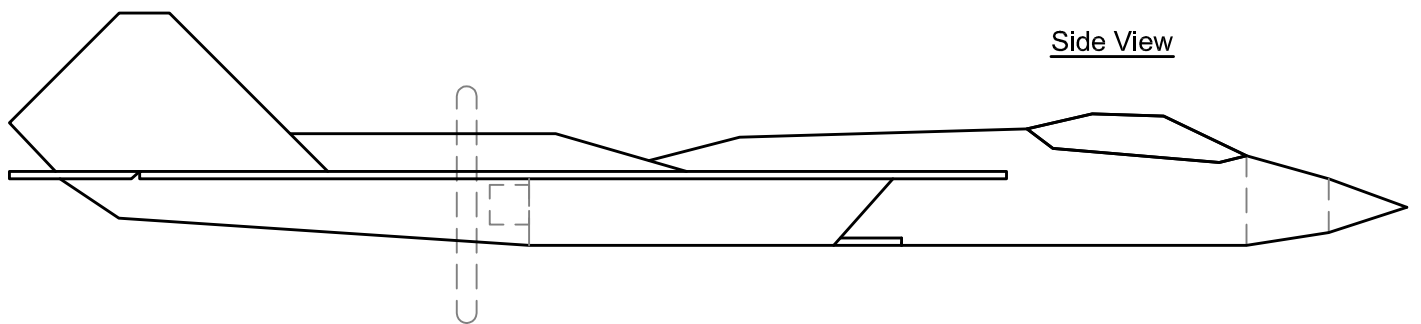
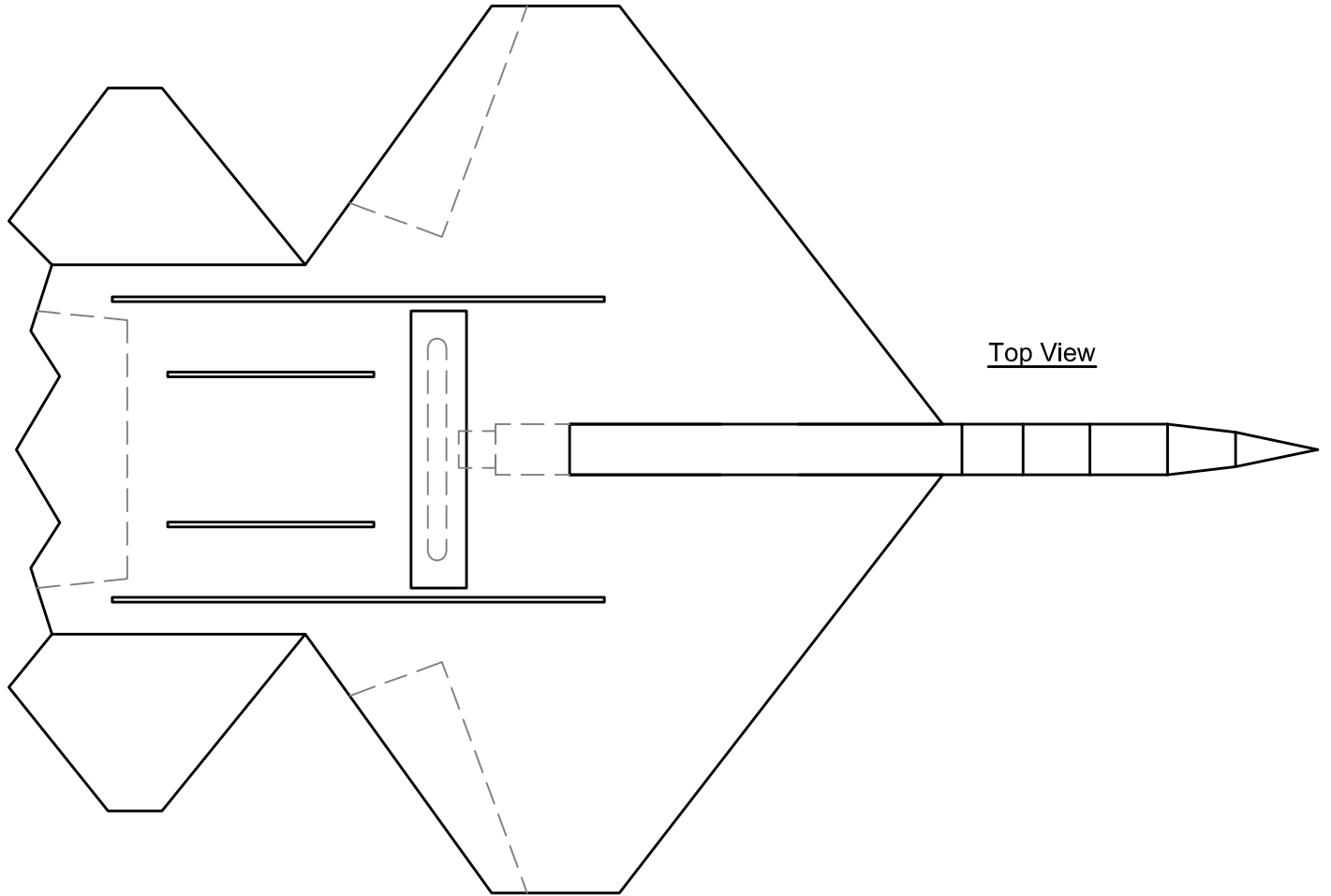
(Design by Paul Petty - Jan.-July 2009 - Rev 1.3)

(CAD Drawing by Paul Petty - July 2009)

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(Contact rcFoamFighters at: admin@rcfoamfighters.com)

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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)

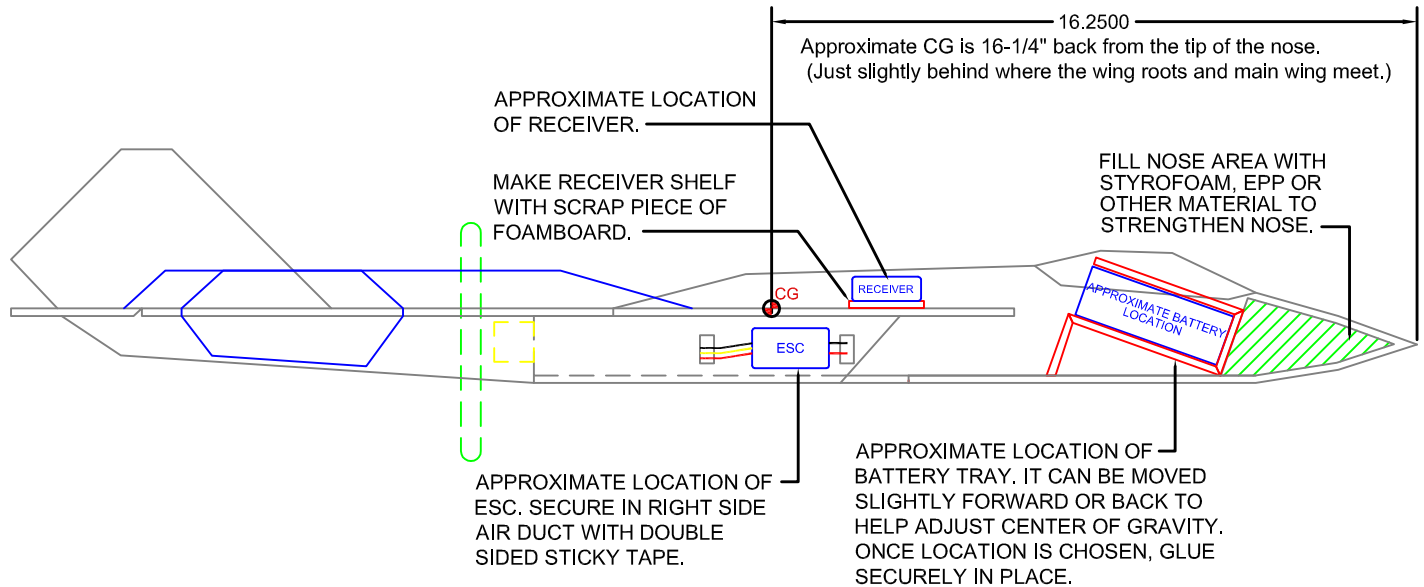
PERFORMANCE SETUP (80+mph)

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 with Carbon Spars may be used .

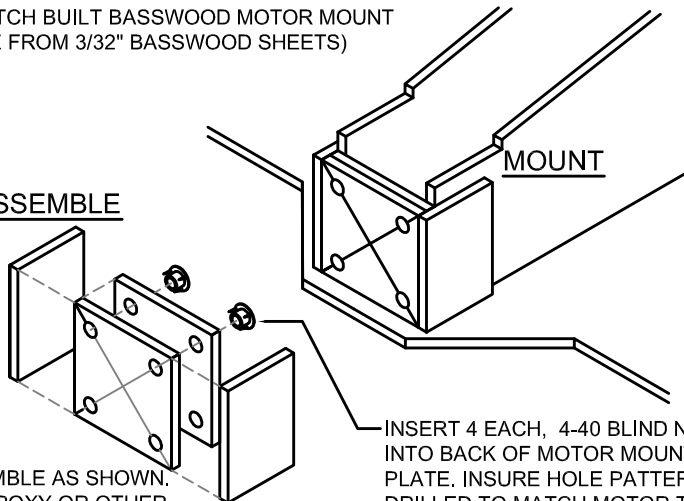
Disclaimer (Please Read):

- 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.



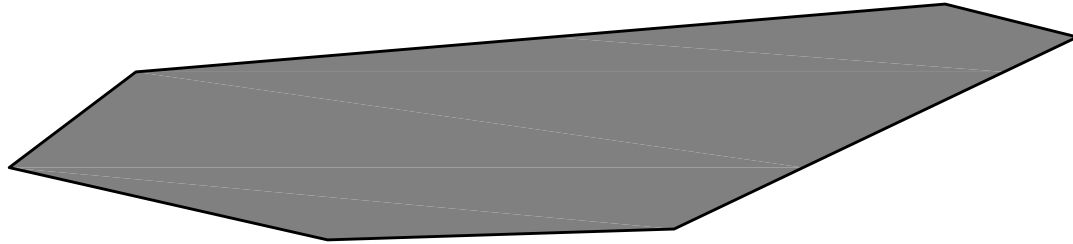
**SCRATCH BUILT BASSWOOD MOTOR MOUNT
 (MADE FROM 3/32" BASSWOOD SHEETS)**

ASSEMBLE



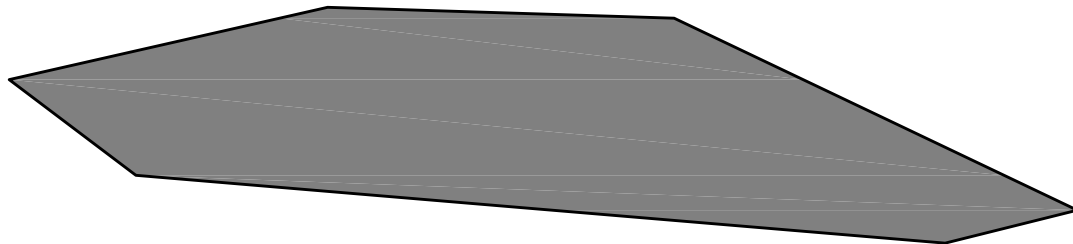
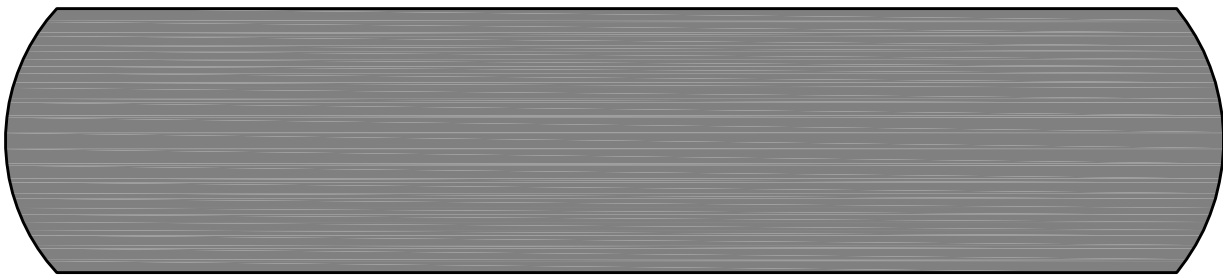
ASSEMBLE AS SHOWN.
 USE EPOXY OR OTHER
 ADHESIVE TO GLUE
 TOGETHER.

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.)



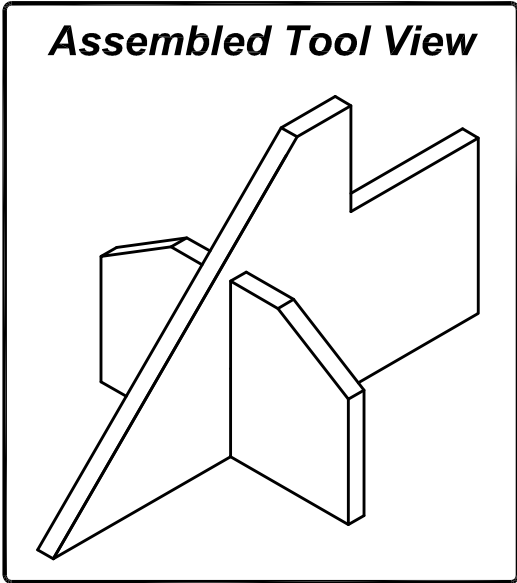
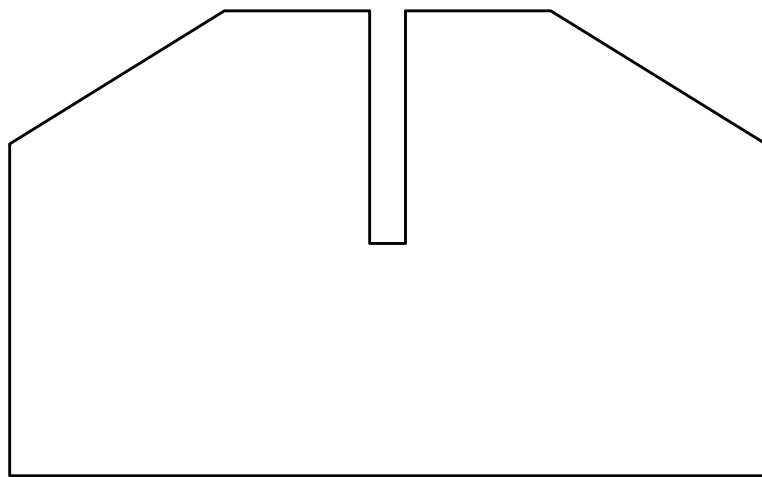
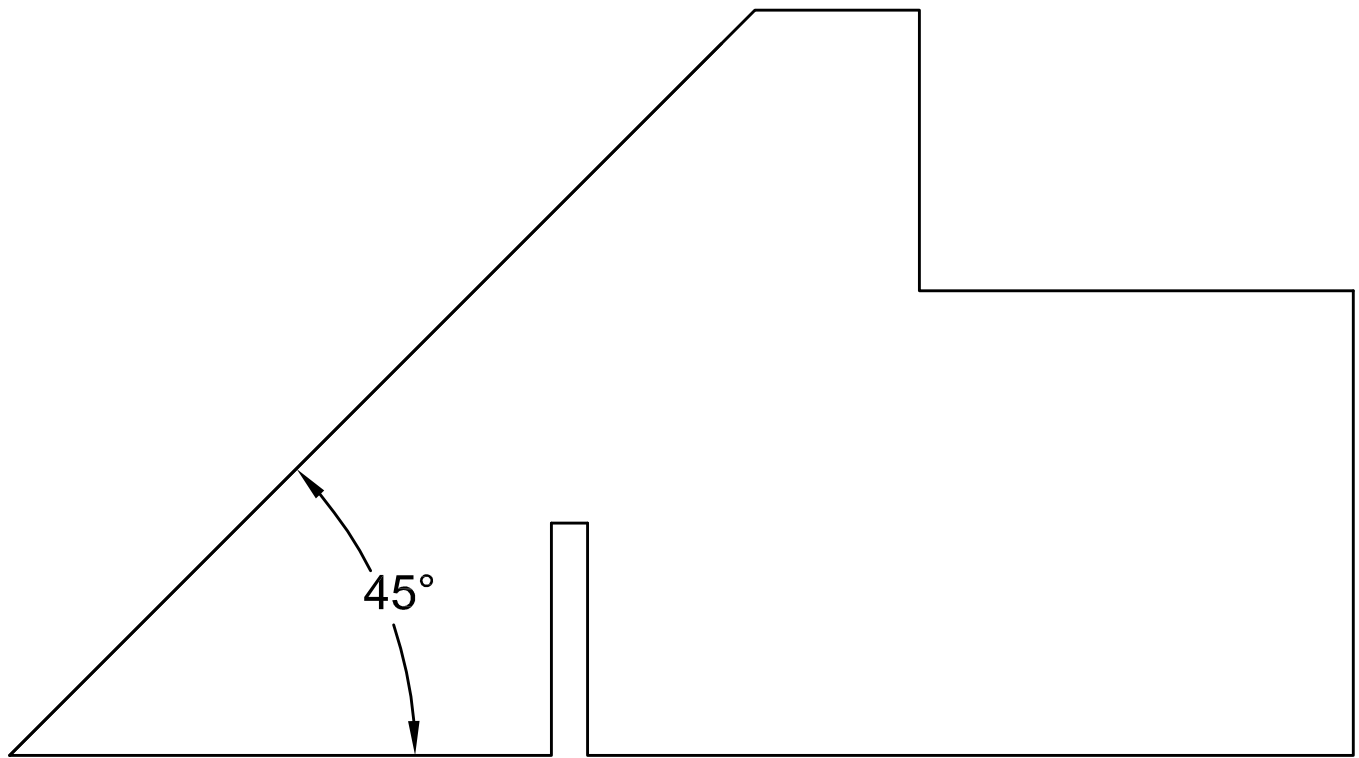
BACK

FRONT



Cockpit Glass Templates

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



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 45° while your adhesive dries.

TEMPLATE ASSEMBLY KEY PLAN

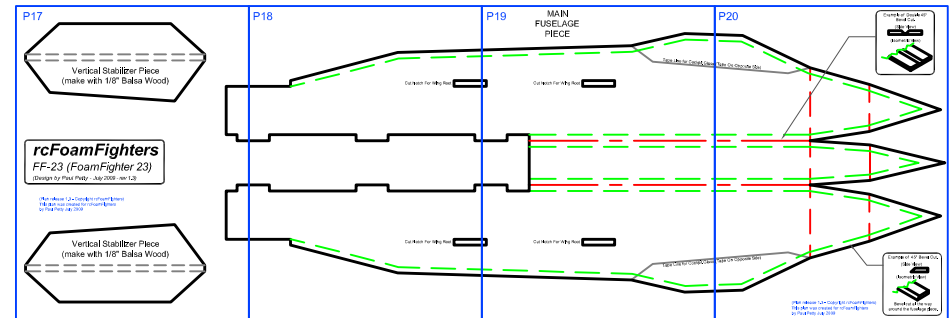
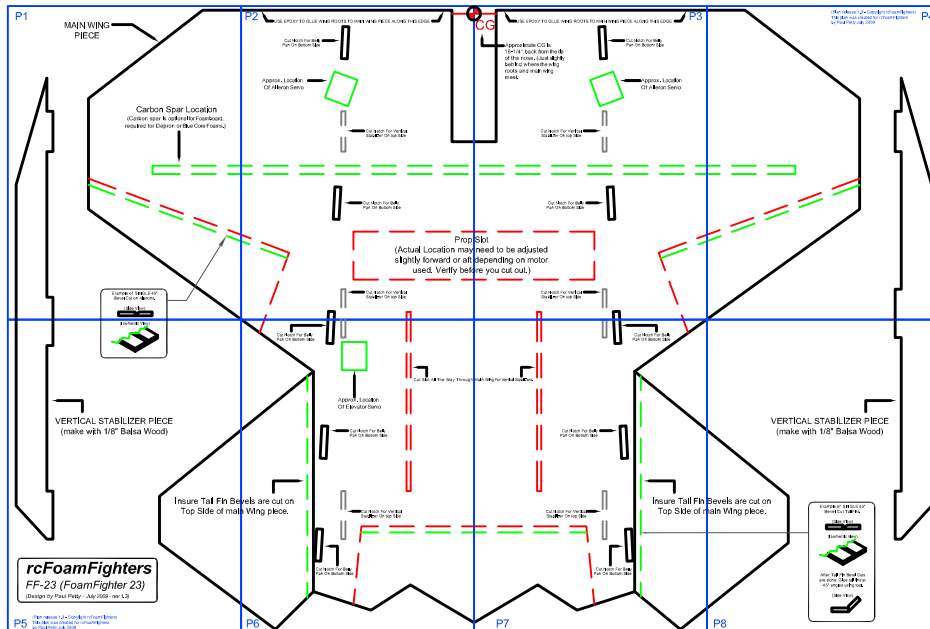
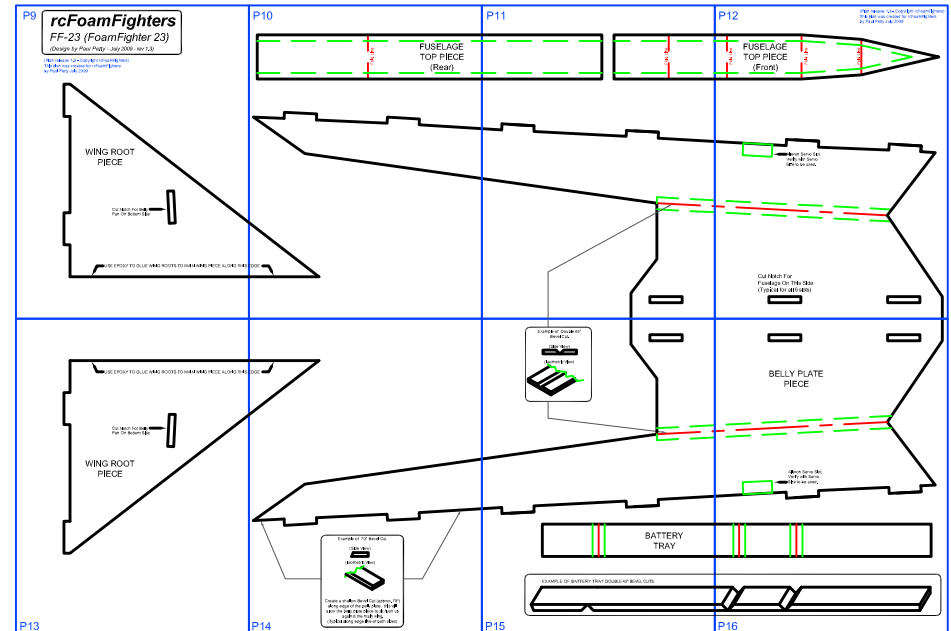
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FF-23 (Foam Fighter 23)

(Design by Paul Petty - Jan.-July 2009 - Rev 1.3)

(CAD Drawing by Paul Petty - July, 2009)

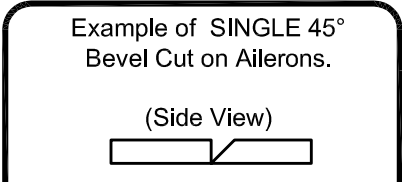
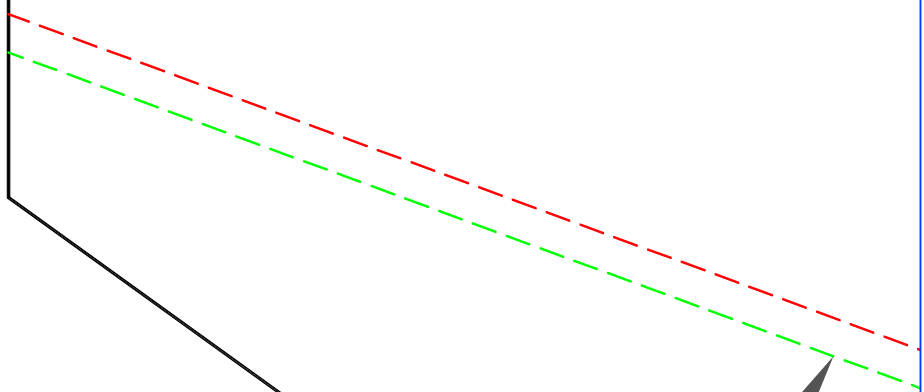
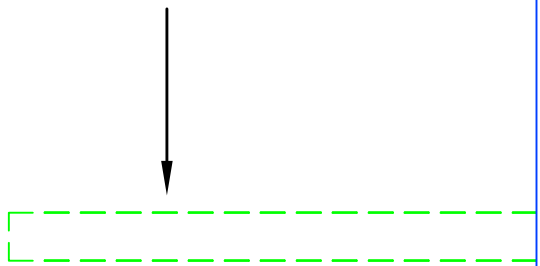
INSTRUCTIONS:
PRINT ALL TEMPLATE SHEETS. CUT AND ASSEMBLE AS SHOWN
BELOW. USE SCOTCH TAPE TO SECURE SHEETS TOGETHER.



P1

MAIN WING
PIECE

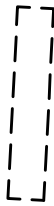
Carbon Spar Location
(Carbon spar is optional for Foamboard,
required for Depron or Blue Core Foams.)



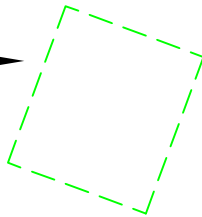
P2

USE EPOXY TO GLUE WING ROOTS TO MAIN WING PIECE ALONG THIS EDGE

Cut Notch For Belly Pan On Bottom Side



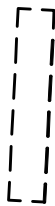
Approx. Location Of Aileron Servo



Cut Notch For Vertical Stabilizer On top Side



Cut Notch For Belly Pan On Bottom Side



Prop
(Actual Location may slightly forward or aft used. Verify before)

Cut Notch For Vertical Stabilizer On top Side



CG

USE EPOXY TO GLUE WING ROOTS TO MAIN WING PIECE ALONG THIS EDGE

Approximate CG is 16-1/4" back from the tip of the nose. (Just slightly behind where the wing roots and main wing meet.)

Cut Notch For Belly Pan On Bottom Side

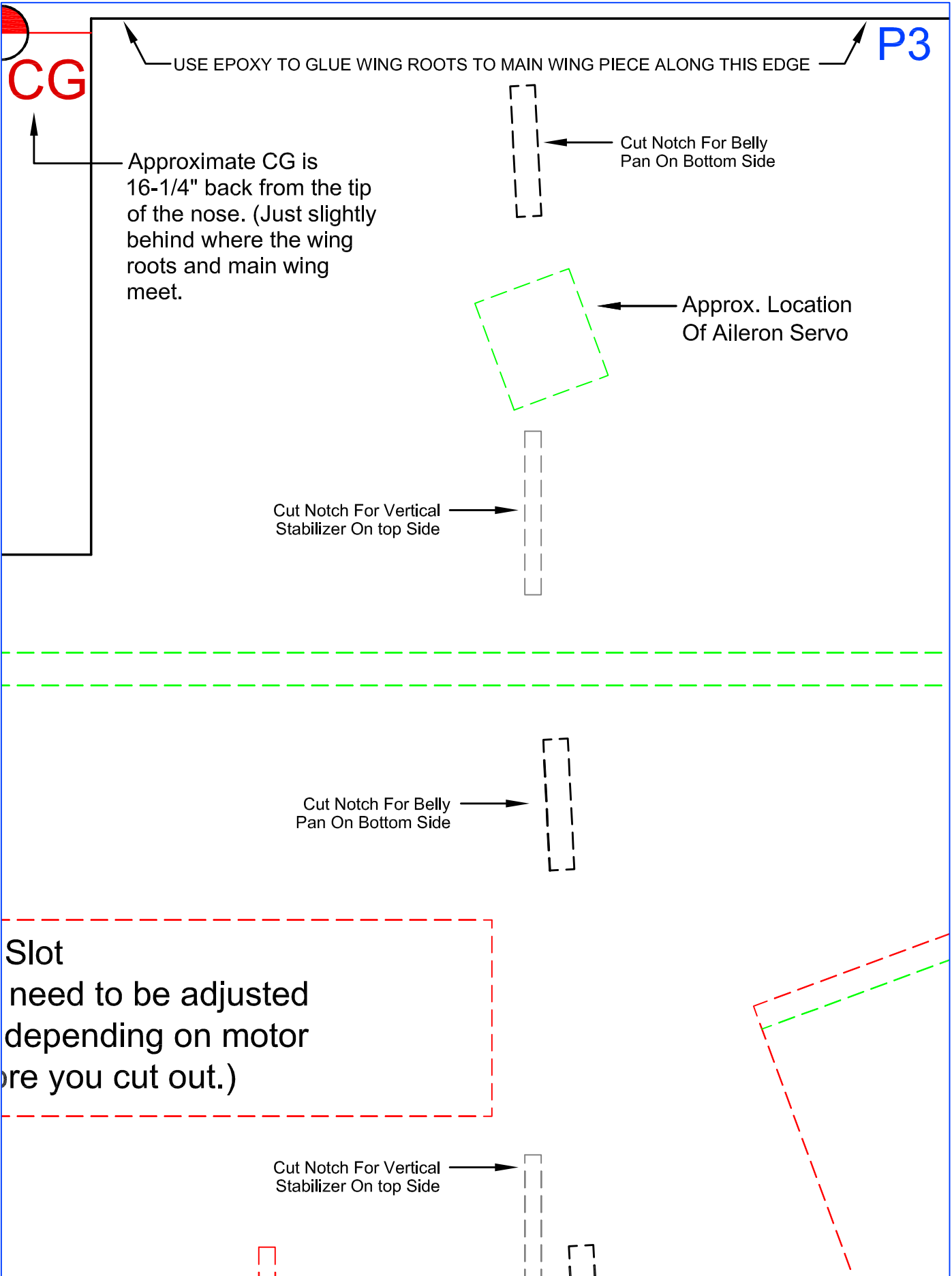
Approx. Location Of Aileron Servo

Cut Notch For Vertical Stabilizer On top Side

Cut Notch For Belly Pan On Bottom Side

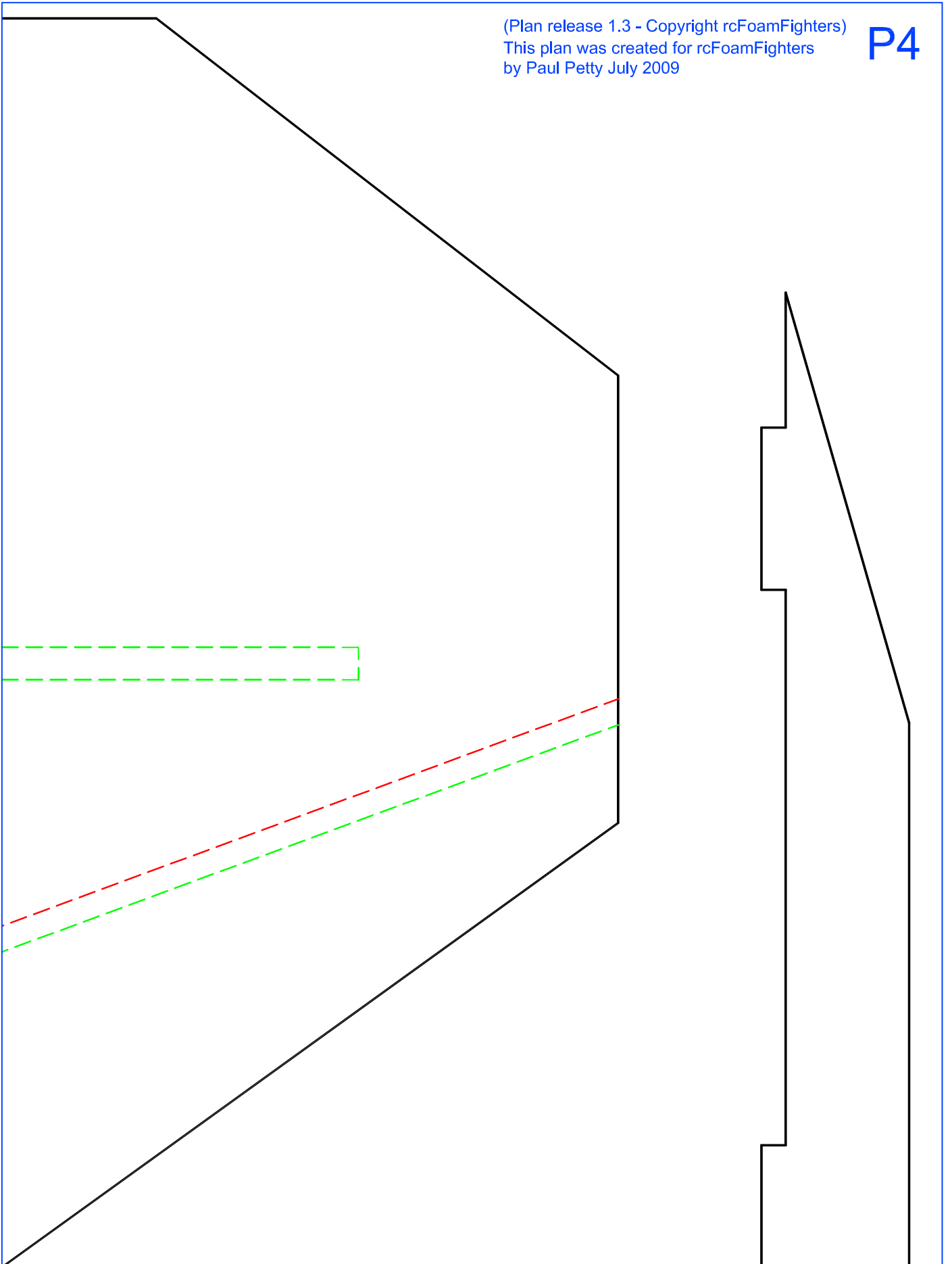
Slot need to be adjusted depending on motor (before you cut out.)

Cut Notch For Vertical Stabilizer On top Side

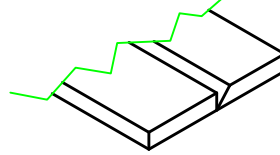


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P4



(Isometric View)



←
VERTICAL STABILIZER PIECE
(make with 1/8" Balsa Wood)

Insure Tail Fin Be
Top Side of main

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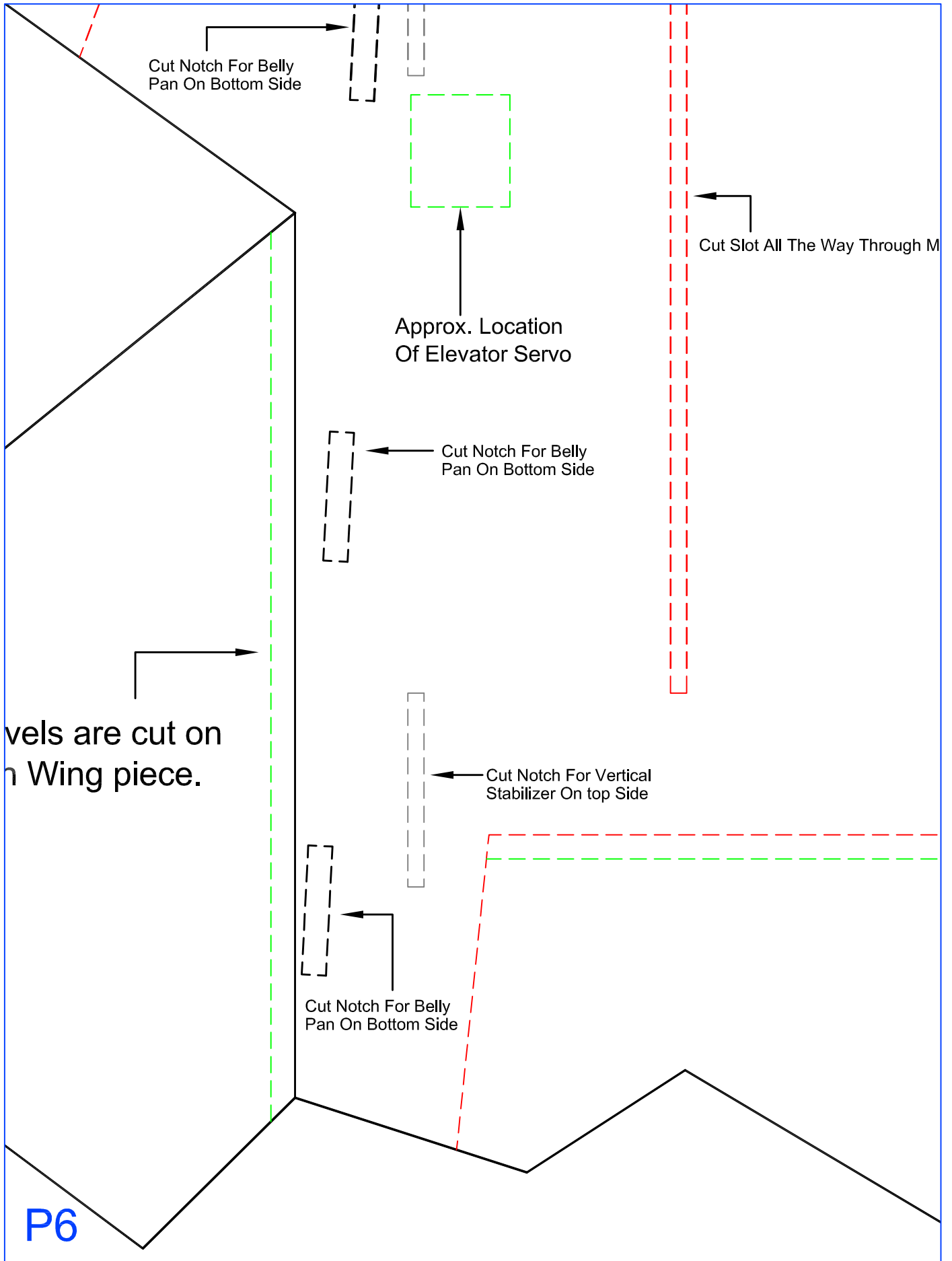
FF-23 (FoamFighter 23)

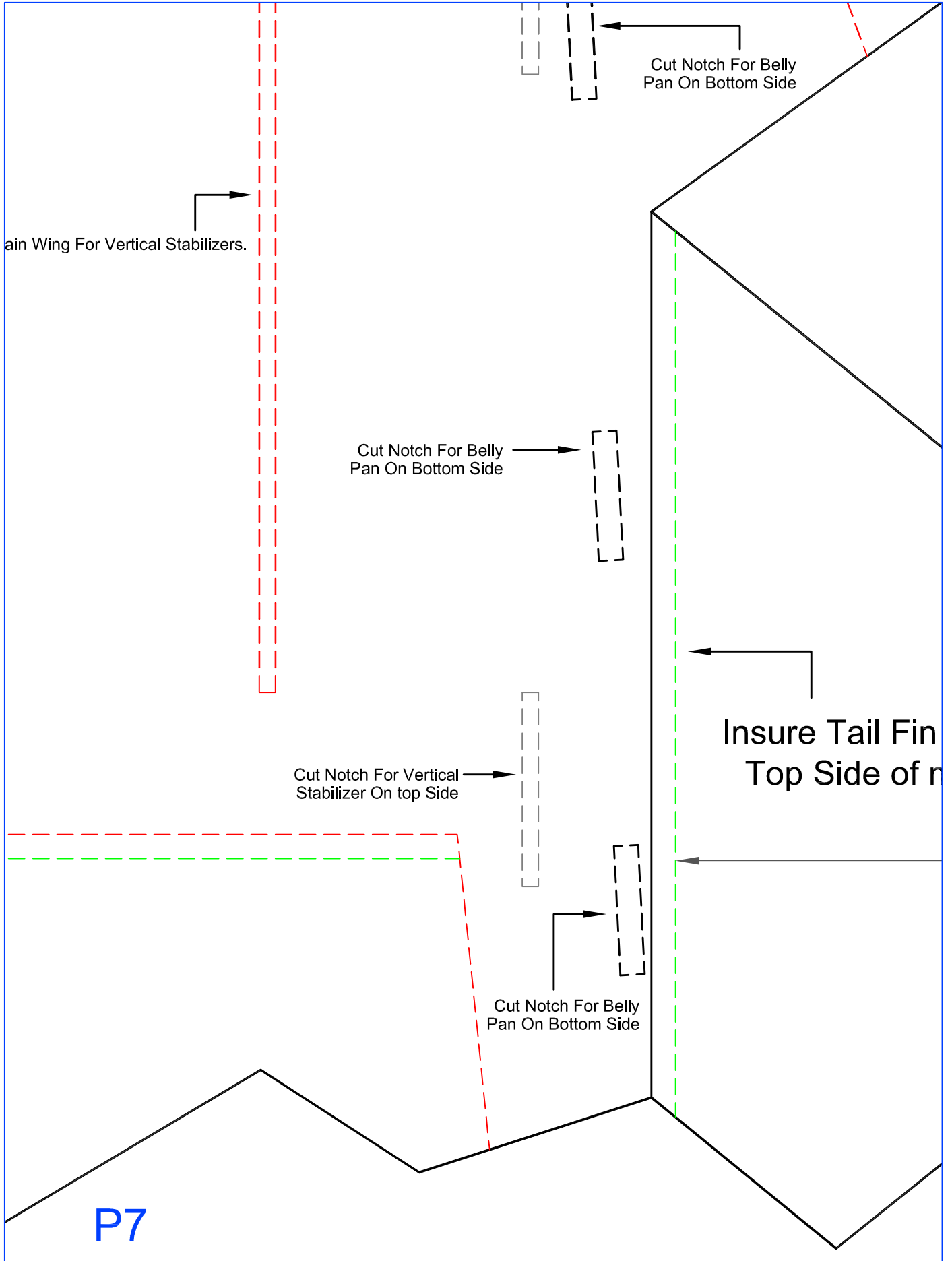
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P5

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P7

VERTICAL STABILIZER PIECE
(make with 1/8" Balsa Wood)

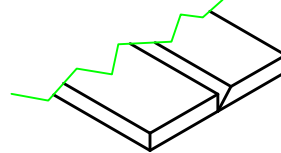
Bevels are cut on
main Wing piece.

Example of SINGLE 45°
Bevel Cut Tail Fins.

(Side View)



(Isometric View)



After Tail Fin Bevel Cuts
are done, Glue tail fins at
45° angles using tool.

(Side View)



P9

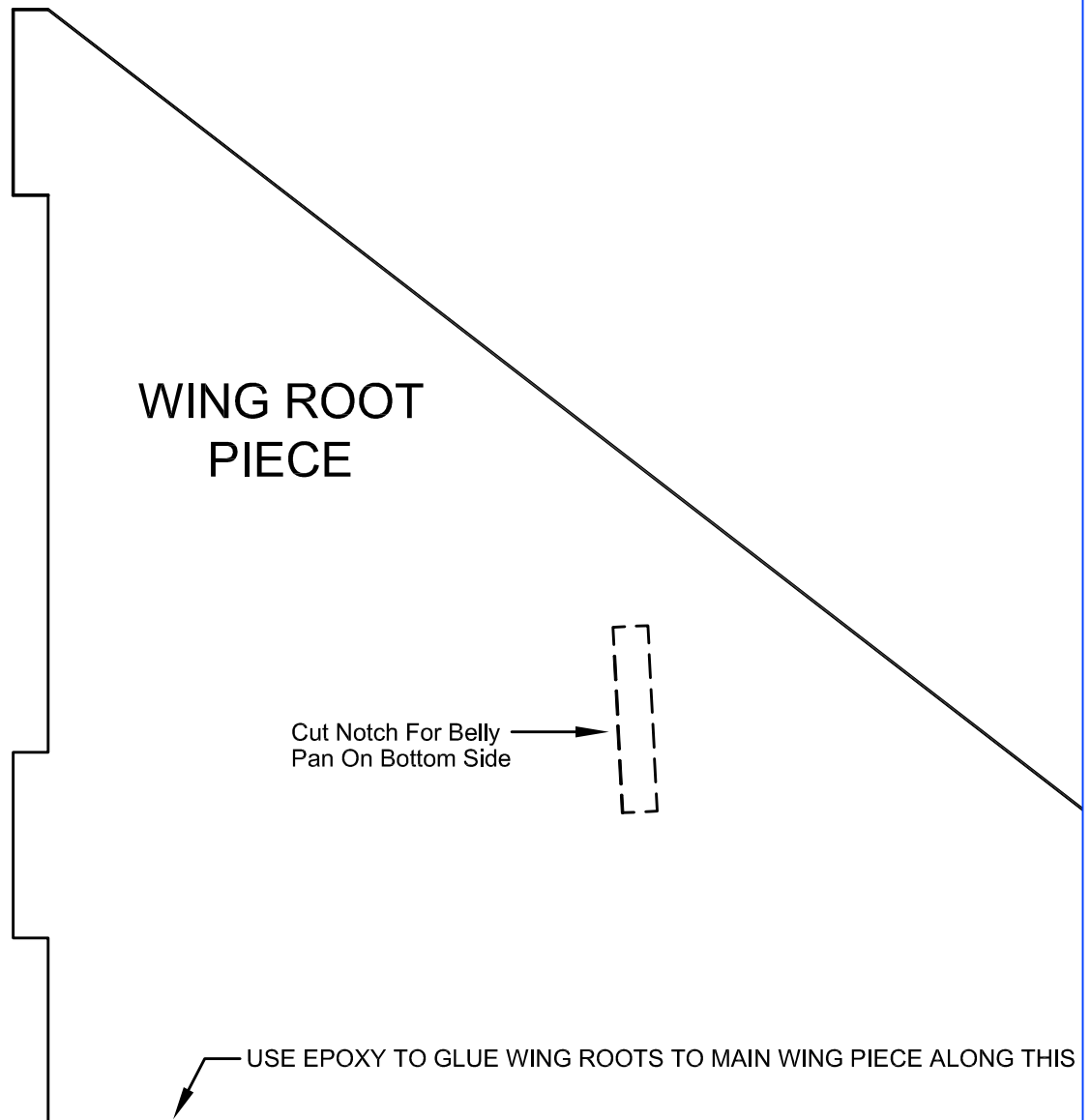
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FF-23 (FoamFighter 23)

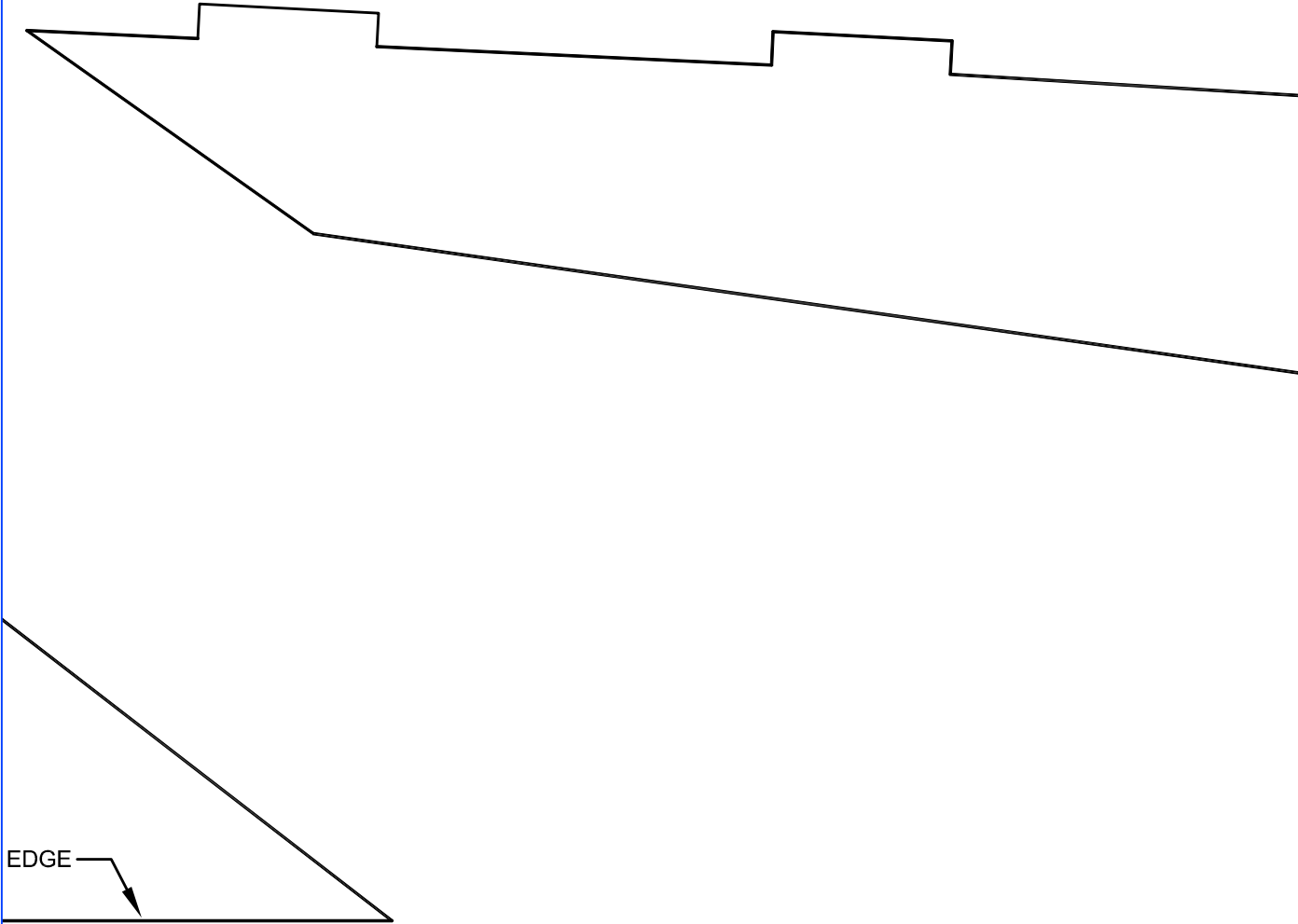
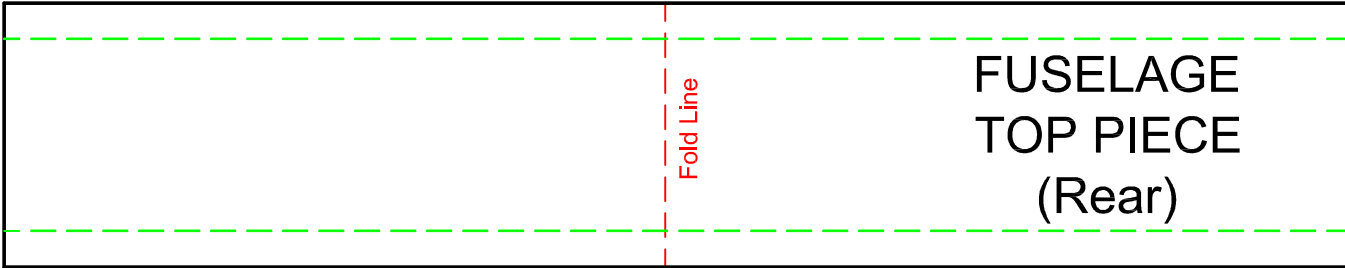
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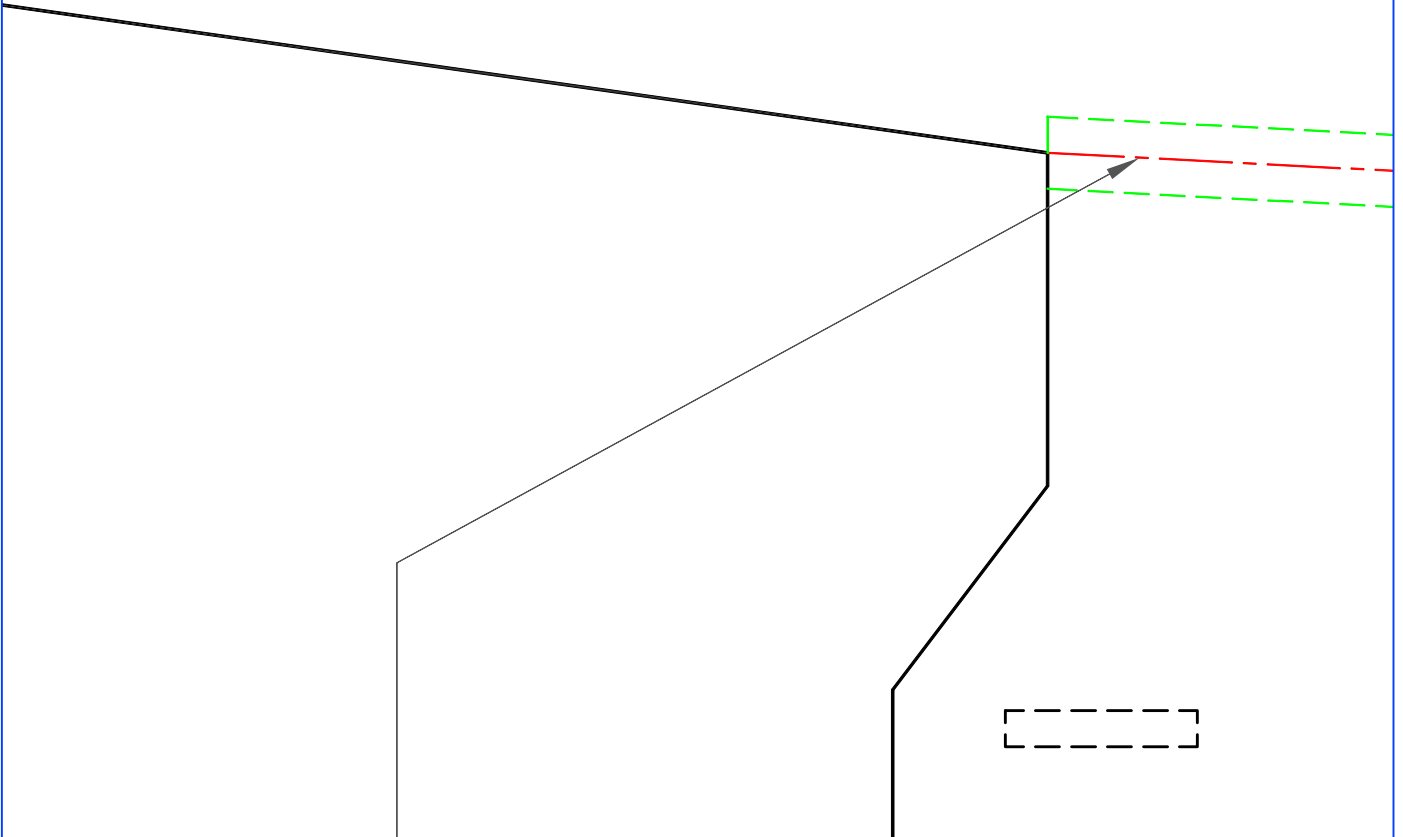
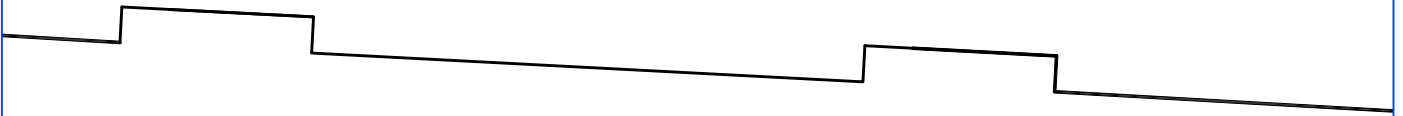
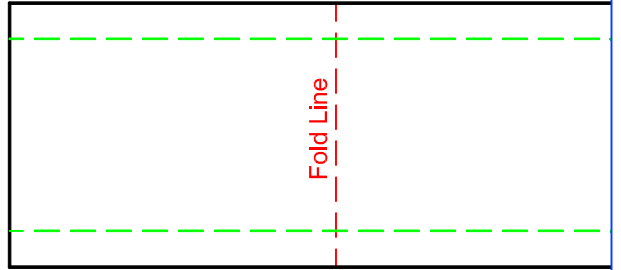
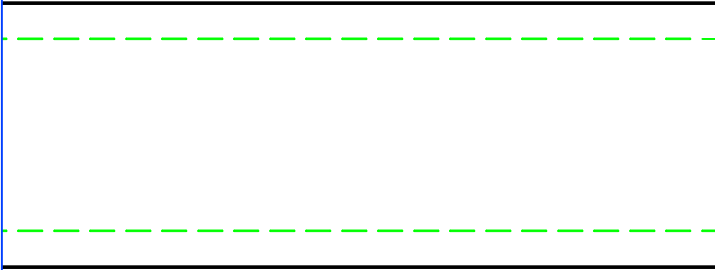
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P10

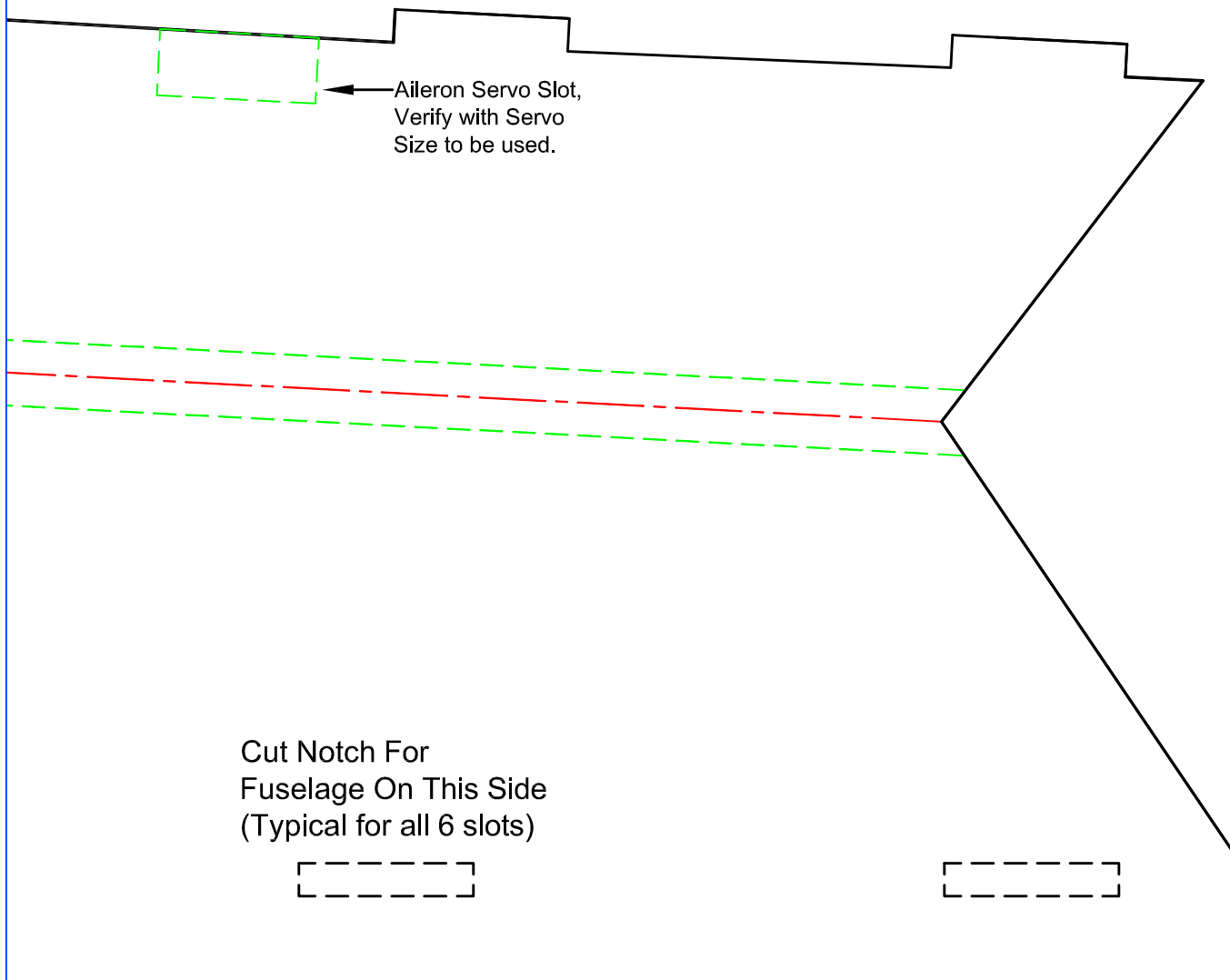
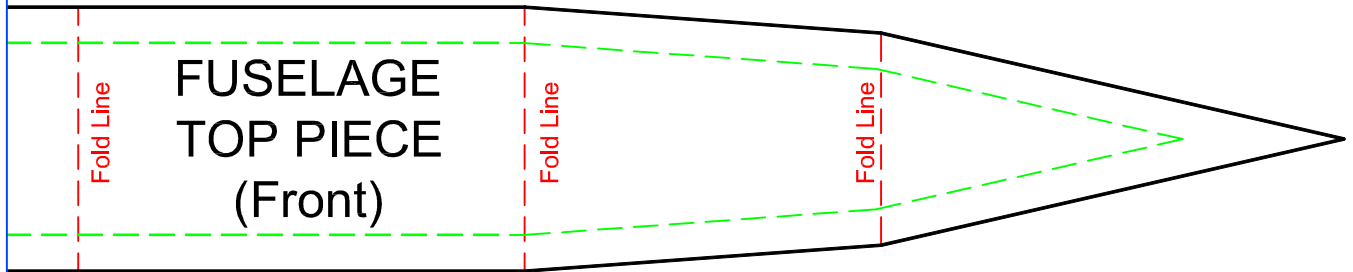


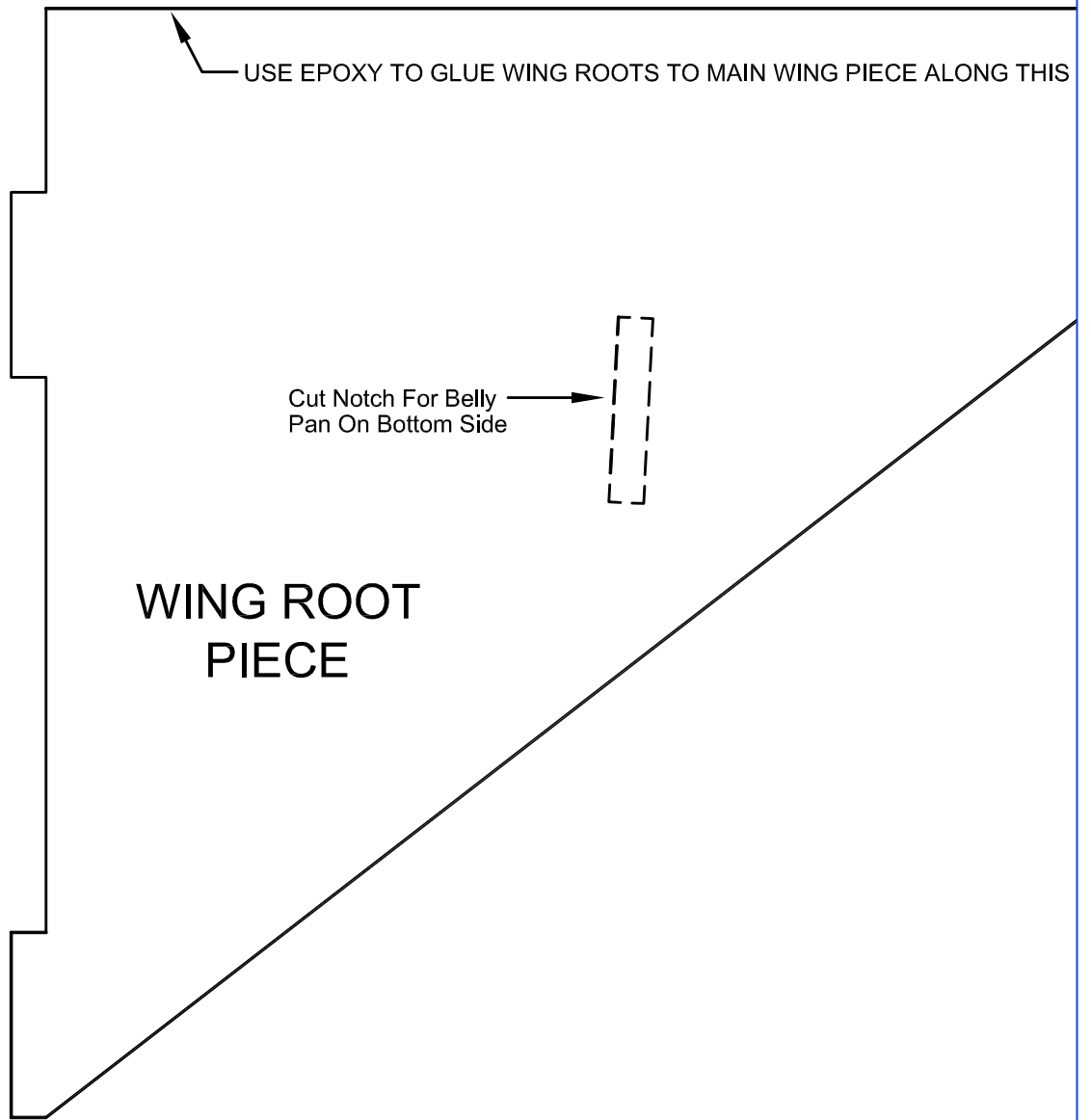
P11

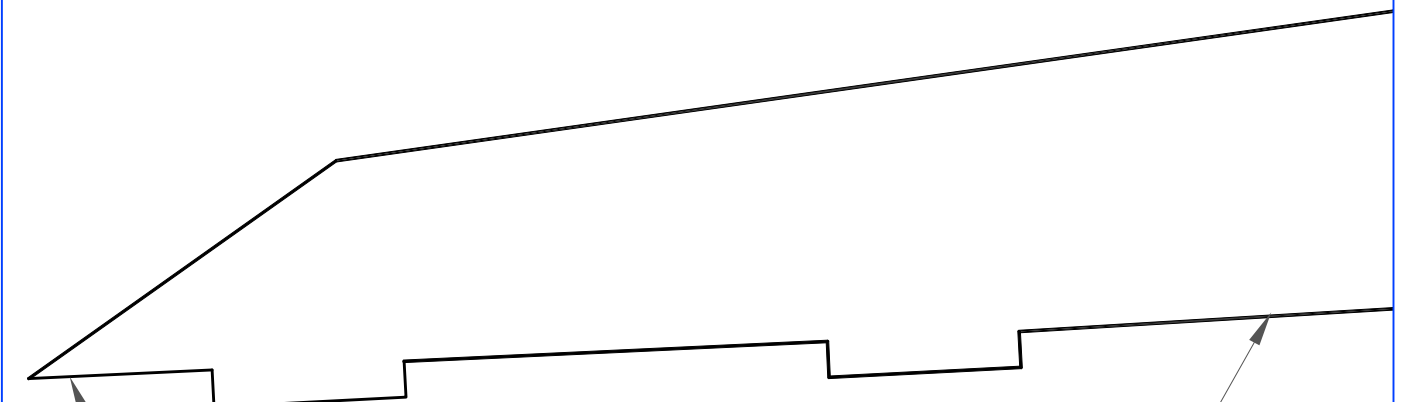
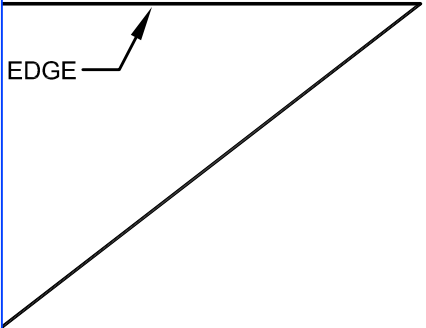


P12

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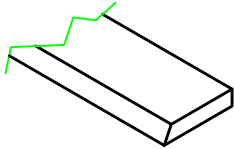


Example of 70° Bevel Cut

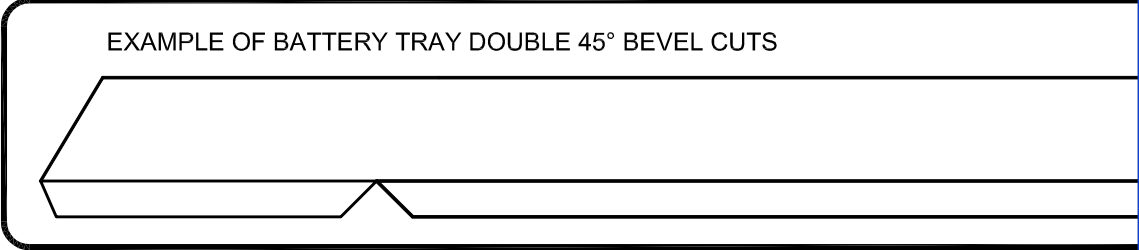
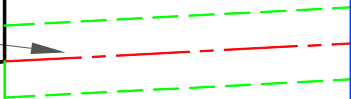
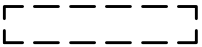
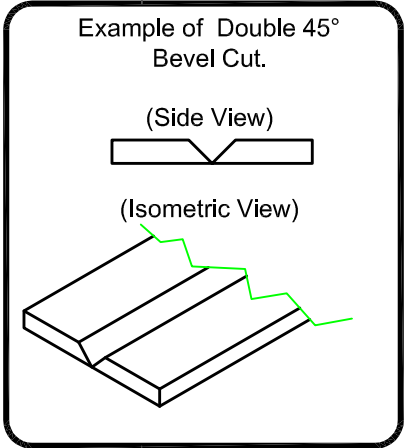
(Side View)

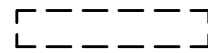
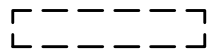


(Isometric View)

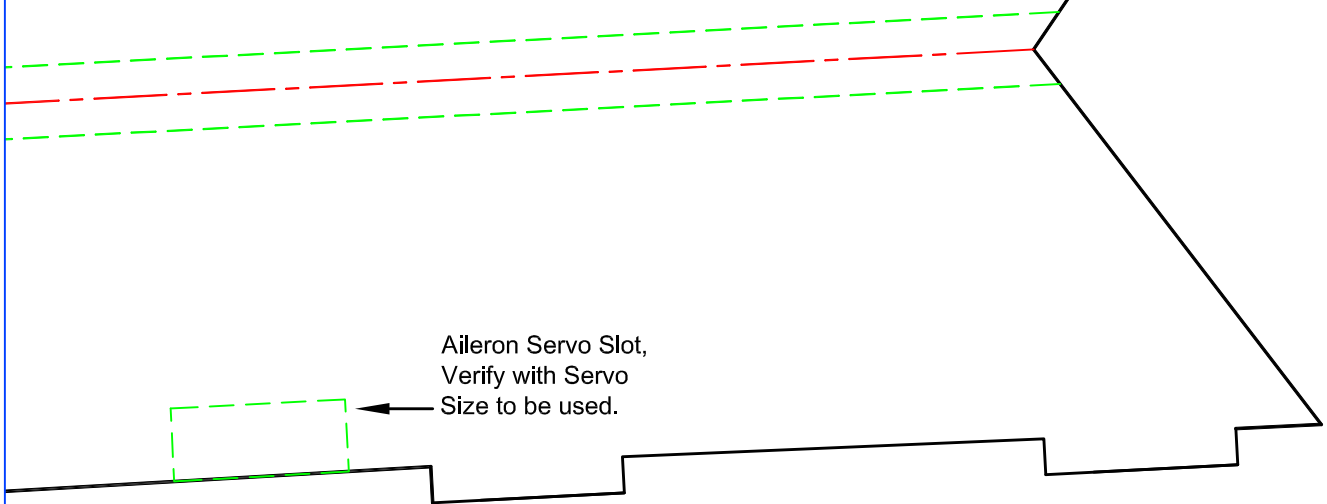


Create a shallow Bevel Cut (approx. 70°) along edge of the belly plate, this will allow the belly plate piece to sit flush up against the main wing.
(Typical along edge line of both sides)

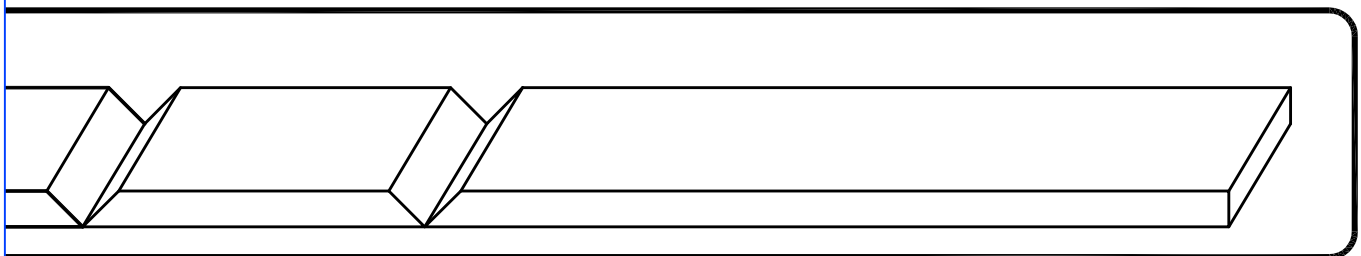




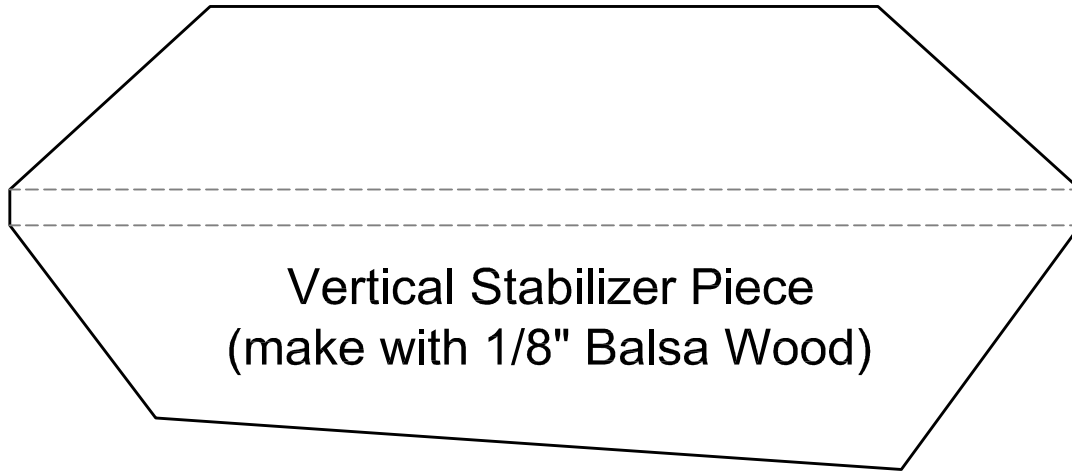
BELLY PLATE PIECE



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

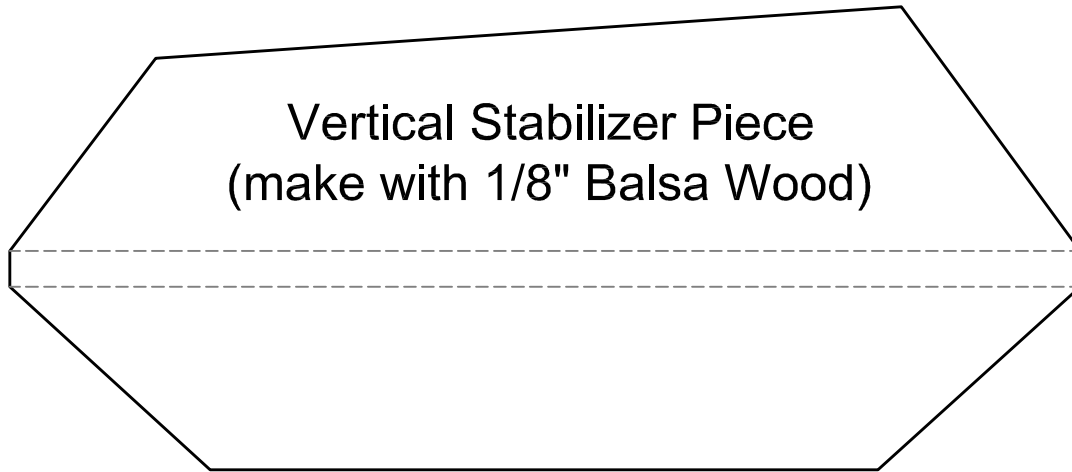


P17

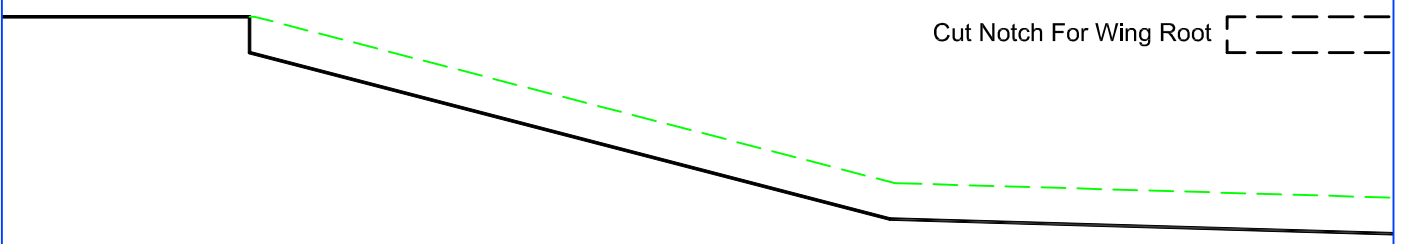
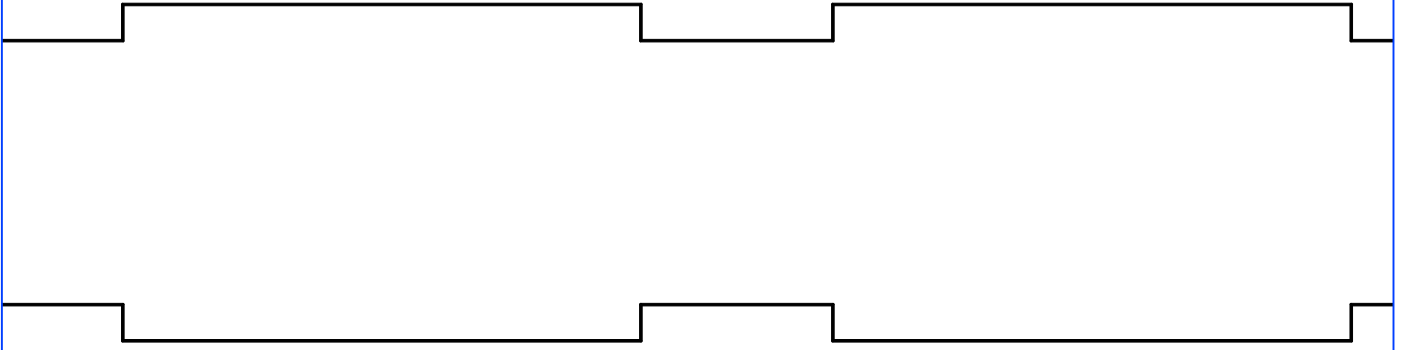
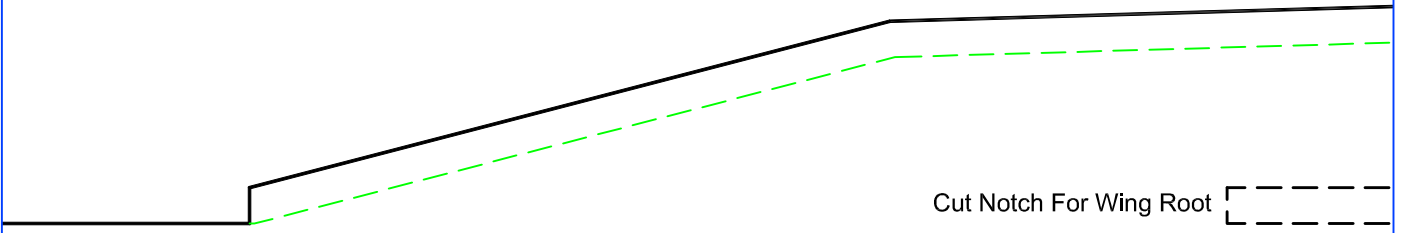


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FF-23 (FoamFighter 23)
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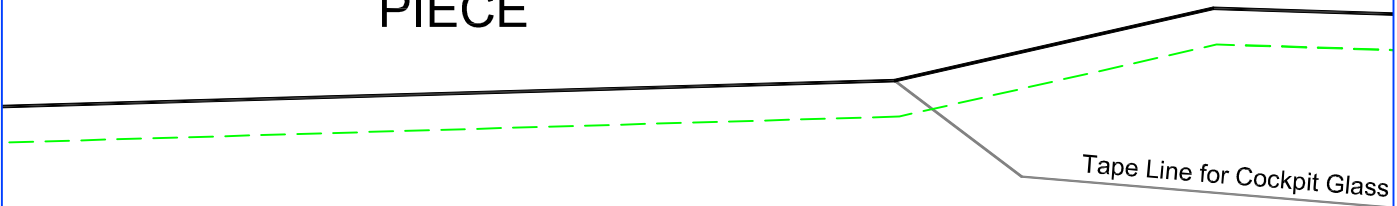


P18



P19

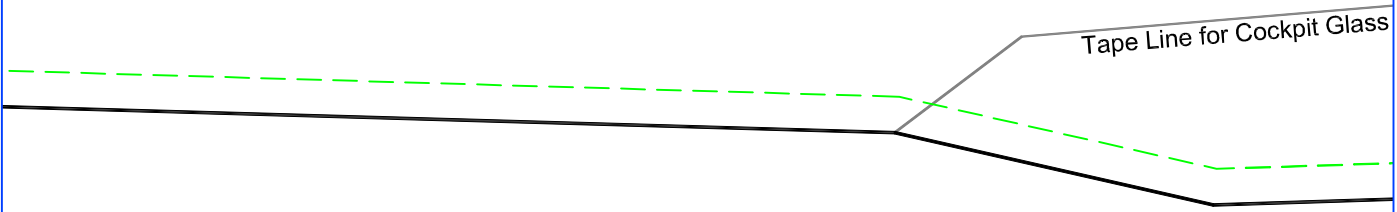
MAIN
FUSELAGE
PIECE



Cut Notch For Wing Root 



Cut Notch For Wing Root 



Tape Line for Cockpit Glass

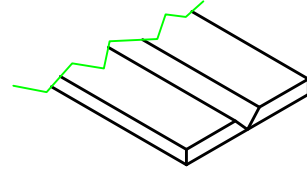
P20

Example of Double 45°
Bevel Cut.

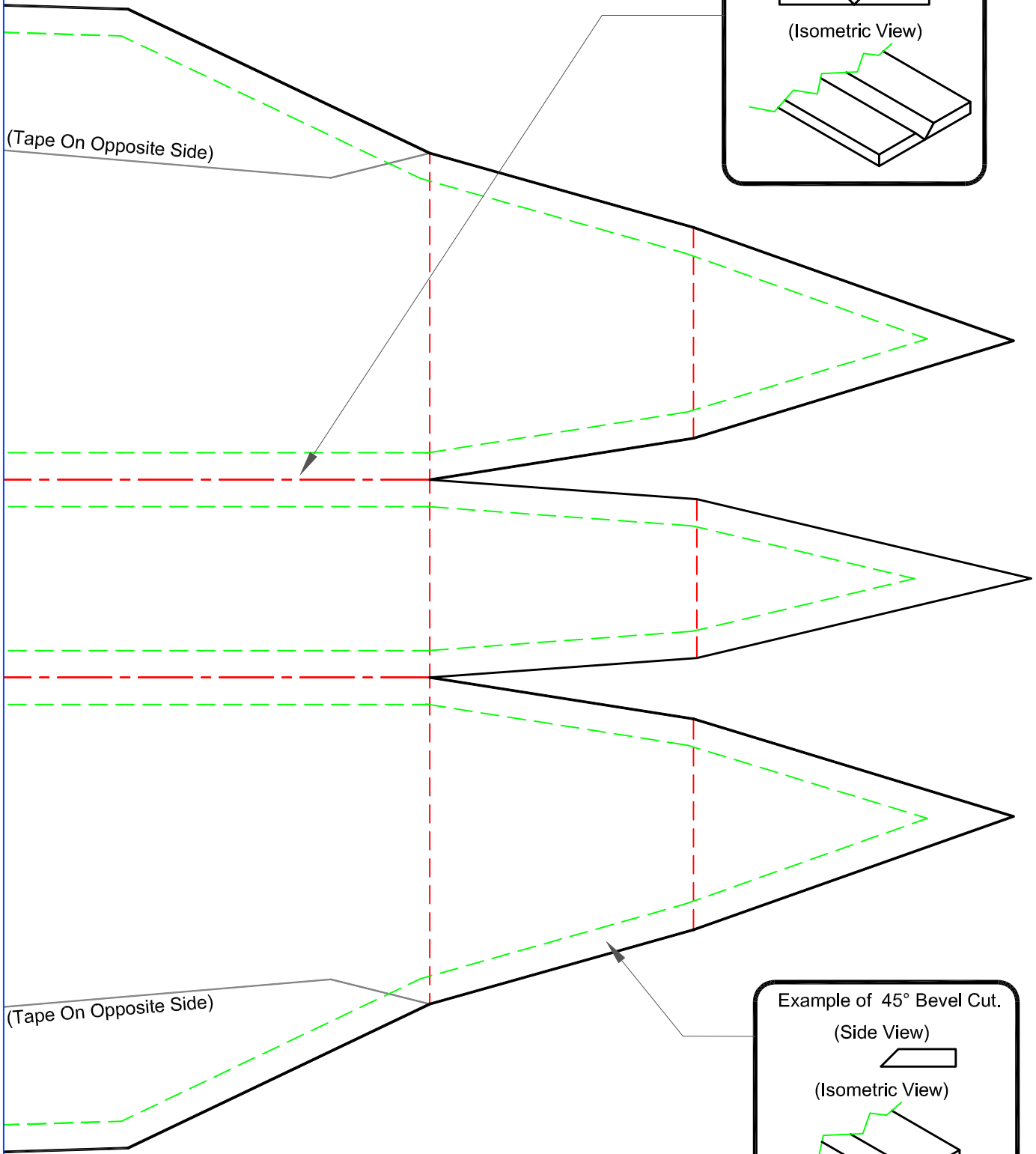
(Side View)



(Isometric View)



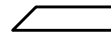
(Tape On Opposite Side)



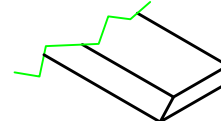
(Tape On Opposite Side)

Example of 45° Bevel Cut.

(Side View)



(Isometric View)



Bevel cut all the way
around the fuselage piece.

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