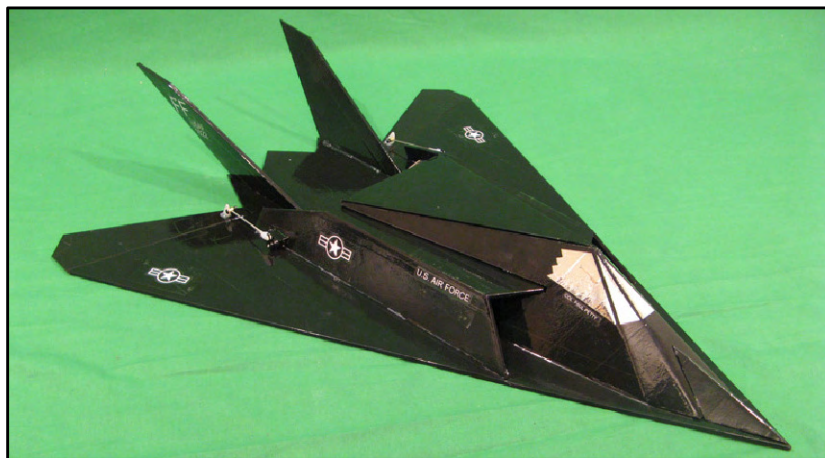




FOAM, GLUE, TAPE AND A LITTLE IMAGINATION....



(Version 1.0 Shown In Picture)

(RC Model Airplane Construction Plans)

rcFoamFighters

FF-117 (Foam Fighter 117)

(Original Design by Paul Petty - DEC. 2009)

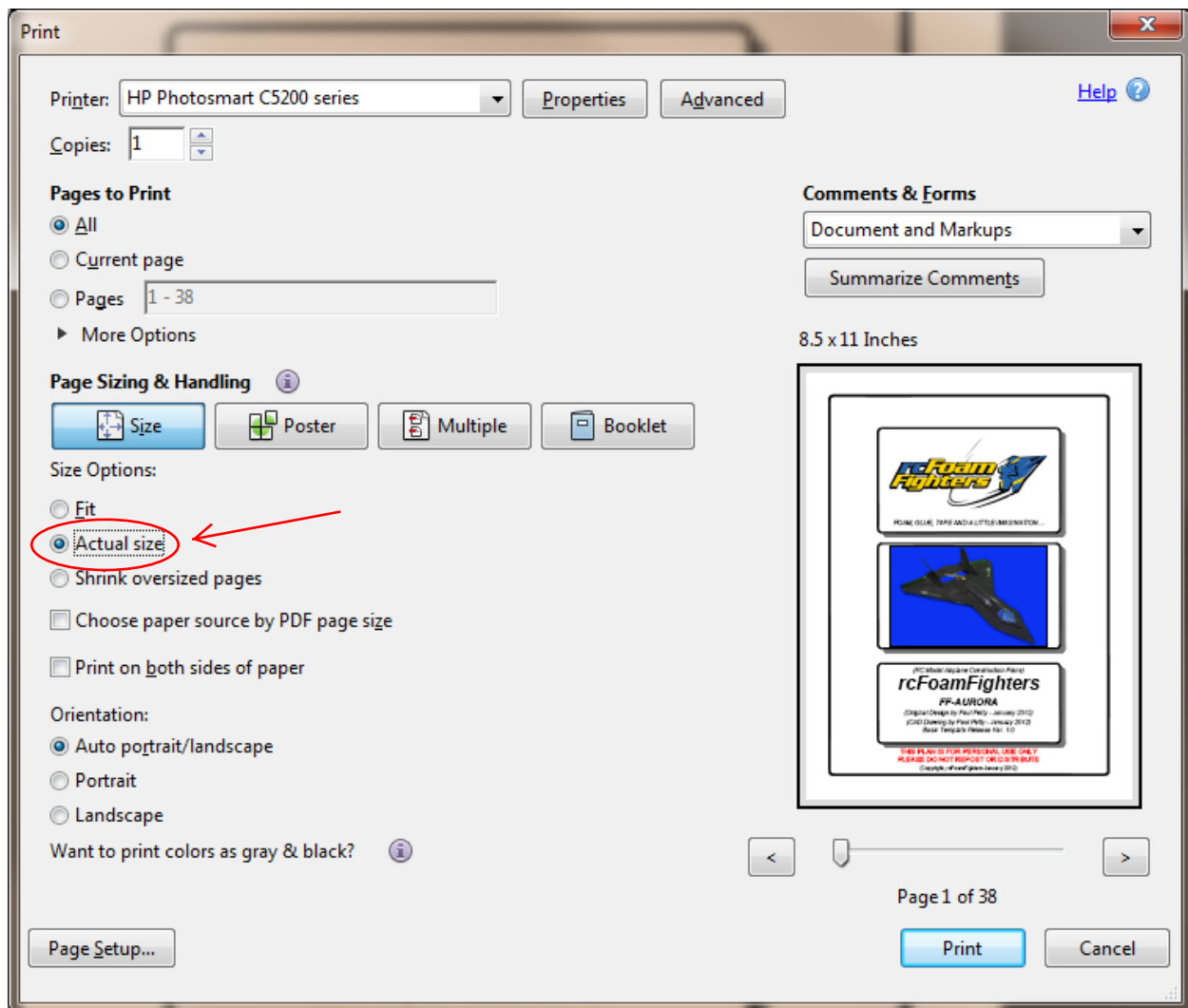
(CAD Drawing by Paul Petty - JAN 2010)

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-117 (Foam Fighter 117)

Basic Template

(Design by Paul Petty - Dec 2009 - Rev 1.0)

(CAD Drawing by Paul Petty - Jan. 2010)

(Basic Template Release 1.0 - Copyright rcFoamFighters)

(Contact rcFoamFighters at: admin@rcfoamfighters.com)

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

Basic Specs as built by rcFoamFighters:

Wingspan: 26 Inches (66cm)

Length: 34.5 Inches (87.6cm)

All Up Weight (AUW): 29oz. (882gms)

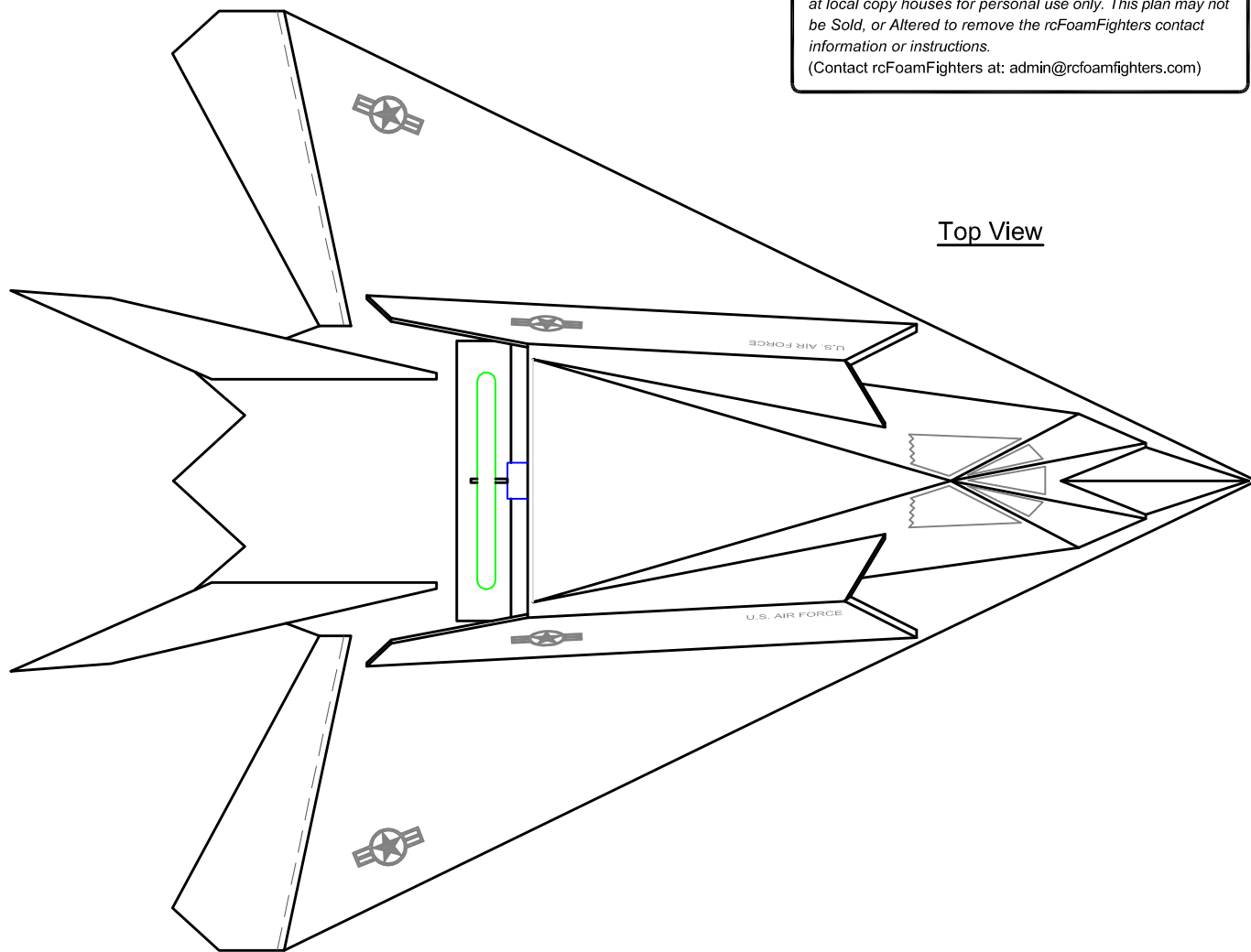
Top Speed: 74mph (119kph)

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 Heavy Duty Elmers Brand Foamboard. Using Depron or Fan Fold Foam will surely reduce the AUW.

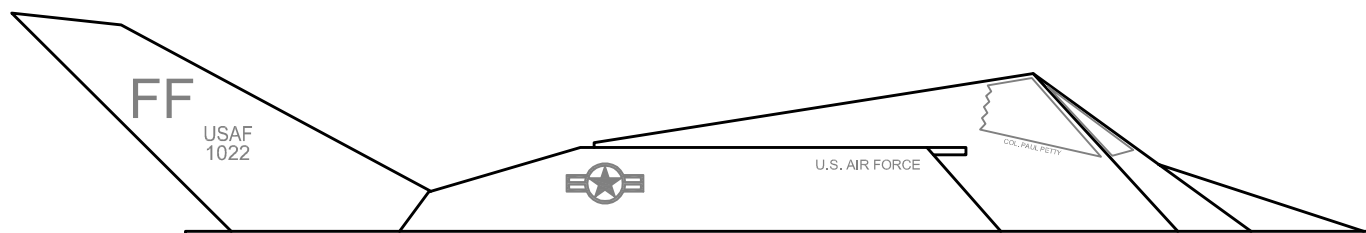
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(Contact rcFoamFighters at: admin@rcfoamfighters.com)



Top View



Side View

Recommend Parts:

BASIC SETUP (70+mph)

Motor: Grayson Hobbies "Super Mega Jet" 2550kV Motor (or TURNIGY 2836-2350 motor or other 400+ watt motor)

ESC: 40A Brushless ESC

Prop: APC 6x5.5

Battery: 2200mA (30C recommended)

Servos: 2 Each Micro Metal Gear

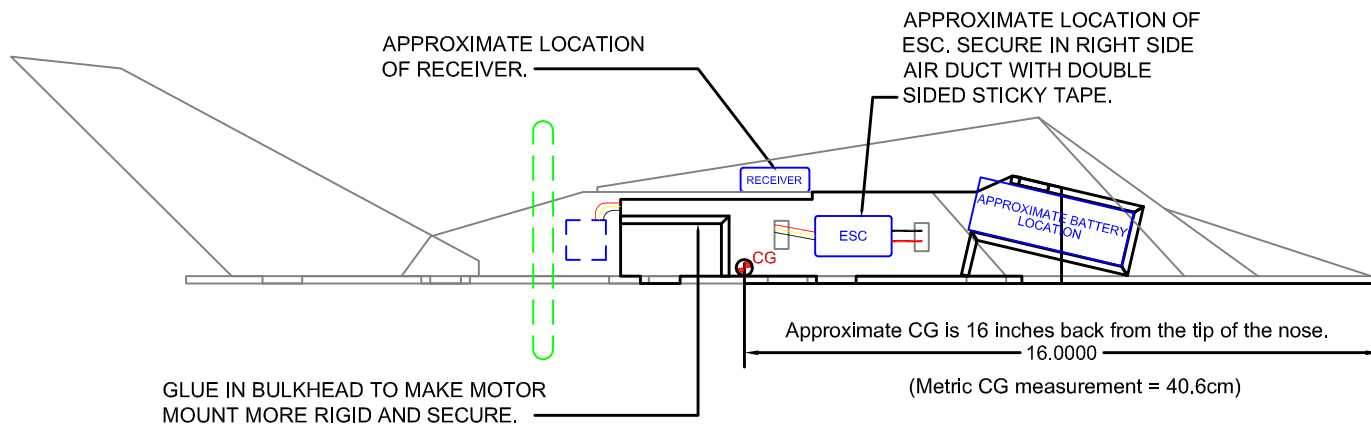
Radio & Receiver: Any 4-channel or better (2.4ghz preferred)

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

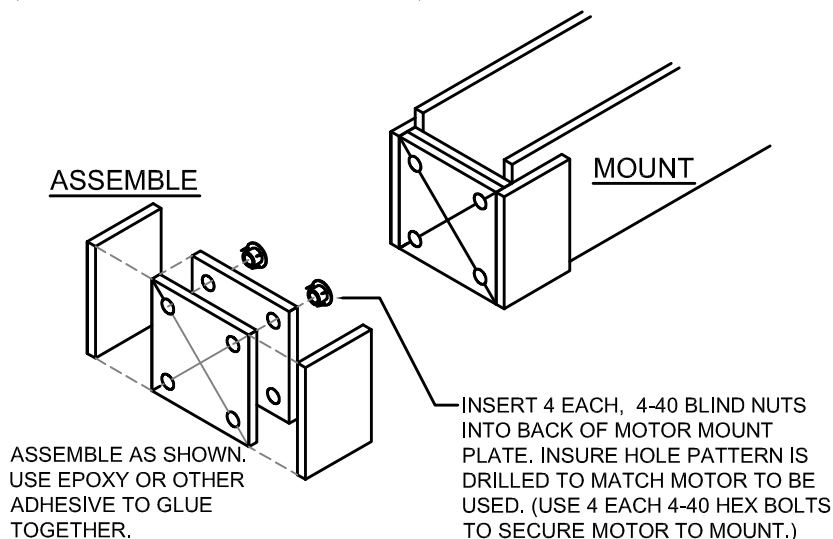
Depron or FanFold Foam with Carbon Spars may be used .

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.



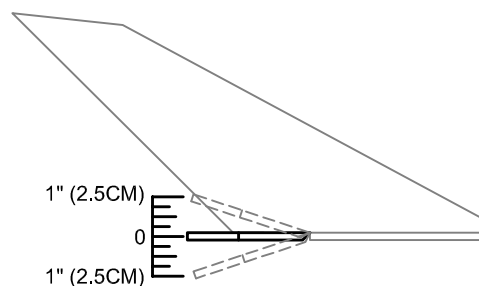
SCRATCH BUILT BASSWOOD MOTOR MOUNT (MADE FROM 3/32" BASSWOOD SHEETS)



VERY IMPORTANT!!!

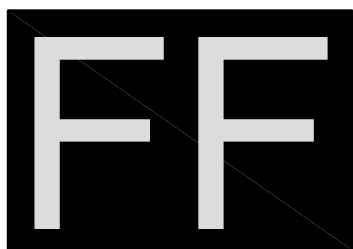
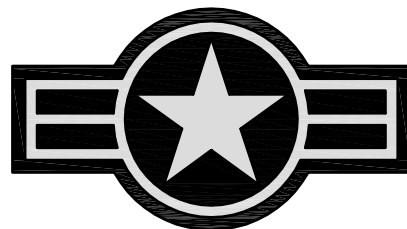
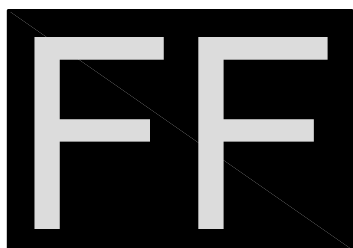
RECOMMEND AILERON THROWS:

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.

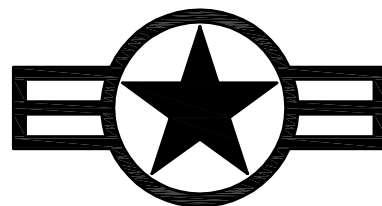
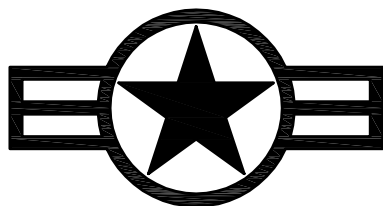
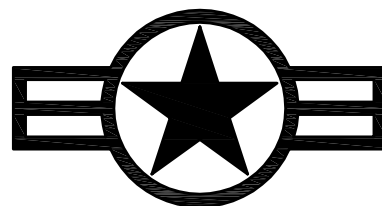
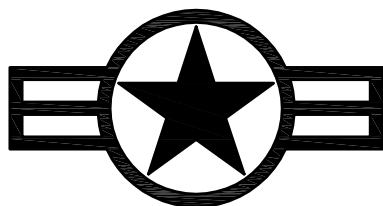


USAF
1022

USAF
1022

U.S. AIR FORCE

U.S. AIR FORCE



USAF
1022

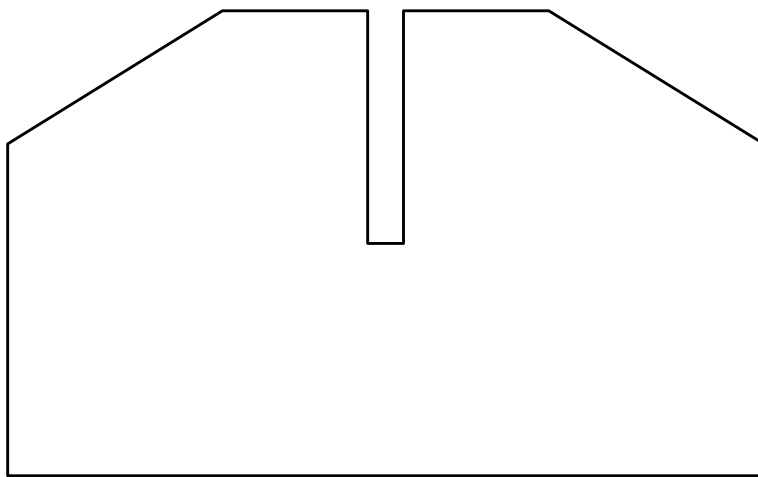
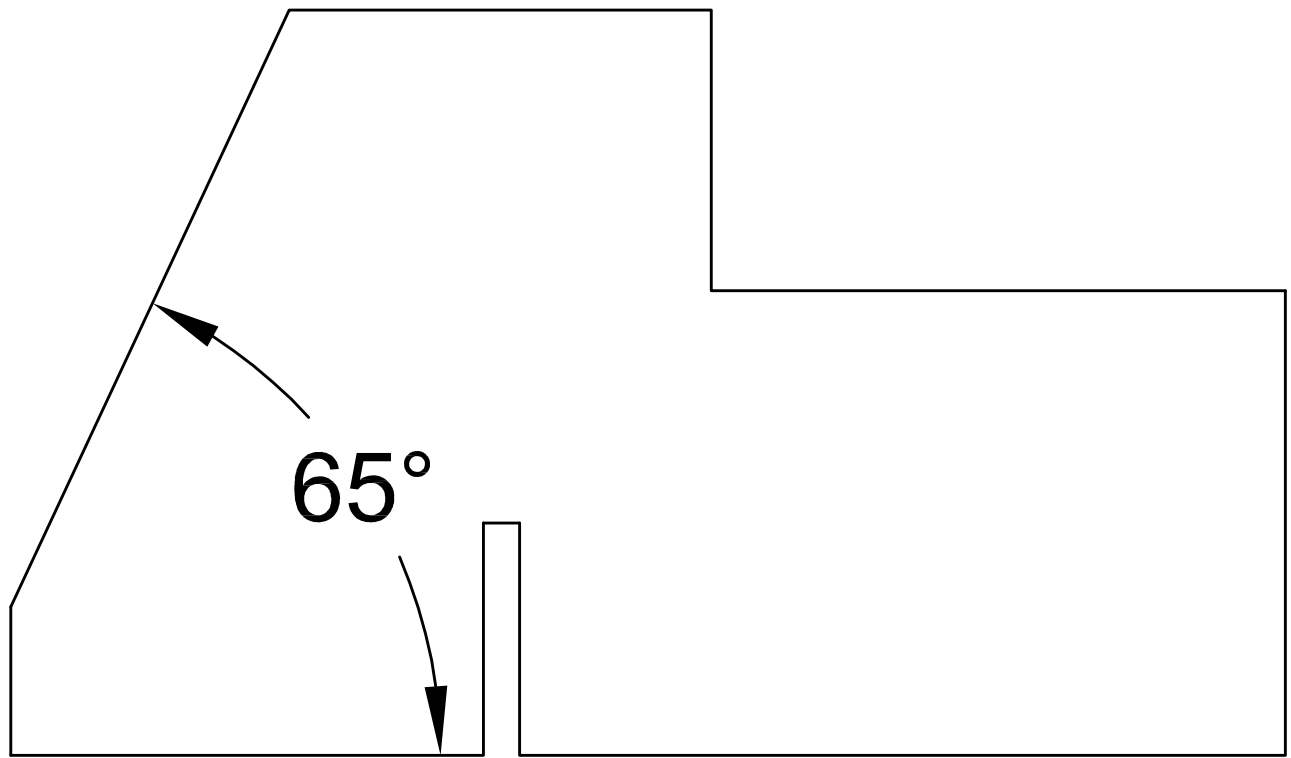
USAF
1022

U.S. AIR FORCE

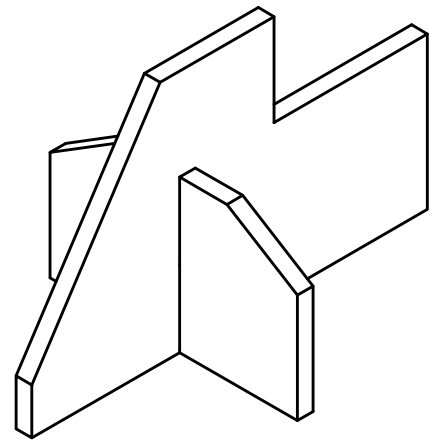
U.S. AIR FORCE

DECALS

These decals can be printed and taped to the plane using clear tape. For best results use photo paper. Top decals are for use on Black tape. Bottom decals are for use with other color schemes.



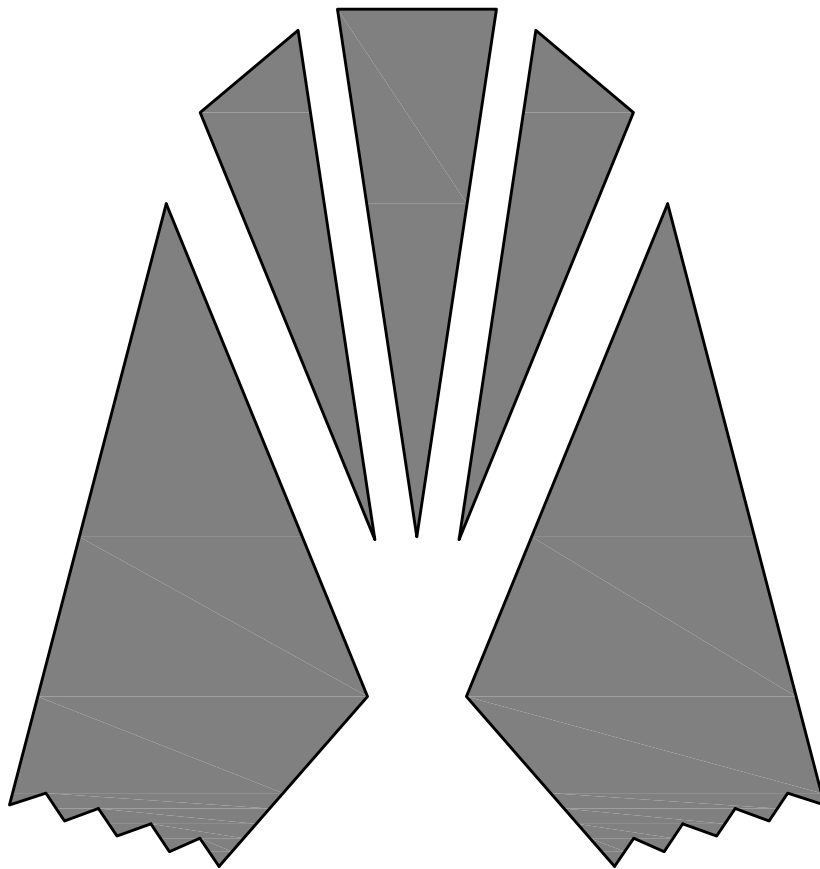
Assembled Tool View



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 65° while your adhesive dries.

FRONT



BACK

Cockpit Glass Templates

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

TEMPLATE ASSEMBLY KEY PLAN

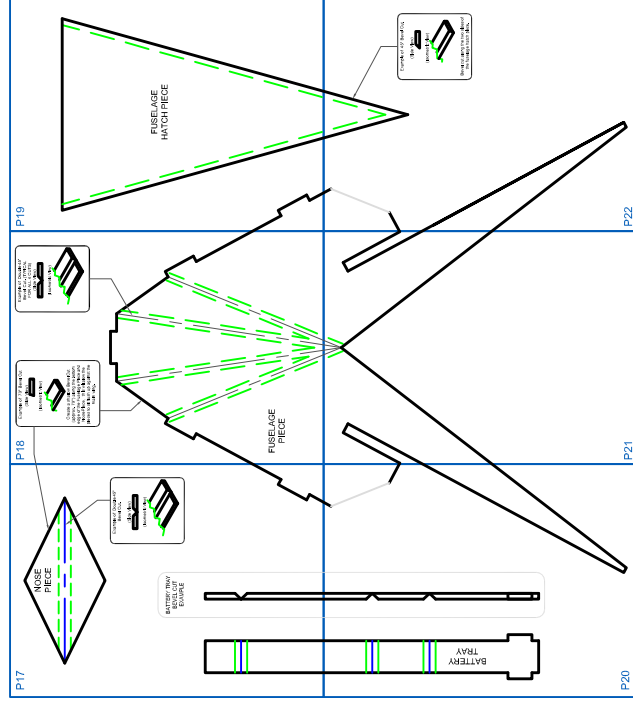
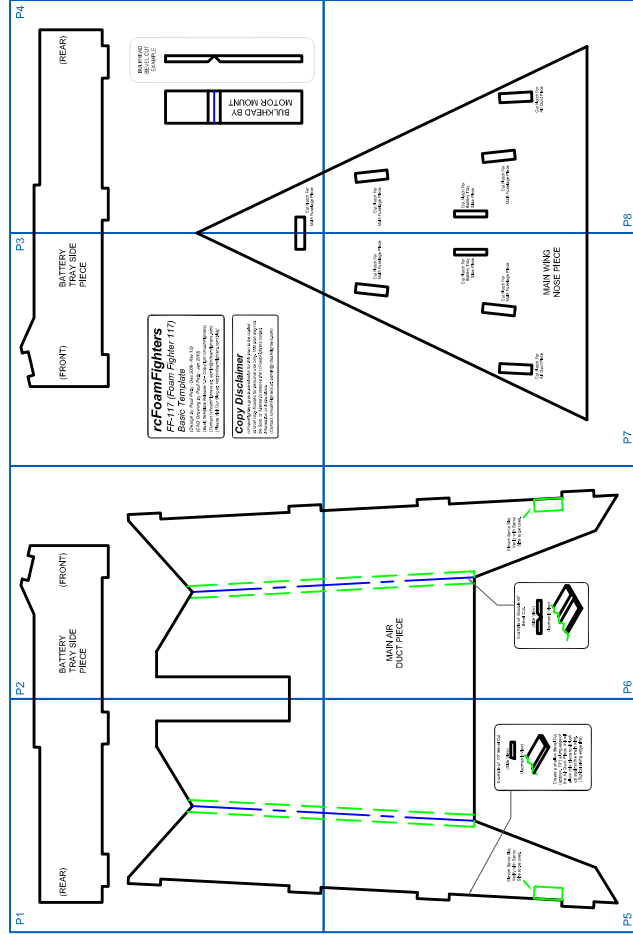
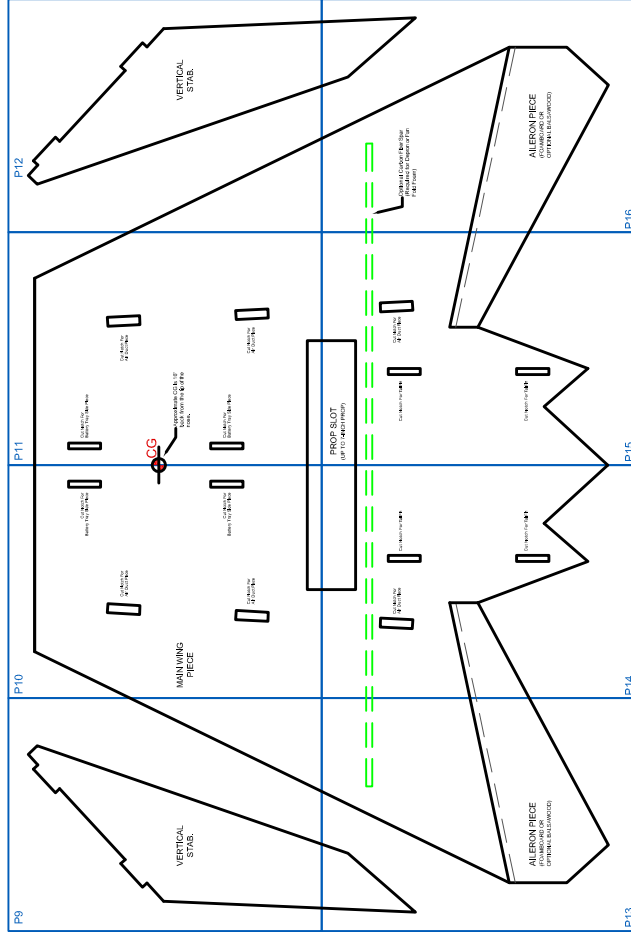
rcFoilFighters

FF-117 (Foil Fighter 117)

(Design by Paul Petty - Dec 2009 - Rev 1.0)

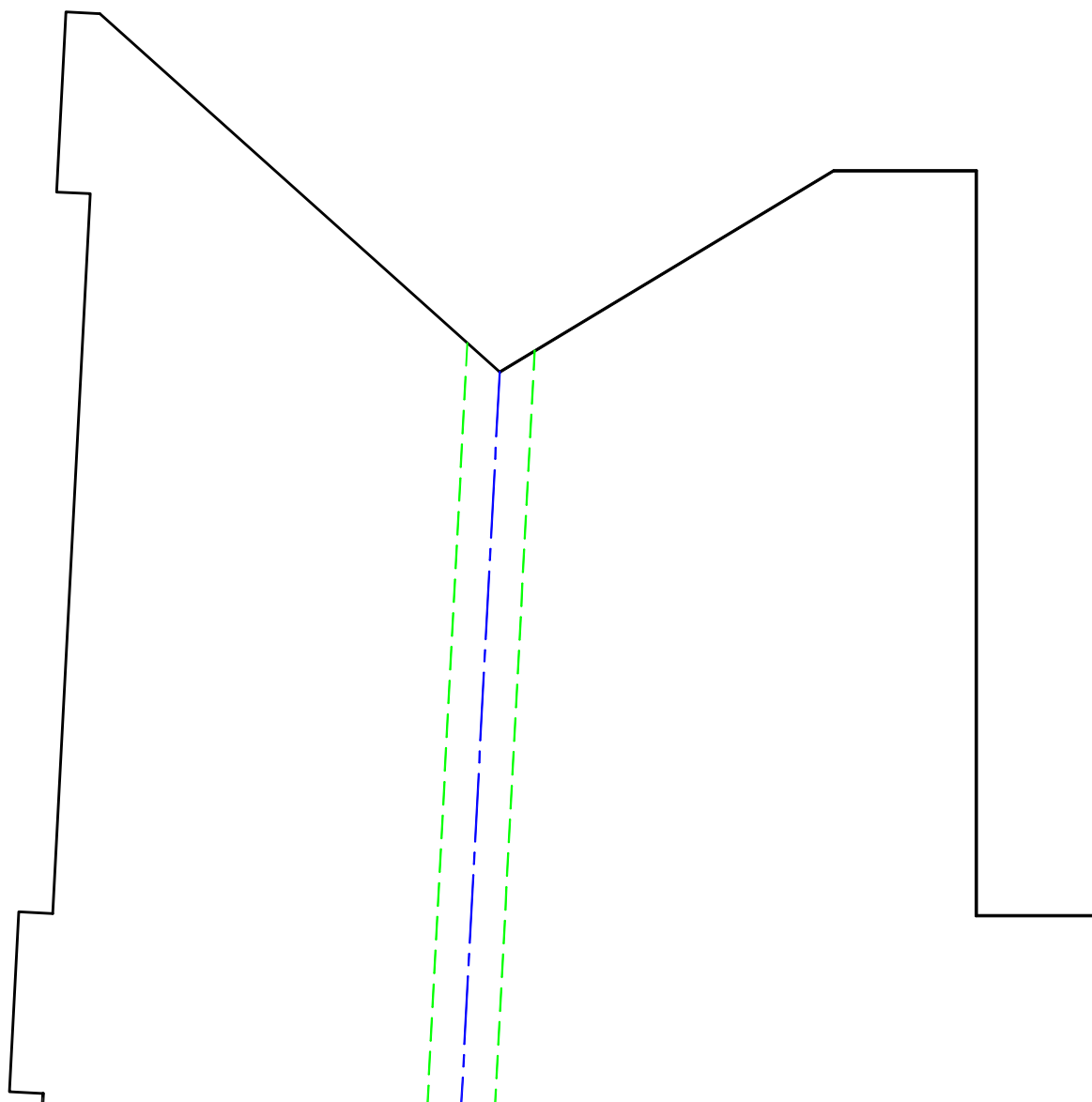
(CAD Drawing by Paul Petty - Jan. 2010)

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



P1

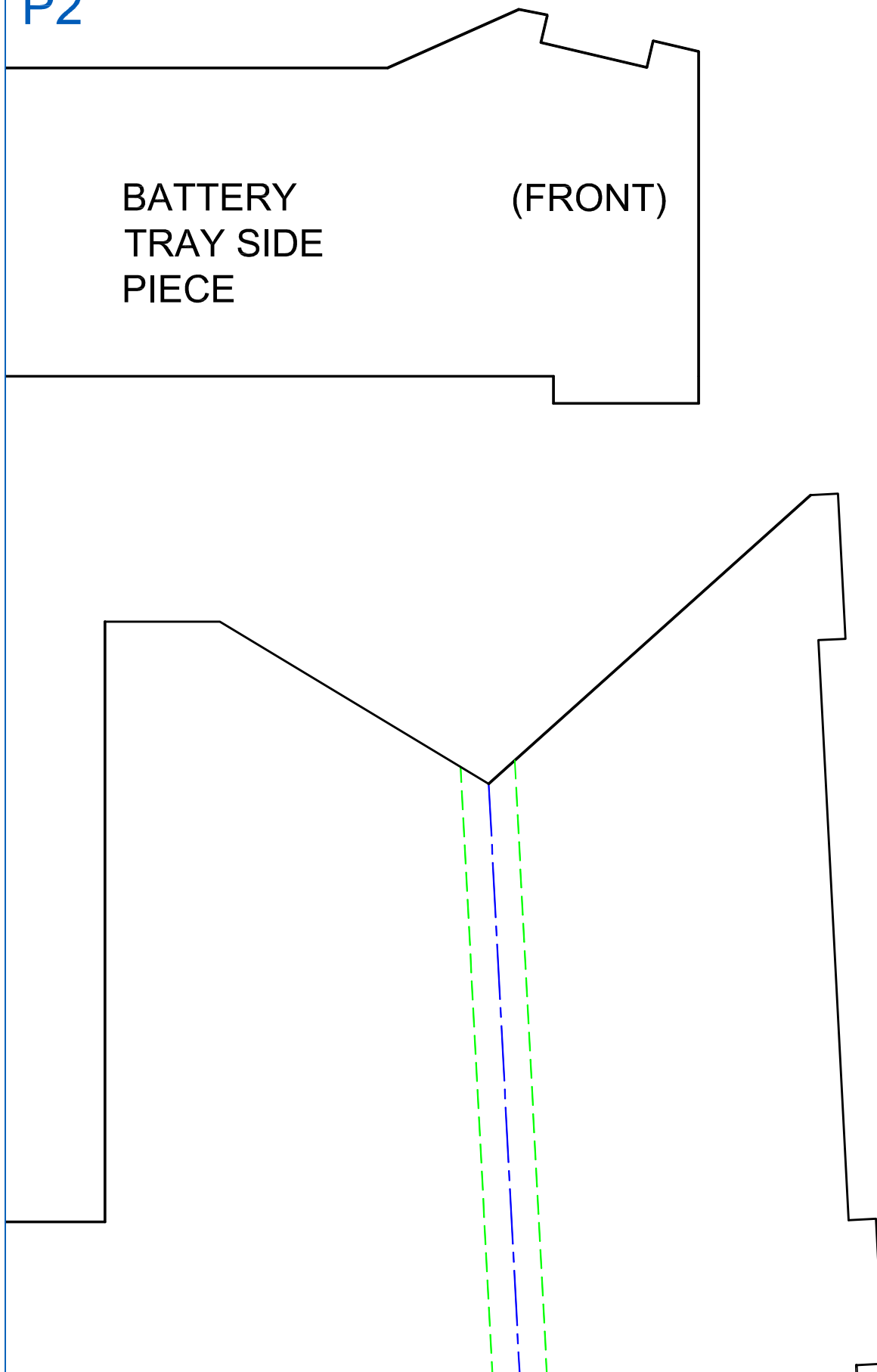
(REAR)

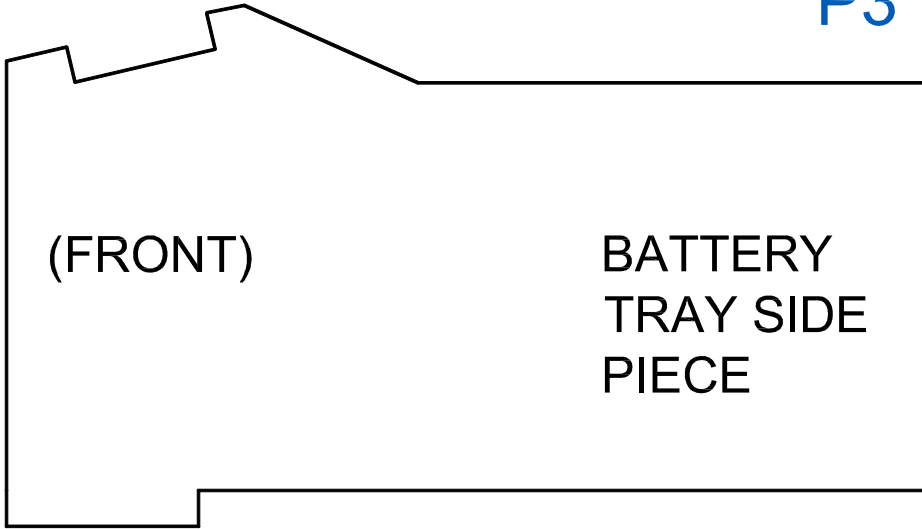


P2

BATTERY
TRAY SIDE
PIECE

(FRONT)





(FRONT)

BATTERY
TRAY SIDE
PIECE

rcFoamFighters

FF-117 (Foam Fighter 117)

Basic Template

(Design by Paul Petty -Dec 2009 - Rev 1.0)

(CAD Drawing by Paul Petty - Jan. 2010)

(Basic Template Release 1.0 - Copyright rcFoamFighters)

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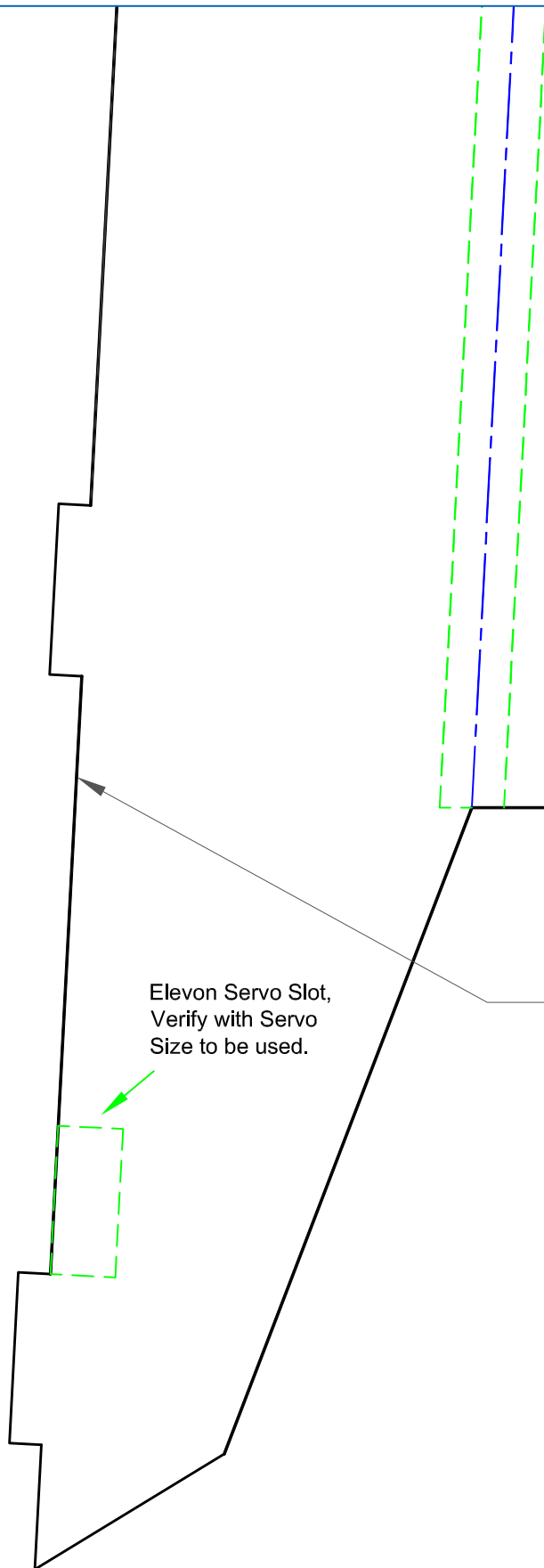
(Contact rcFoamFighters at: admin@rcfoamfighters.com)

(REAR)

BULKHEAD
BEVEL CUT
EXAMPLE

BULKHEAD BY
MOTOR MOUNT

Cut Notch For
Main Fuselage Piece



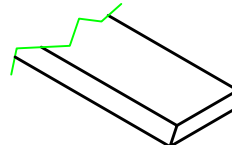
Elevon Servo Slot,
Verify with Servo
Size to be used.

Example of 70° Bevel Cut

(Side View)

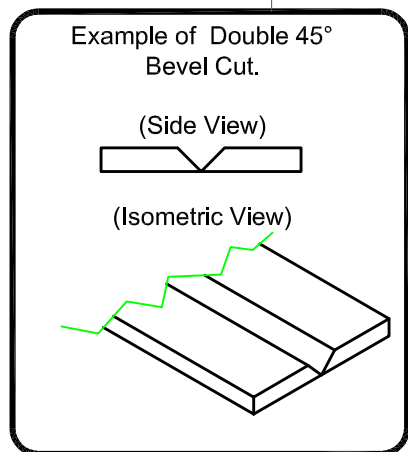


(Isometric View)

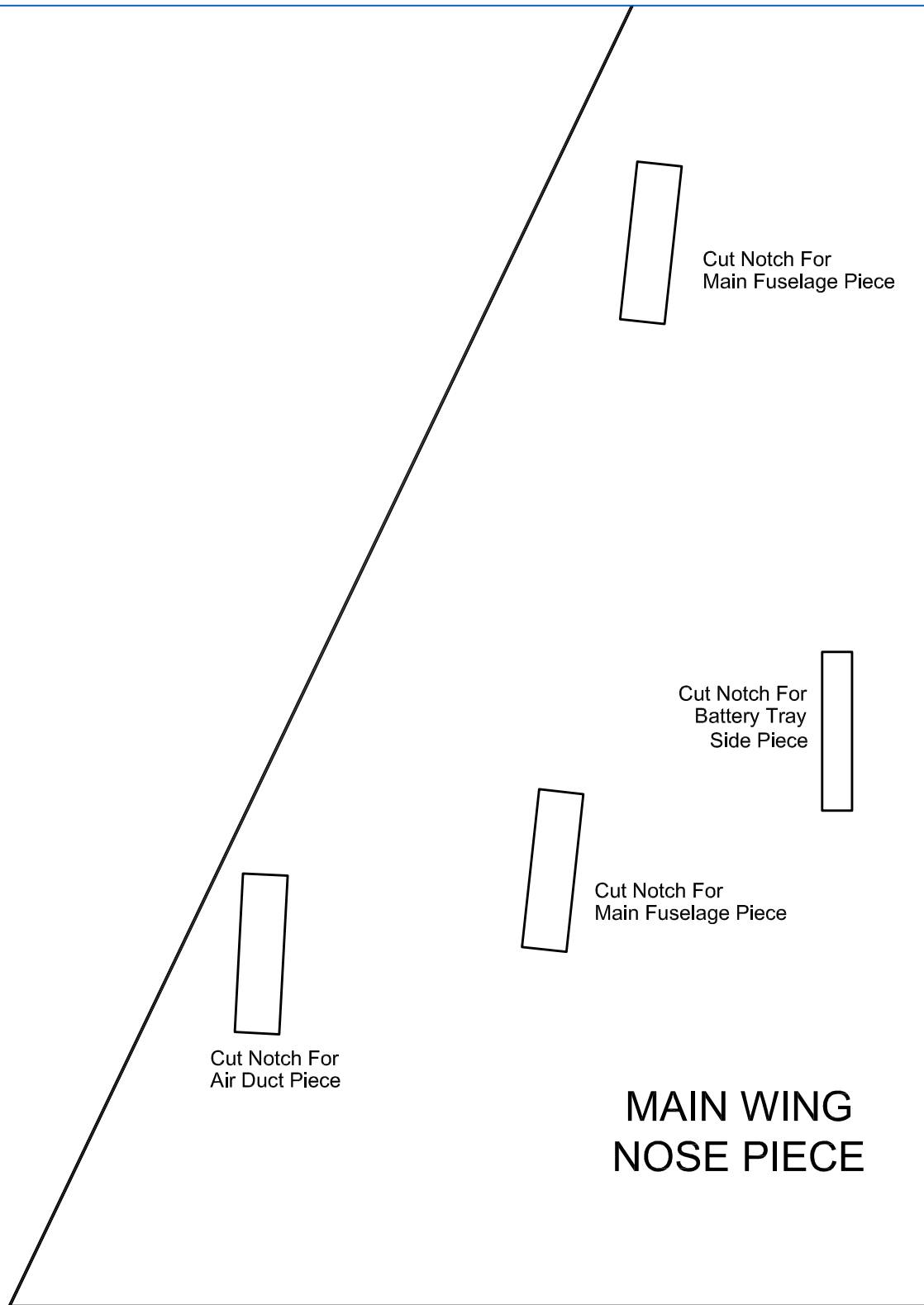


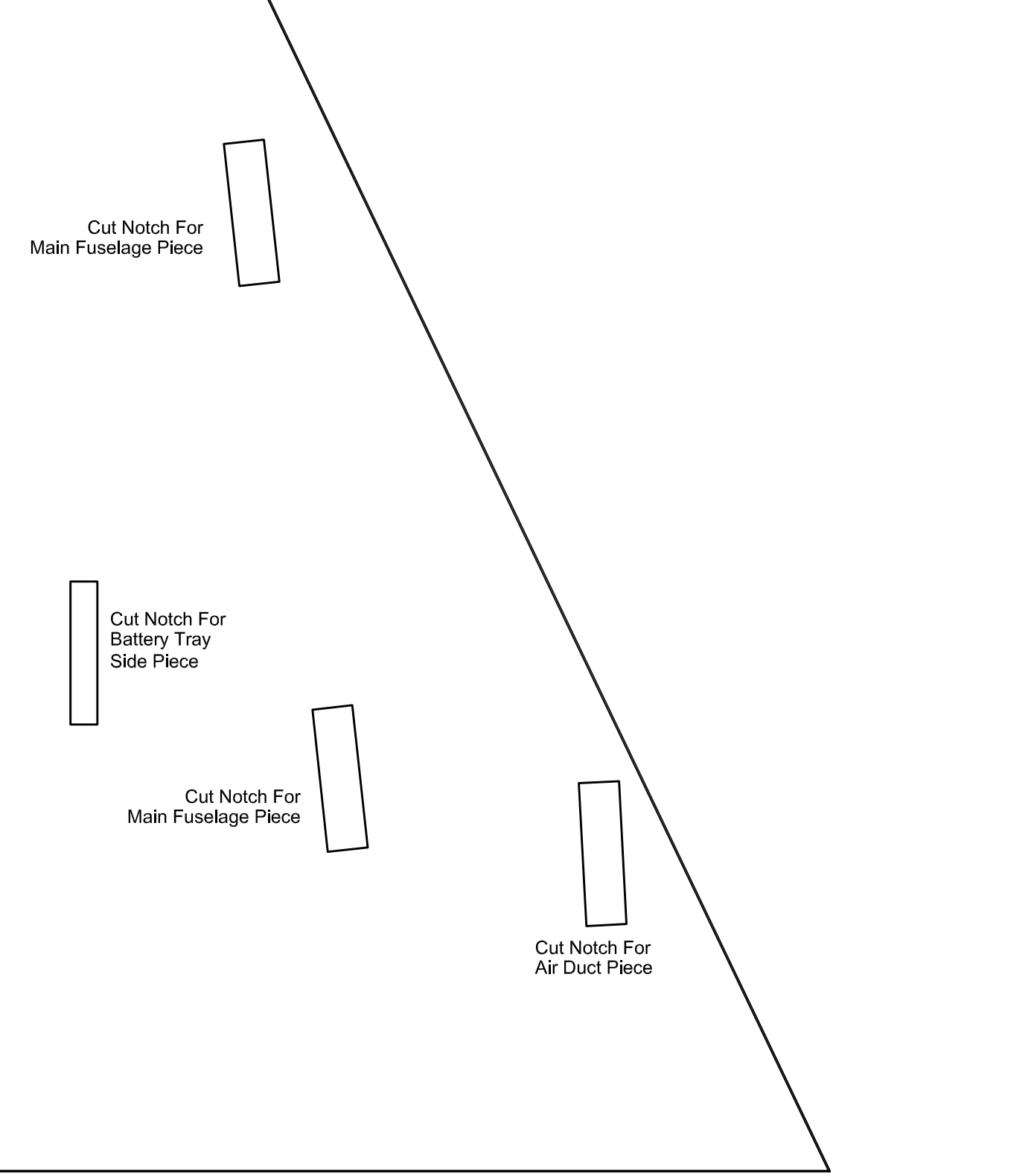
Create a shallow Bevel Cut
(approx. 70°) along edge of
the Air Duct Piece, this will
allow this piece to sit flush
up against the main wing.
(Typical along edge line)

MAIN AIR DUCT PIECE



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





The diagram shows a large right-angled triangle with a horizontal base and a vertical left side. A diagonal line runs from the top-left corner to the bottom-right corner. Four rectangular notches are positioned along the left side of the triangle. Each notch is labeled with text indicating its purpose: 'Cut Notch For Main Fuselage Piece' (top), 'Cut Notch For Battery Tray Side Piece' (middle), 'Cut Notch For Main Fuselage Piece' (lower middle), and 'Cut Notch For Air Duct Piece' (bottom).

Cut Notch For
Main Fuselage Piece

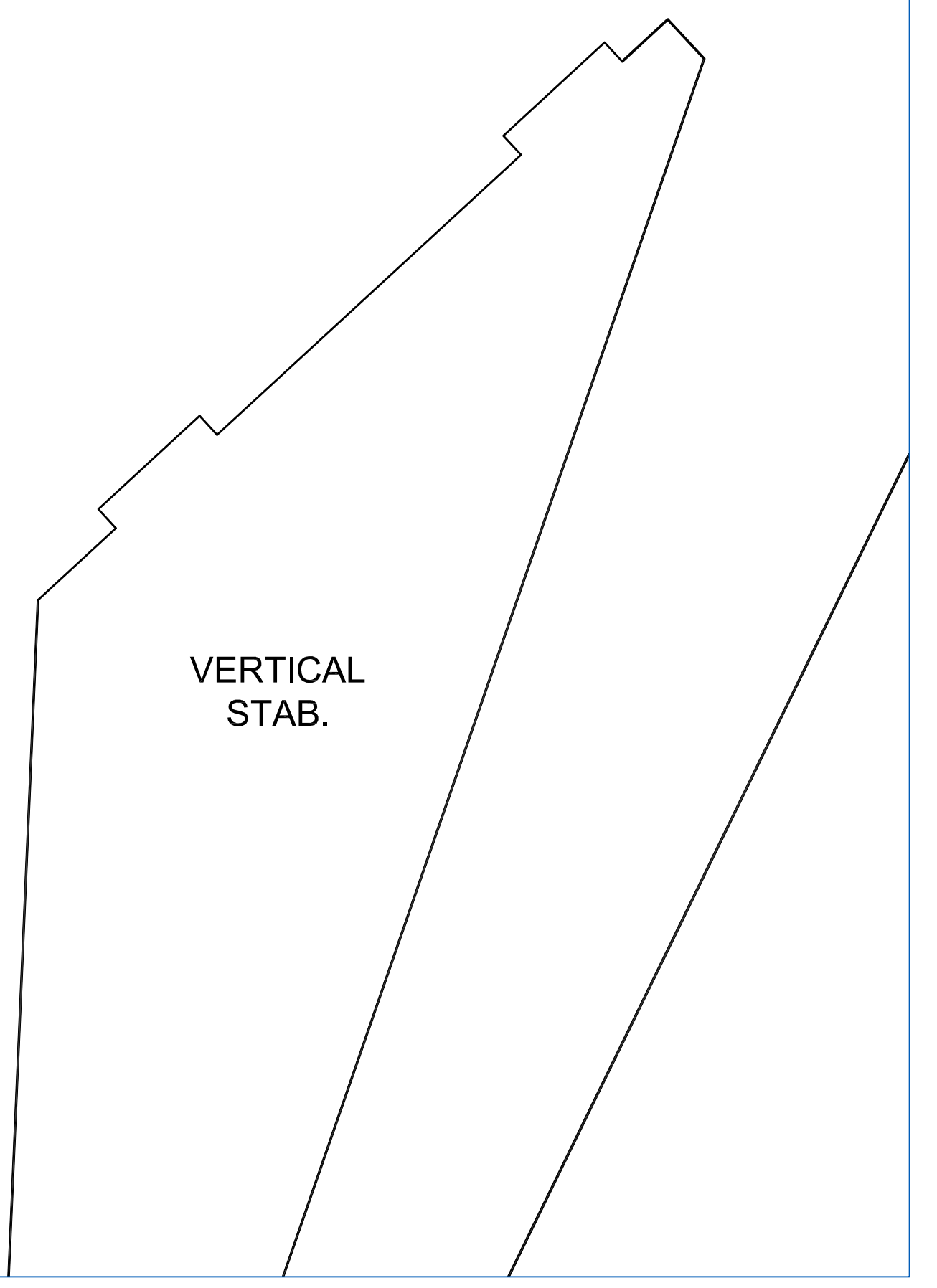
Cut Notch For
Battery Tray
Side Piece

Cut Notch For
Main Fuselage Piece

Cut Notch For
Air Duct Piece

P9

VERTICAL
STAB.



The diagram consists of a vertical line on the left side, which is part of a larger, jagged, stepped profile that extends towards the top right. From the base of this vertical line, two diagonal lines extend downwards and outwards to the right, meeting the bottom edge of the frame. The text 'VERTICAL STAB.' is centered within the diagram area.

P10

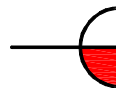
Cut Notch For
Battery Tray Side Piece

Cut Notch For
Air Duct Piece

MAIN WING
PIECE

Cut Notch For
Battery Tray Side Piece

Cut Notch For
Air Duct Piece



P11



Cut Notch For
Battery Tray Side Piece



Cut Notch For
Air Duct Piece



CG

Approximate CG is 16"
back from the tip of the
nose.



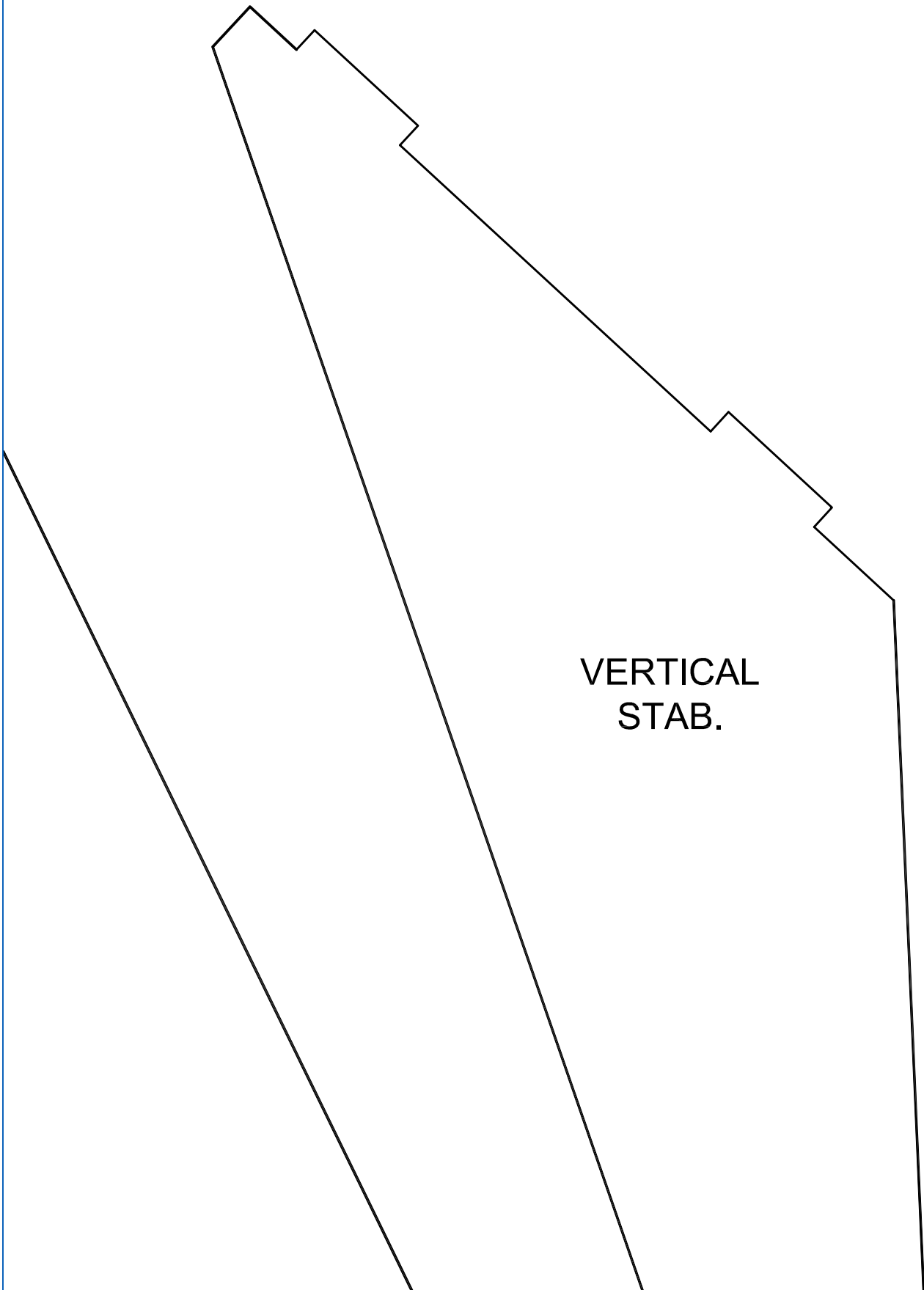
Cut Notch For
Battery Tray Side Piece

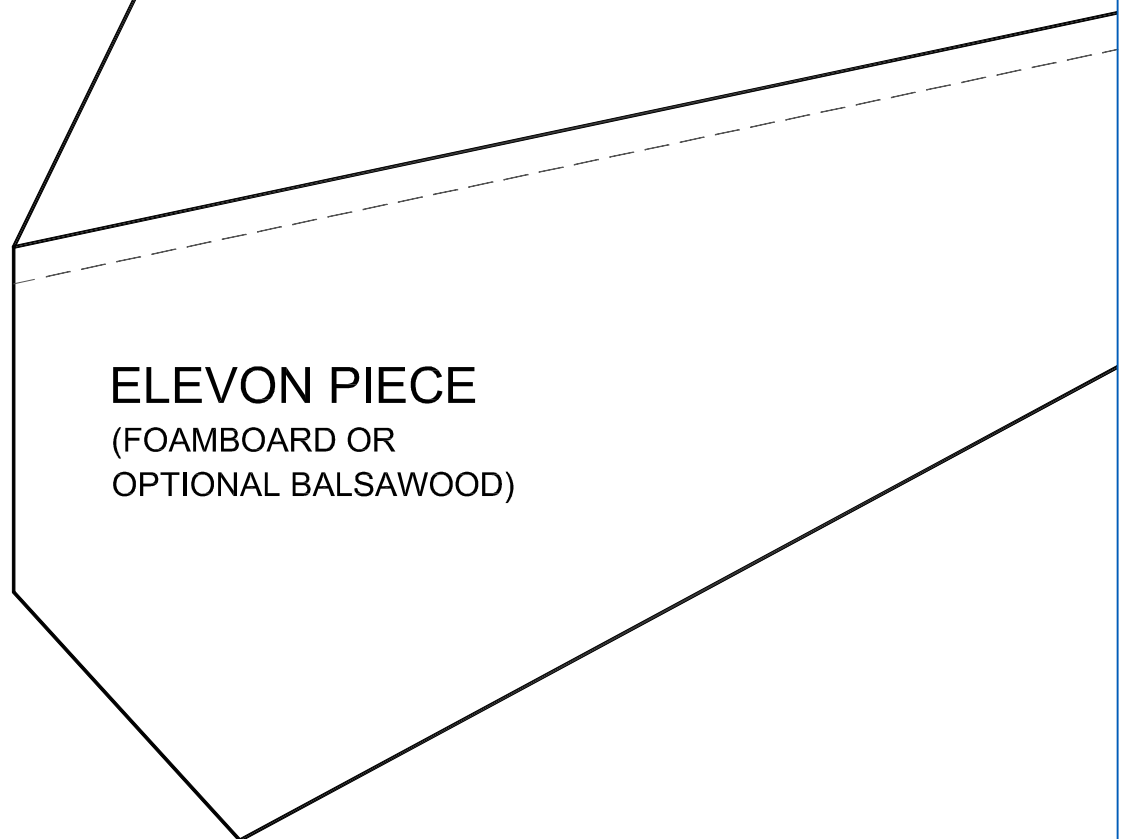


Cut Notch For
Air Duct Piece

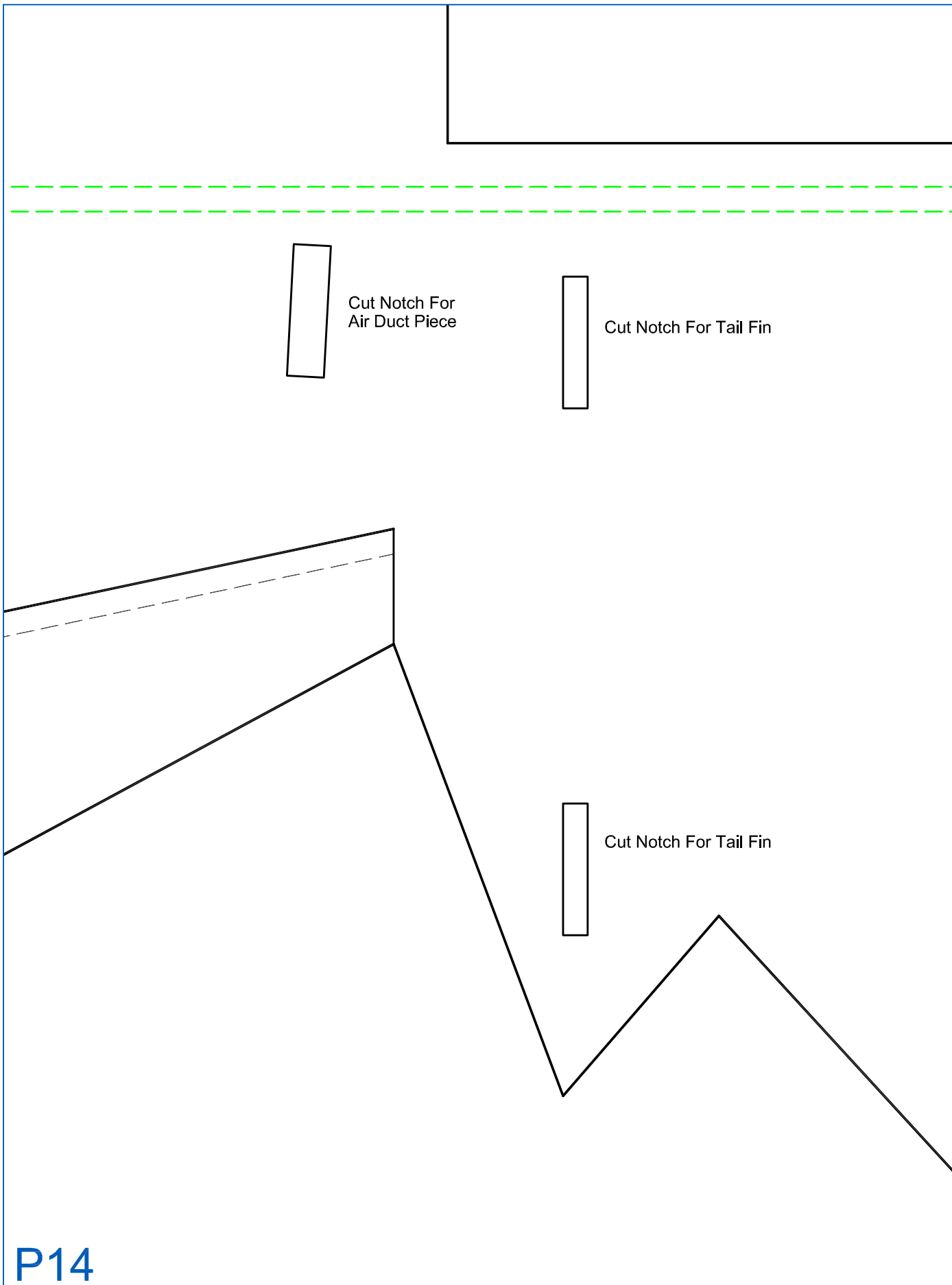
P12

VERTICAL
STAB.





ELEVON PIECE
(FOAMBOARD OR
OPTIONAL BALSAWOOD)



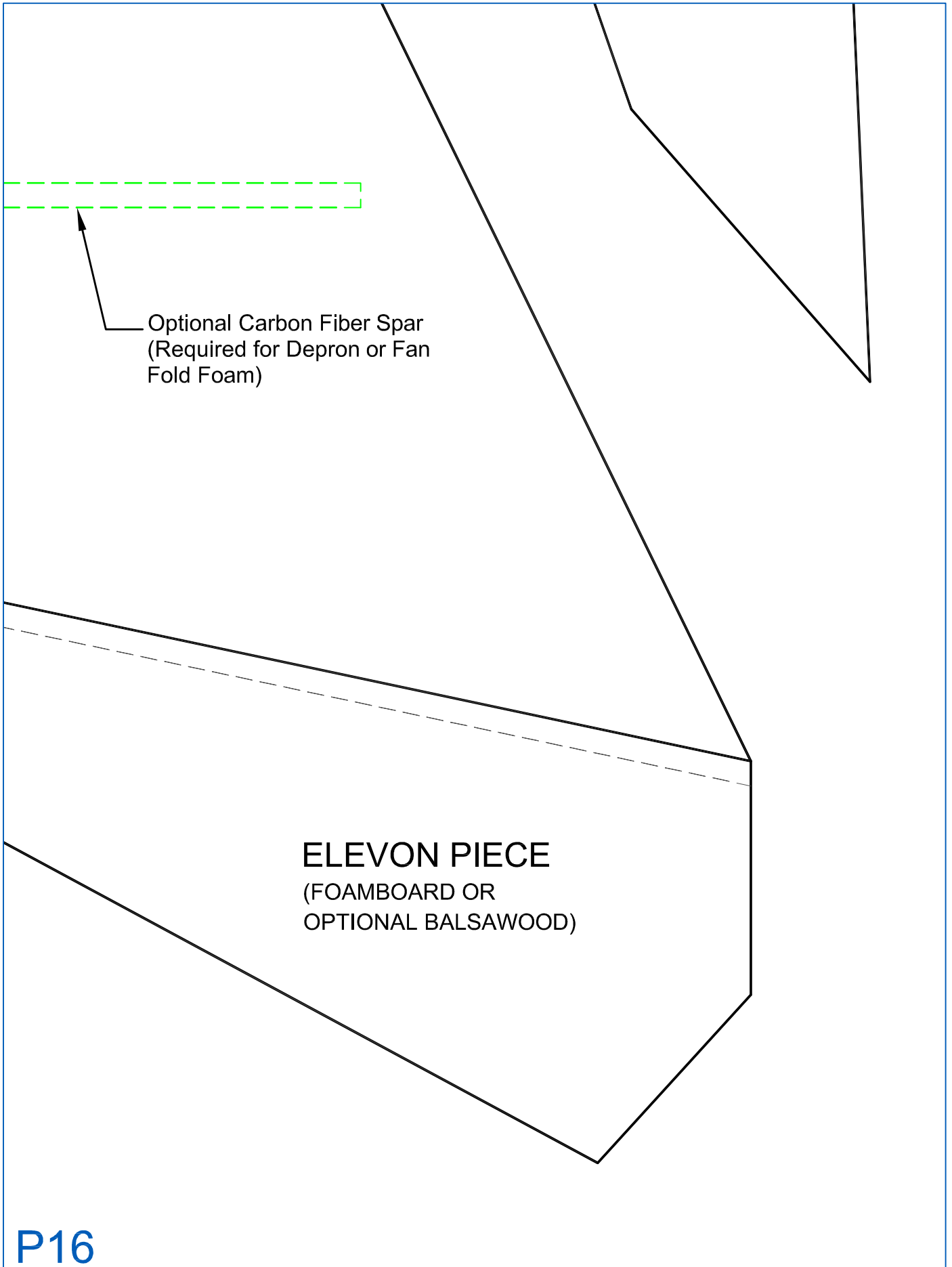
PROP SLOT

(UP TO 7-INCH PROP)

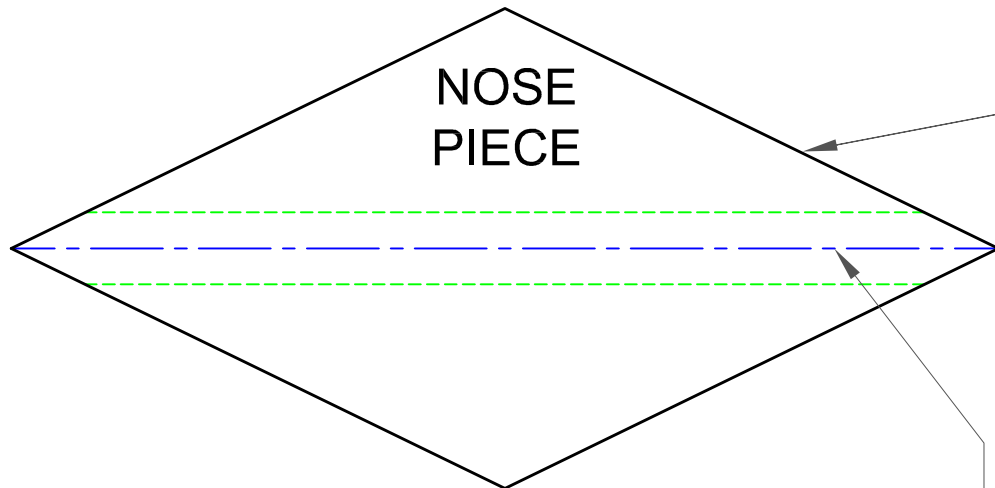
Cut Notch For Tail Fin

Cut Notch For
Air Duct Piece

Cut Notch For Tail Fin



P17

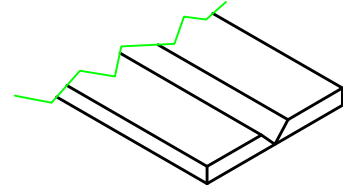


Example of Double 45°
Bevel Cut.

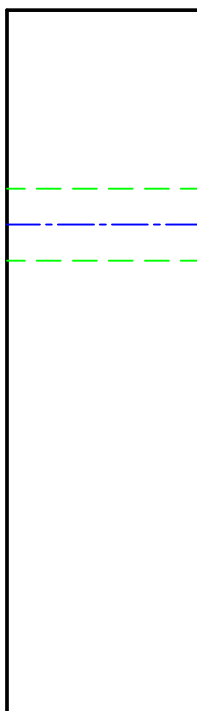
(Side View)



(Isometric View)

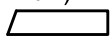


BATTERY TRAY
BEVEL CUT
EXAMPLE

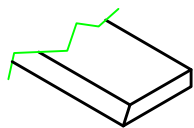


P18

Example of 70° Bevel Cut
(Side View)



(Isometric View)

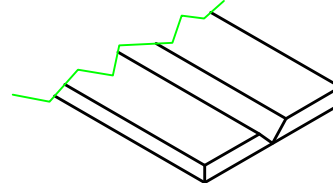


Create a shallow Bevel Cut
(approx. 70°) along the bottom
edge of the Fuselage Piece and
NosePiece, this will allow the
pieces to sit flush up against the
main wing.

Example of Double 45°
Bevel Cut. (TYPICAL
FOR ALL 4 CUTS)
(Side View)



(Isometric View)



FUSELAGE
PIECE

P19

FUSELAGE
HATCH PIECE

