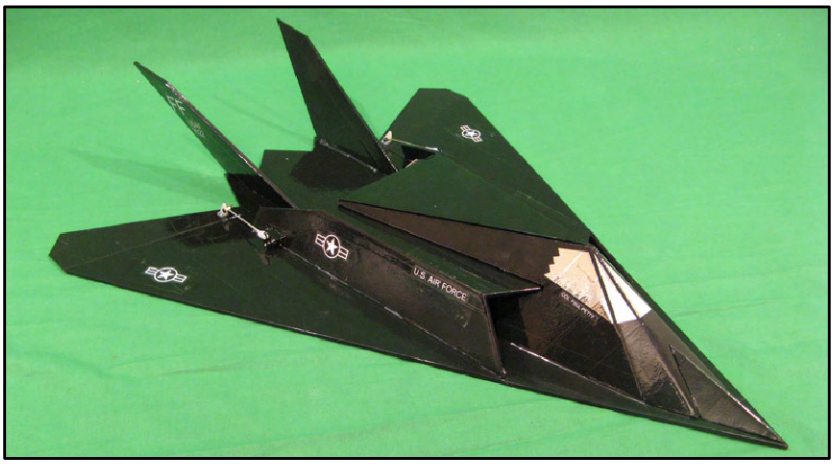
FOAM, GLUE, TAPE AND A LITTLE IMAGINATION....



(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

rcFoamFighters

FF-117 (Foam Fighter 117) Basic Template

(Design by Paul Petty -Dec 2009 - Rev 1.0)
(CAD Drawing by Paul Petty - Jan. 2010)

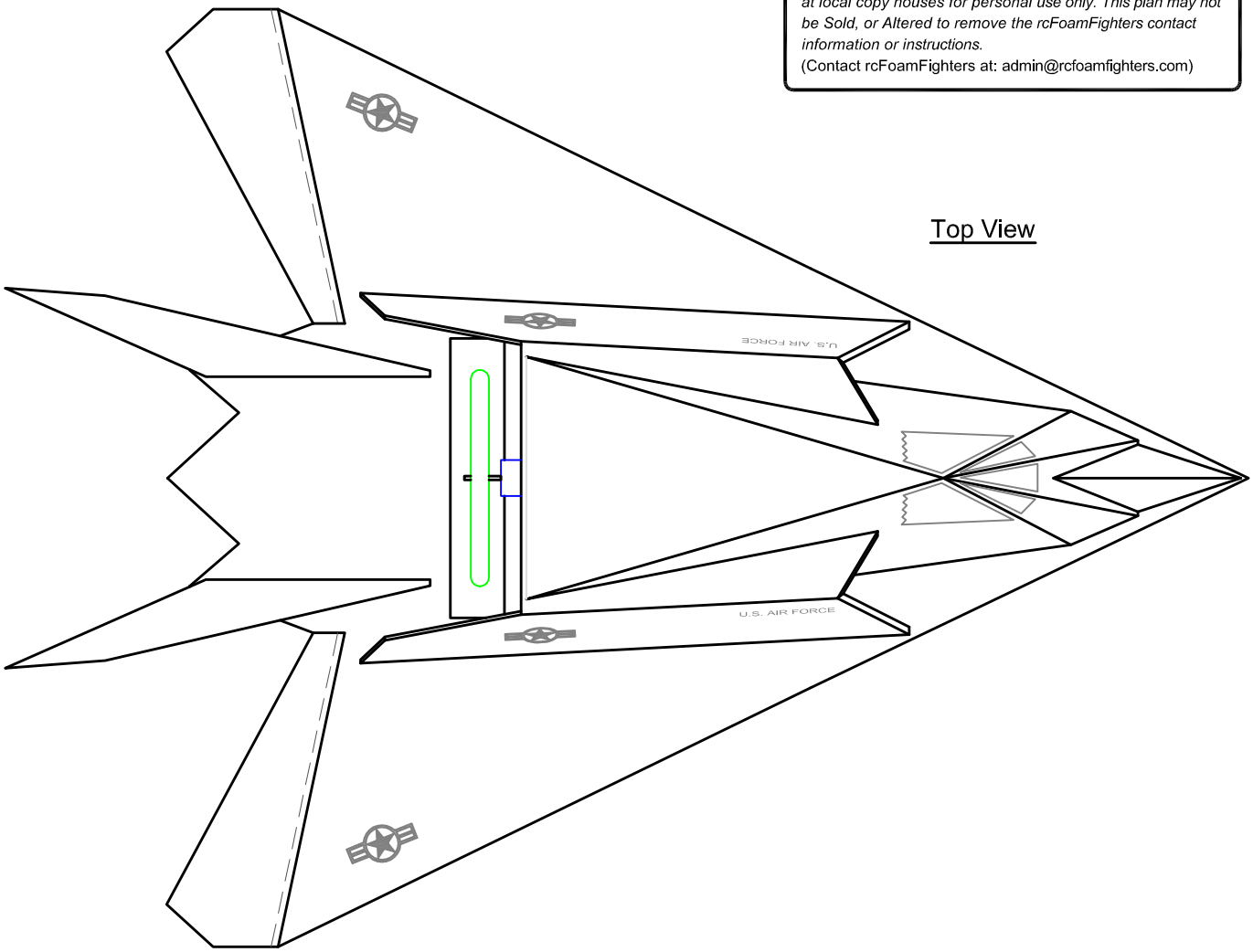
(Contact rcFoamFighters at: admin@rcfoamfighters.com)
(Please Visit Our Blog at: http://rcfoamfighters.com/blog/

Basic Specs as built by rcFoamFighters:

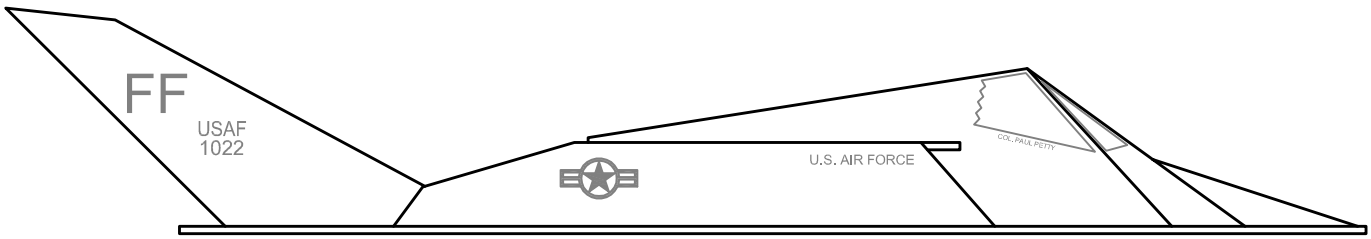
Wingspan: 26 Inches (66cm)
Length: 34.5 Inches (87.6cm)
All Up Weight (AUW): 29oz. (882gms)
Top Speed: 74mph (119kph)

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.

Top View



Side View



Recommend Parts:

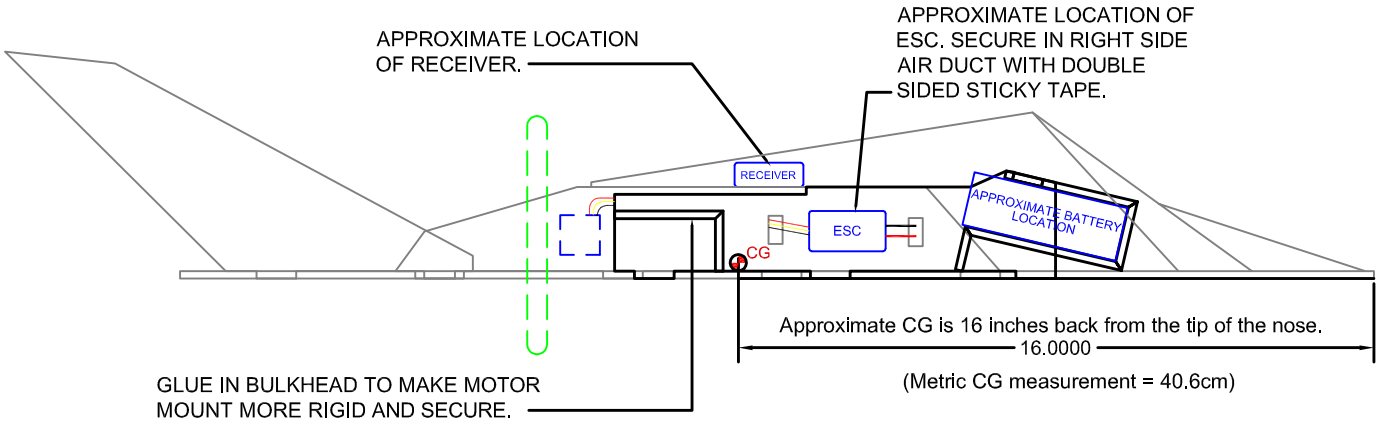
BASIC SETUP (70+mph)

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)

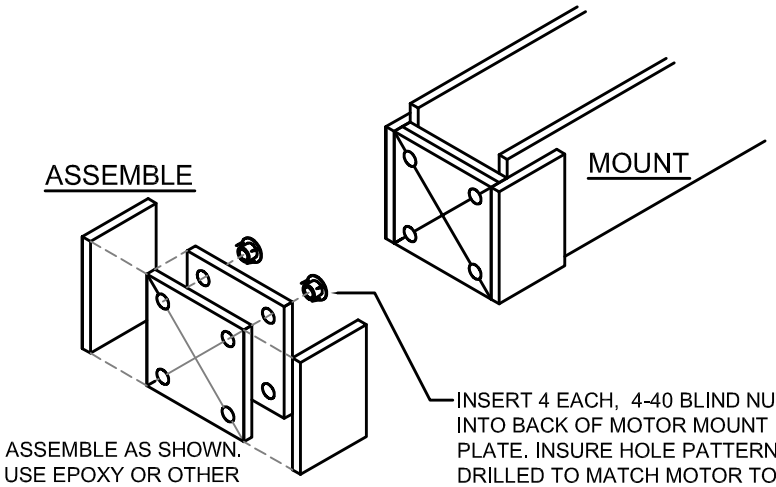
Plane was originally designed to be made from 3 Sheets of 20x30 Foamboard.
Depron or FanFold Foam with Carbon Spars may be used .

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)



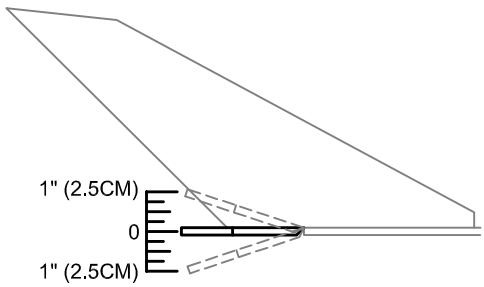
ASSEMBLE AS SHOWN. USE EPOXY OR OTHER ADHESIVE TO GLUE TOGETHER.

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.)

VERY IMPORTANT!!!

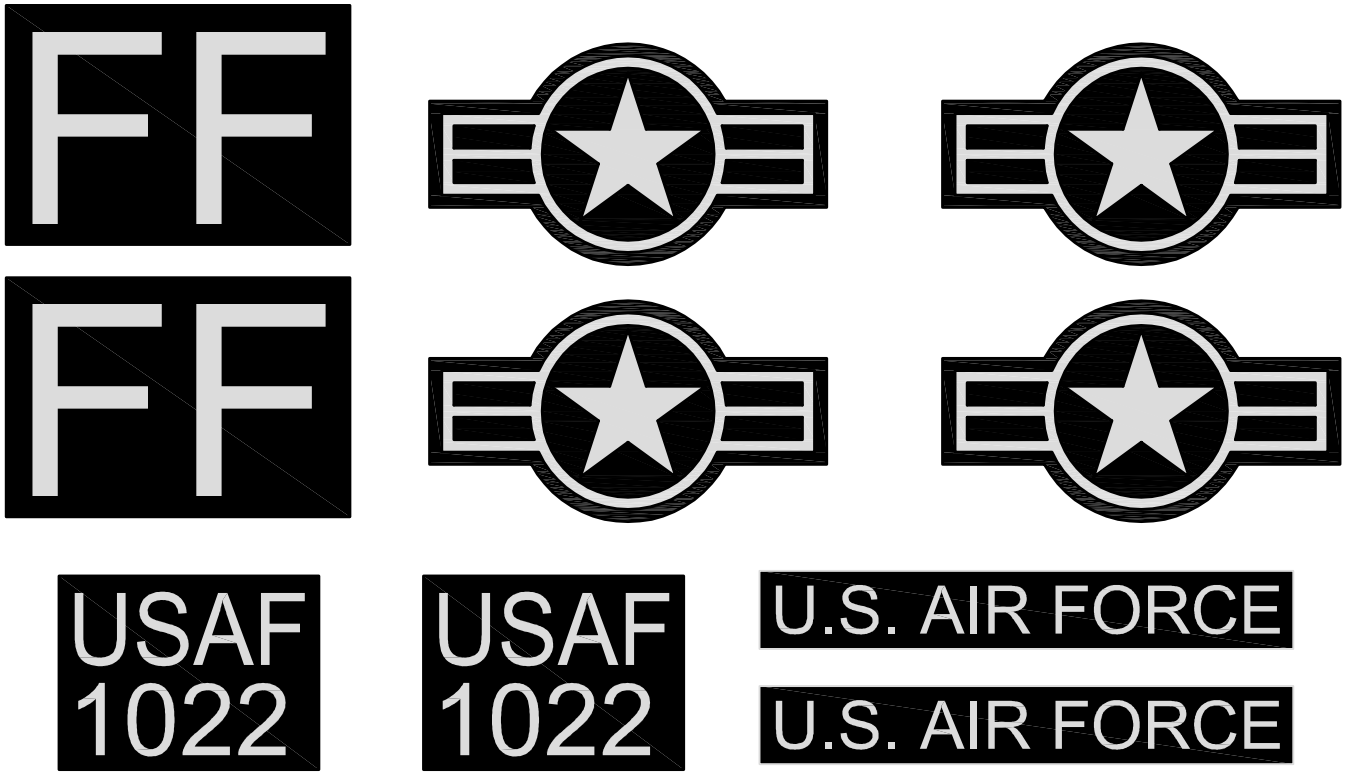
RECOMMEND AILERON THROWS:

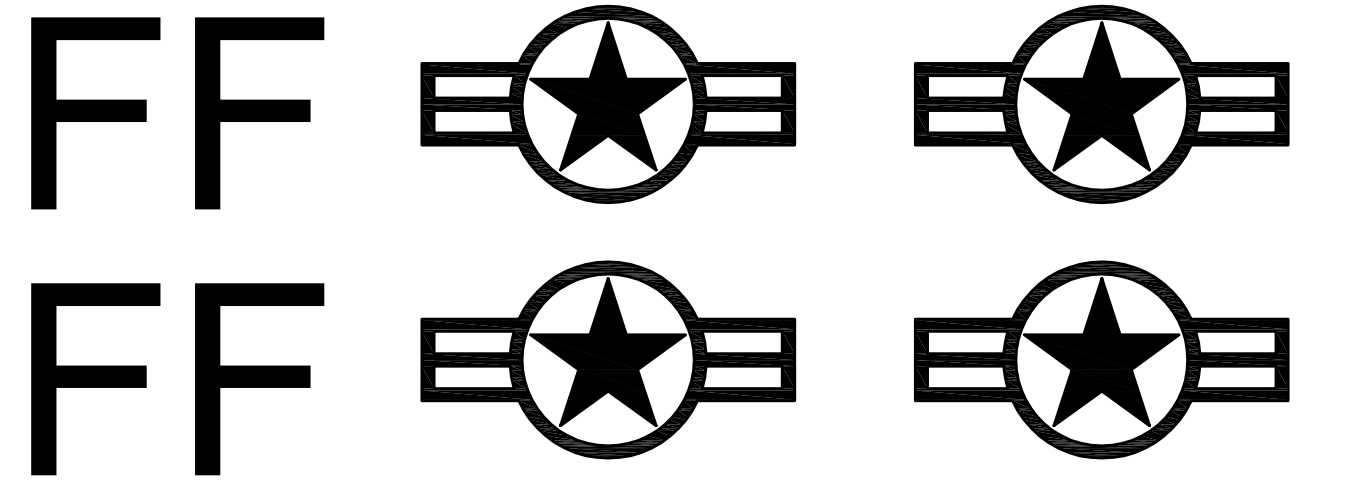
MAKE SURE YOU SET YOUR AILERON THROWS TO NO MORE THAN 1 INCH (2.5CM), UP AND DOWN. 3/4 INCH (1.9CM) RECOMMENDED FOR BEGINNERS.



ELEVATOR NOTE:

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





USAF 1022

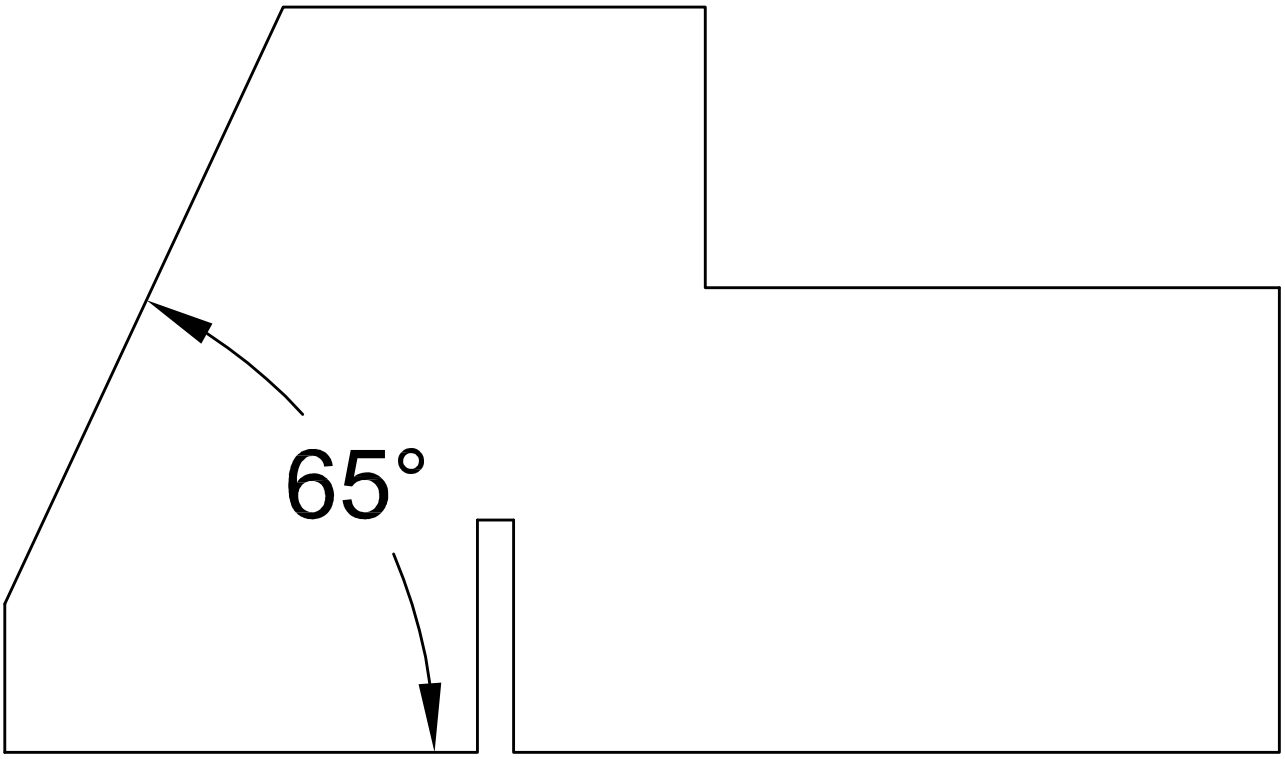
USAF 1022

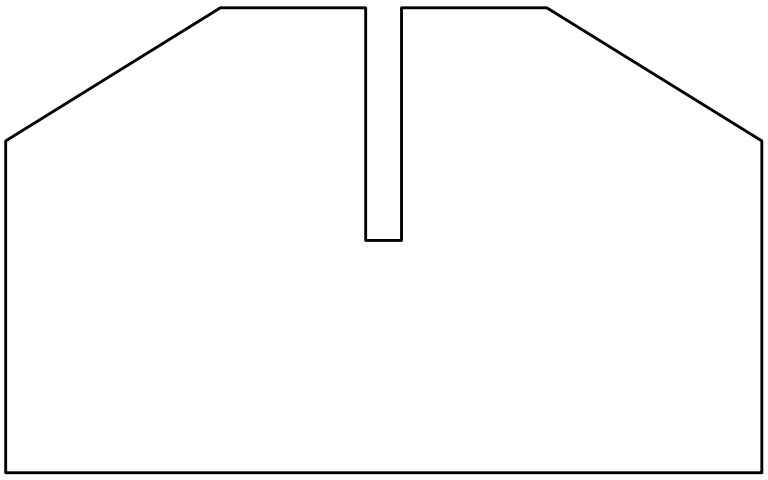
U.S. AIR FORCE

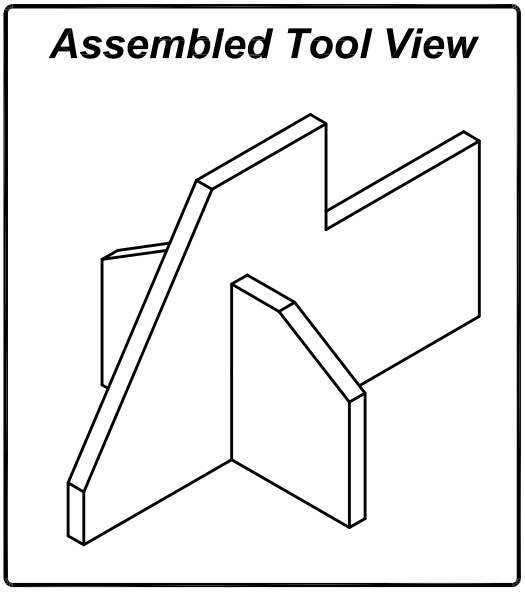
U.S. AIR FORCE

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.



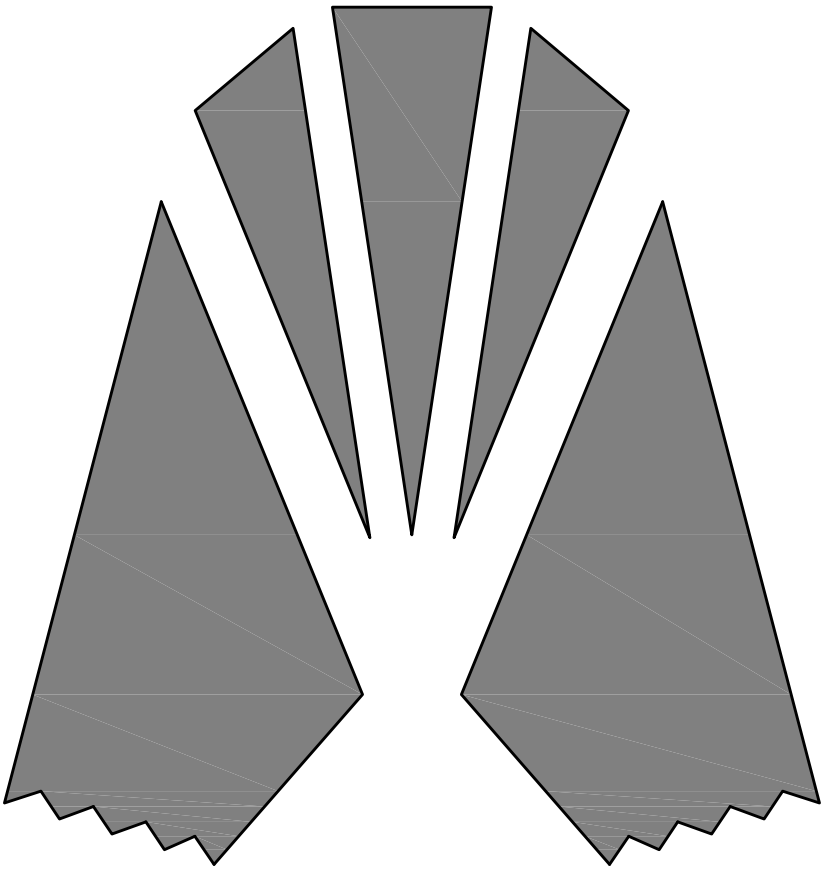




TAIL FIN ANGLE TEMPLATE TOOL

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

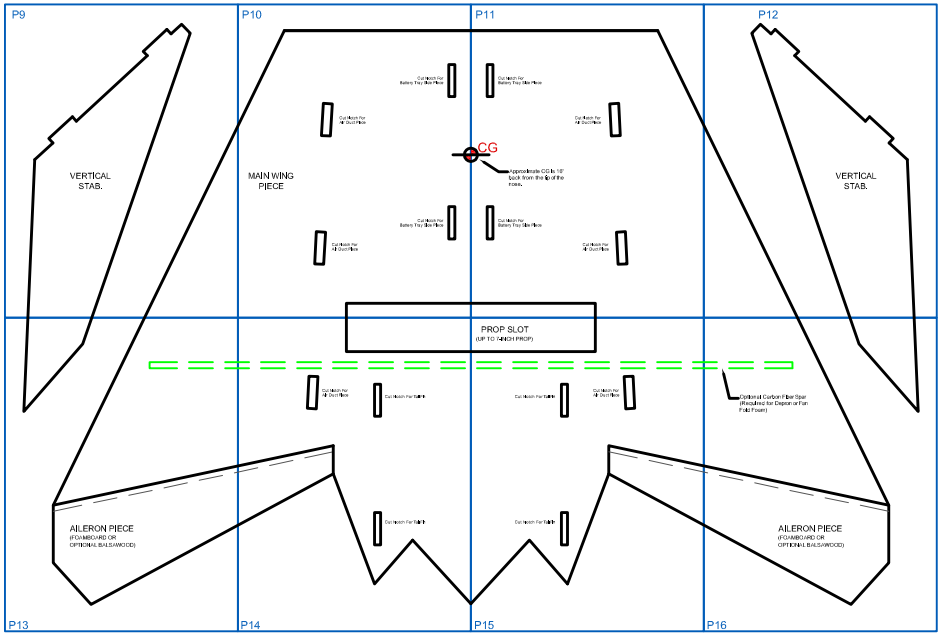
rcFoamFighters

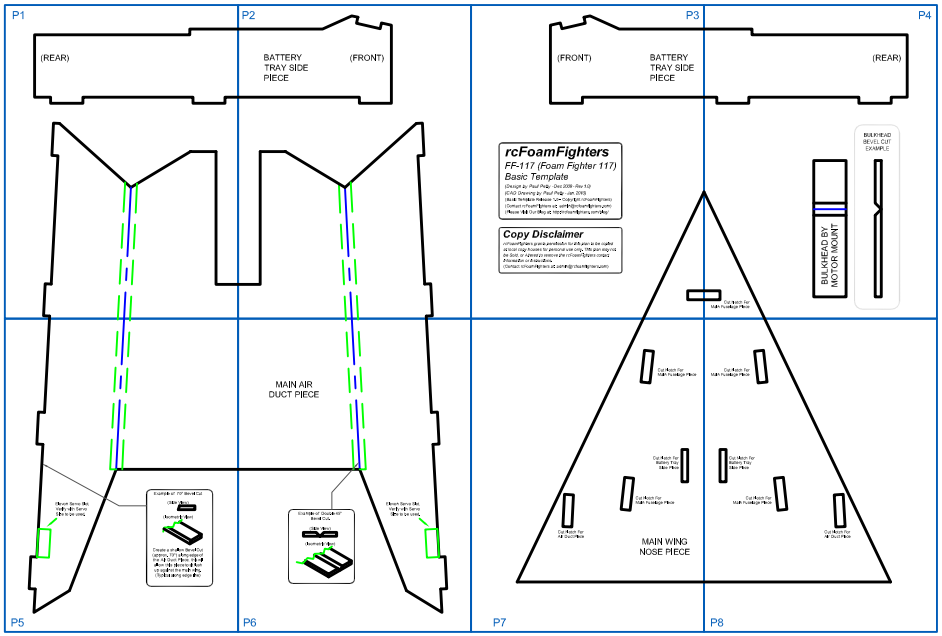
FF-117 (Foam Fighter 117)

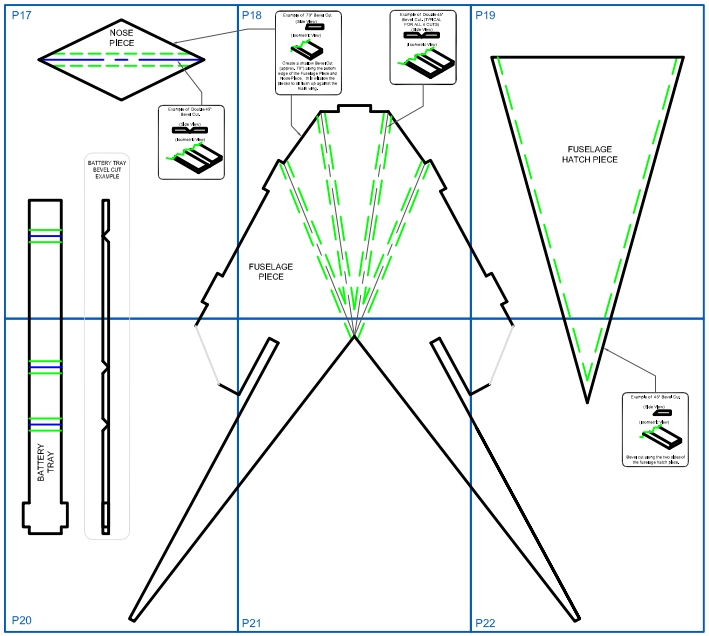
(Design by Paul Petty - Dec 2009 - Rev 1.0)

(CAD Drawing by Paul Petty - Jan. 2010)

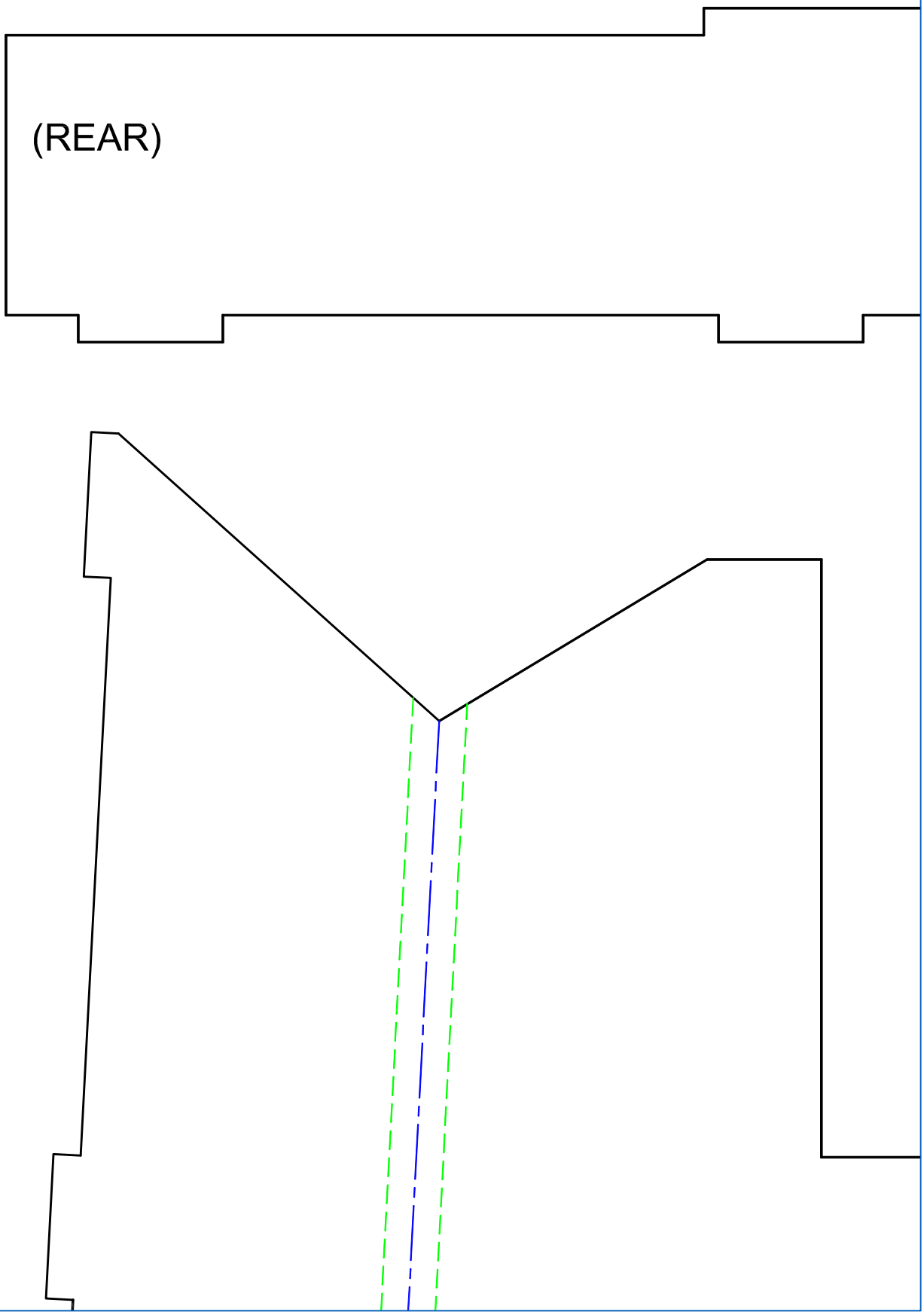
INSTRUCTIONS:
PRINT ALL TEMPLATE SHEETS. CUT AND ASSEMBLE AS SHOWN BELOW. USE SCOTCH TAPE TO SECURE SHEETS TOGETHER.



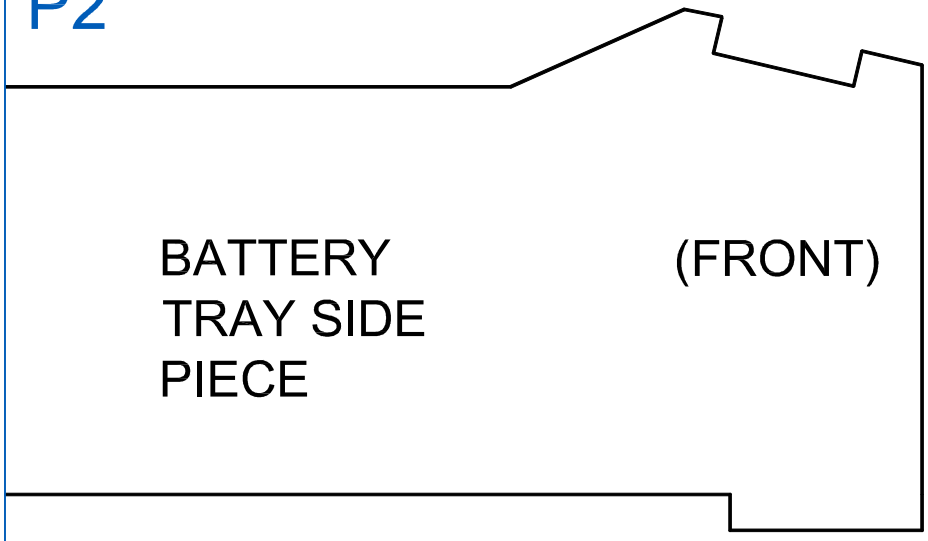


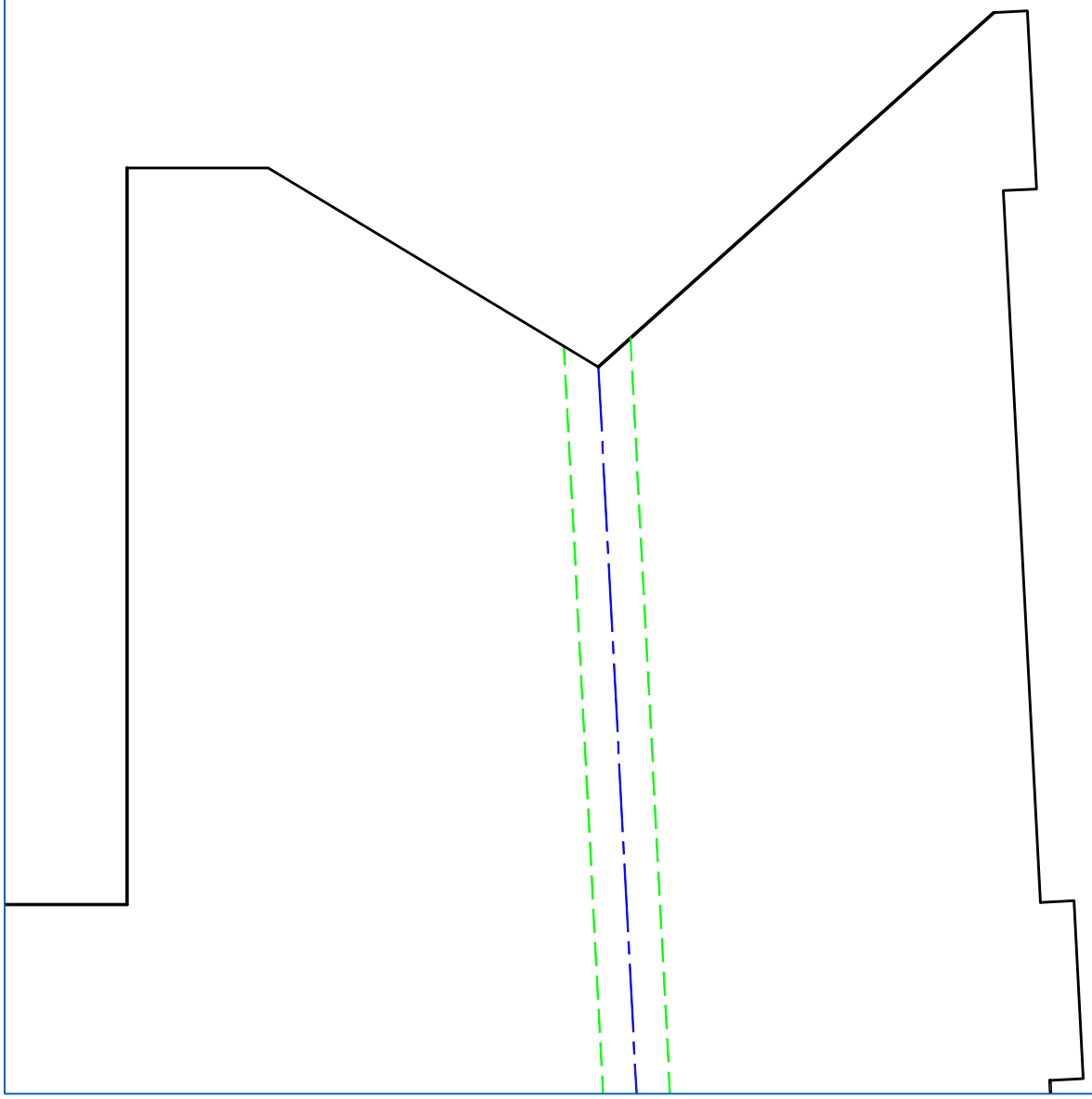


P1

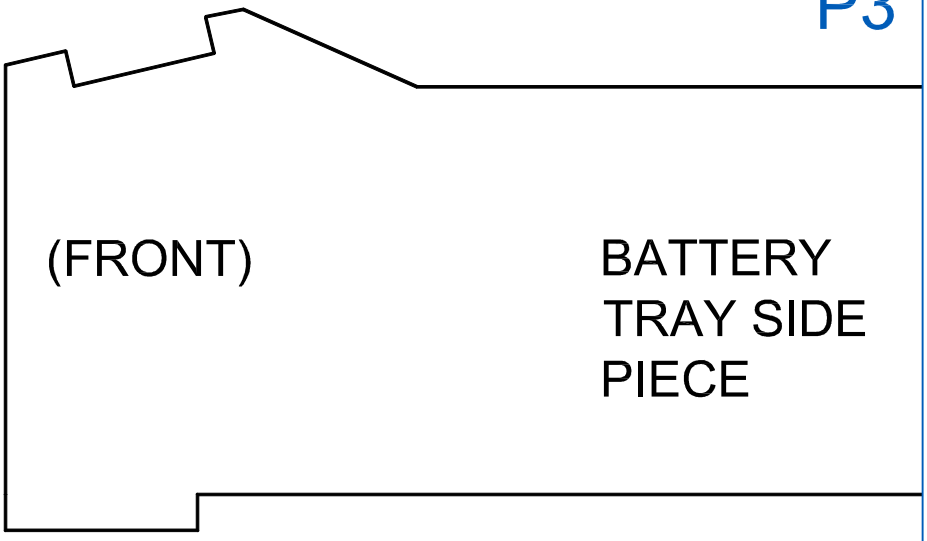


P2





P3



rcFoamFighters

FF-117 (Foam Fighter 117)

Basic Template

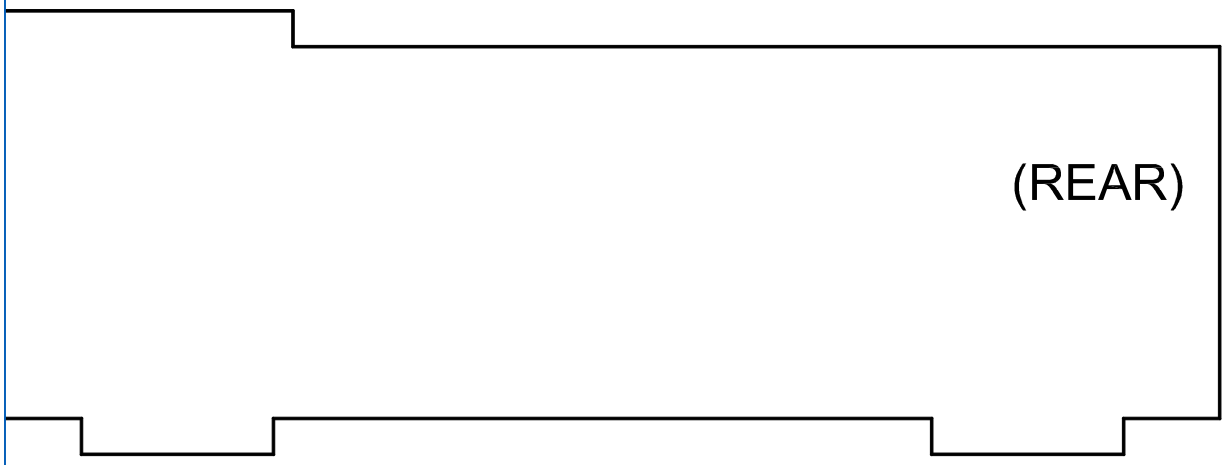
(Design by Paul Petty -Dec 2009 - Rev 1.0)

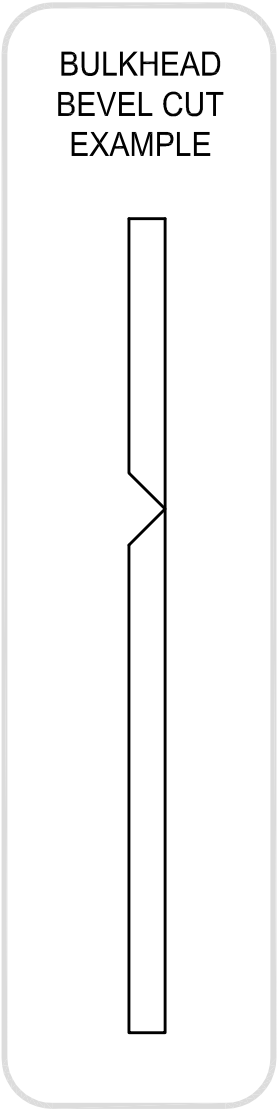
(CAD Drawing by Paul Petty - Jan. 2010)

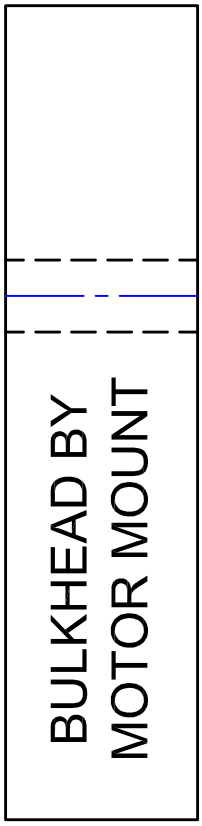
(Contact rcFoamFighters at: admin@rcfoamfighters.com)

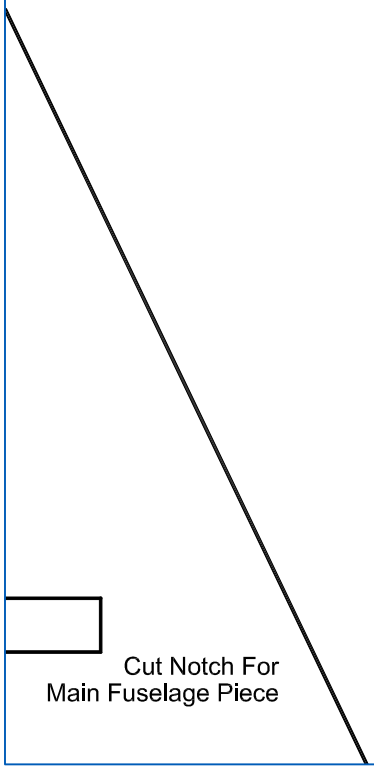
(Please Visit Our Blog at: http://rcfoamfighters.com/blog/

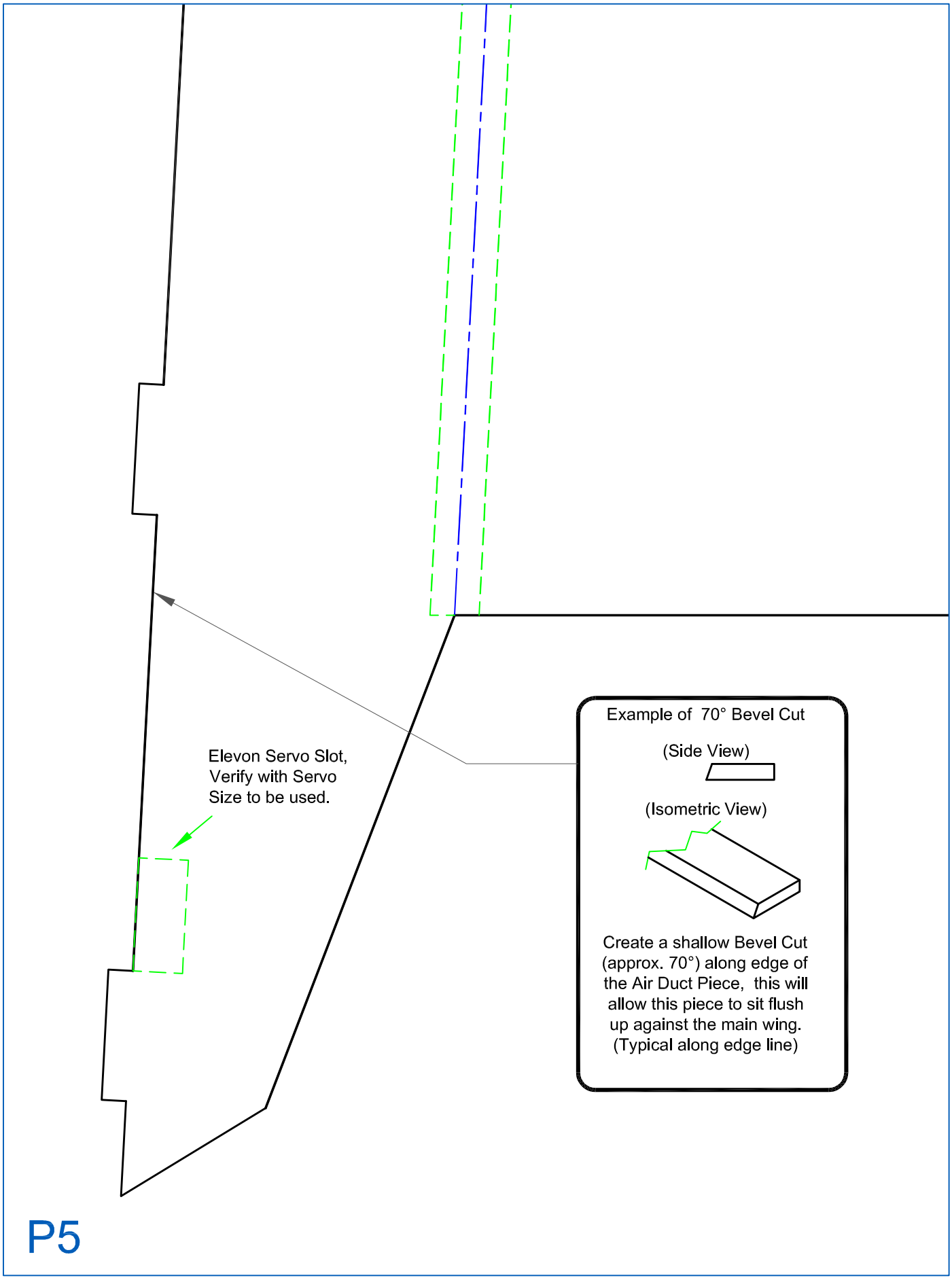
Copy Disclaimer


(REAR)


BULKHEAD
BEVEL CUT
EXAMPLE

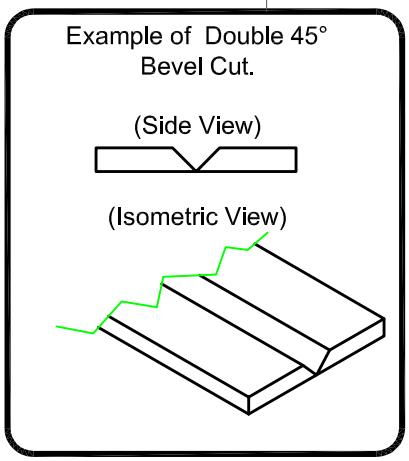

BULKHEAD BY
MOTOR MOUNT


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)

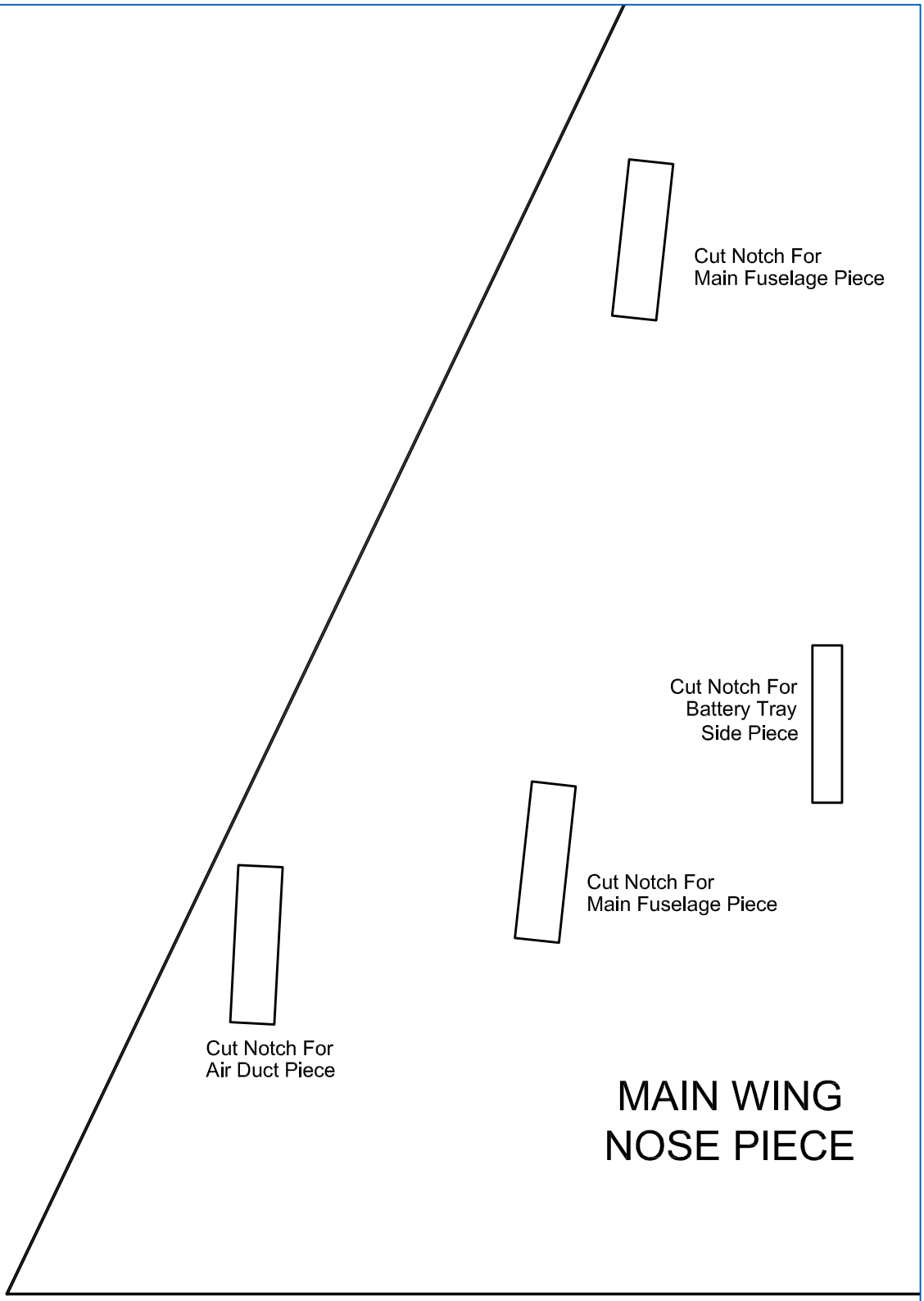
P5

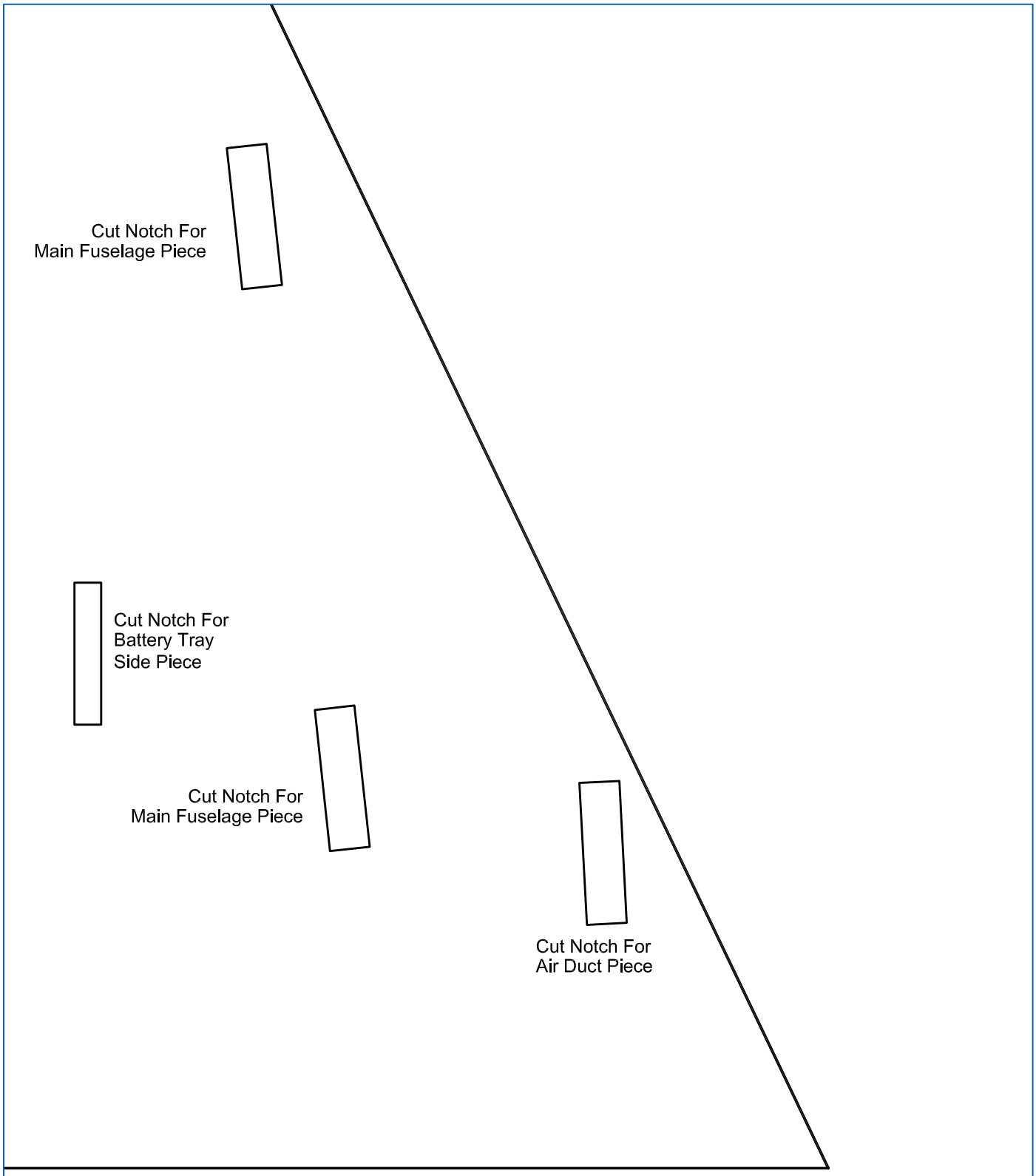
MAIN AIR
DUCT PIECE



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

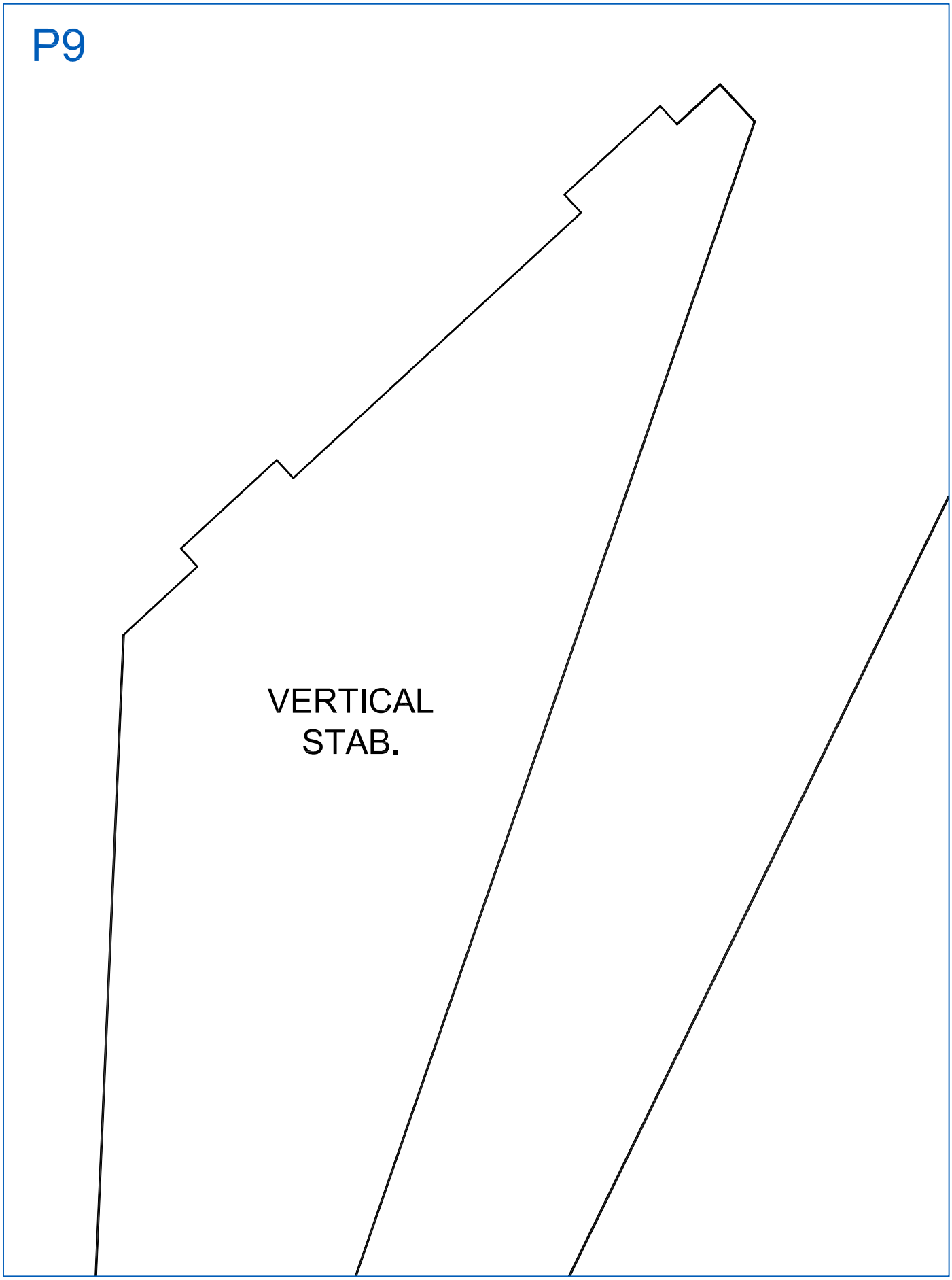
P6


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
MAIN WING
NOSE PIECE

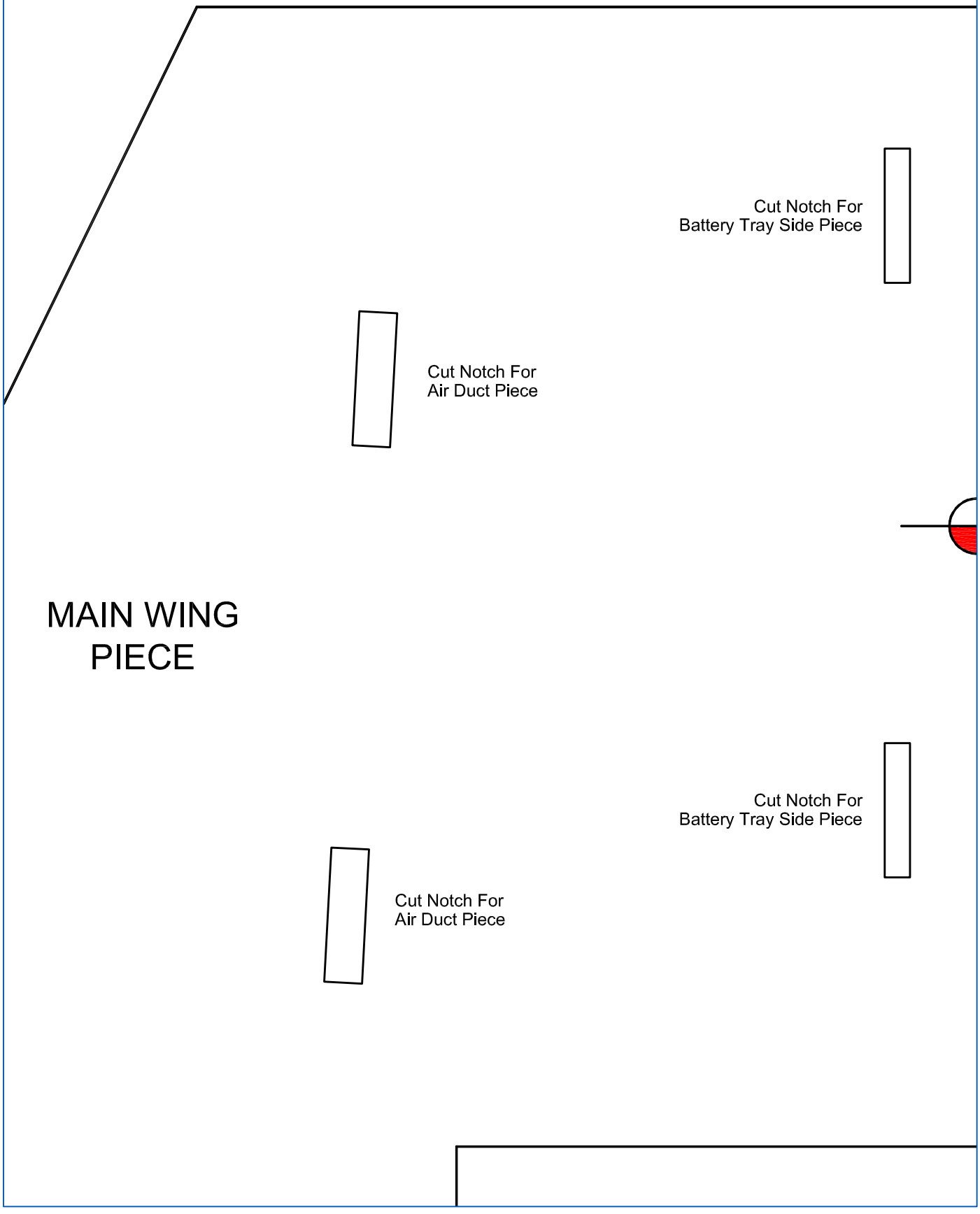

Cut Notch For
Main Fuselage Piece
Cut Notch For
Battery Tray
Side Piece
Cut Notch For
Main Fuselage Piece
Cut Notch For
Air Duct Piece

P8

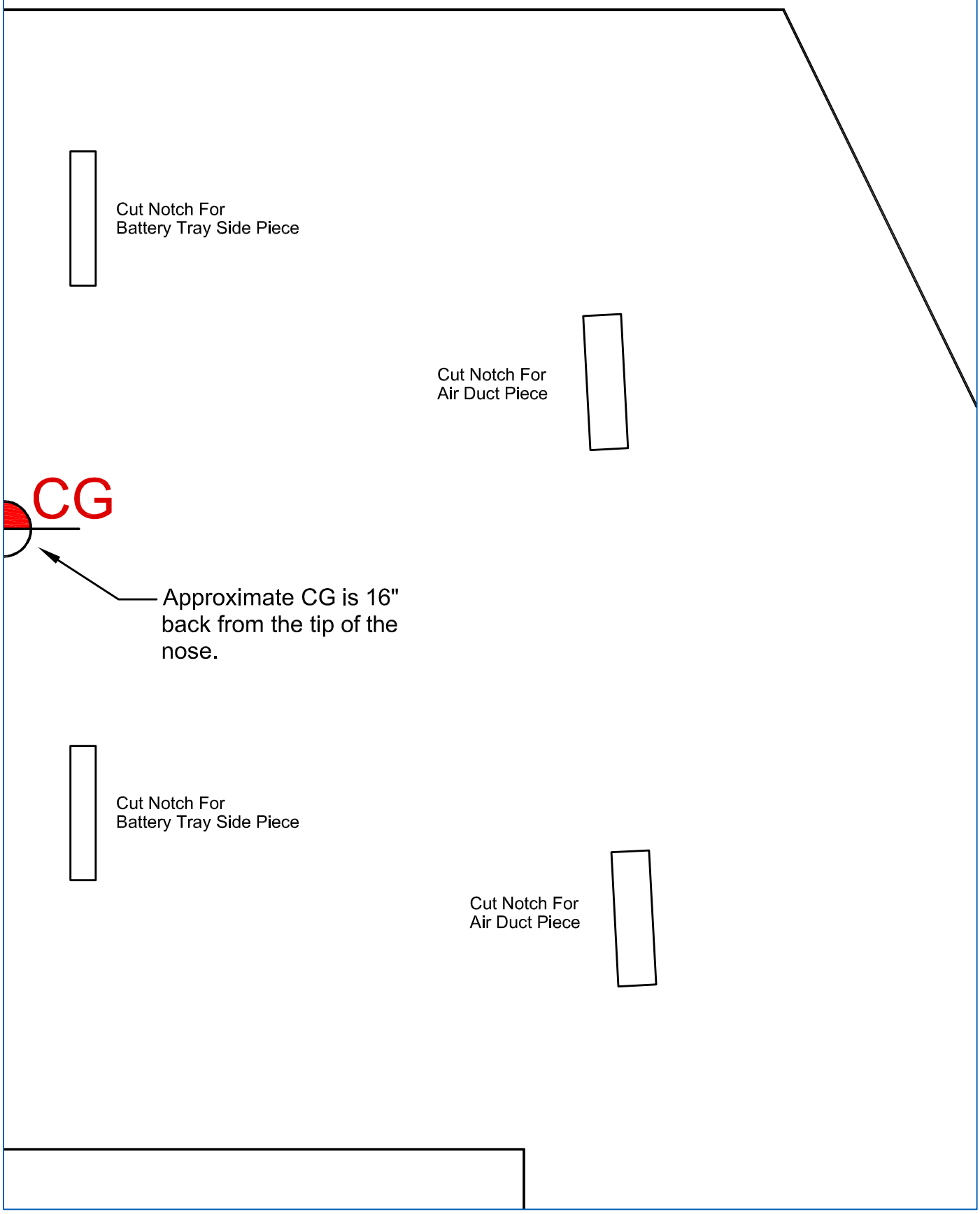
P9

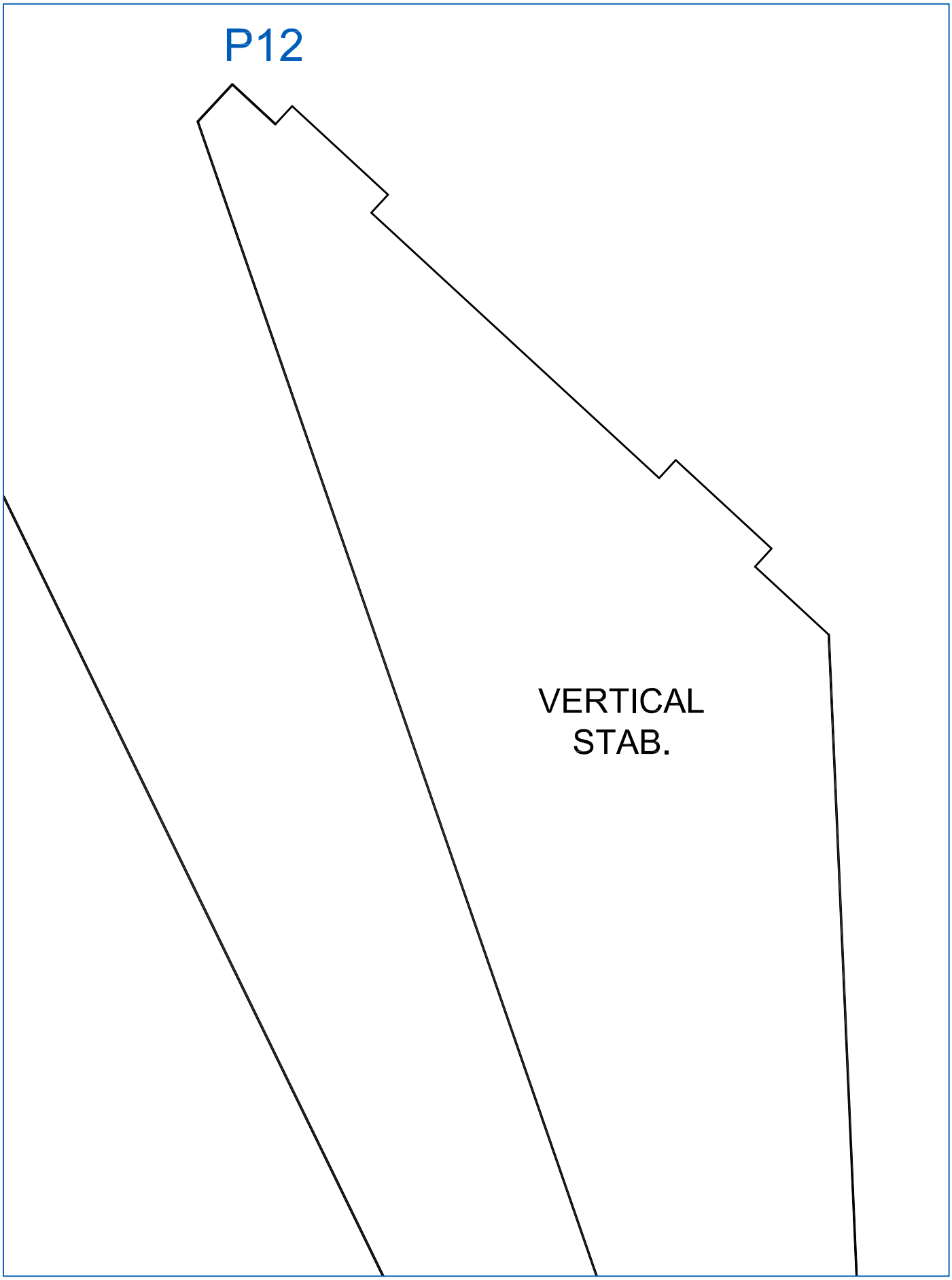


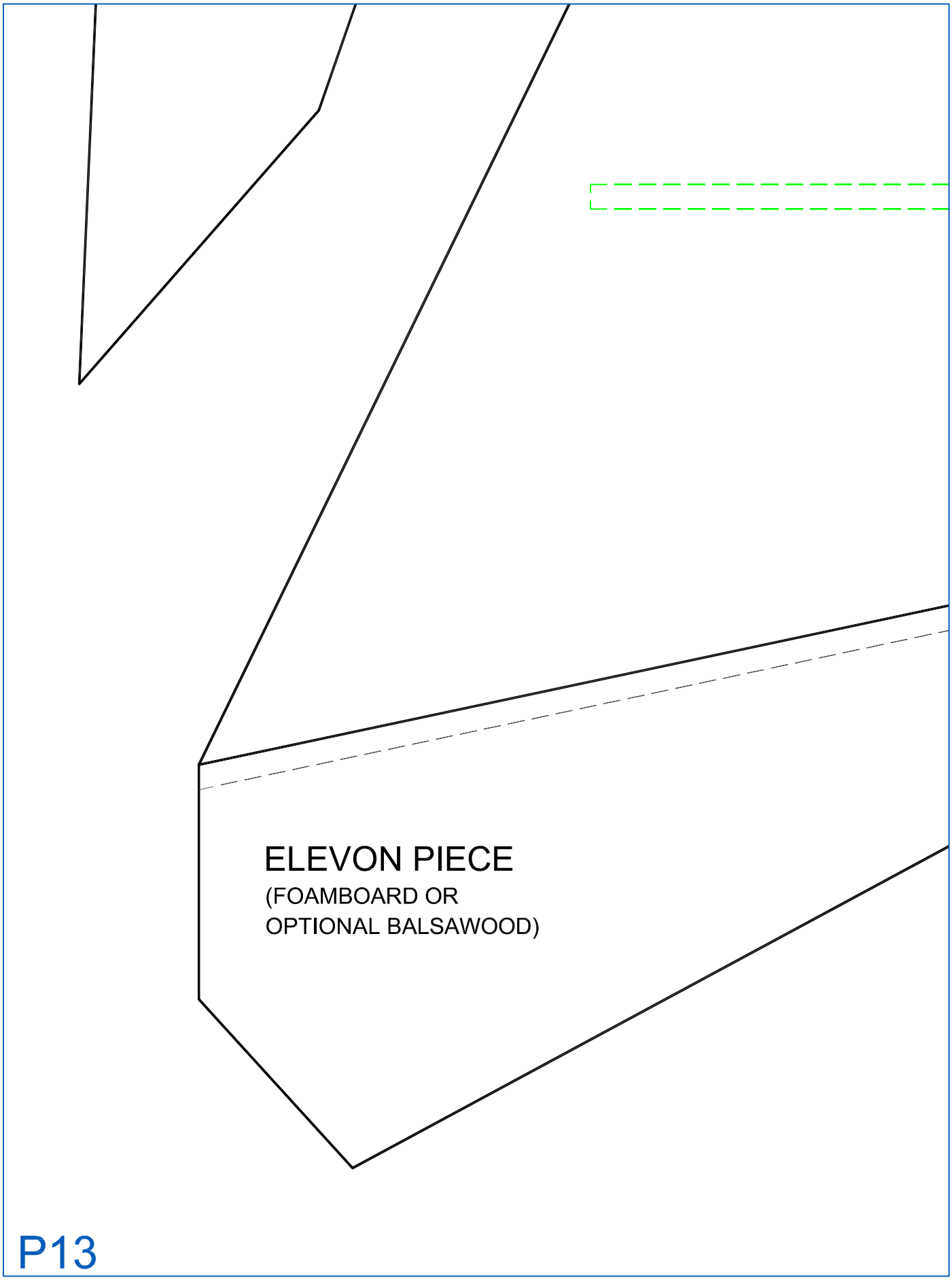
P10


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

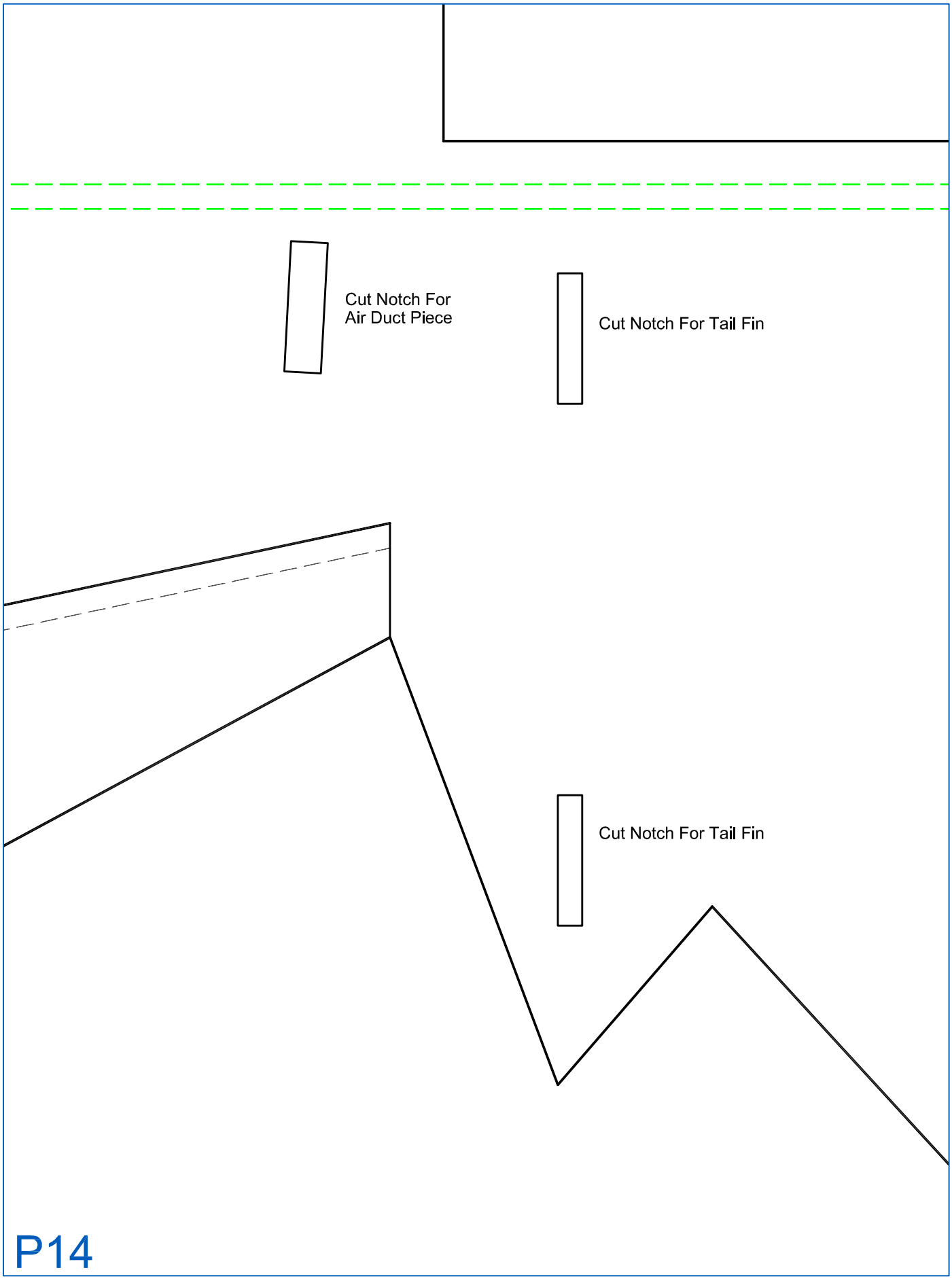
P11


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.

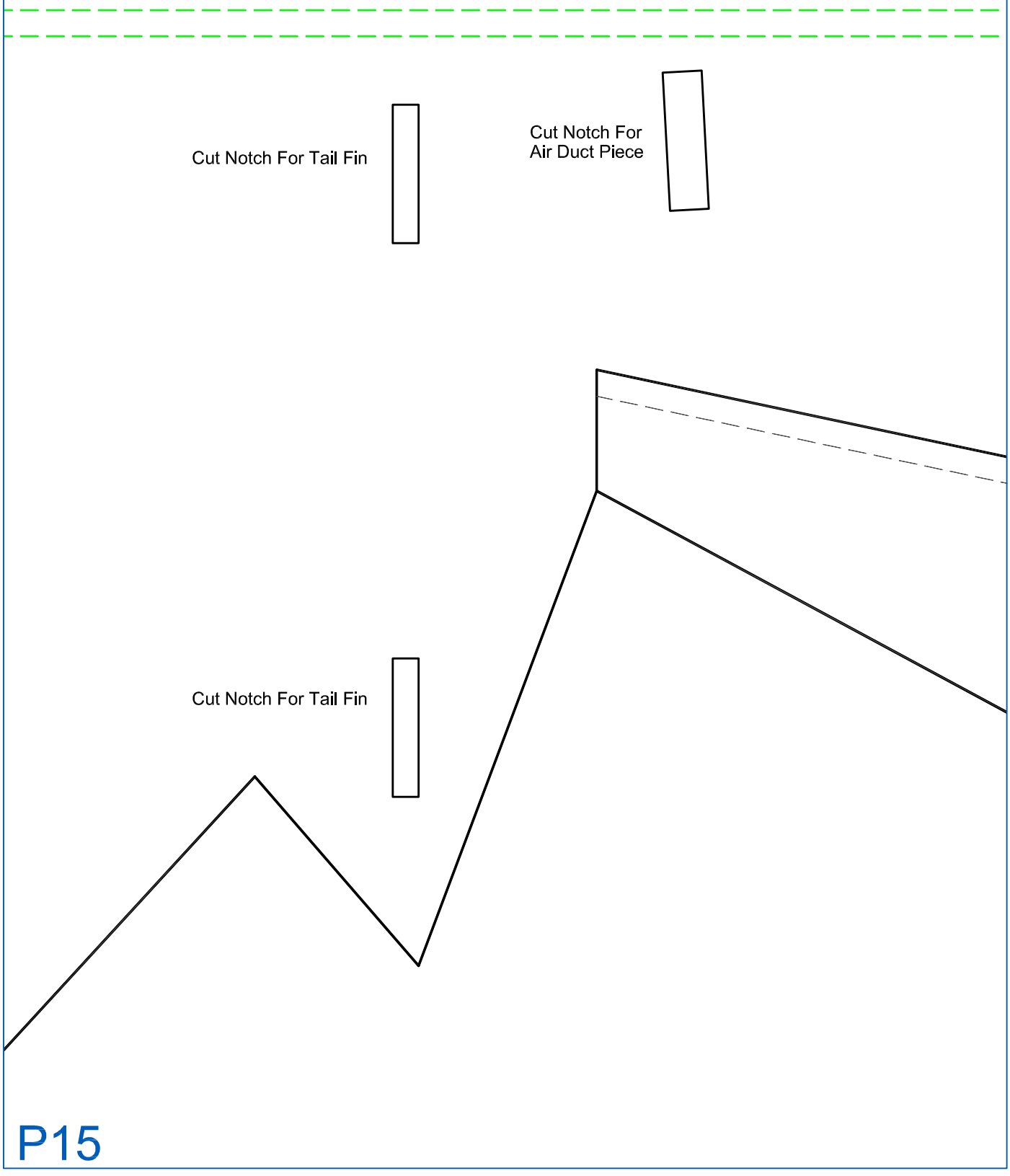


P13

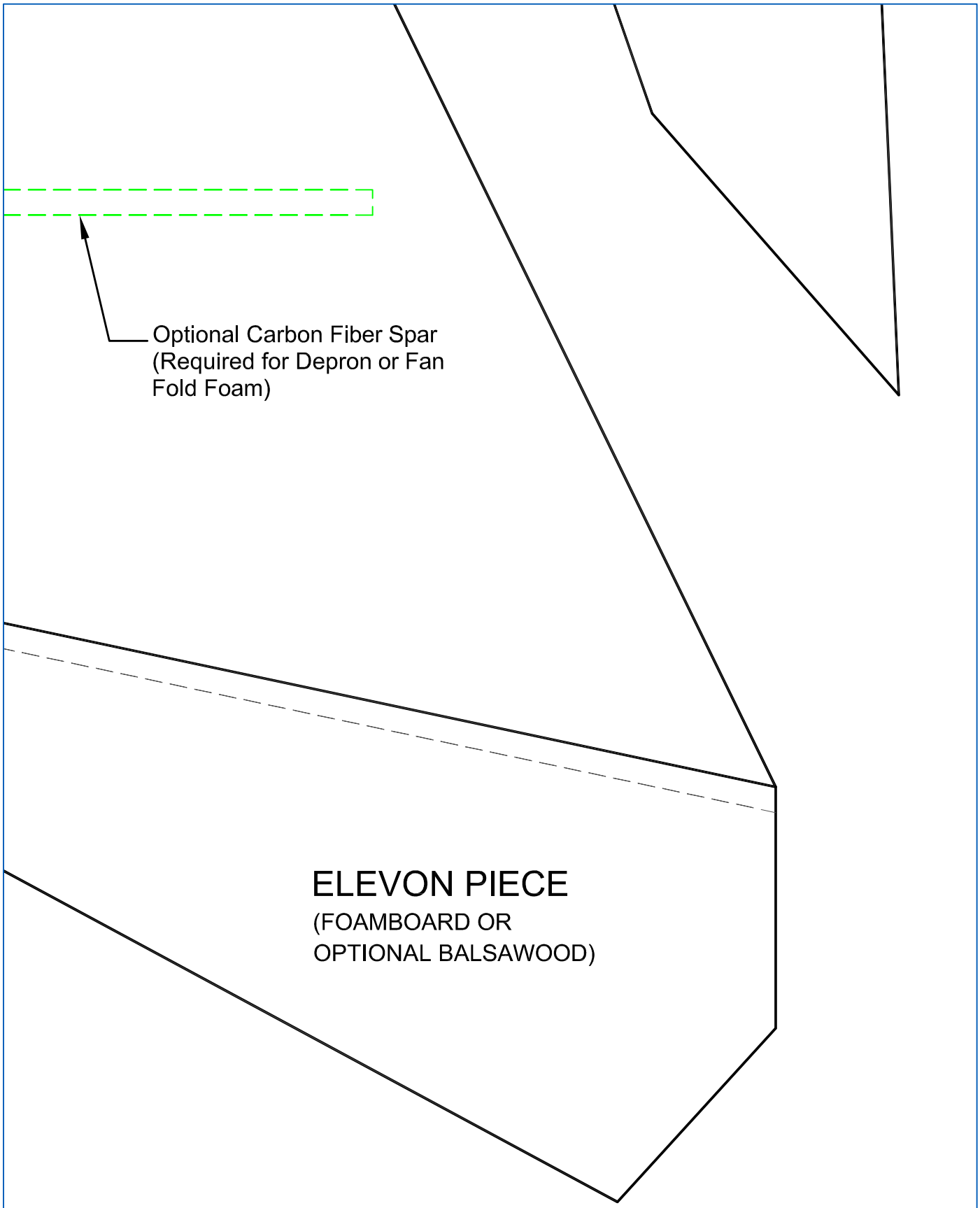

Cut Notch For
Air Duct Piece
Cut Notch For Tail Fin
Cut Notch For Tail Fin

PROP SLOT

(UP TO 7-INCH PROP)

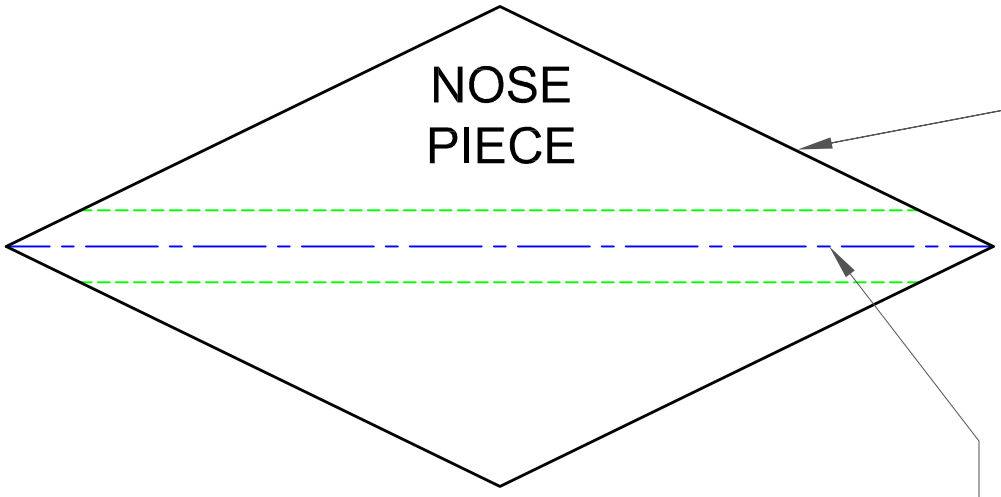


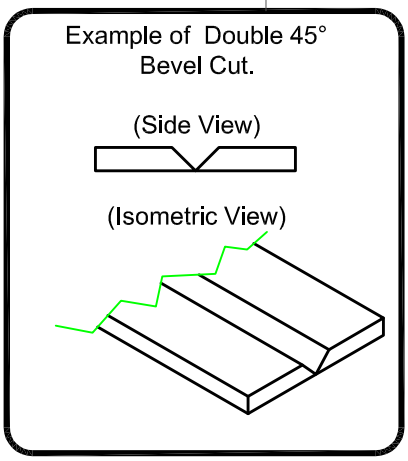
P15

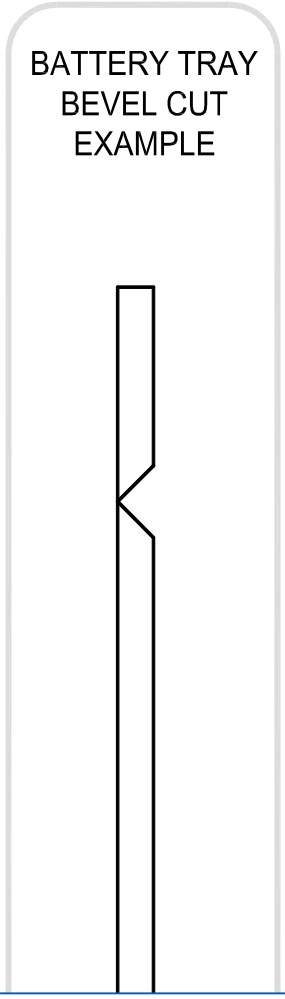

Optional Carbon Fiber Spar
(Required for Depron or Fan
Fold Foam)
ELEVON PIECE
(FOAMBOARD OR
OPTIONAL BALSAWOOD)

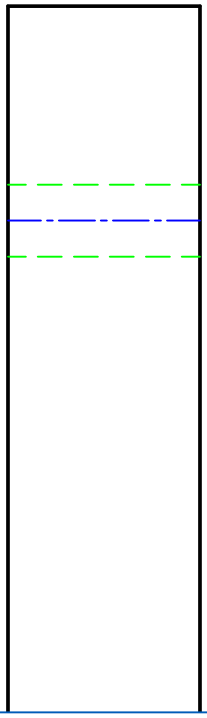
P16

P17


NOSE
PIECE


Example of Double 45°
Bevel Cut.
(Side View)
(Isometric View)

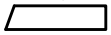

BATTERY TRAY
BEVEL CUT
EXAMPLE



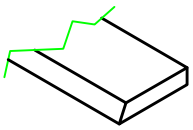
P18

Example of 70° Bevel Cut

(Side View)



(Isometric View)

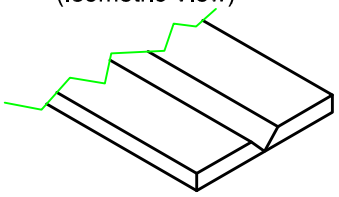


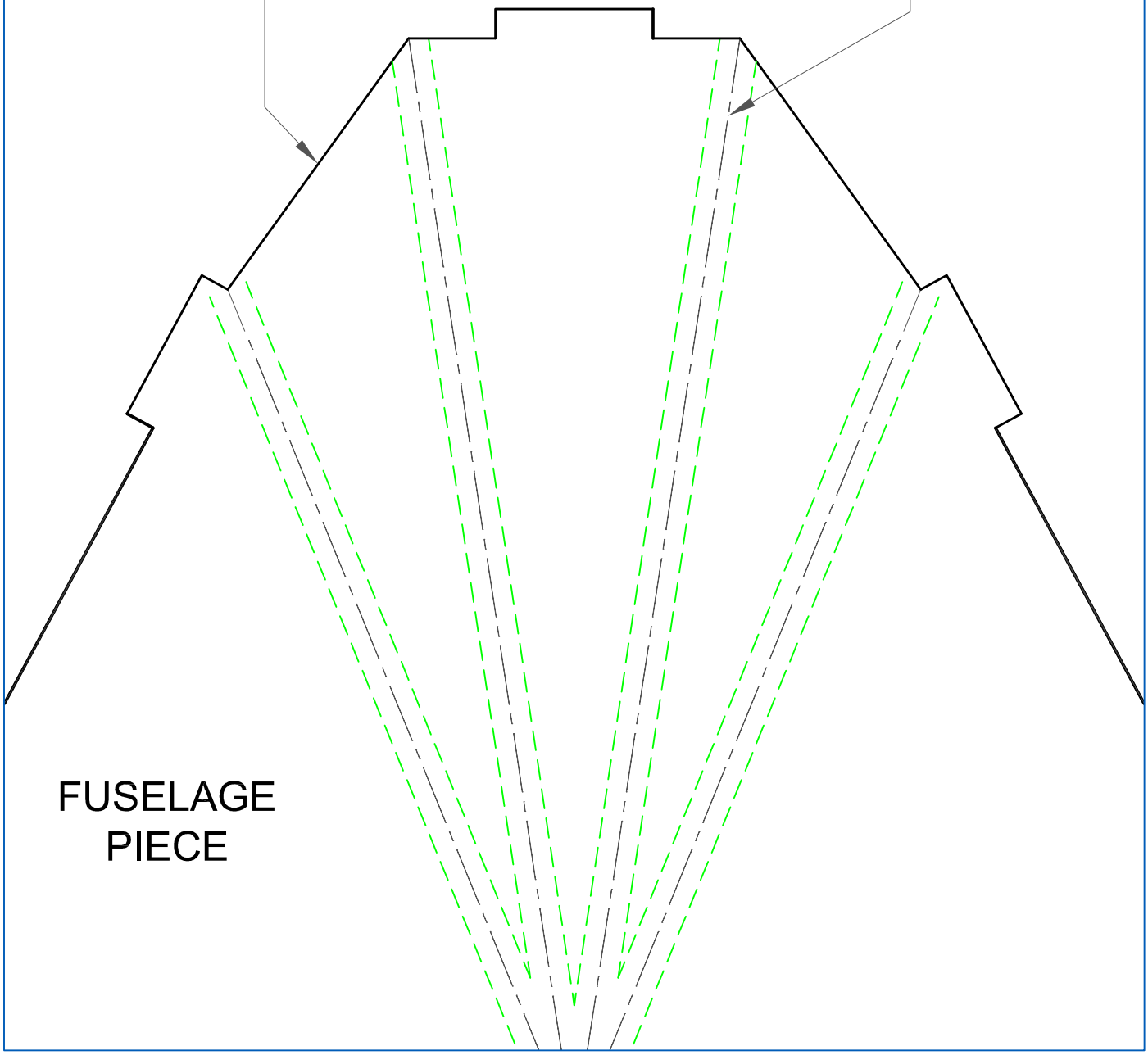
Create a shallow Bevel Cut (approx. 70°) along the bottom edge of the Fuselage Piece and NosePiece, this will allow the pieces to sit flush up against the main wing.

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

(Side View)

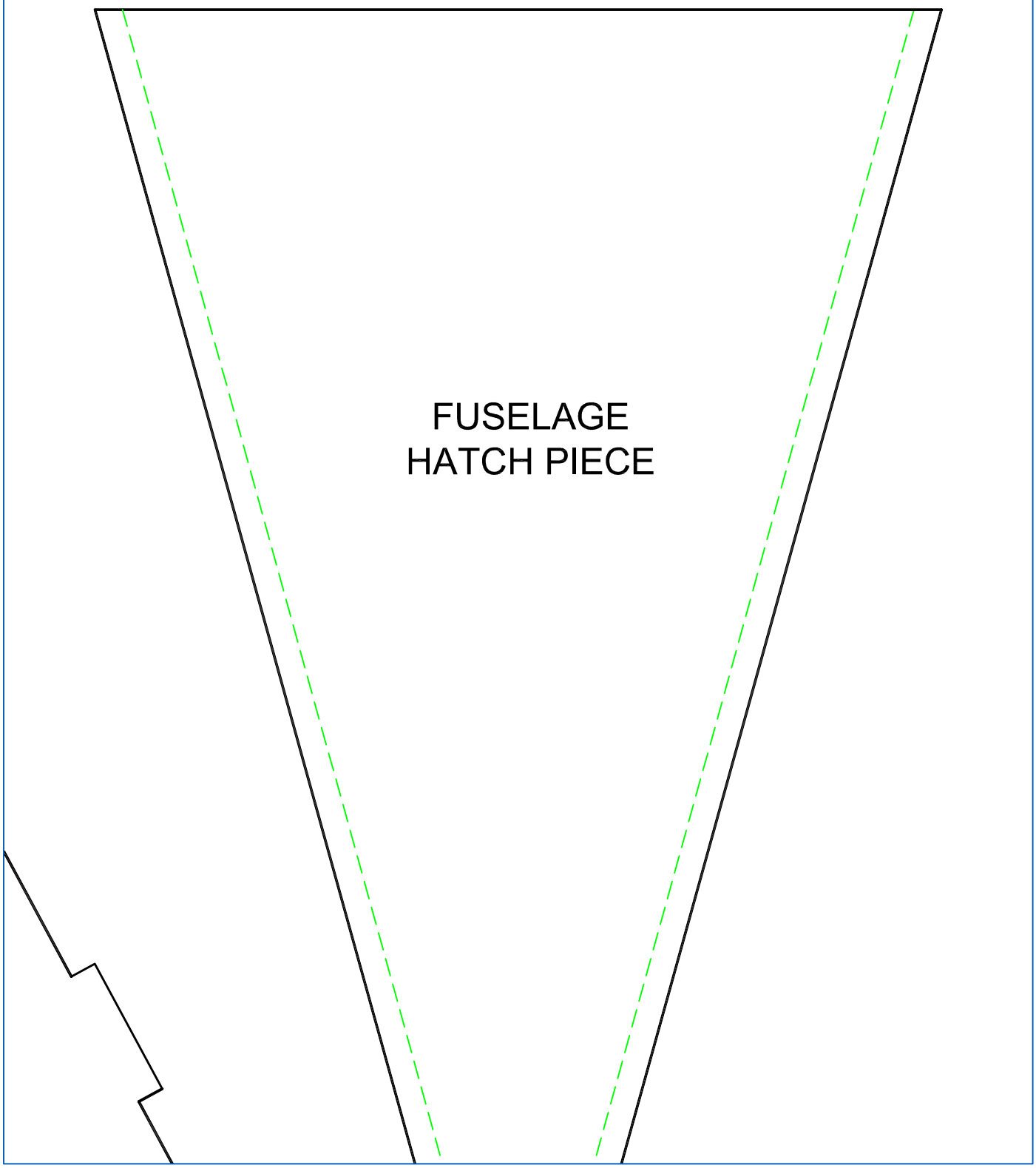
(Isometric View)

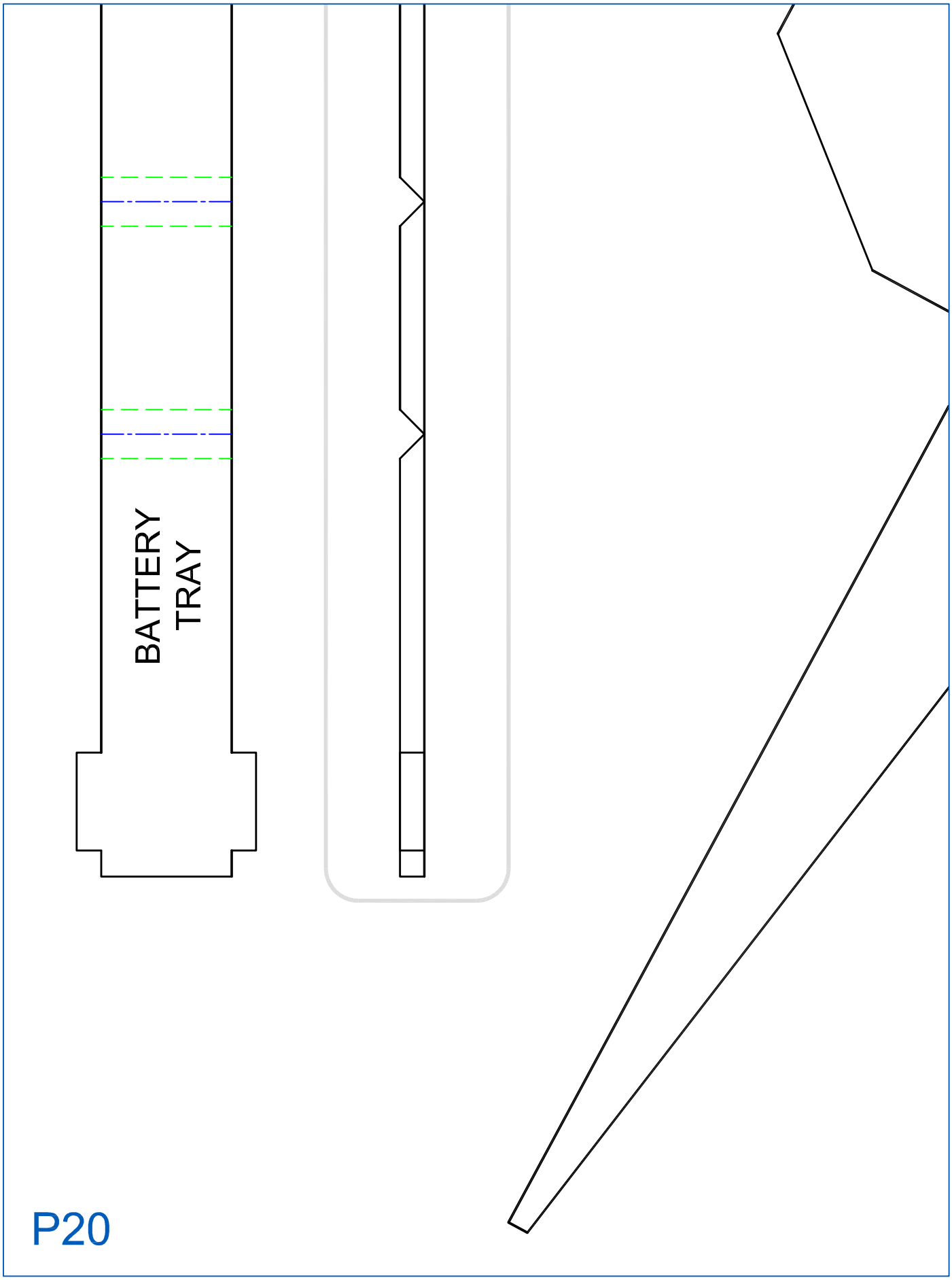




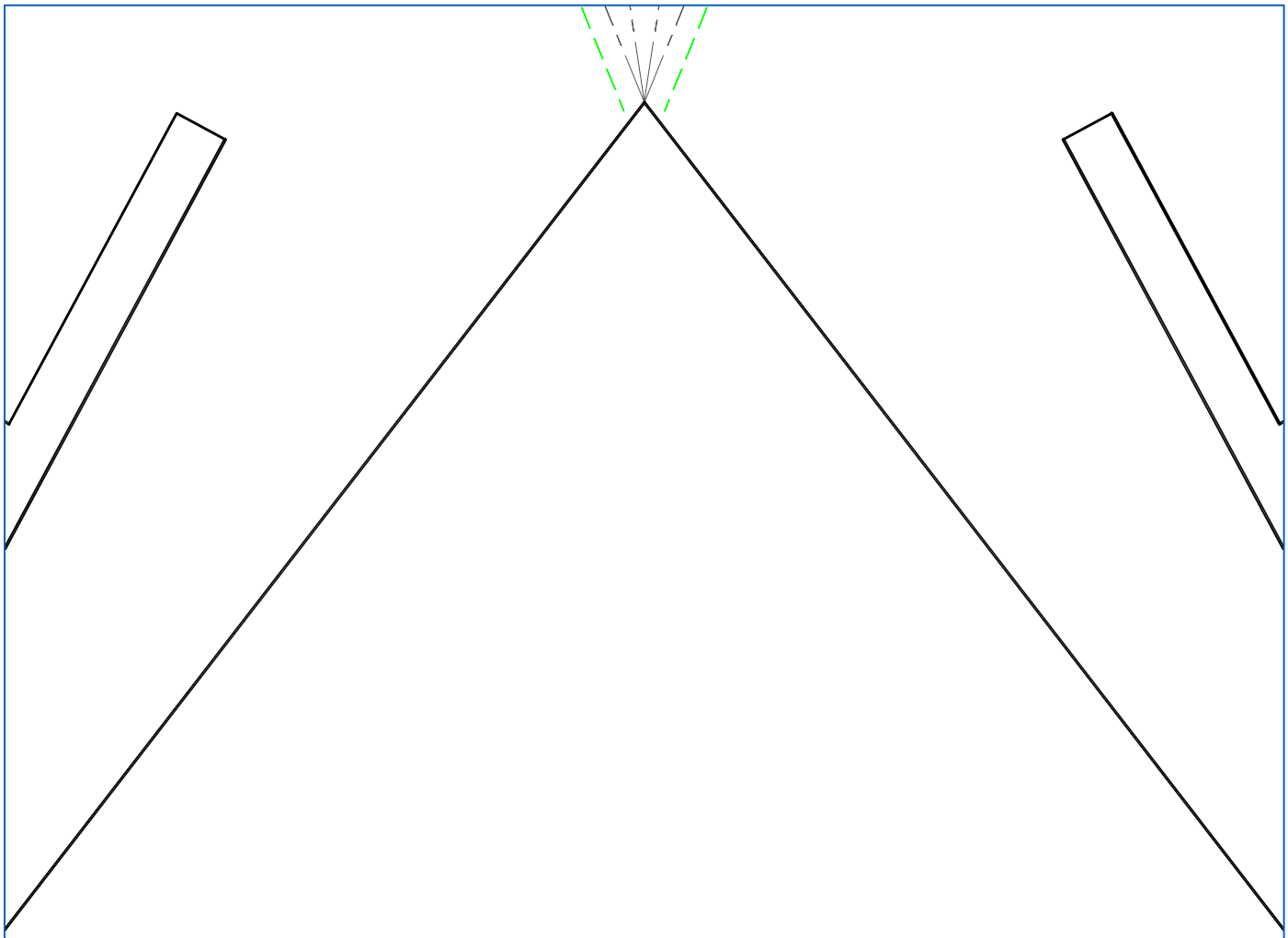
FUSELAGE PIECE

P19

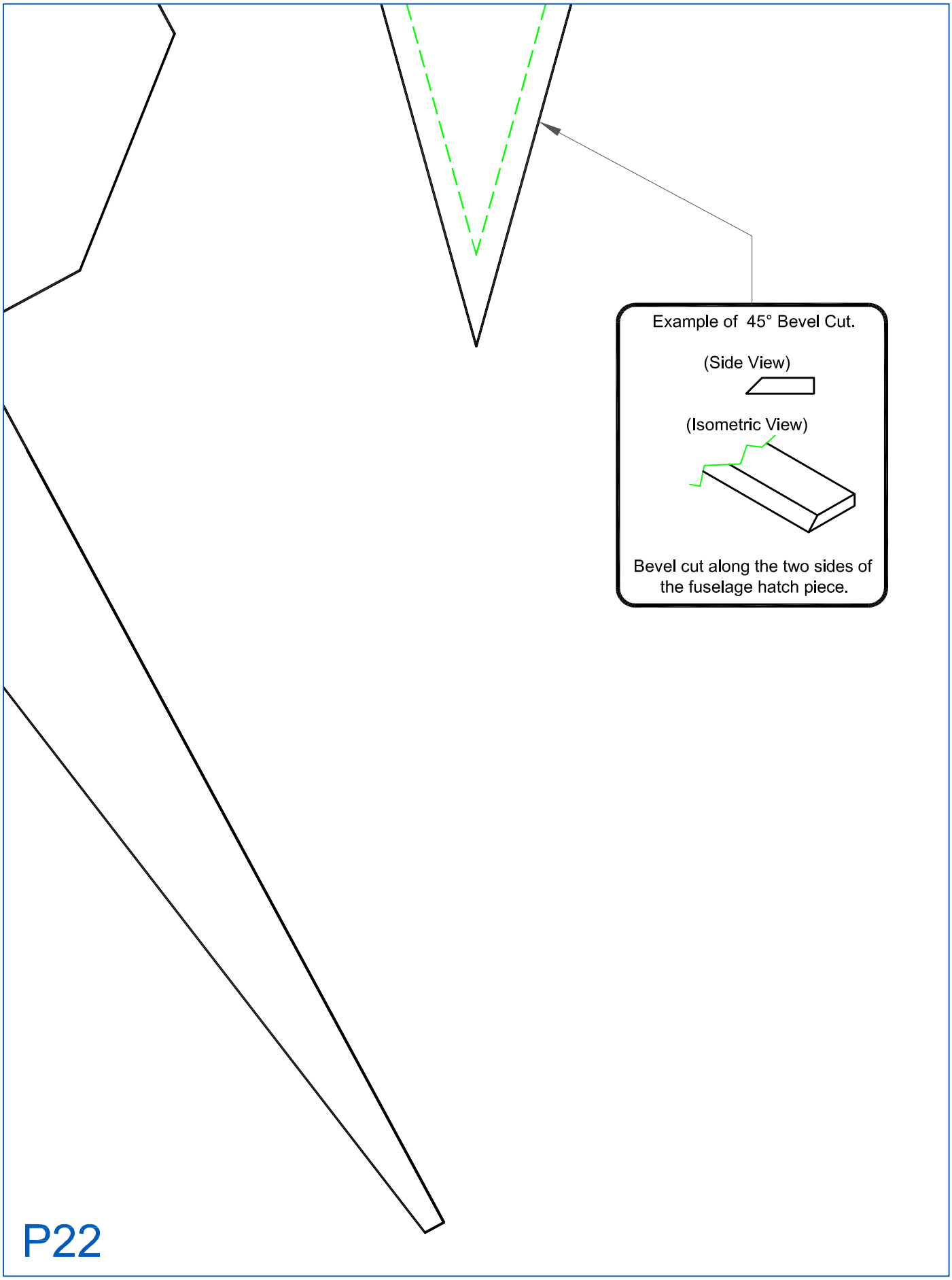




P20



P21


Example of 45° Bevel Cut.
(Side View)
(Isometric View)
Bevel cut along the two sides of the fuselage hatch piece.

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