

R  
Cu

CF Rod cutout slot

Hand-launch Grip Cut (3) and laminate  
Attach to centerline center on CG point

Exhaust Duct side piece  
Cut (2)

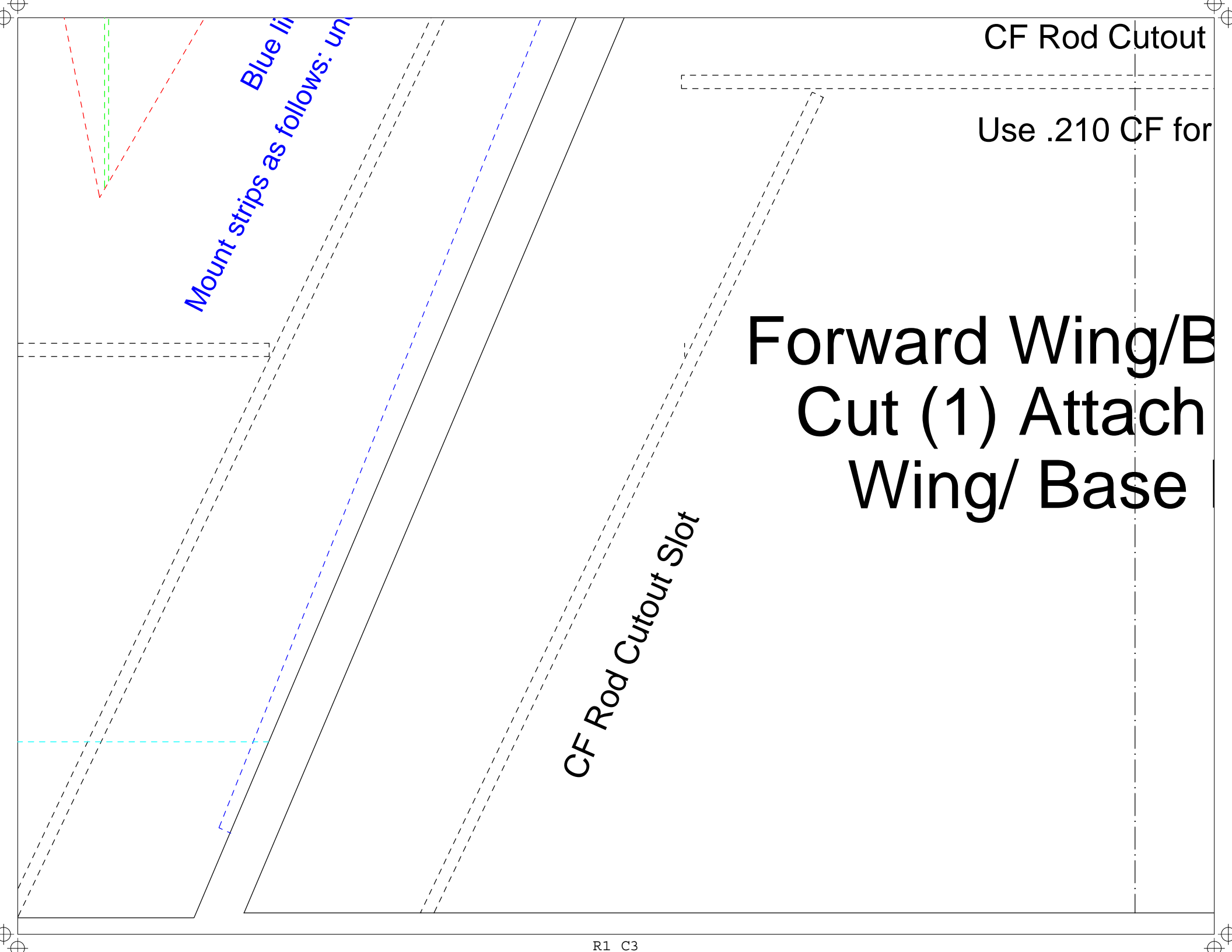
*Cut notch near end to pass servo connector thru*

# Rear Wing/ Base (Cut 1)

ed lines indicate elevon cut lines  
t elevons and bevel to 45 deg. angle

CF Rod Rear crossbrace

CG



CF Rod Cutout

Use .210 CF for

Forward Wing/B  
Cut (1) Attach  
Wing/ Base

CF Rod Cutout Slot

Mount strips as follows: un  
Blue li

Slot

all

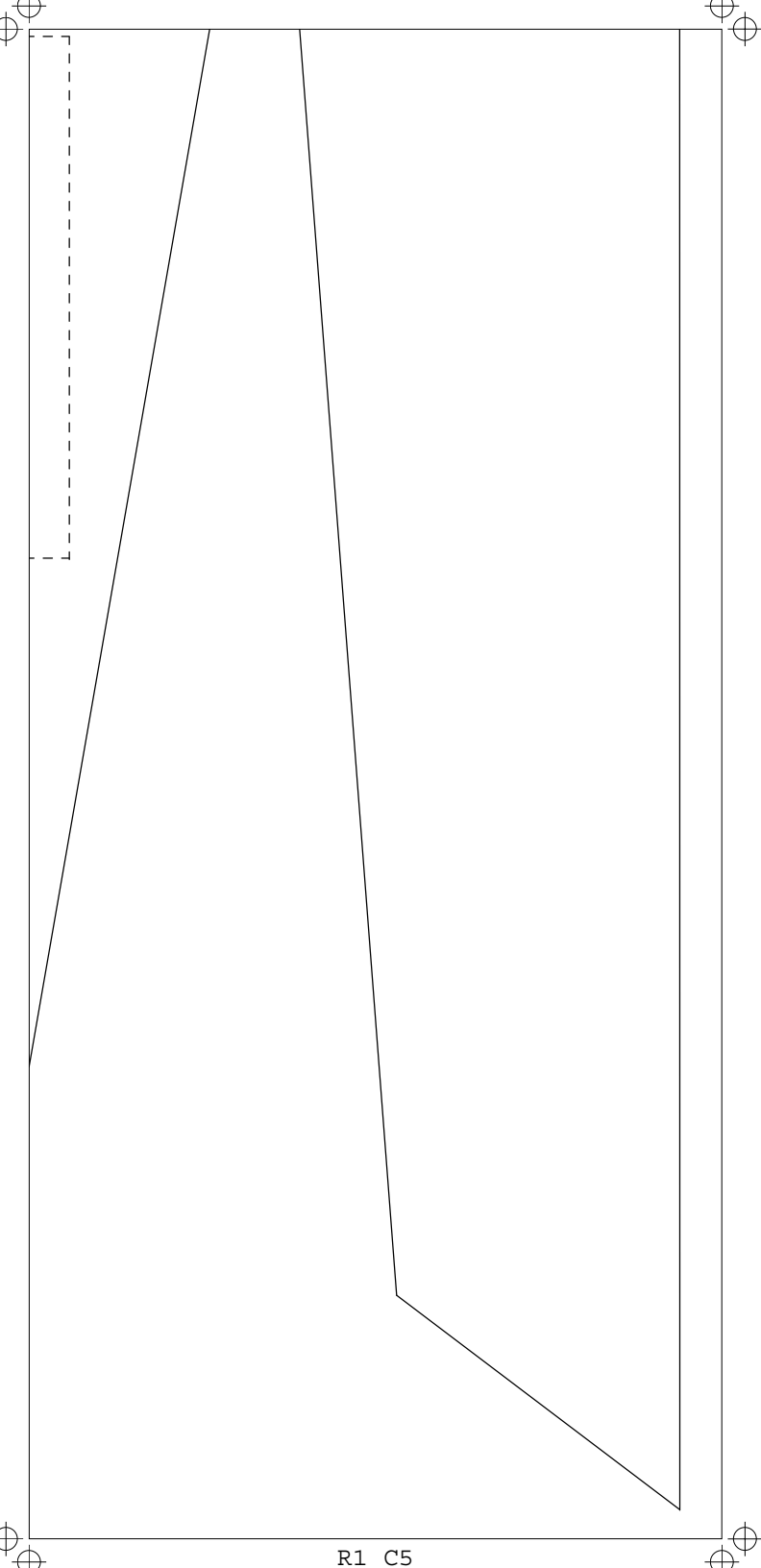
Base Piece  
to Rear  
Piece

Cockpit front Cut (1)

st center keystone cut (1)

Cut at approx. 60 deg. for tails (no need to be exact)

Vertical Tail Template  
Place between tails  
until glue dries



R1 C5

Control Horns



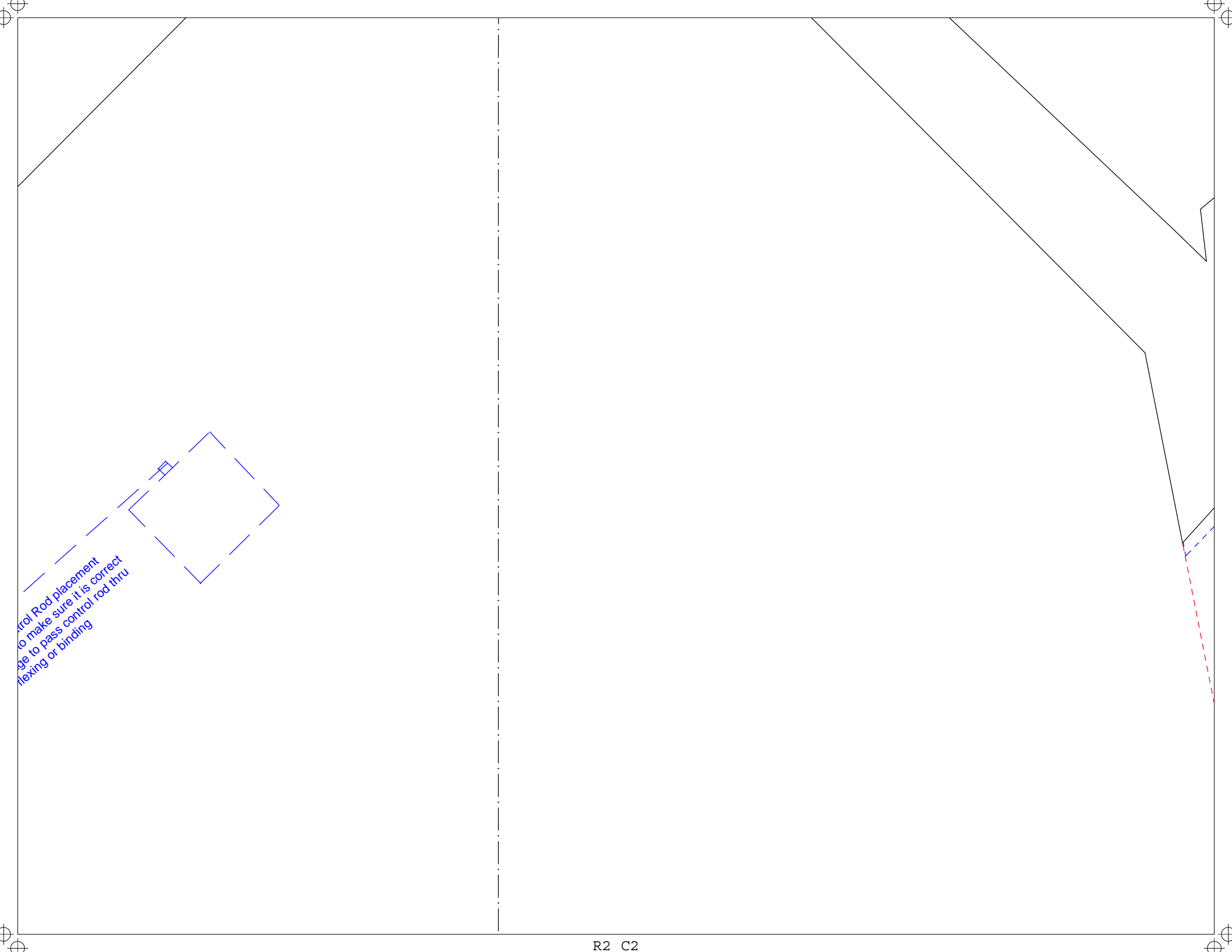
Cut (2) from 1/32 ply or polycarbon plastic



Lower cockpit side piece  
Cut (2)

Bottom side

Approximate Servo/Control  
Double check angles  
Cut notch in Fuselage  
Double check notch



Control Rod placement  
to make sure it is correct  
to pass control rod thru  
flexing or binding

R2 C2

Green lines indicate elevon vortex generator strip placement  
Use thin 2mm balsa strip or cut strips from FFF/depron  
Install on top and bottom of both elevons

Lines indicate placement of forced washout strips  
Under leading edge of wing and atop trailing edge of elevons



# Exhaust panel Cut (2)

Rear Edge

Front Edge

bottom edge

rear  
Cockpit side piece Cut (2)

bottom edge  
Cut (2)

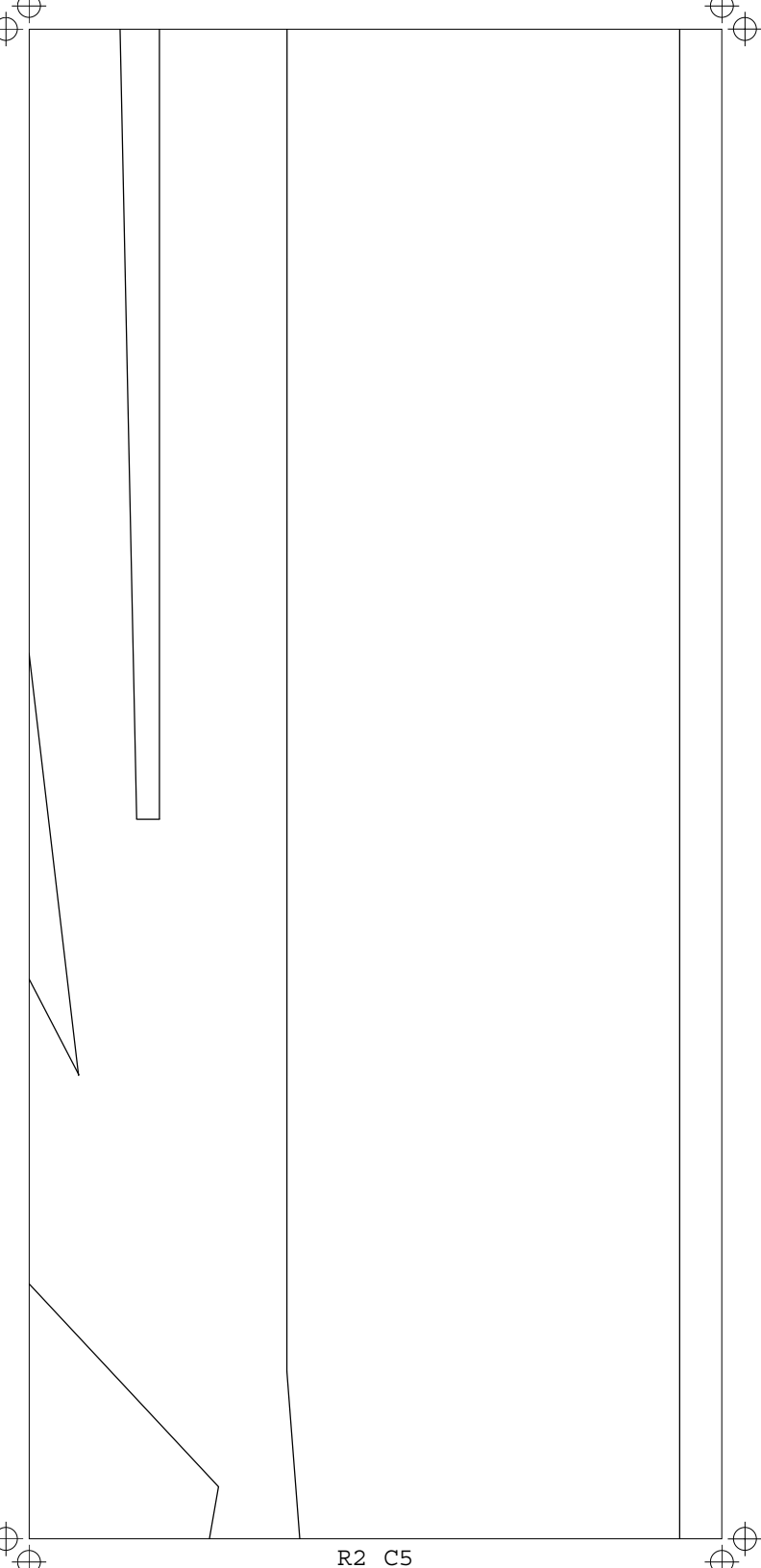
Top Cockpit Piece



Cut (1)  
Trim to shape

Exhau

(ct)

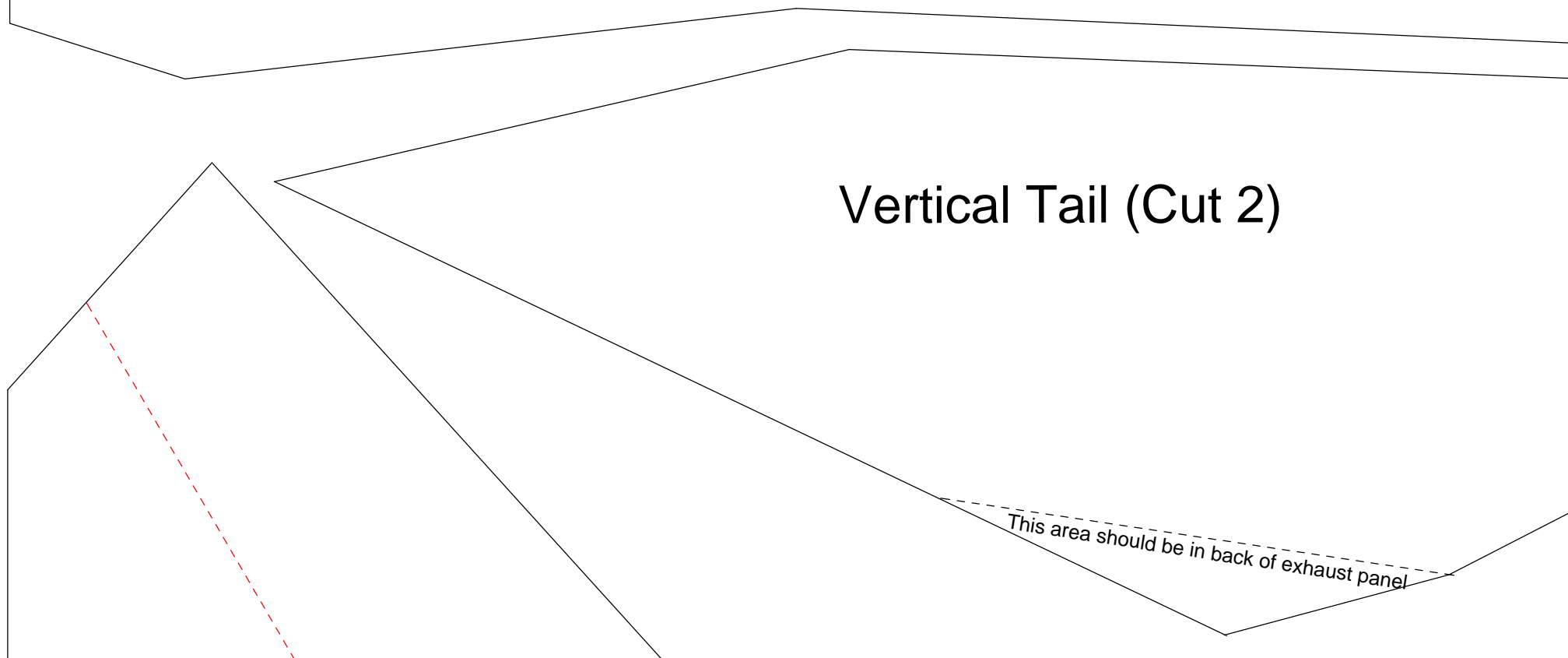


R2 C5

Keep in mind...any angle variation from my build will result in a different fuselage shape.  
Also, try to minimize curving of fuselage base piece during fuse construction.

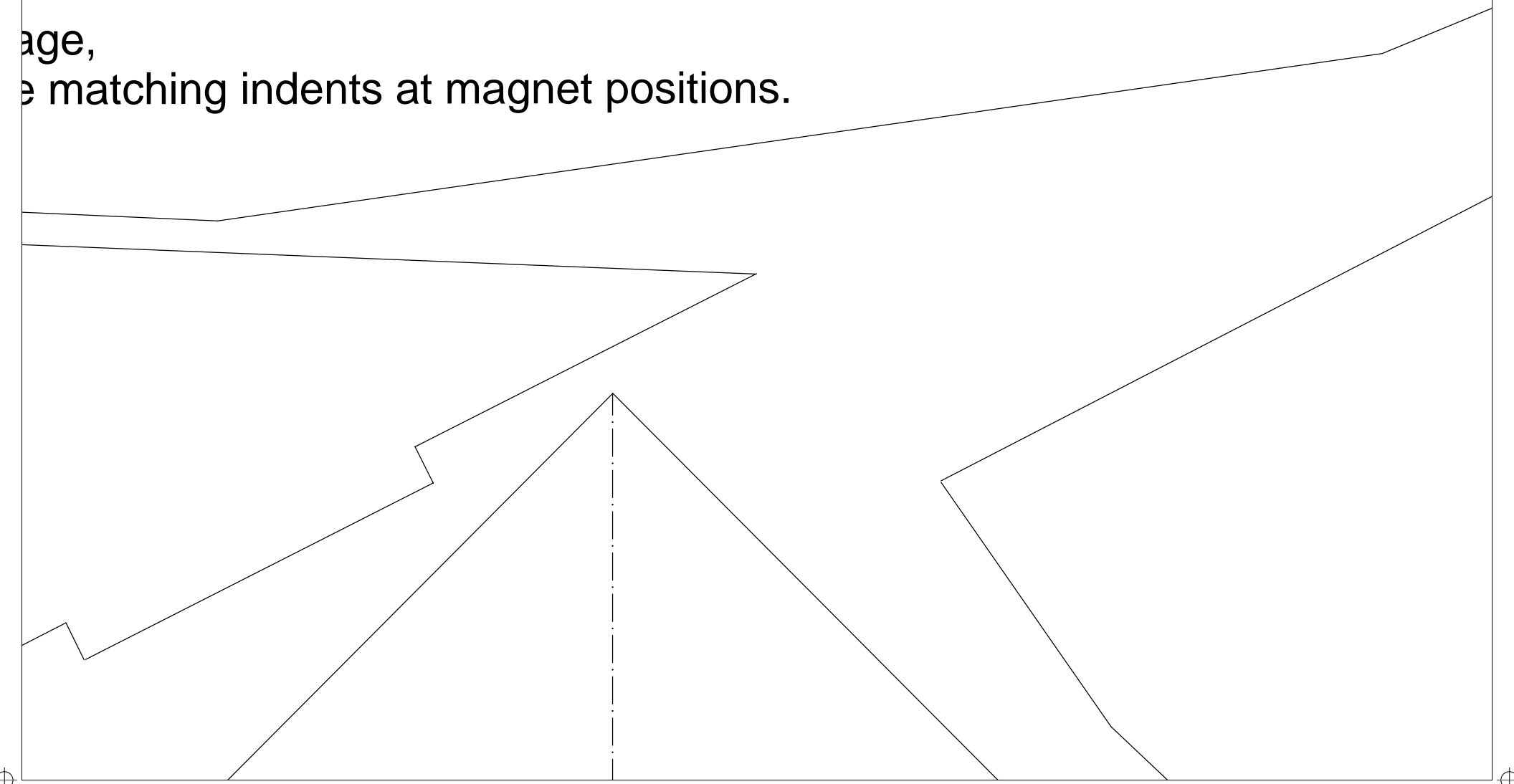
9. When placing magnets, space them evenly along the edges of the Fuselage Base piece.

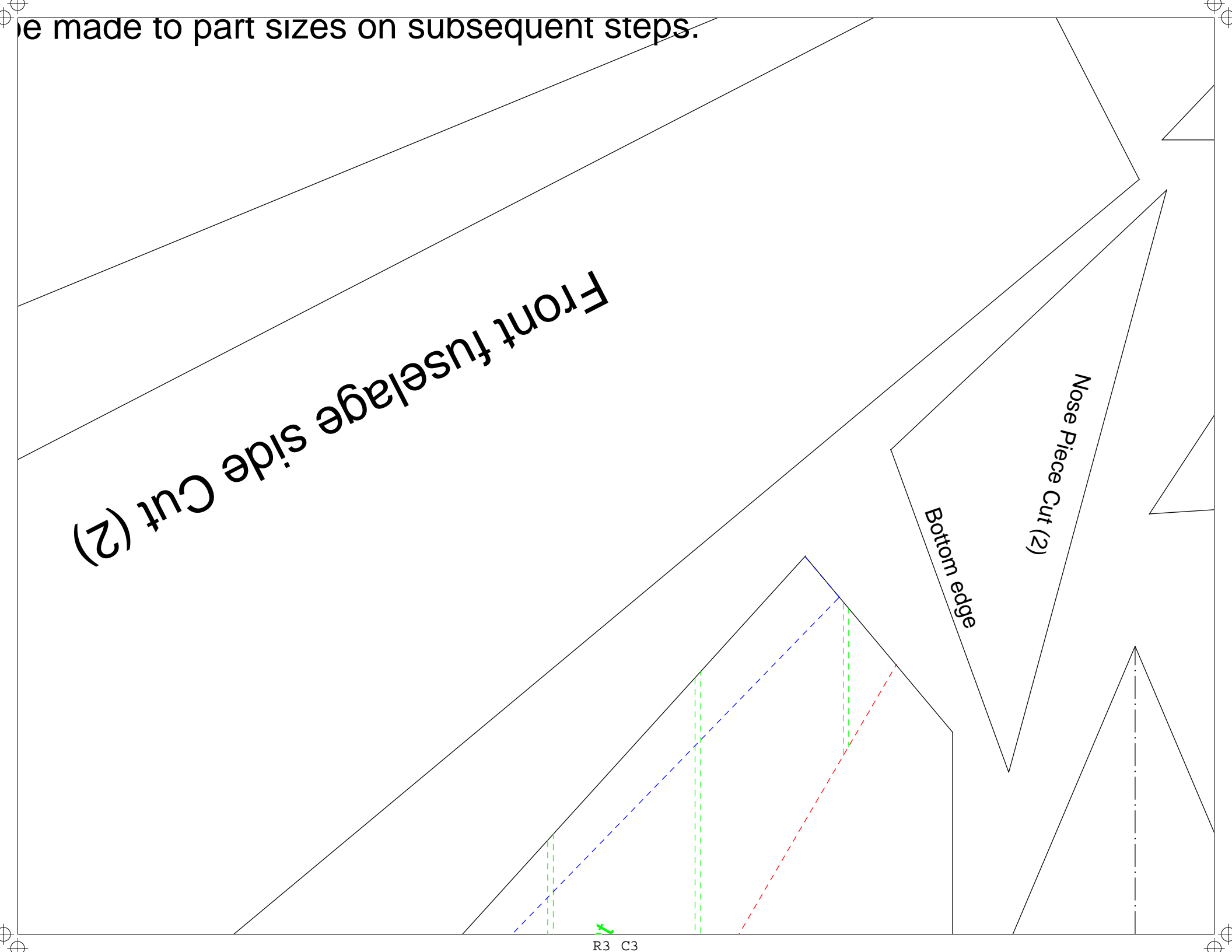
Use more magnets at the front and rear, and remember to avoid placing magnets where the CF spars are. My advice is to mount the magnets to the fuselage base piece before building the fuselage, then press the fuselage base piece against the wing/base piece to make



for that step...depending on placement of parts, adjustments may need to be made to get the best result for you. Keep in mind these plans are BETA only. This is a preliminary construction, but a little curvature won't hurt the flight characteristics.

page,  
the matching indents at magnet positions.





...e made to part sizes on subsequent steps.

Front fuselage side side Cut (2)

Bottom edge

Nose Piece Cut (2)

R3 C3

front e

Intake side piece (Cut 2)

outer edge

front edge

Intake Top Piece Cut (2)

Top edge

Intake to exhaust transition top piece cut (2)

Rear edge

Intake to exhaust transition bottom piece  
front edge

edge

forced washout strip Cut (2) and mount ato

forced washout strip Cut (2) and mount und

**Internal spine /motor mount pie**

## General Tips

1. All fuselage pieces need to be beveled at varying degrees for proper fit.
2. I recommend using UHU Creativ glue for joining fuselage pieces for flexibility
3. Start with 1/2 inch up and down deflection on elevons and adjust to your flying
4. If possible, use exponential on radio mixing to soften control throws.
5. Have fun! Any questions please email me at [dcobra\\_98@yahoo.com](mailto:dcobra_98@yahoo.com) or visit
6. CG measurement on 100% scale is 52cm along centerline from nose to
7. Materials needed /recommended:
  - 2-3 sheets depron/FFF/sturdyboard
  - 1/32 lite ply for control horns
  - Polyurethane glue, foam safe CA, UHU Creativ Glue
  - Thin balsa strips (1/32 I think)
  - (2) Servos I used Hitec HS-55's
  - (1) Brushless motor/ESC/Prop - I used HET Typhoon 15/10, EFlite 20
  - (1) Receiver - I used Hitec Electron 6. Minimum Rx would be 4 channels
  - (3) 61mm .210 CF rods or equivalent length
  - Scotch Satin tape for elevon hinges, tape over CF rods
  - (124) 1/8 x 1/16 N48 Neodymium disc magnets (doubled-up) or approx
  - (1) 3/8 hardwood stick for motor mount.





g style.

discussion thread at <http://www.rcgroups.com/forums/showthread.php?t=481872>  
ip, or 56cm along wing leading edge from nose tip.

amp ESC, and APC 8x6 SF prop  
l and Transmitter needs to be capable of elevon or V-Tail mixing

Fuse

imately (62) 1/4 x 1/16 magnets.

Top Spinal Piece Cut (2)

Aft In

Large Base Piece (Cut 1)

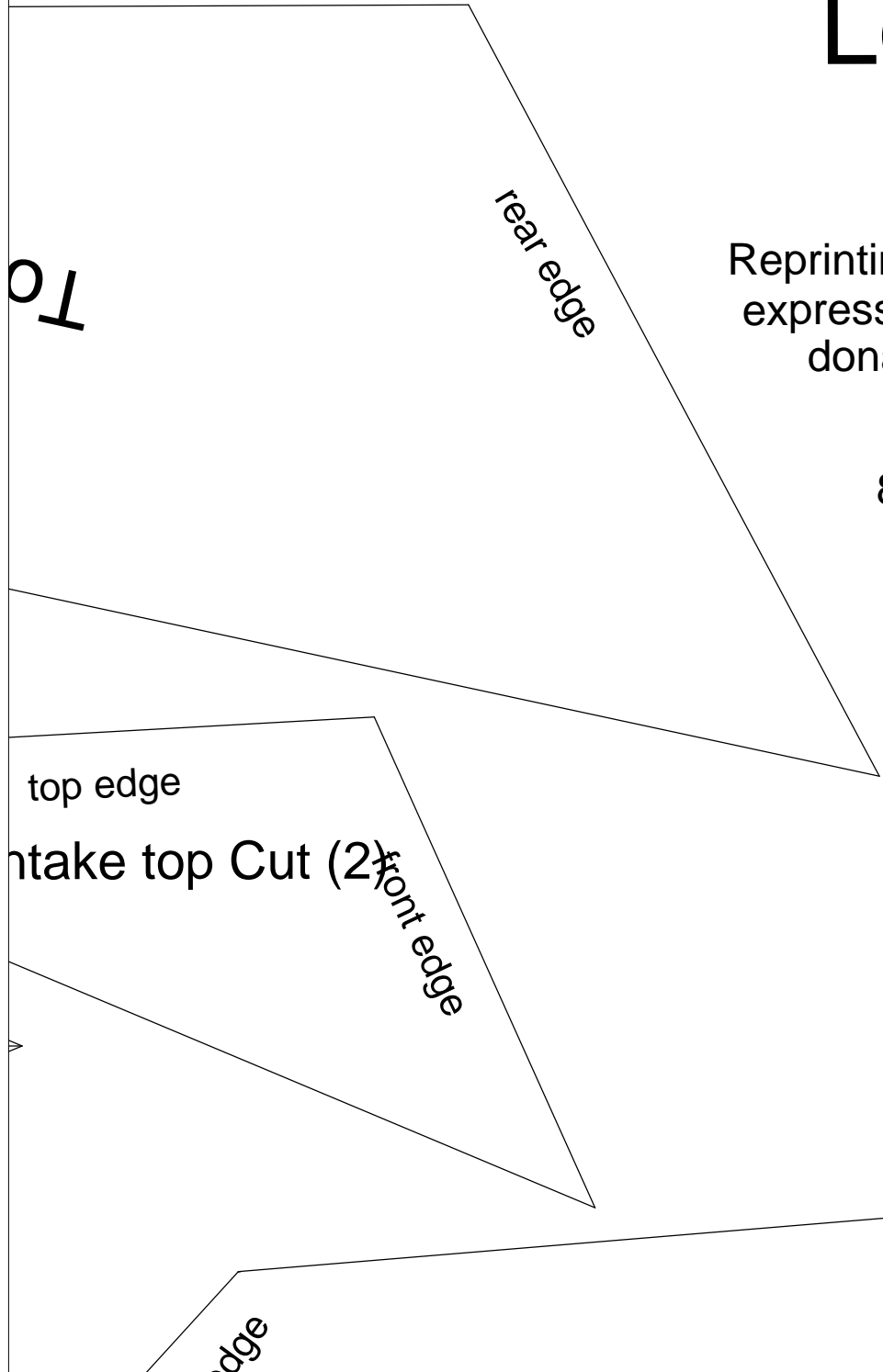
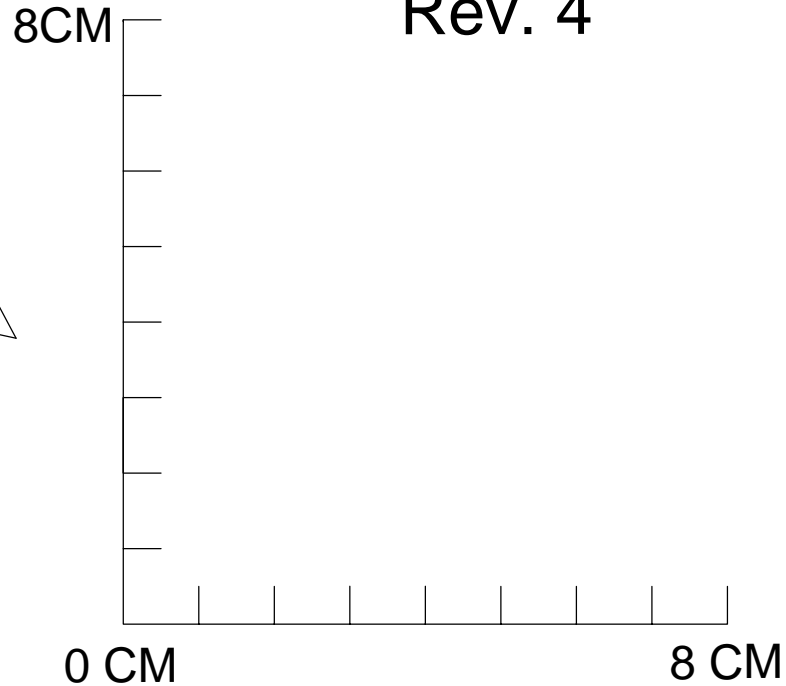
# Lockheed-Martin F-117 Nighthawk

Copyright 2006 by Paul Albert

Reprinting authorized for personal use only, no commercial use without express permission of author. If you like this design, please make a donation for the effort via PayPal to dcobra\_98@yahoo.com

This design is free for personal use.

## Rev. 4

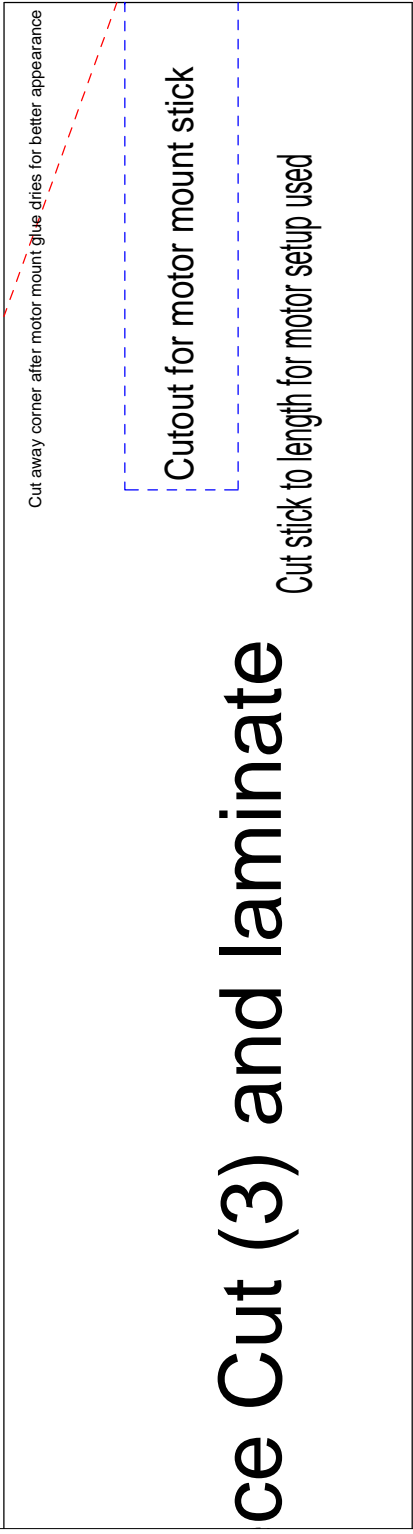


A

use without  
consider a  
com



er leading edge of wing (follow blue stitched lines)



Cut away corner after motor mount glue dries for better appearance

Cutout for motor mount stick

Cut stick to length for motor setup used

# ce Cut (3) and laminate