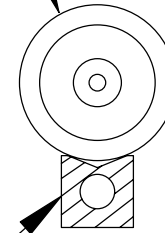


Motor



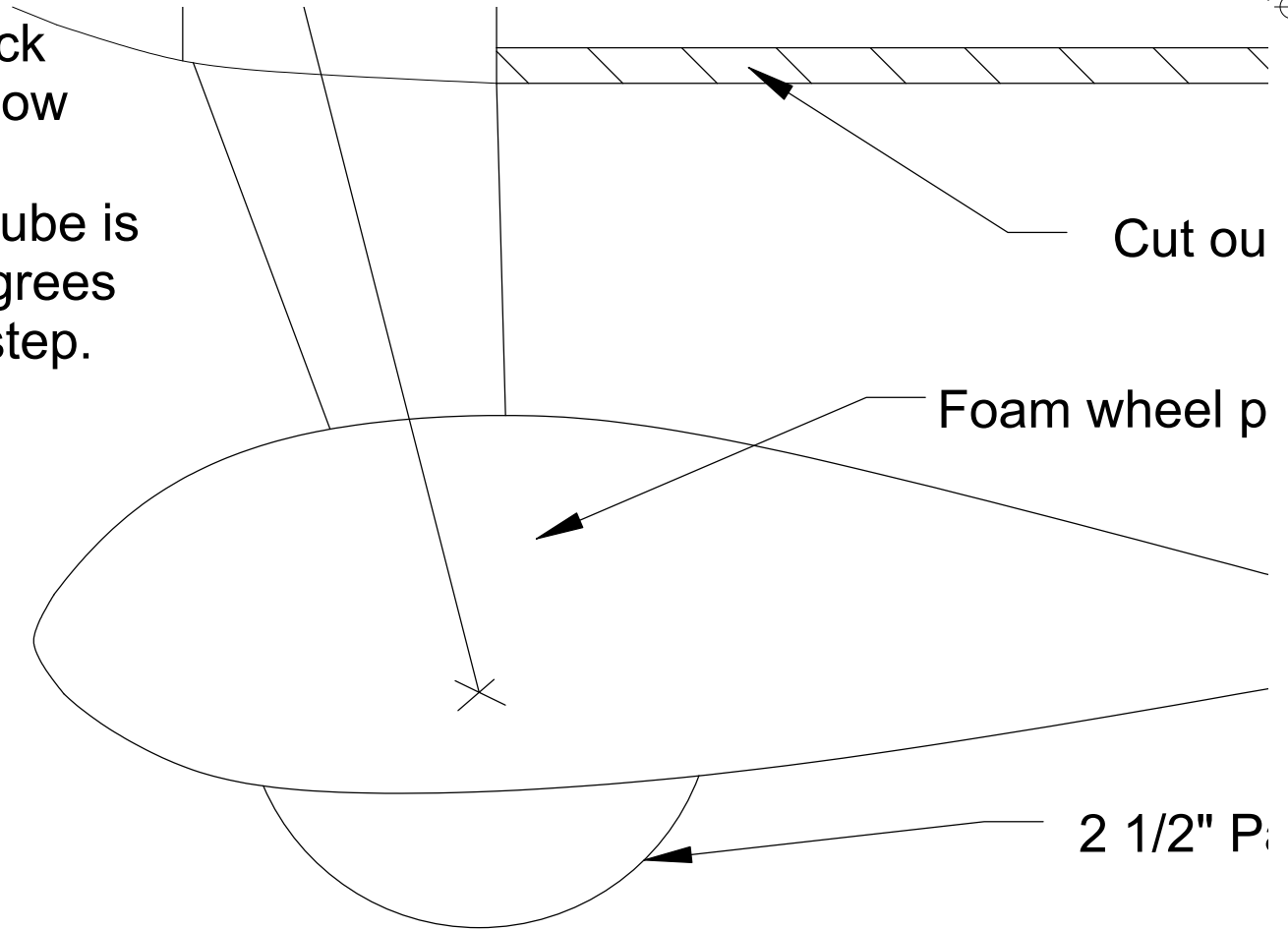
Drill 3/16" (4mm) hole to fit carbon tube. Use for adjustment while. Glue motor mount block mounted to fuselage right thrust. Make :

Groove motor mount block so that it rest in the groove with motor shaft center line. Groove allows zip mounting straps. This also allows up-down thrust by placing mass at the front or rear end of the motor.

ole in end of hardwood block
Drill hole just a bit big to allow
e mounting.

block to carbon tube after tube is
je. Adjust block for 2-3 degrees
sure to use epoxy for this step.

hat motor will
raft along fuselage
ties to be used as motor
ows easy adjustment of
king tape shims under
or.





t for bottom wing

ants, see note above



Battery and servo locations: These locations are entirely dependant on the equipment you choose. Build the entire airframe. Then tape it together and temporarily mount the motor, prop, and speed controller. Locate your servos so the model balances about 1" behind the CG shown on the plan. Now, locate the battery so that the model will balance at the location on the plans. Lighter batteries will have to go farther forward. This method allows you to move the battery aft in small increments to adjust the CG to your preferred flying style. Equipment location is completely flexible, and is up to the builder.

ark flyer wheel





hat the
is.
e CG
rd.
rements

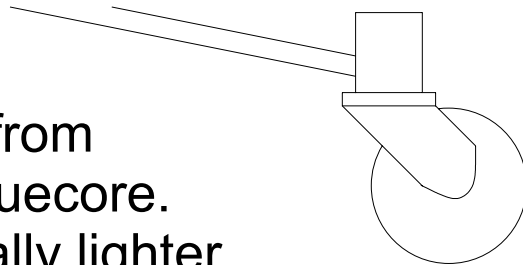
uilder.

Note: Placement of Elevator and Rudder servos on plans is approximate. Due to differing weights of components, mount servos so that airplane will balance at CG without battery mounted (temporarily mount the motor and speed controller) This allows for battery movement fore and aft to adjust CG. and the use of different types of batteries. (servo locations are not critical and may also be adjusted for the use of pull-pull cables) Cut holes in fuse and hot glue the servos in place.

Note: All airfr
Fan Fold Foa
6mm Depron



ame parts shown are cut from
m, also known as Dow Bluecore.
may be used and is actually lighter.



Jltime 10-300 3D Aerobatic Park Flyer

Wing Span: 40"

Weight: 18-20oz.

Power: Hacker B20-15L (4.4:1)/Razor 2500a

Propeller: APC 11.4.7 SlowFlyer

Battery: 3s2p E-Tec 1200ma LiPoly

Designed and Drawn By:

Tim Hart

www.jetworksmodels.com

tim@jetworksmodels.com

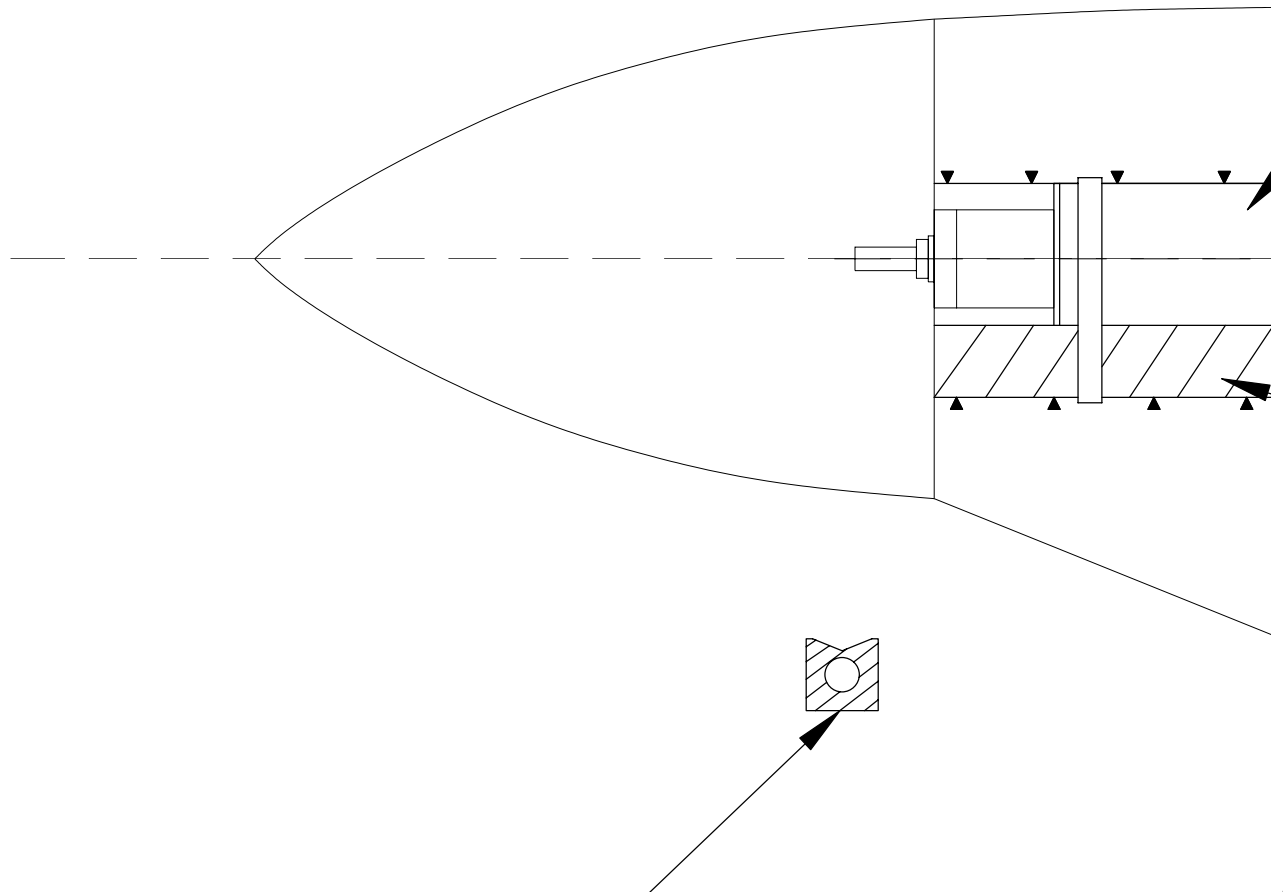
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R1 C6

Note: Depending on motor and prop used, you may need to adjust motor for 2-5 degrees UP thrust. Test knife edge and full power vertical climbs. If the plane tends to pull toward it's belly, add UP thrust to motor. You can use paper shims under the front of the motor to adjust the thrustline.

▲▲▲ Denote



as cut-line to clear motor mount and motor

Hacker B20-15L (4.4:1)/Razor RZ 2500a

Note: Mount speed controller as close as possible to motor.

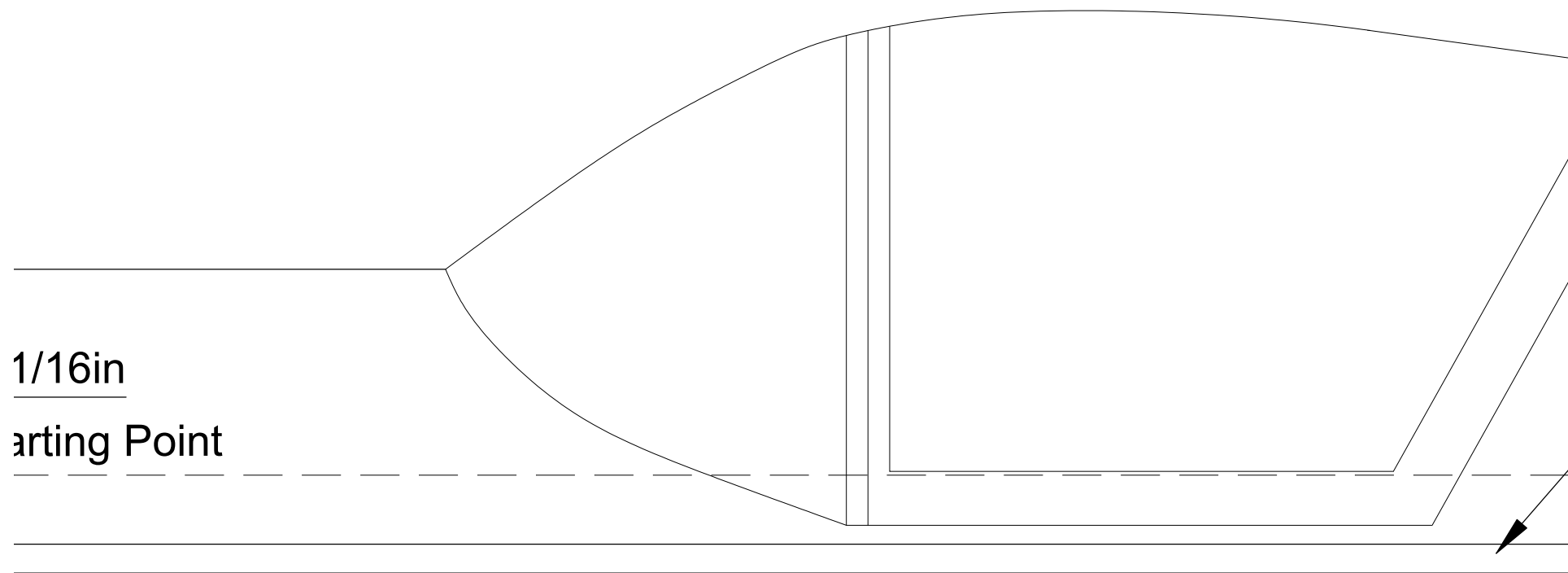
3/8" square hardwood block
motor mount

1/32" Ply landing gear plate
Make 2 and laminate one on each
side of fuse. Peel plastic from the
foam under plate for a good bond.

R2 C2

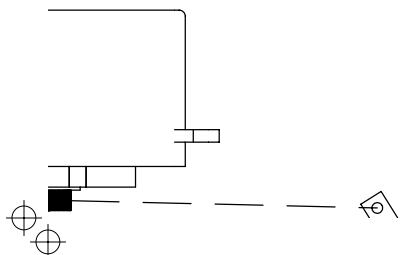
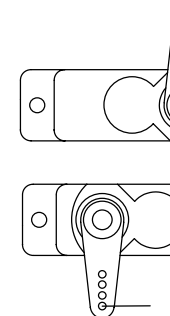
CG Sta

1



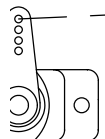
1/16in
Starting Point

Aileron servo. Make a cut-out in fuse for servo, or place one servo on each side of fuse for 2 servo aileron control. Use hot glue to attach servos to fuse.

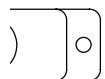


4mm carbon tube fuselage stiffener
Use a "wrapped" carbon tube for extra strength. Groove foam for spar, then epoxy into place. Do the same for wing spar.

Horizontal



Elevator servo



Rudder servo

(Servo locations are approximate)

Push rod location and t
on servo location and a



tal stabilizer cut out



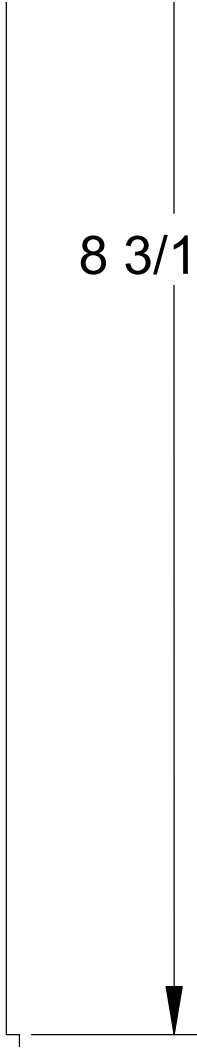
type are dependant
are up to the builder.

Control horn

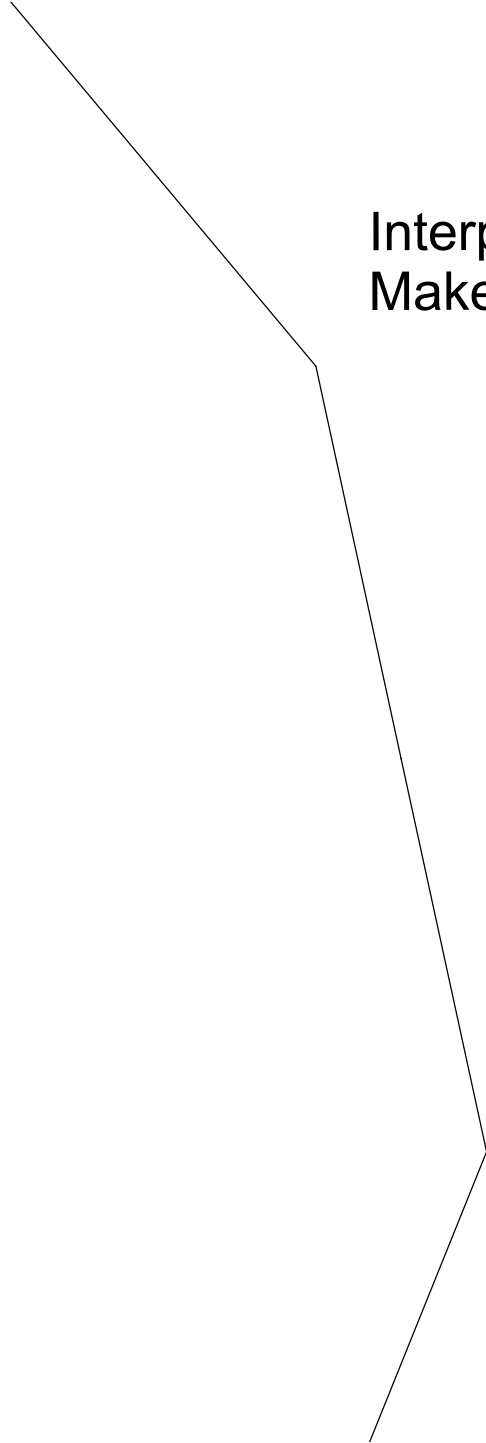




R2 C6



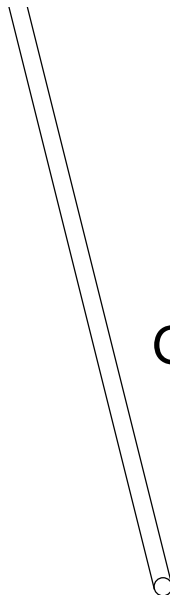
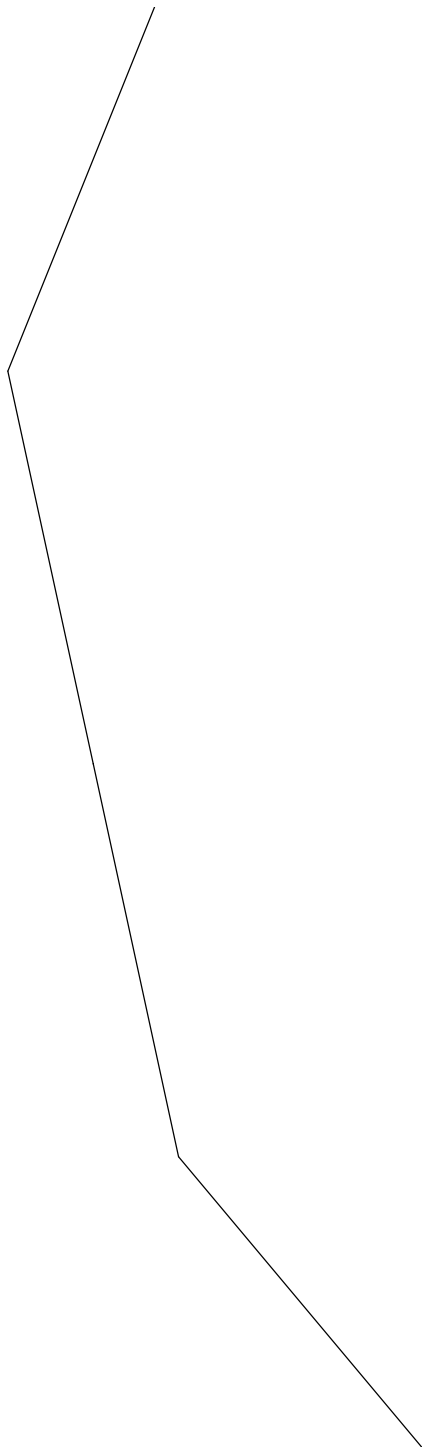
8 3/16in



Interplane
Make 2

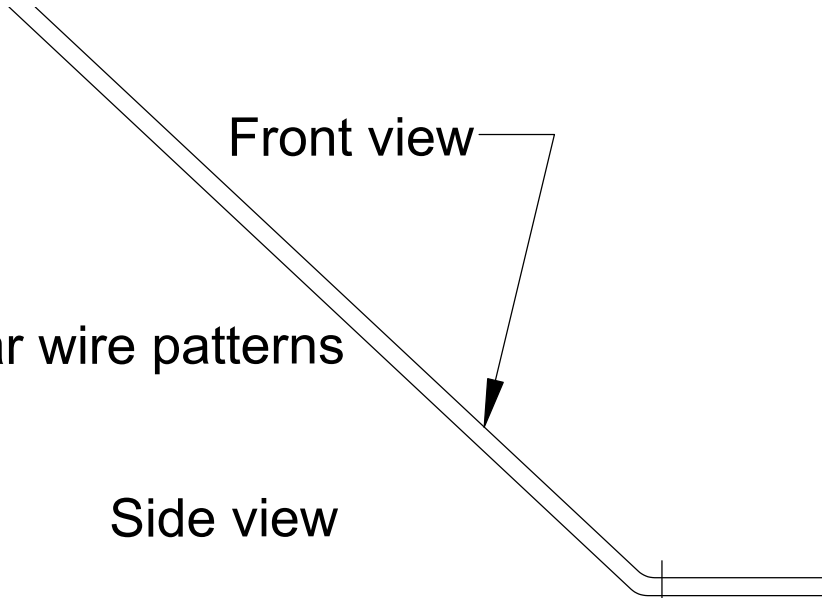


Strut



Gear wire patterns

Side view



Front view

Solder washer to ge

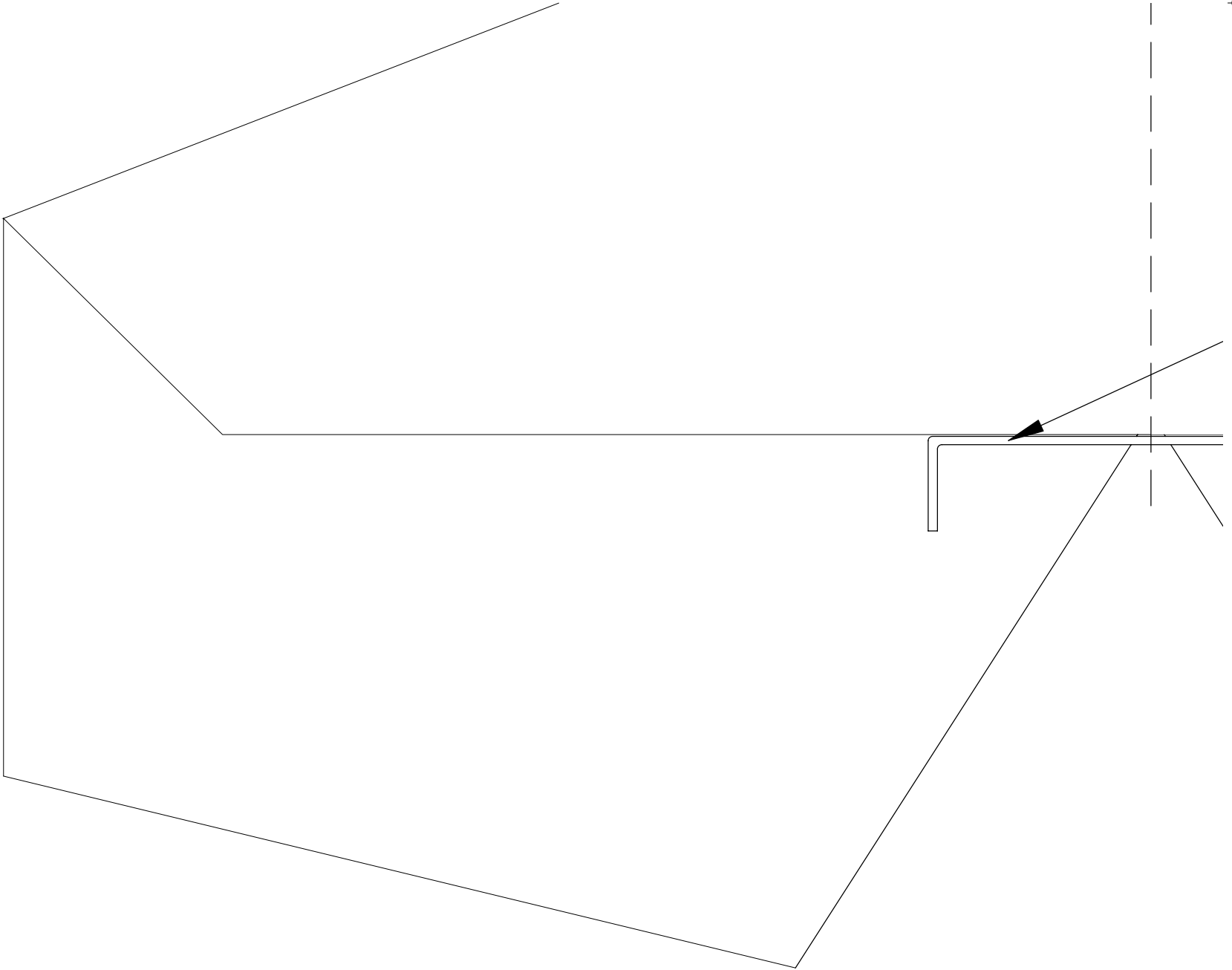


R3 C2





ear wire



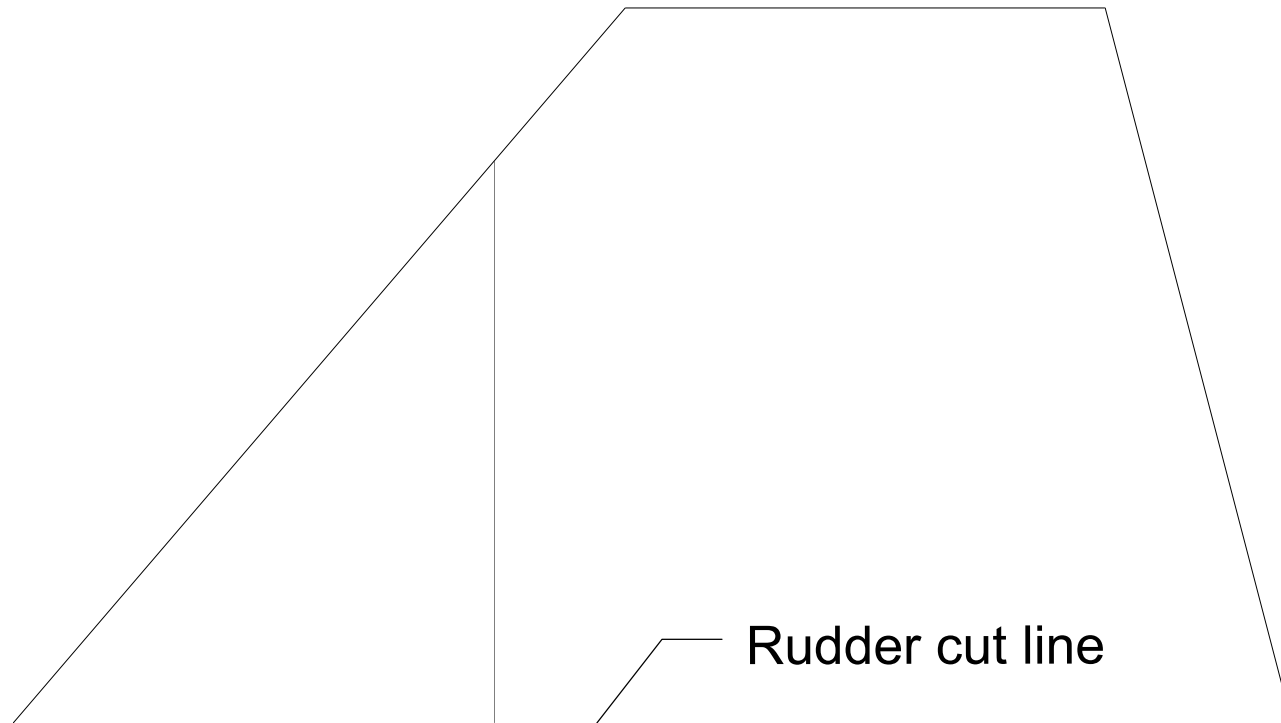


Wire elevator joiner





← Cut down Zip-Ties are used for control horns, or use your favorite method. The Zip-Tie can also be used for push rod standoffs to support the small dia. wire push rods.



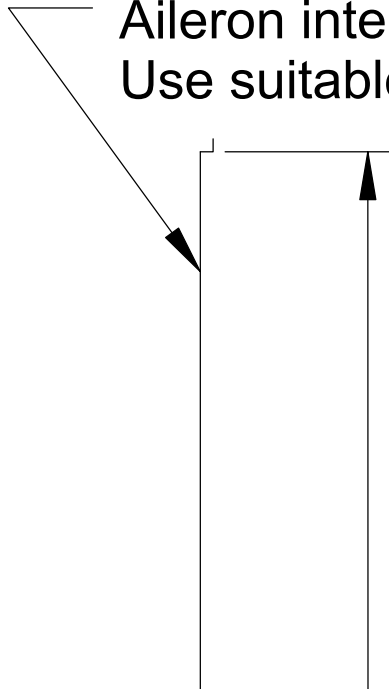
Rudder cut line

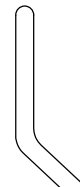
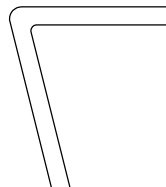
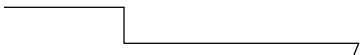
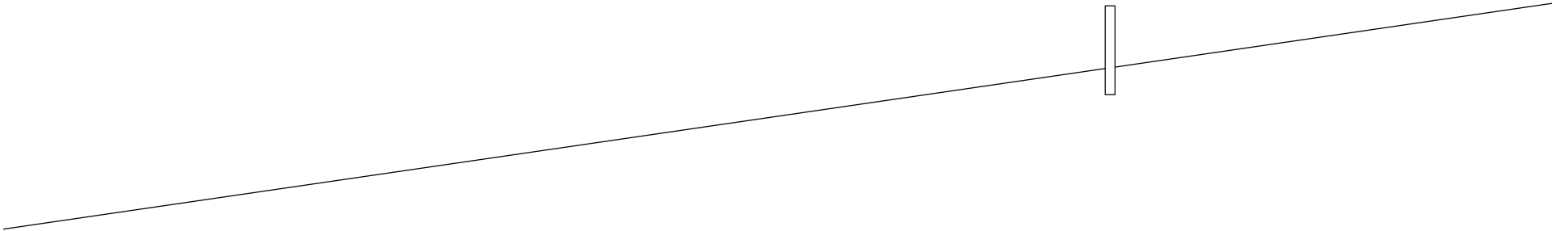
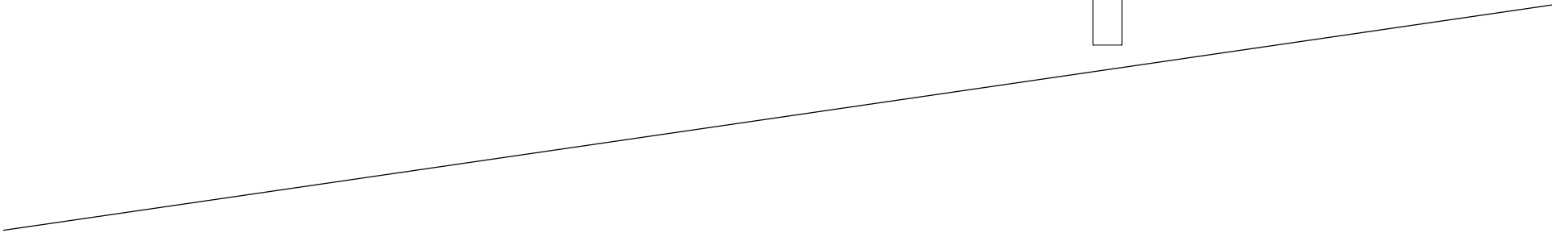


Aileron Linkage Detail

Aileron push rod setup: Make 4 zip-tie control horns and locate them as shown on plans. Cut a slot in the foam for the horns. Glue zip-tie control horns to top ailerons only. Fit the control rod into the top horns. Next, fit the bottom horns onto the control rod. Then, fit the bottom horns into the bottom ailerons, but do not glue in place. Temporarily tape all 4 ailerons in the neutral position. Apply a bit of glue to the bottom horns and fit into slots in bottom ailerons. Adjust bottom horns as necessary so all 4 ailerons are neutral. Let the glue dry without disturbing the alignment.

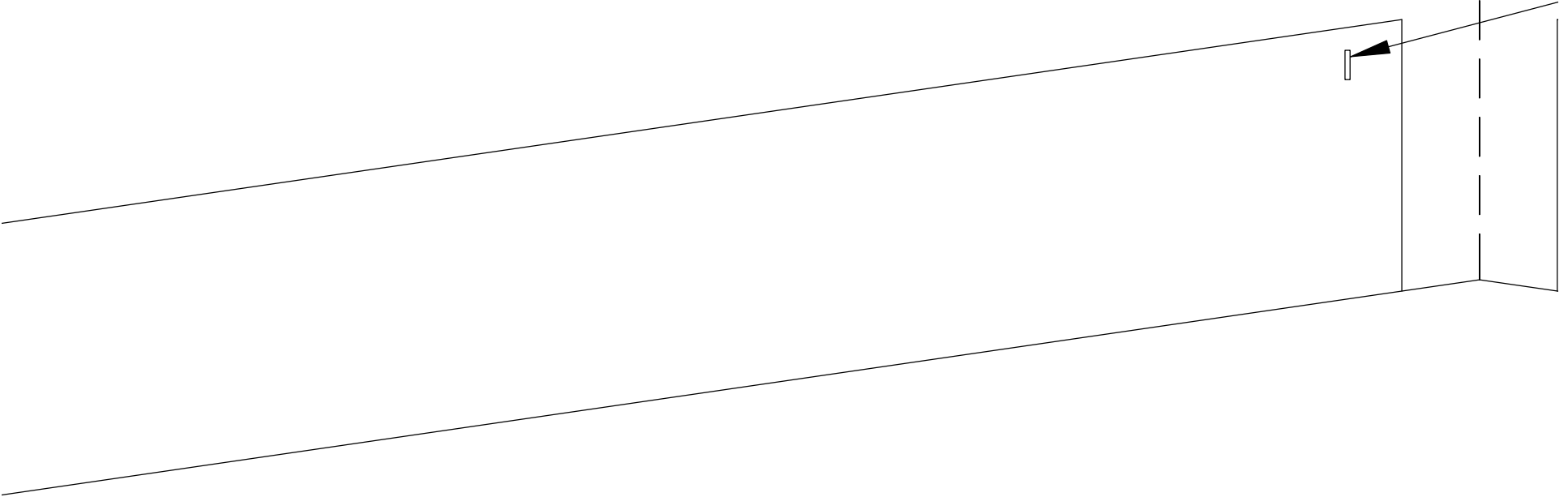
Aileron interconnect push rod
Use suitable stiff wire.





R4 C2

Use 3/32" music wire for gear or substitute.



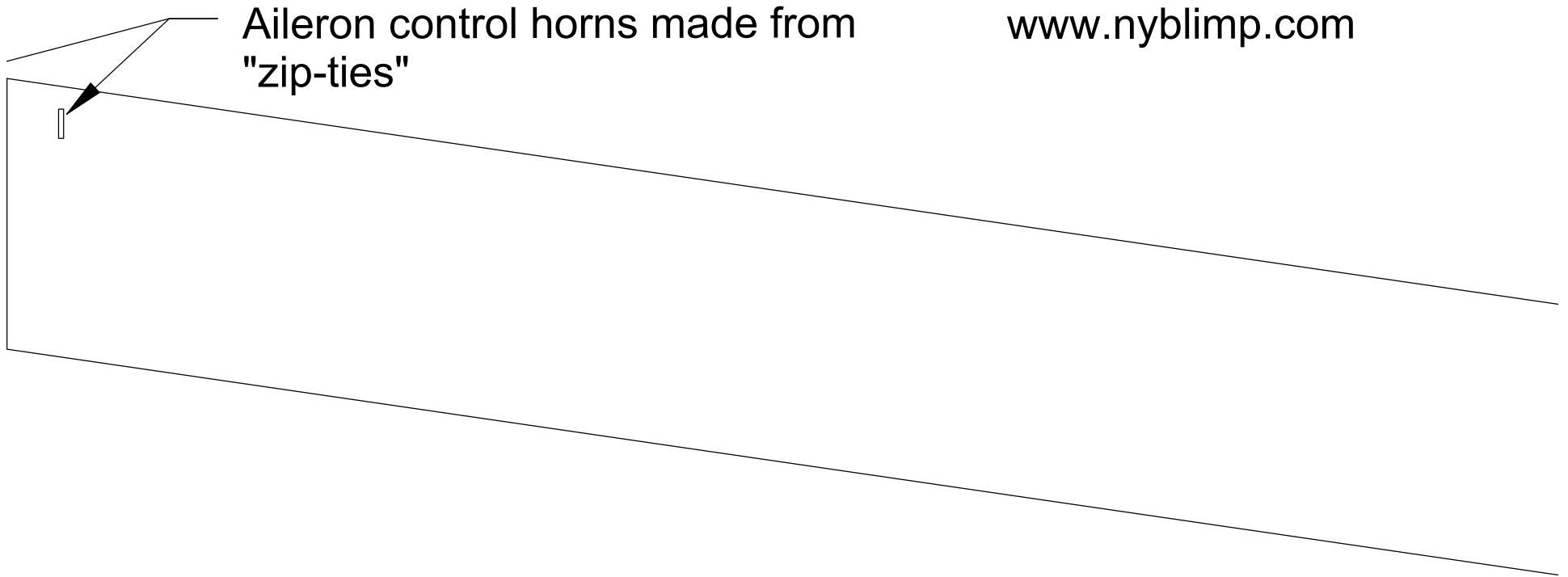
suitable



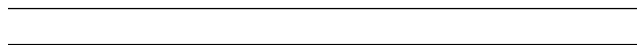
R4 C3



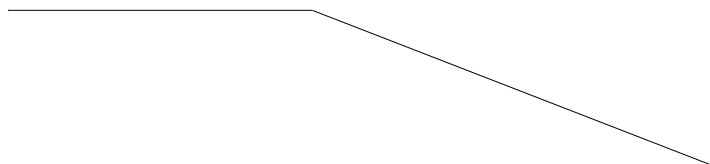
Carbon tube spars are available at www.nyblimp.com



Bevel horizontal stabilizer, not elevator.
(other surfaces, bevel the control surface)

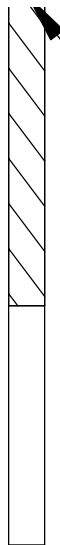


Aileron to aileron control horn
Cut a slot for horn and embed the horn in the foam aileron
See aileron connection diagram

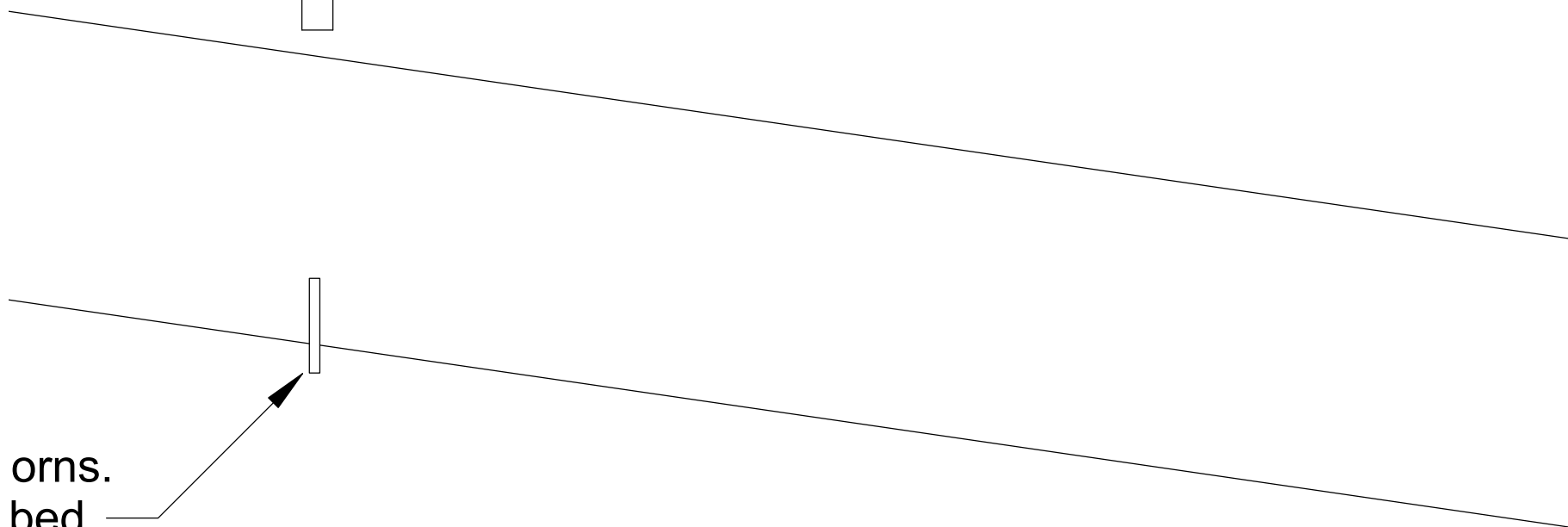




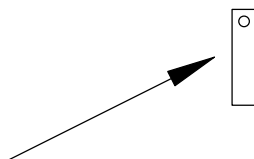
ible from



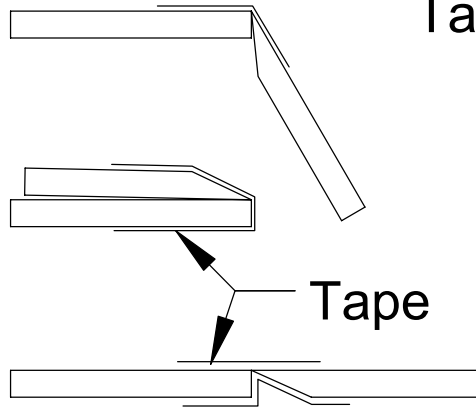
Notch alignment tab on inter plane
strut to clear carbon tube spar



orns.
bed
n.
agram.







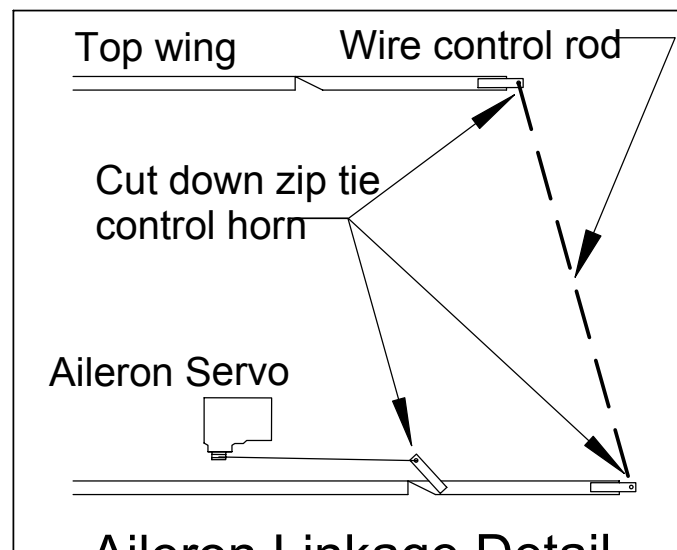
Tape

Tape

Tape

Tape hinges are used to save weight. Use clear tape for hinges

1. Apply a piece of tape to the top of the control surface
2. Make sure full deflection is used when lining up the tape
3. Smooth down tape.
4. Now, fold control surface upward all the way
5. Apply tape to bottom surface and smooth down
6. Check for freedom of movement.
7. You are done. Easy huh?



Aileron Linkage Detail

R5 C1

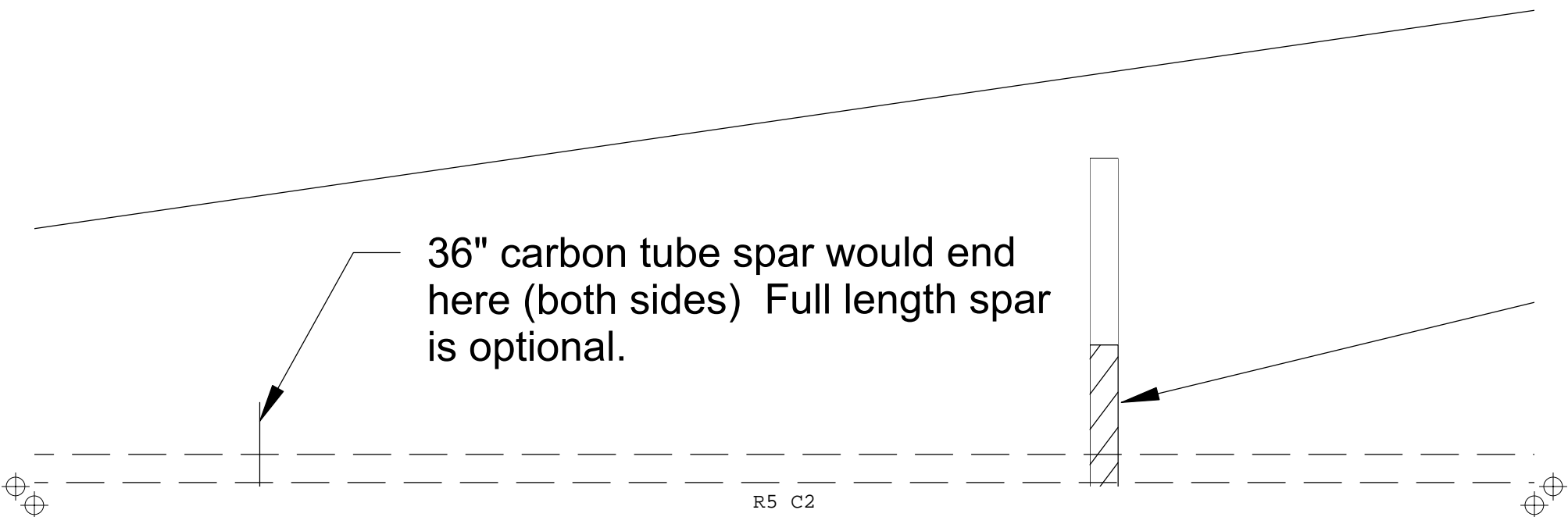




ar packing tape

ol surface first.
g up both surfaces.

y as shown.
own.

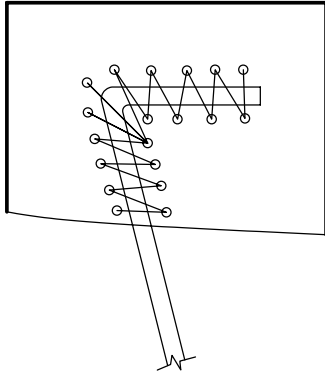




The diagram shows a cross-section of a wing. A solid line represents the upper surface, sloping upwards from left to right. A vertical dashed line extends from the tip of the wing downwards. A vertical rectangular area is shown on the right side of the wing, filled with diagonal hatching. An arrow points from the text 'Cut out hatched area for strut tabs' to this hatched area. Below the wing, there are several horizontal dashed lines. The text '**Cut wing from one piece of foam' is centered in the middle of the diagram.

****Cut wing from one piece of foam**

Cut out hatched area for strut tabs
Center cutout only on top wing



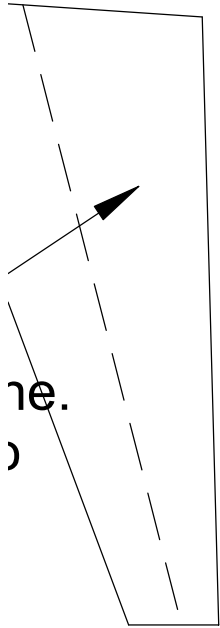
Drill holes in ply plates along the gear outline. Glue gear wire to plate. Use thread to "sew" the gear to the plate. Coat the thread with foam safe Ca. or a light coat of epoxy.

Cut 2 strut covers
Groove foam at dotted line
Use clear silicone glue to attach to gear wire.

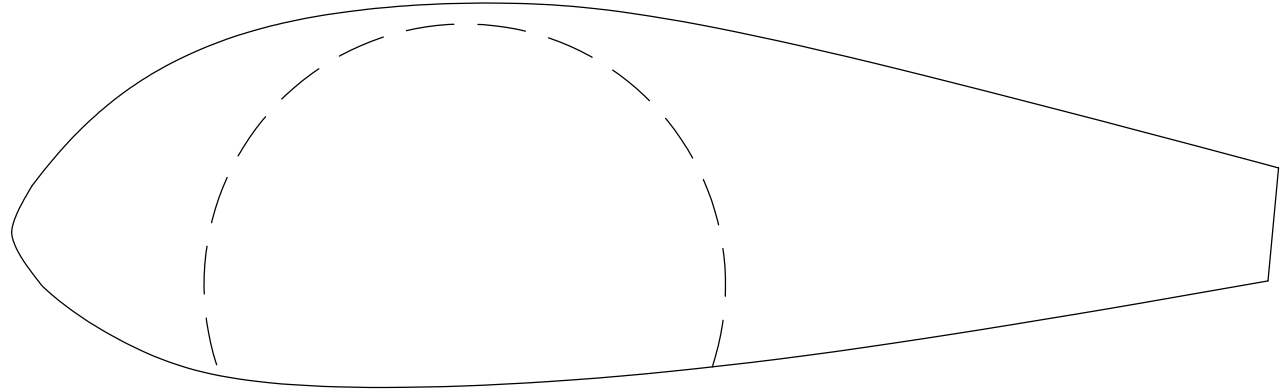
Note: Carbon spar only on bottom wing

4mm carbon tube wing spar
Use a "wrapped" carbon tube for strength. Groove foam for spar, into place. Place groove for spar underside of wing.





re.
,



Wheel Pants: Cut out 8 wheel pant shapes from Fan Fold. Cut out wheel clearance areas in 4 of them. Peel the plastic off of the foam, then laminate 2 outside solid pants and 2 cut out inner pants together. Sand the edges round. You now have lightweight foam wheel pants.

extra
then epoxy
on





R5 C6





R6 C1



R6 C2





R6 C3





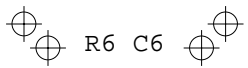
R6 C4





R6 C5





R6 C6