

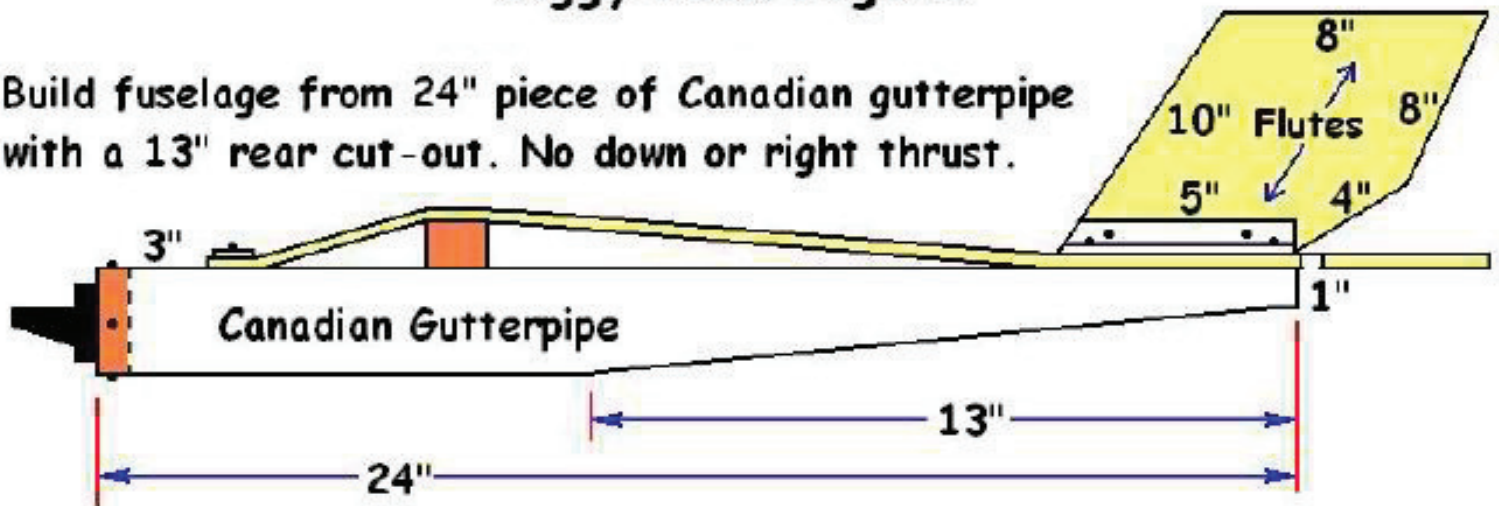
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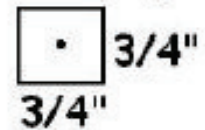
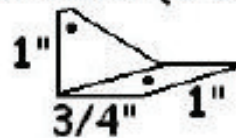
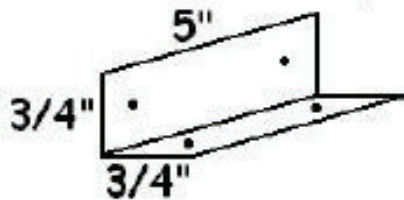
Having gotten my grubby hands on some 4 mm Coroplast cigarette signs from a local gas station, I decided to try making one fly...it was a great success! The sky is the limit for creative shapes and controls as well as adding the 4th channel and landing gear. That is up to your creativity! Presented here are some drawings and photos to show you how I built mine and I hope that it is enough to get you off and running on yours! The instructions are simple: Cut out a Canadian gutterpipe fuselage, gas station sign wing, and vertical stabilizer from what's left of the sign. From the scrap PVC make the tail mount "L" brackets, control horns/back plates, and front wing hold down piece. Screw it all together with some small self tapping screws, install a firewall, engine/mount and strap a fuel tank on top with a coat hanger hook and rubber bands. Zip-tie all your radio stuff in place making sure the CG is at the forward airfoil fold. Rig it out with some pushrods made from 1/4" dowels and go have more fun at the field than you could ever imagine!!!

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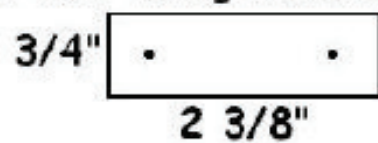
Build fuselage from 24" piece of Canadian gutterpipe with a 13" rear cut-out. No down or right thrust.



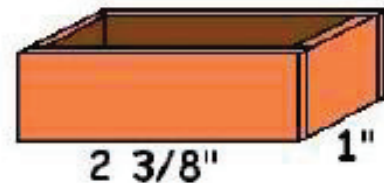
Tail Mount bracket (2 each) Control Horn (3 each) Back Plate (3 each)



Front Wing Hold Down



Build small PVC pieces from the fuselage cut-out scrap. Make firewall from Plywood or HDPE (Wal-Mart cutting board). Make wing and tail from 4 mm Coroplast gas station cigarette sign.

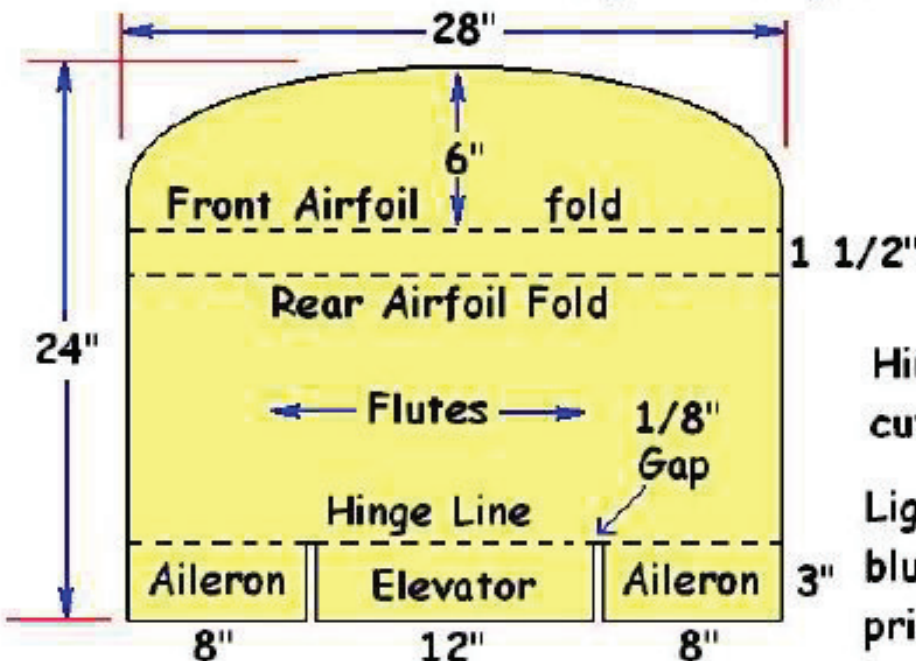


Build airfoil stand-off from yardstick pieces



Hinge control surfaces by carefully cutting away one side of flute

Lightly score airfoil fold flutes with blunt tipped object and pre-fold prior to assembling ciggy pack

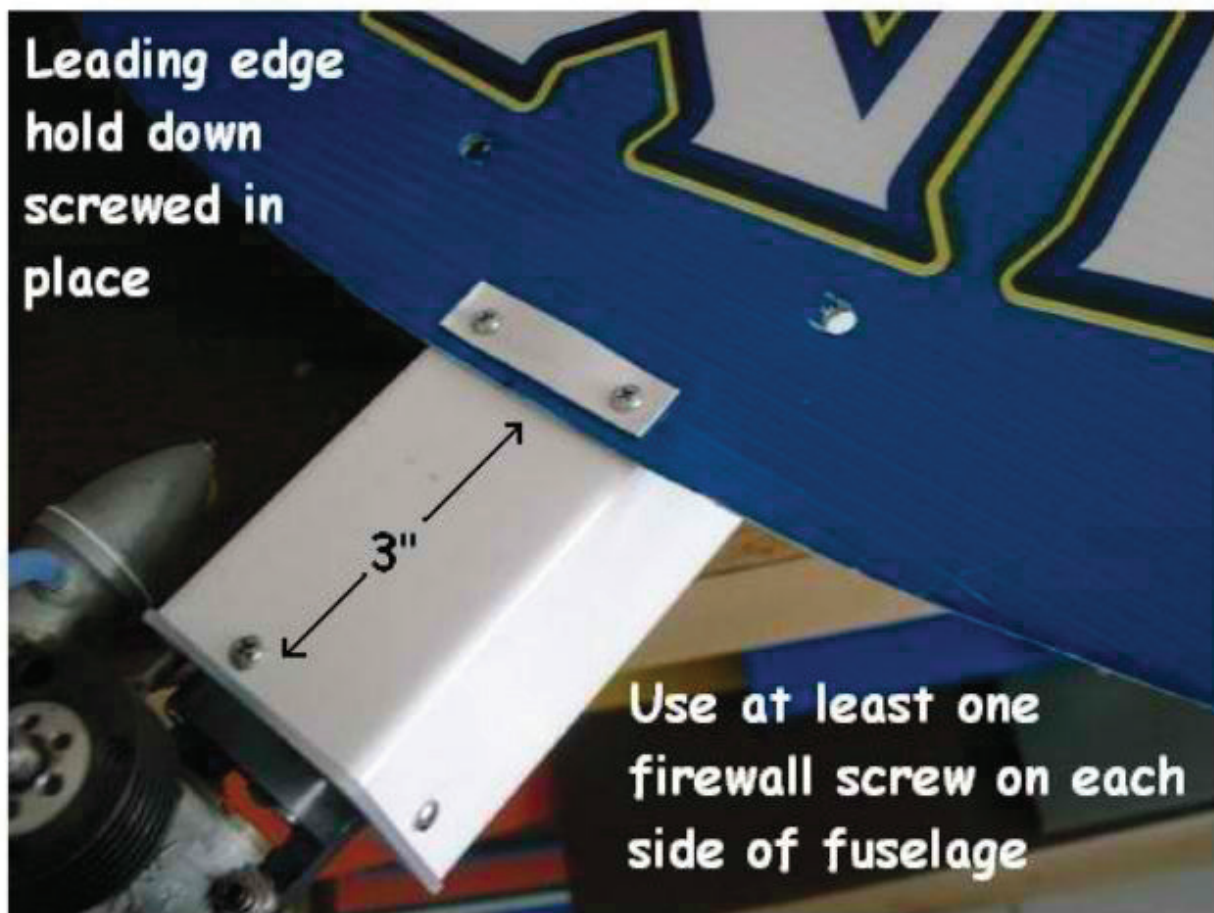


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Once all the pieces are cut out, I start by screwing the "L" brackets to the vertical, and then screwing the wing flat to the fuselage with the vertical assembly. Make sure the hinge line just clears the back of the fuselage. Next glue the airfoil stand-off in place between the airfoil folds. Then screw the leading edge down with the leading edge hold down piece. The aileron servo is installed just aft of the rear fold. Simply cut a hole in the Coroplast for a snug fit, drill two zip-tie holes in the fuselage, and zip-tie the servo in place to the top of the fuselage. On this plane I installed the elevator servo on the bottom. In retrospect, it would have been easier to simply install it just aft of the aileron servo on top. Install control horns and back plates. When you rig the control surfaces, **MAKE SURE THEY ARE PARALLEL TO THE TOP OF THE FUSELAGE FOR THE NEUTRAL POSITION!!!** I made my pushrods using 1/4" dowels. When I got the sign, it had some holes in it. Notice I used them for antenna routing.

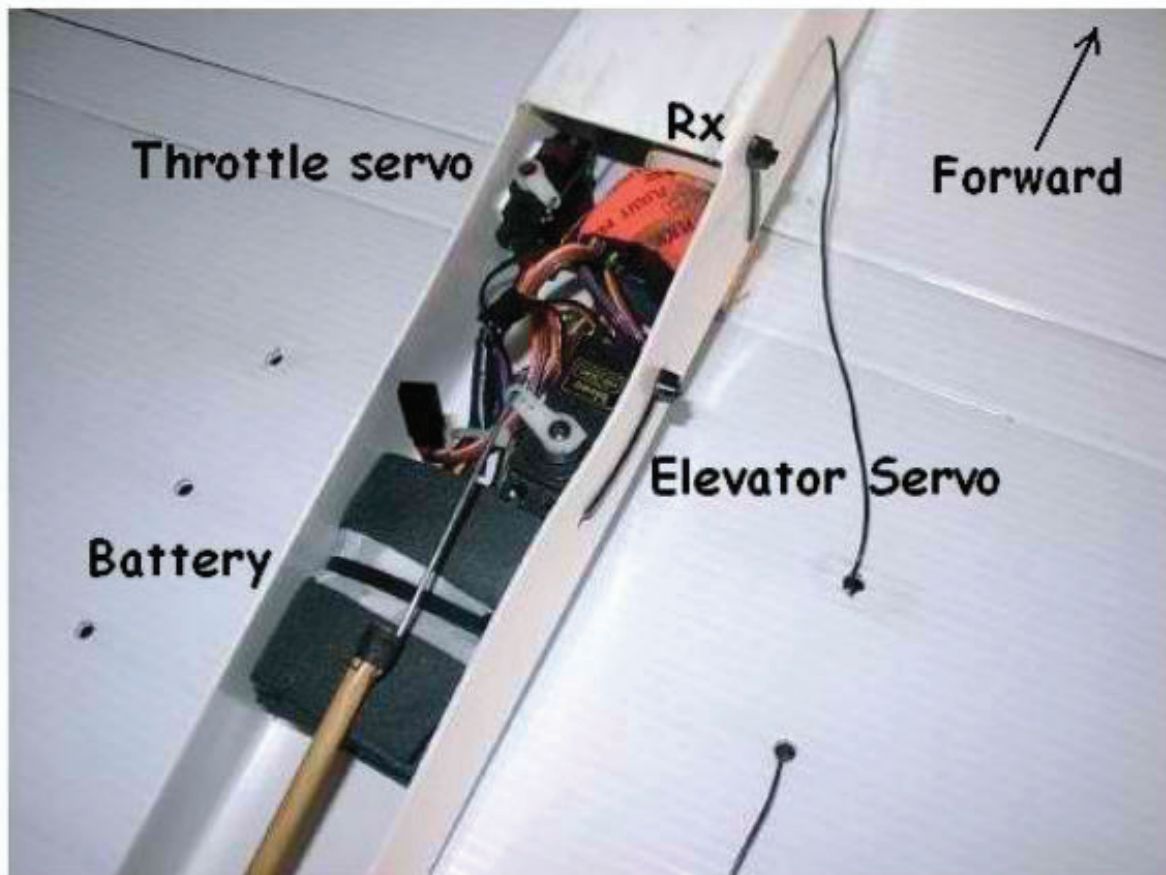
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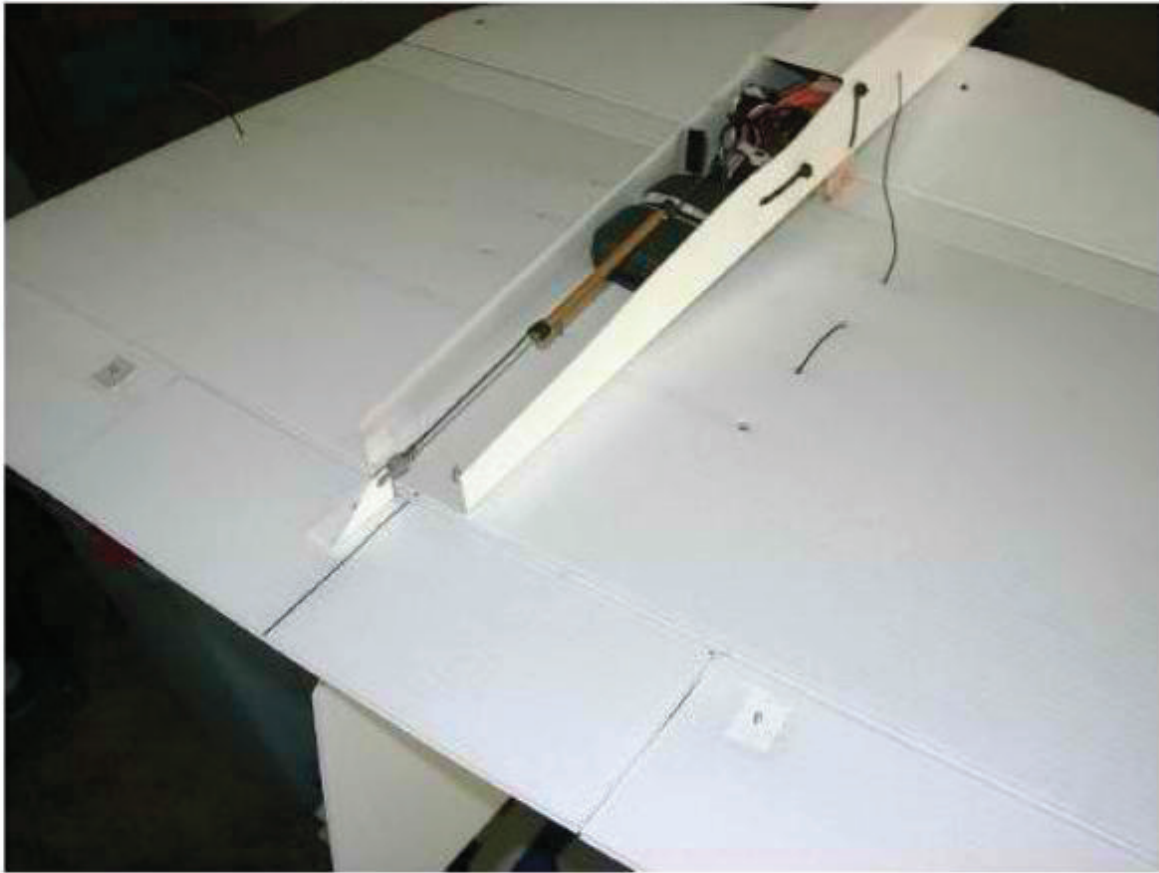
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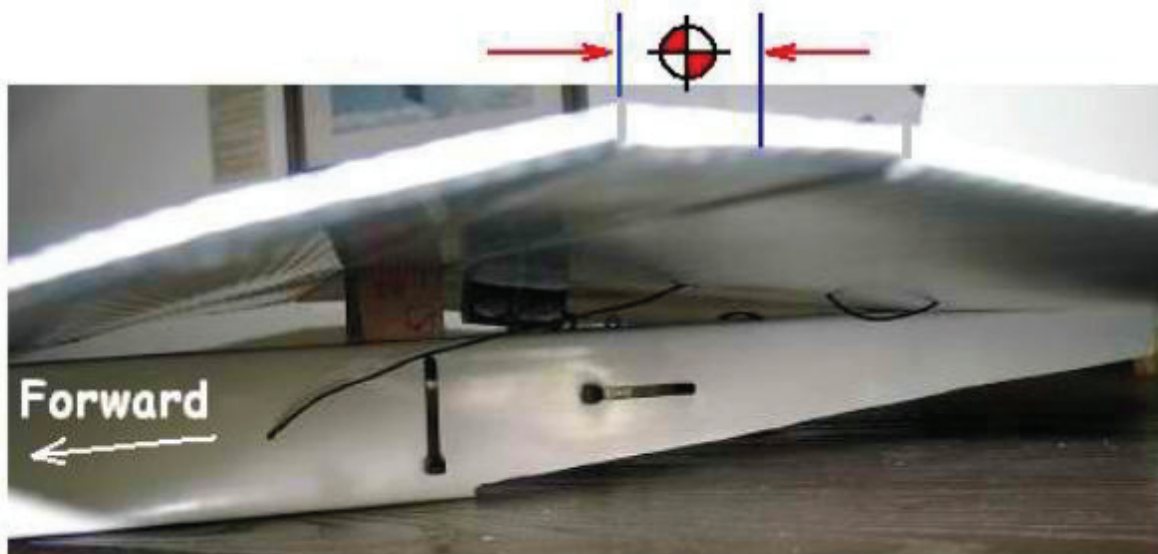
I installed the fuel tank on a layer of foam and rubber banded to the fuselage with a coat hanger hook. All the radio gear is simply zip-tied in place. Make sure you also use double sided foam mounting tape to stick the servos in place before installing zip-tie.



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Set *CG* by placement of radio gear. For a very stable airplane, set *CG* on forward airfoil fold. For better slow flight response we have gone as far aft as halfway between folds, but high speed pitch response becomes very sensitive. Make your control surface throws barn doors! I went as far as I structurally could using standard sized servo arms.



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Follow all AMA safety guidelines while flying your Ciggy Pack! If you have any questions at this point, you are NOT

ready to fly this plane! If you are not an experienced pilot, please get one to help you! Make sure your prop is set to stop horizontal for dead stick landings. A slight hand launch is all that is needed to get the Ciggy Pack airborne...be ready for a slight pitch up on launch! Once airborne you will find that small stick movements will fly the Ciggy Pack just like any conventional airplane. Get plenty of altitude to get used to some unbelievable maneuvers when full stick movement is used! This plane will do what we call "flop loops", "toilet bowls", "tornadoes" and the flattest spin you've ever seen! I can even get mine to gain altitude in a flat spin at full throttle! Have fun and please don't hesitate to experiment! This was my first try at a Coroplast "slab" type airplane...and I'm sure the sky is the limit!!!