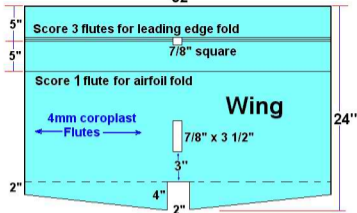


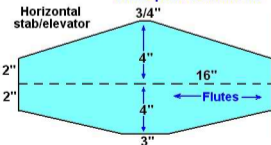
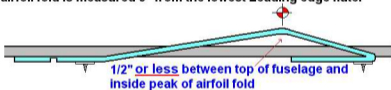


Thanks to innovative Spad builders on the internet, the latest craze is adding a profile fuselage to a basic QHOR to create incredible versions of the Spad PQHOR (Profile Quick Hell On Rails). Appearance is improved dramatically, and is limited only by your imagination! Performance is also improved with added stability! The idea is basically nothing more than an extension of the vertical stab/rudder with cutouts for the wing and servos, adding several more attachment points with screws and PVC back plates. PLEASE NOTE THAT THE WING, TAIL, AND CONTROL SURFACE DIMENSIONS HAVE ALSO BEEN INCREASED from the original QHOR plans for much more radical 3D stability and performance. PLEASE REVIEW THE ORIGINAL QHOR PLANS for basic assembly. The PQHOR presented here is how I built the airplane I am holding in the photo above. PLEASE READ! The plane presented here is built from the original basic airframe utilizing a 32" section of aluminum "U" channel. The wing, tail, and fuselage are cut to the dimensions shown on the following pages. I built the entire airplane to flight ready condition BEFORE CUTTING OUT THE PROFILE FUSELAGE AND DETERMINING FINAL WING POSITION. I then cut out the fuselage/stab/rudder, installing the tail wheel wire, and made the servo cut-outs. I then laid the assembled fuselage flat on the airplane for determining the CG and positioned the wing where it needed to be. Unlike any other Spad, I set the CG at the airfoil fold WITH THE TANK FULL! I then attached the wing to the fuselage with screws and PVC back plates and made the wing cut-out in the fuselage. Then installed the fuselage to the plane with screws and PVC back plates near the tail, one between the servos, and one in front of the wing. I then finished bending and installing the tail wheel and rigged the rudder pushrod. My plane is powered with a Norvel .25 and MAS 9x4 prop. I'm using a GP 6 ounce fuel tank. My control surfaces are rigged for as much "barn door" throws as I can physically get out of them! Have fun and get ready for one WILD RIDE!!!

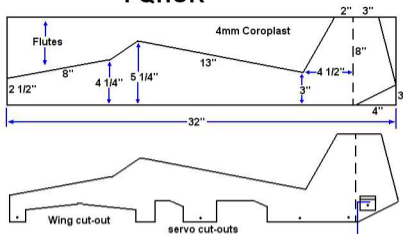
32"



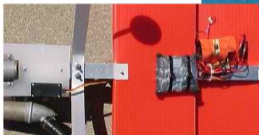
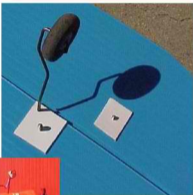
Please look close at some fold details. The top edge of the 7/8" square is even with the top leading edge fold. Also note that two of the three leading edge fold flutes are above the top 5" mark. The airfoil fold is measured 5" from the lowest Leading edge flute.



## PQHOR



This picture represents measurements that will get you close to how I cut out my fuselage. This is not rocket science and is wide open to your imagination. I started with a 32" x 8" piece of Coroplast and hinged the rudder at 4" and then simply cut away everything that didn't look like a fuselage. **KEEP IN MIND THAT OTHER THAN FINAL WING POSITION, THE REST OF THE AIRPLANE IS FINISHED TO FLIGHT READY CONDITION AT THIS POINT.** The length of your fuselage may vary from mine. I simply measured from the back of my fuel tank to the end of the fuselage and then added the 4" for the rudder. I then laid it on top of my plane and marked where the servos were. Then I used a spare servo for height and made the servo cut-outs. Then installed the rudder control horn and back plate with the tail wheel wire. I slipped the tail wheel on the wire (for CG purposes) and laid this assembly in place, flat on top of my plane. I then positioned the wing where it needed to be for the CG at the airfoil fold. Unlike most airplanes, I did this with a full fuel tank. At this point I screwed the wing to the fuselage with PVC back plates at the LE and TE. I then drilled the hole for the tail wheel wire and slipped the fuselage into position on the plane and marked it for the wing cut-out. Taking some depth measurements and taking into consideration 4mm thickness of the wing, it was easy to calculate the wing cut-out. Once I made the wing cut-out, I installed the fuselage to the plane at four attach points (shown by dots in above picture) using screws and PVC back plates. I then finished out the tail wheel installation and installed the rudder pushrod. Don't forget to add the coat hanger pieces to your wing tips as per the original QHOR plans. Now just add a bunch of cool stickers to your Profile Quick HOR and you're ready to tear up the sky!



Here are several reference photos of how I built my plane. You will notice that I mounted my landing gear to the fuselage. The landing gear mount bolts are also the anchor points for the fuel tank rubber bands.

I also used a switch on this airplane mounted just behind the receiver. For the receiver zip-tie, I poked two holes in the Coroplast, but only in the bottom side of the flute. Then I just curled the tip of the zip-tie and it will run in the flute and poke out the other hole! For my tail wheel I mounted the elevator hinge one flute away from the back edge of the aluminum. This gave me enough meat in the tail mount back plate to give the tail wheel wire some added support.