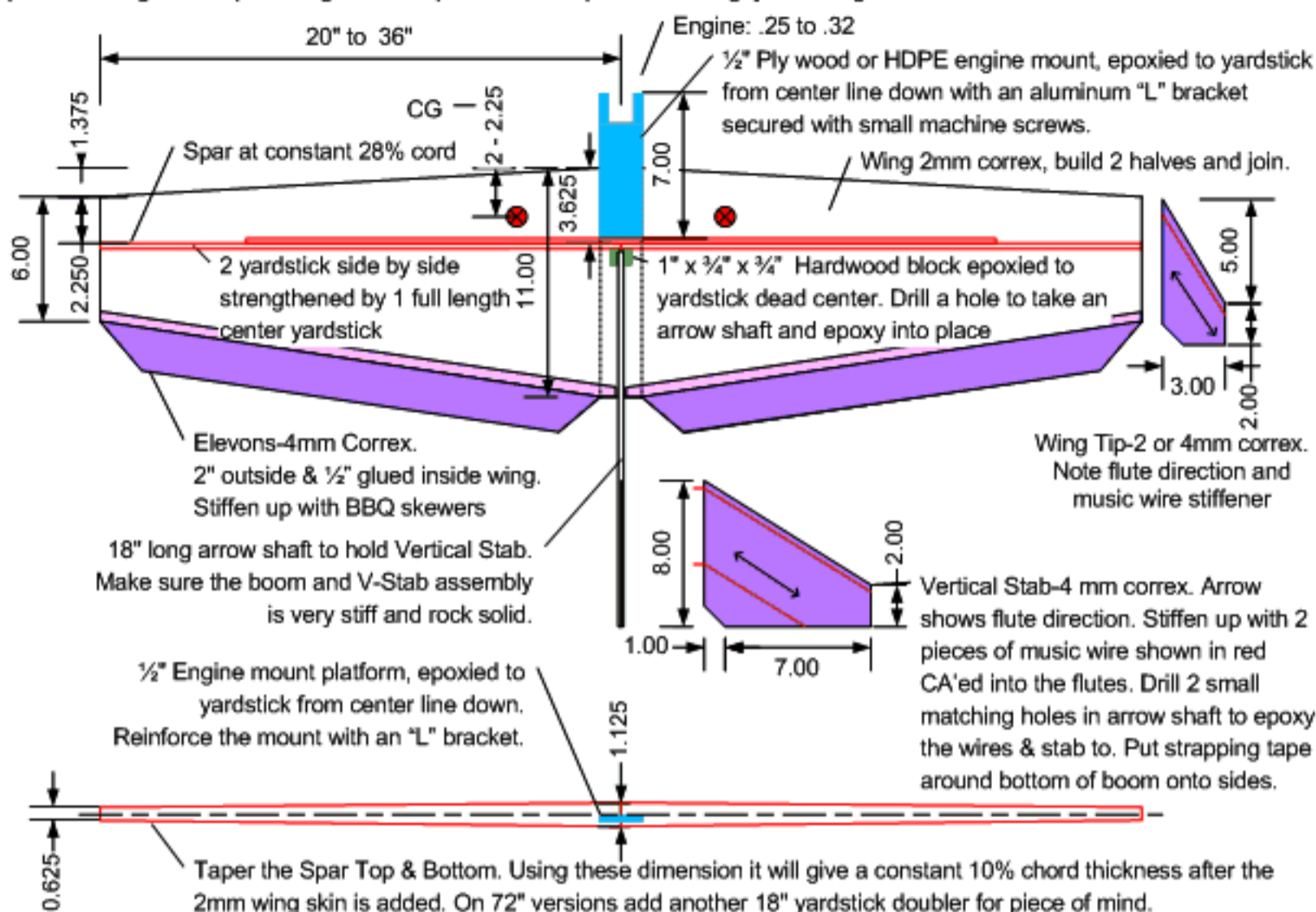


Draco "Terror of the Sky"

[Special thank goes to SpadDawg and his Spalcon that inspired this design] - Drawing Versions 1.02



This design takes from previous designs, got some new innovations, and is very flexible:

- 1) Variable wingspan (from 40" to 72" - lengthen or shorten to your liking, just ensure the wing tip dimensions stay the same)
- 2) No fuselage, the wing spar serves as the whole skeleton for the plane.
- 3) Highly accurate wing design parameters & dimensions (Constant wing thickness @ 10% chord, Spar @ constant 28% chord)
- 4) More streamlined (No fuselage, and the elevon servos buried in the wing, 2mm vertical stabs)
- 5) Hopefully an easier build, due to only 1 straight spar.
- 6) Less weight.

Please note this model is not for beginners! Only recommended for experienced SPAD builders and Flyers.

What follows is some basic construction guidelines: Latest info here: <http://spadworld.net/viewtopic.php?t=6334>

- 1) Make the spar first: Glue the 3 yardsticks for the Spar together, make sure it is straight, then cut them taper. If you are constructing a 72" version I would highly recommend the addition of another 18" yardstick doubler in the center.
- 2) Install the engine mount & arrow shaft block to the Spar, ensure it is perfectly perpendicular before installing the Spar.
- 3) Fuel proof the engine mount, and the area on the yardstick where it is glued to, since some fuel might get in there.
- 4) Remember the engine mount fits into the bottom center section of the wing, so you will have to cut the bottom of the wing.
- 5) Cable tie the tank onto the engine mount as far back as possible, against the spar, use double sided tape as insulation.
- 6) By mounting the tank this way it is as close as possible to CG and won't affect flight performance full or empty.
- 7) The CG is very important on flying wings, start at 2" from the center LE and move back as you feel comfortable.
- 8) If you use 2mm correx for the wingtips make sure you fit music wire in them to stiffen them up, otherwise use 4mm. You can change the shape of the Stab and Tips just ensure you have about the same surface area.
- 9) If you consider building a 72" wingspan version you might have to increase the size of the vertical stab to compensate for the additional wing area.
- 10) You do not have to bury all the servos in the wing, it just looks neater.
- 11) Make sure you roughen the arrow shaft up with sanding paper where you are going to epoxy the stab to. Make sure it is very stiff. You can also stick strapping tape from the bottom around the boom onto the sides of the stab for additional piece of mind
- 12) Start with the engine mount platform at a length of 7", check your CG and if nose heavy you can shorten it.
- 13) Make sure you glue the Spar to both the top and the bottom of the wing skin.

Disclaimer: Model airplanes can be very dangerous and can cause damage to property, injury, or even death. You must accept full responsibility for any damage or injuries incurred while procuring materials, building, and flying. This plan as is free and provided as a guideline, with no obligations. Follow all RC flying rules of your country.

