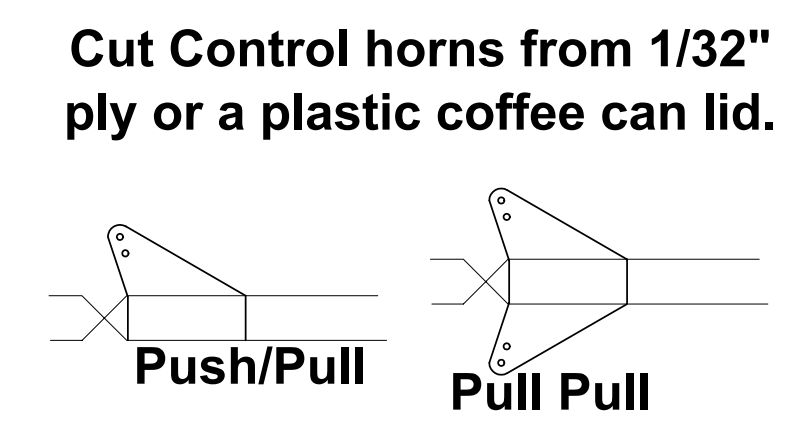
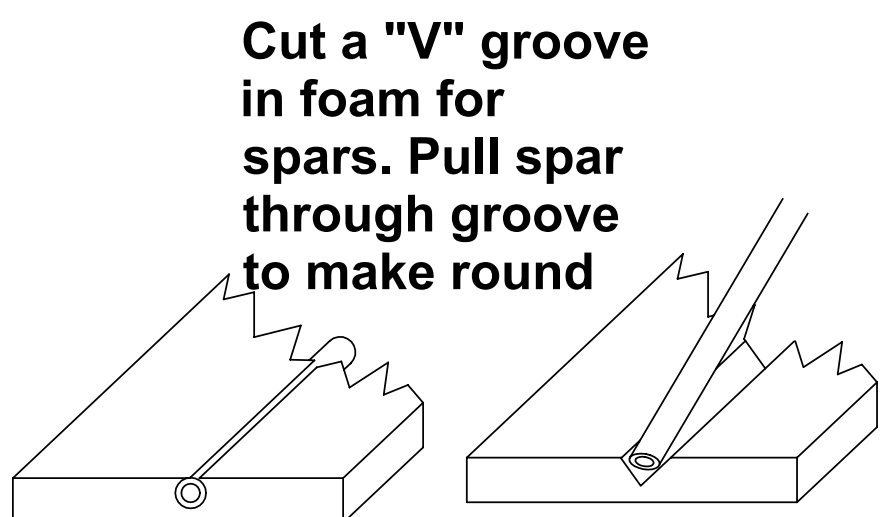


**Notes on the fuse:**  
 If you are going for all out light weight, consider leaving out the fuse spar. The side plates are strong enough, but the plane will not be quite as tough. Make sure to use 15-30 minute epoxy or shoogoo for the main parts...5 min and foam CA are not strong enough, and will crack under the torque.



CG

4mm Carbon Spar

All hinging for control surfaces can be packing tape or actual hinges. I prefer robart hinge points epoxied in place for the added longevity and control freeness.

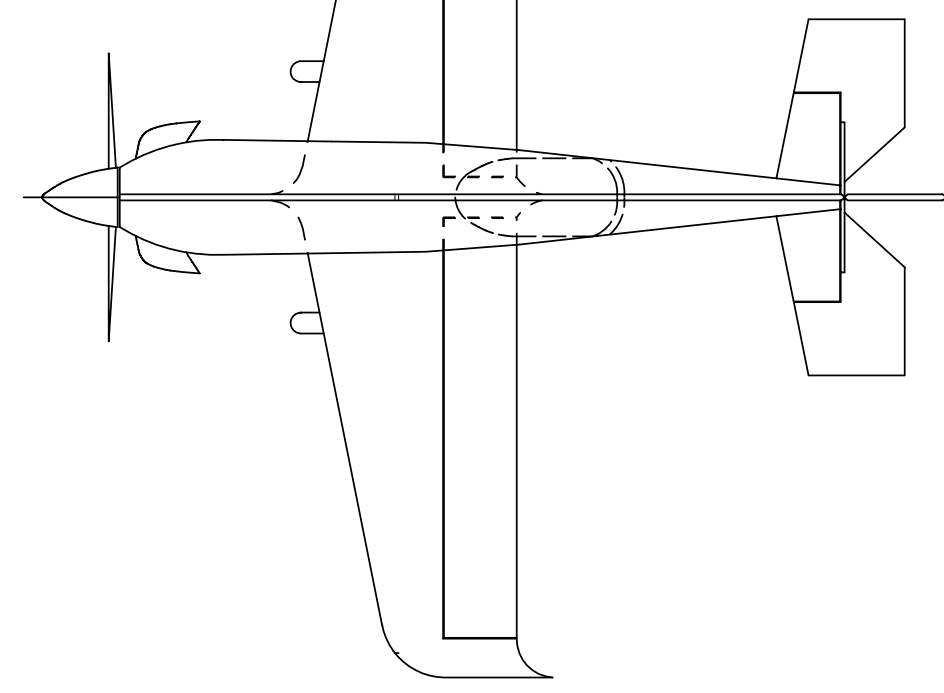
Whole plane is Red, white "ORACLE" markings, black raven, with yellow trim on raven's edges.

GWS 12-6 Slowflyer Prop

3/8"x3/8" Hardwood motor block Groove block to fit carbon rod. If using GWS 350 Drive, mount block on Carbon rod so that the prop/drive shaft is in the same location as shown on plans.

Motor stick instillation. You will need to adjust the position of the Carbon rod and motor mount for your motor/gearbox combination. The carbon rod may be in a different location, that is OK.

Canopy drawings for details only.



CG

3/16" zipties

4mm Carbon Spar

Elevator Servo (HS-56HB Shown)

6mm Depron tail surfaces

Hacker B20-15L shown

LiPo Battery 2100(3s2p)

Aileron Servo (1 Each side)

Rudder Servo (HS-56HB Shown)

6mm Depron Fuse Rails

1/64 ply gear mount plates

Suggested CG Starting Point

10-12w fish-line pull-pull rudder cables

Cut opening to suit your motor/gearbox combo

Molded Carbon Fiber Gear

Use Cotterpin to adjust tension on pull-pull system. Mount using Dubro EZ Connectors

Carbon Tail wheel bracket  
 1/16" wire wheel axle/steering arm (Bend 90 deg. at the top to form a control arm. Use clamp on ball link to attach to rudder control horn)

1/64" ply doublers on both sides of fuselage (see side view)

Molded Carbon Gear Legs

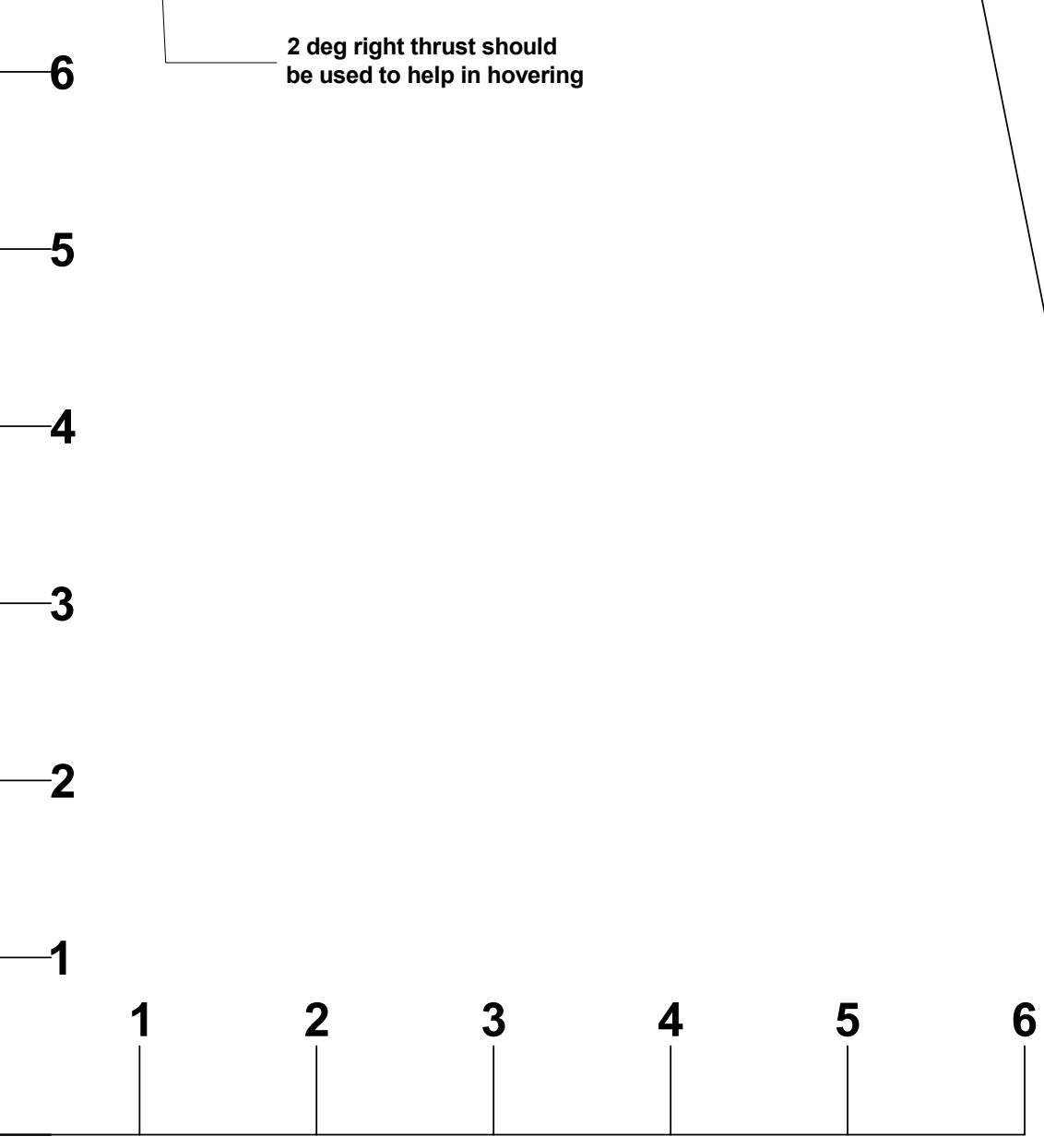
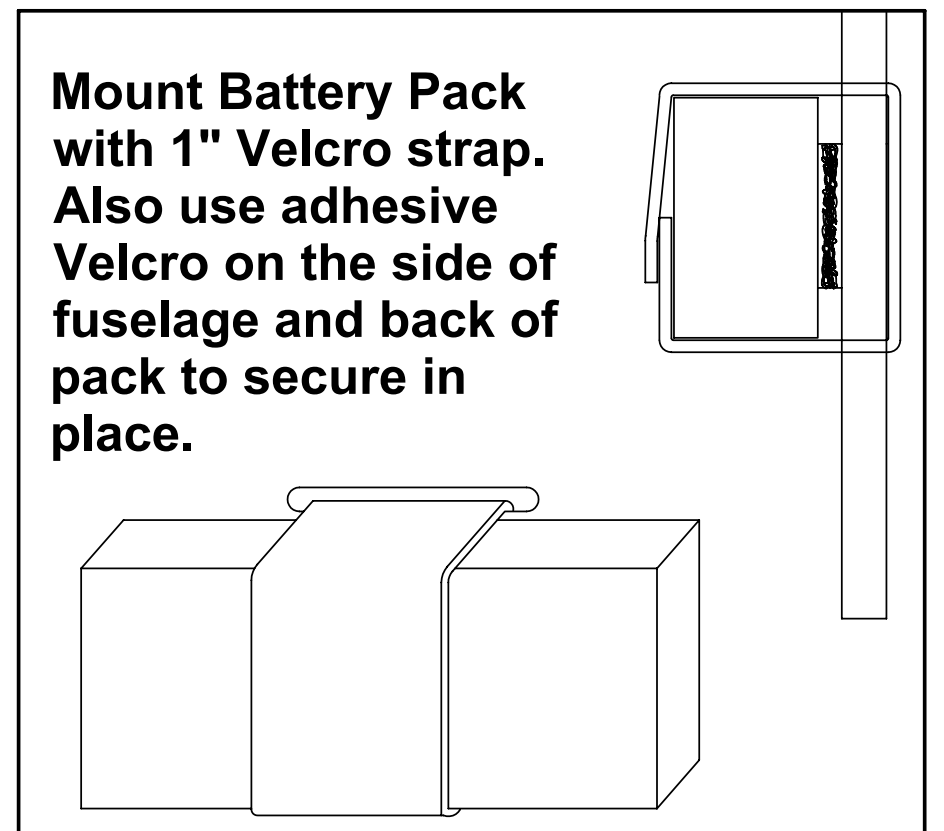
**Motor/Battery Info**

Motor	Gearing	Prop	Battery	Amp	Draw	Thrust
GWS	EPS350C DS (6.6:1)	GWS	12x6 2s1p Lipo	9.5	17.1 oz.	
GWS	EPS350C DS (6.6:1)	GWS	11x4.7 3s1p Lipo	11.5	24.3 oz.	
Hacker	B20-26S 4:1 Planetary APC	11x4.7 3s1p Lipo	11	amps	22.1 oz.	
Hacker	B20-31S 4:1 Planetary APC	11x4.7 3s1p Lipo	7.7	amps	18.6 oz.	
Hacker	B20-15L 4:1 Planetary APC	11x4.7 3s2p Lipo	19.5	amps	38.5 oz.	
Hacker	B20-15L 4:1 Planetary APC	11x4.7 2s1p Lipo	10.8	amps	20.6 oz.	
Hacker	B20-18L 4:1 Planetary APC	11x4.7 3s1p Lipo	11.7	amps	27.7 oz.	
Hacker	B20-18L 4:1 Planetary APC	12x6 3s2p Lipo	19	amps	36.7 oz.	
Razor	RZ300 GWS/5.3:1	GWS	11x4.7 2s1p Lipo	8.8	amps	15.7 oz.
Razor	RZ300 GWS/5.3:1	GWS	12x6 2s1p Lipo	9.9	amps	18.5 oz.
Razor	RZ300 GWS/6.6:1	GWS	11x4.7 3s1p Lipo	12	amps	26 oz.
Razor	RZ350 GWS/6.6:1	GWS	12x6 3s1p Lipo	12.4	amps	27 oz.
Razor	RZ350 GWS/6.6:1	GWS	11x4.7 3s1p Lipo	8.7	amps	21.2 oz.
Razor	MicroHelix v2 GWS/6.6:1	GWS	12x6 3s1p Lipo	8.9	amps	22.8 oz.
PJS	3D 500 Direct APC	10x4.7 3s2p Lipo	13.8	amps	20.7 oz.	
PJS	3D 550 Direct APC	10x4.7 3s2p Lipo	13.8	amps	20.7 oz.	
HiMax	HA2015-3600 GWS/5.3:1	GWS	12x6 3s1p Lipo	8.7	amps	20.5 oz.
HiMax	HA2015-3600 GWS/6.6:1	GWS	12x6 3s1p Lipo	6.5	amps	18.5 oz.
HiMax	HA2015-4100 GWS/6.6:1	GWS	12x6 3s1p Lipo	11.2	amps	26.4 oz.
HiMax	HA2015-4100 GWS/5.3:1	GWS	11x4.7 3s1p Lipo	11.6	amps	25.2 oz.
HiMax	HA2015-5400 GWS/6.6:1	GWS	12x6 2s1p Lipo	10.2	amps	17.8 oz.
HiMax	HA2025-3236 3.6:1	Planetary APC	11x4.7 3s2p Lipo	14	amps	29.3 oz.
HiMax	HA2025-3236 3.6:1	Planetary APC	12x6 3s2p Lipo	17	amps	32.2 oz.
HiMax	HA2025-4236 4.3:1	Planetary APC	11x4.7 3s2p Lipo	20.2	amps	38.1 oz.

Vacuum Formed Wheel Pants

1.75" DIA

6mm Depron Fuse



Painted Canopy Area

**Specs: Turbo Raven 3D**

<b>Weight</b>	<b>10.5-15.5 oz.</b>
<b>Power</b>	<b>24-39 oz.</b>
<b>Radio</b>	<b>4-5 Chanel</b>
<b>Area</b>	<b>295.4 in2</b>
<b>Loading</b>	<b>5.4-7.3 oz/ft2</b>
<b>WWW.3DFOAMY.COM</b>	

Painted Turbine Stacks