Servo horn mounted to carbon rod (drill out to fit)

Receiver (GWS R4P shown)

Aileron servo (one on each wing)  
(GWS Pico BB shown)

Wing, fuselage, canard, and nacelles are all constructed from BlueCore foam (or 6mm Depron)

4mm carbon tube spar

Servo horn used for control horn

3/16" OD x 1" aluminum tube bearing

Approximate battery location
* 960 mAh 3s Lithium polymer battery used on prototype
* Battery mounted with Velcro

5/16" x 3/16" x 3" hardwood motor mount  
(epoxied to both nacelles AND wing)

GWS IPS motors with A gearing  
and 8 x 6 GWS SF props  
(no right thrust or down thrust)

16" long 4mm carbon tube

1" x 1/2" x 1/4" hardwood block  
(epoxied to carbon rod and foam)

Neutral canard position is about 2 degrees leading edge up. Set 1" down / 3/4" up max canard deflections, measured at the root trailing edge (exponential or dual rates will help during cruise).

0.2" x 1/2" 1/32" plywood wing spar (cut slit in foam, apply epoxy to both sides of spar, and slide spar into foam)

Use 3M Satin tape hinges

Wing, fuselage, canard, and nacelles are all constructed from BlueCore foam (or 6mm Depron)

Sonic Cruiser Parkflyer

Span: 30.2"  
Weight: 9.5 oz - 10.5 oz RTF

Wing area: 242 sq in  
Wing loading: 6.3 oz/sq ft

Designed and drawn by Steve Shumate