After gluing the two wing halves together drill through ribs using pilot hole formed in root rib halves.

Locate to Suite Servos

Length 50mm

Length 43mm

After gluing servo mount and receiver/landing gear mount in place drill through the upper fuselage tube wall using the pilot holes as a guide and glue cabins in place.

DO NOT GLUE the wing to the cabins until the plane has been test flown. The cabins will/should be a tight fit into the wing root rib.

Join wing halves by carefully aligning and being sure the two root rib surfaces are flush before using Cyanoacrylate thick foam safe glue. Wing dihedral is 8 deg. and is built into the root rib.

Battery Mount snaps on to fuselage. It can be glued in place after the CG is determined and the plane is test flown.

True length of Landing Gear legs is 95 mm.
Glue root rib in place after removing wing from flat building board.

1/8"x1/8" Balsa

1/8"x1/4" Balsa

0.5mmx3mm Carbon Fiber Strips

Stbd. Rib

Stbd. Wing Tip

Gusset

Stbd. Wing Layout
Gymster V
Designed by Carl Hock
02Feb2017
Glue root rib in place after removing wing from flat building board.

Port Wing Tip

Port Rib

Gusset

0.5mmx3mm Carbon Fiber Strips

Port Wing Layout
Gymster V
Designed by Carl Hock
02Feb2017
Gymster V
Stabilizer Patterns
3 mm Depron
Designed by Carl Hock
02Feb2017
Gymster V
w/ Mount for HobbyKing
1811-2000 Brushless Motor Mount
Designed By Carl Hock
26" Wing Span
14Feb2017
Gymster V

General Notes:

1. CA foam safe glues is used except as noted on drawings.
2. 6g Servos were used on prototype.
3. A pull pull control system utilizing spider wire fishing line is recommended.
4. An electrical power system of 15 to 20 watts plus is recommended as the ready to fly weight of the prototype is 100g (3.6 oz).
5. A 160 mah 2S 30C LiPoly battery was used on the prototype.
6. The wing is covered on the top surface only, i.e. single surface.
7. Polyester synthetic tissue was used for covering on the prototype.
8. Stereo Lithography (.stl) files are provided in the accompanying Zip file for all the 3D printed components.
9. PLA 3D Filament was used to print the plastic components.
10. All 3D printed parts designed to be printed on a flat build surface.
11. Supports are drawn into the component where necessary.
12. All assembly holes printed in the 3D plastic components 3D will need to be reamed or drilled to the correct size.
13. The main wheels are printed in half's and need to be glued to together. The prototype wheels were aligned during gluing using the drill bit used to previously to ream the wheel half's center hole to size.
14. Small rubber bands are used to secure the receiver, motor controller and battery to the model.
15. Consider adding a LED light system to the model as the still night air is very conducive to the enjoyable flying of this model.