0" 1" 2" 3" 4" 5" 6"

FILE NAME: Straight nose fuselage pod.dwg

Sketch w. dimension based on 6000cc Houston Hawk

Design based on approaches from Sig/Ni, Strengthening suggestions from Mr. Imagination Ray Foley

Wooden Fuselage Pod prototype for Houston Hawk

REV 3b: 11-16-2012

SCALE: 1:1

Nose Block

F1 F2 F3 F4 F5 F6

1/32" ply nose doubler (2 req'd)

1/8" lite ply wing mount doubler (2 req'd)

3/8" x 1" bass wood or laminated ply tow hook reinforcement beam with 0.125 C.F. laminated on top

Drill to hollow out nose block

secure with 1/8" dowel through F3

1/4" balsa rear hatch cover

Wing position. Root chord is 9 3/4" Incidence = 0 degrees.

Locate F4 and wing joiner holes to match wing spar location

1/4" balsa top

1/8" lite ply wing mount reinforcements both sides between F4 and F5

Fuselage sides 1/8" Lite Ply

Secure with screw or magnets into nose block

Adjust pod end opening and fill with micro-balloon+epoxy to match diameter of boom at exit from pod.

Front hatch cover carved from 2" balsa

Balancing weight compartment

Battery compartment

Receiver compartment

1/32" ply nose skid

3/8" balsa tri from F5 to nose block

bevel former tops and bottoms to match slope

Towhook position approx. 15" forward of CG

3/8" x 1" bass wood or laminated ply tow hook reinforcement beam between F3 and F5. Cap top of beam with 0.125 C.F. Shape bottom to match fuselage curve

Fuselage pod forward of F5 can be wrapped in 0.75 or 1.5 oz. bias +- 45 fiberglass for added strength.

Formers F1-F6 are 1/8" lite ply laminated to 1/8" cross-grain lite ply or balsa.

Set diameter of hole to match boom diameter at F5 and F6 being careful to align the holes to ensure the pod is straight and at 0 degrees incidence. These drawings are set to match Mountain Model's Mark Drela Bubble Dancer boom, which tapers fron 13/16th inch at the pod end to 0.464 or approx. 7/16 inch at the tail end.

F1 F2 F3 F4 F5 F6

Tri bracing omitted from bottom plan for clarity

1/32" ply nose skid doubler sanded to tapered shape. Overlap noseblock joint.

Fuselage bottom 1/8" Lite Ply (length of part is longer than shown to accomodate curvature

Lite ply or balsa wing root fairings to match fuselage taper. Shape to match root airfoil shaped filet.

Servo openings

Airfoil shape is a rough demo

1/8" Lite Ply nose trays (cut as needed to mount servos, rxabs, batt.)

1/8" Lite Ply fuselage top supports between F3 and F5

11/16"

3/4"

1/2"

Airfoil shape is a rough demo