**UZBEKISTAN S4 SWING-FLOP DESIGN (2012 WSMC - 17.2 g + Spent Motor/Zenit A2-3)**

- **Total Wing Span**: 23" - Tips 5-5/8"; Center Span 11-3/4"  
  - 1/8" Light Balsa, High Point At 25% Cord
- **Dihedral**: 1-3/8" At Tip
- **Rubber Band Hooks**: (Holes on the right wing are on the back 1/3 area of the cord)
- **Hole with plastic straw for reinforcement**
- **Left Side Rubber Band (to boom)**
- **Right Side Hold String (to boom)**
- **Pivot Screw/Nut**: (moves with wing)
- **Wing Pivot Screw**: (12-7/8" From Back of Fuselage)
- **Tie Hooks**:
- **Rudder and S tab are 3/32” Balsa Flat bottom Stab with top airfoiled, symmetrical airfoil on the Rudder; Note: the Rudder is mounted straight in line with the boom. Turn seems to be induced by the wing being mounted with the left side being lower than the right.

**NOTE**: This drawing is of the model as found, it and the first model I built from these plans is nose heavy - roughly 0.5 grams of weight on the tail is needed for trimming.

- **CG of model as found (Boost & Glide)** (but appears to be a bit nose heavy here)

**Wing mount "wedge"** is made of 1/4” wide stock of balsa and G-10 type material which are glued to the center line of the wing bottom. An additional layer of G-10 is glued to the boom - with the two G-10 layers acting as the pivot area, this creates a solid/stable angle of attack for the wing once it is deployed - the angle is about 1.6 degrees. Note the boom also has a very slight taper; adding just a touch more incidence.

- **Total Boom Length**: 18.75"

**Pylon is 3 piece balsa, a V shape on each side - mounting up to the lower side of the motor tube then the 3 piece covers the front of the pylon with a curved shape. This creates more of a cradle for the motor tube.**

**Motor thrustline is parallel with fuselage.**

**NOTE**: This drawing is of the model as found, it and the first model I built from these plans is nose heavy - roughly 0.5 grams of weight on the tail is needed for trimming.