



Balsa used: 1/4 x 1/2 x 294" = 36.75cu-in @ 0.091oz/cu-in = 3.44oz  
 Elevator & stab area = 273sq-in  
 Hinges and horn weight = 0.3 oz  
 Ultracote covering weight = 4.0sq-ft x 0.18oz/sq-ft = 0.72oz  
 CF tube and adhesives = 0.5oz  
 Total estimated weight = 4.96oz

The elevator tabs balance the outer 4" of each elevator side. The servo is loaded only by the inner portion, from -11" to +11" on this drawing. This portion is approximately 8.4" + 8.4" = 16.8" span by 5.1" average chord. Use these dimensions (with actual control horn geometry) when computing the servo torque requirements.

**Solar Plane Horizontal Tail**  
*(Print at 200% for 1:1 building plans)*  
 Gary Stevens    2/19/17