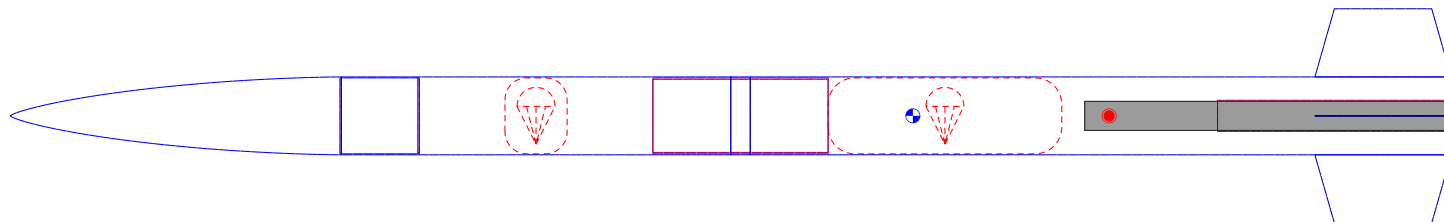


Rocket Design



EthaNos Bound

Stages: 1

Mass (with motor): 119 oz

Stability: 2.52 cal / 13.6 %

CG: 46.353 in










CP: 56.433 in

J825-14

Altitude	3957 ft	Motor	Avg Thrust	Burn Time	Max Thrust	Total Impulse	Thrust to Wt	Motor Wt	Size
Flight Time	347 s	J825R	900 N	1.07 s	1203 N	962 Ns	27.11:1	17.6 oz	1.5/18.8 in
Time to Apogee	13.4 s								
Optimum Delay	12.3 s								
Velocity off Pad	82.5 ft/s								
Max Velocity	867 ft/s								
Velocity at Deployment	49.4 ft/s								
Landing Velocity	11.5 ft/s								

Parts Detail

Stage: Sustainer

	Nose Cone	Fiberglass (1.07 oz/in ³)	Haack series	Len: 17 in	Mass: 14.8 oz
	Bulkhead	Cardboard (0.393 oz/in ³)	Dia _{out} 3.842 in	Len: 0.079 in	Mass: 0.359 oz
	Bulkhead	Fiberglass (1.07 oz/in ³)	Dia _{out} 3.843 in	Len: 0.079 in	Mass: 0.976 oz
	Upper Body Tube	Fiberglass (1.07 oz/in ³)	Dia _{in} 3.9 in Dia _{out} 4 in	Len: 20 in	Mass: 13.3 oz
	SkyAngle Classic 24 [Cd 1.16 (3.5 oz) 38.1 in ³] b2 Rocketry Company CL-24-N	Ripstop Nylon, lightweight, 1.3 oz. 4 mil (0.132 oz/ft ²)	Dia _{out} 24 in	Len: 3.189 in	Mass: 3.5 oz
	Shroud Lines b2 Rocketry Company CL-24-N	5625 Nylon woven tubular #950 [flat 3/8 x 3/32 in (12.7 x 1.9 mm)] (0.133 oz/ft)	Lines: 3	Len: 24 in	
	Ebay Coupler	Fiberglass (1.07 oz/in ³)	Dia _{in} 3.755 in Dia _{out} 3.89 in	Len: 9 in	Mass: 7.8 oz
	Switch Band	Fiberglass (1.07 oz/in ³)	Dia _{in} 3.9 in Dia _{out} 4 in	Len: 1 in	Mass: 0.664 oz
	Body Tube	Fiberglass (1.07 oz/in ³)	Dia _{in} 3.9 in Dia _{out} 4 in	Len: 36 in	Mass: 23.9 oz
	Freeform Fin Set (4)	Cardboard (0.393 oz/in ³)	Thick: 0.118 in		Mass: 3.9 oz
	Inner Tube	Fiberglass (1.07 oz/in ³)	Dia _{in} 1.561 in Dia _{out} 1.6 in	Len: 12 in	Mass: 1.25 oz
	SkyAngle Classic II 60 [Cd 1.89 (18.2 oz) 143 in ³] b2 Rocketry Company CL2-60	Ripstop Nylon, 1.9 oz 5 mil (0.193 oz/ft ²)	Dia _{out} 60 in	Len: 12 in	Mass: 18.2 oz
	Shroud Lines b2 Rocketry Company CL2-60	5625 Nylon woven tubular #950 [flat 3/8 x 3/32 in (12.7 x 1.9 mm)] (0.133 oz/ft)	Lines: 3	Len: 60 in	

