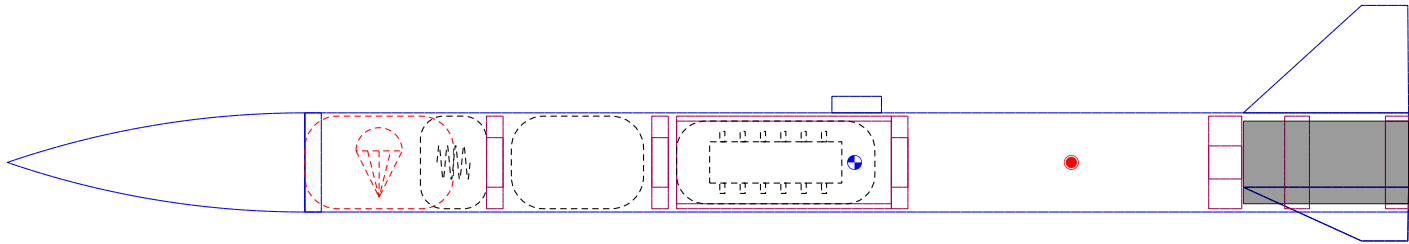


Rocket Design



Rocket

Stages: 1

Mass (with motor): 2869 g

Stability: 2.19 cal

CG: 513 mm
















CP: 644 mm

H67-P

Altitude	187 m	Motor	Avg Thrust	Burn Time	Max Thrust	Total Impulse	Thrust to Wt	Propellant Wt	Size
Flight Time	54.1 s	H67	81.2 N	2.46 s	159 N	201 Ns	2.88:1	300 g	50/100 mm
Time to Apogee	7.38 s								
Optimum Delay	4.45 s								
Velocity off Pad	6.71 m/s								
Max Velocity	50.5 m/s								
Velocity at Deployment	3 m/s								
Landing Velocity	3.86 m/s								

Parts Detail

Sustainer

	Nose cone	PLA (1.3 g/cm ³)	Ogive	Len: 180 mm	Mass: 93.5 g
	Body	Fiberglass (1.85 g/cm ³)	Dia _{in} 56 mm Dia _{out} 60 mm	Len: 668 mm	Mass: 450 g
	Parachute	Ripstop nylon (67 g/m ²)	Dia _{out} 2000 mm	Len: 90 mm	Mass: 263 g
	Shroud Lines	Tubular nylon (25 mm, 1 in) (29 g/m)	Lines: 6	Len: 300 mm	
	Shock cord	Elastic cord (round 2 mm, 1/16 in) (1.8 g/m)		Len: 400 mm	Mass: 20 g
	Parachute block	Aluminium (2.8 g/cm ³)	Dia _{in} 30 mm Dia _{out} 56 mm	Len: 10 mm	Mass: 49.2 g
	Flight Control		Dia _{out} 56 mm		Mass: 250 g
	Flight control block	Aluminium (2.8 g/cm ³)	Dia _{in} 30 mm Dia _{out} 56 mm	Len: 10 mm	Mass: 49.2 g
	Electronics bay	PLA (1.3 g/cm ³)	Dia _{in} 50 mm Dia _{out} 56 mm	Len: 130 mm	Mass: 84.4 g
	Flight computer		Dia _{out} 50 mm		Mass: 800 g
	Altimeter block	Aluminium (2.8 g/cm ³)	Dia _{in} 30 mm Dia _{out} 56 mm	Len: 10 mm	Mass: 49.2 g
	Launch lug	PLA (1.3 g/cm ³)	Dia _{in} 8 mm Dia _{out} 10 mm	Len: 30 mm	Mass: 1.1 g
	Trapezoidal fin set (3)	Fiberglass (1.85 g/cm ³)	Thick: 2 mm		Mass: 46.2 g
	Centering ring	PLA (1.3 g/cm ³)	Dia _{in} 0 mm Dia _{out} 56 mm	Len: 15 mm	Mass: 48 g
	Centering ring	PLA (1.3 g/cm ³)	Dia _{in} 50 mm Dia _{out} 56 mm	Len: 14 mm	Mass: 9.09 g
	Engine block	PLA (1.3 g/cm ³)	Dia _{in} 20 mm Dia _{out} 56 mm	Len: 20 mm	Mass: 55.9 g

