

## Milestone Review Flysheet

<b>Institution</b>	Tuskegee University	<b>Milestone</b>	PDR
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Vehicle Properties		Motor Properties	
Total Length (in)	51.18	Motor Manufacturer	Aerotech
Diameter (in)	2.2	Motor Designation	I200W
Gross Lift Off Weigh (lb)	23	Max/Average Thrust (lb)	40.745
Airframe Material	Fiberglass	Total Impulse (lbf-s)	73.46
Fin Material	Fiberglass	Mass Before/After Burn	0.79 lbs/
Drag	21.98	Liftoff Thrust (lb)	5.386

Stability Analysis		Ascent Analysis	
Center of Pressure (in from nose)	94.7077	Maximum Velocity (ft/s)	452.565
Center of Gravity (in from nose)	88.859	Maximum Mach Number	0.4047
Static Stability Margin	2.462	Maximum Acceleration (ft/s^2)	98.81
Static Stability Margin (off launch rail)		Target Apogee (From Simulations)	5280 ft
Thrust-to-Weight Ratio		Stable Velocity (ft/s)	
Rail Size and Length (in)		Distance to Stable Velocity (ft)	
Rail Exit Velocity			

Recovery System Properties					Recovery System Properties				
Dogue Parachute					Main Parachute				
Manufacturer/Model	Bender Designs				Manufacturer/Model	The Rocket Man			
Size	12.55 in				Size	12 ft			
Altitude at Deployment (ft)	5280 ft				Altitude at Deployment (ft)	2500 ft			
Velocity at Deployment (ft/s)					Velocity at Deployment (ft/s)				
Terminal Velocity (ft/s)					Terminal Velocity (ft/s)				
Recovery Harness Material					Recovery Harness Material				
Harness Size/Thickness (in)					Harness Size/Thickness (in)				
Recovery Harness Length (ft)					Recovery Harness Length (ft)				
Harness/Airframe Interfaces	H				Harness/Airframe Interfaces				
Kinetic					Kinetic				
	Section 1	Section 2	Section 3	Section 4		Section 1	Section 2	Section 3	Section 4



**Payload**

Payload 1	Overview

Payload 2	Overview

**Test Plans, Status, and Results**

Ejection Charge Tests	
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Sub-scale Test Flights	
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Full-scale Test Flights	
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**Milestone Review Flysheet**

Institution	Milestone
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**Additional Comments**

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