

Rocket Data Sheet and Launch Record

Rocket Description		Recovery Information		Altimeter Two Data					
Owner:	Jessi P and Anthon	Ejection Occurred		Apogee Altitude:	312				
Rocket Name:	Hump Day	⋄ During Ascent	⋄ At Apogee	Top Speed:	91				
Type:	Modelrocket.us	⋄ After Apogee	⋄ During Descent	Burn Time (burn):	2.2				
Length: (inches)	22.625	⋄ Ejection Failure		Peak Acc (Pacc):	8.1				
Diameter: (inches)	1.645	Parachute Deployment		Avg Acc (Aacc):	1.9				
Fins:	3	⋄ Full	⋄ Partial	Coast Apogee (C2AP):	2.5				
Listed Mass: (g)	28.34	⋄ Did not deploy		Apogee to Eject (AP2E):	3.1				
Date of Construction:	9/26/2013	Parachute Descent		Ejection Alt. (EALt):	216				
Recommended Motors: (G only)		⋄ Stable Descent	⋄ Tangled lines	Descent Speed (dESc):	21 mph				
C6-5		⋄ Some swaying	⋄ Sprial descent	Flight Duration (durA):	14.7				
Center Gravity(CG):	14 3/4 in	Reason for Recovery Failure		Altimeter Data Analysis					
Center Pressure(CP):		⋄ Damaged Chute		the highest point the rocket got to was 312 ft. the top speed was 91 mph the engine burned for 2.2 seconds before gravity was the only acceleration. The most it accelerated by was 831 ft/s/s with the average being 19. ft/s/s. It took 2.5 seconds from when the engine burned until it reached its highest point at the apogee. From apogee until the parachute was ejected it was 3.1 seconds which coincides with our actual vision which we said it ejected after the apogee. The rocket dropped 96 feet until the parachute deployed. The decent speed was 21 mph which is very fast, and that is because the parachute came out, but it did not deploy. The flight duration was only 14.7 seconds because it did not go very high up and it came down at a very					
Estimated Cd:	0.5	⋄ Tight Upper Body tube							
Predicted Altitude:	378	⋄ Improper setup							
Prediction Notes		⋄ Chute Separated							
I took the results from last years rockets and did the average of all of the altitude results.		⋄ Motor Ejected							
		⋄ Unplanned Separation							
		⋄ other- shoot did not deploy							
		Descent Speed							
		⋄ Slow	⋄ Average speed						
		⋄ Very fast	⋄ Ballistic						
		Landing							
Launch Information		⋄ Soft	⋄ Water						
Date:	10/9/2013	⋄ Tree	⋄ Caught on Wire						
Time of Launch:	1:00:00	⋄ Hard	⋄ Crash						
Location:	southeast of school	⋄ Landed on Building							
Rocket Mass:	70.3 g	Recovery		Post Launch Information					
Motor:	C6-3	⋄ Full Recovery	⋄ Lost	Rocket Damage					
Motor Mass:	25.2 g	⋄ Not Recoverable	⋄ Parts lost	⋄ No Damage					
Altimeter Mass:	6.7g	Distance & Direction from pad:		⋄ Scuffed Paint					
Liftoff Mass:	102.2 g	south 100 yds		⋄ Launch Lugs					
Wind Direction:	south			Recovery Notes		⋄ Engine Stuck			
Wind Speed:	15 mph			the parachute came out but it did not come out but there was no damage to the rocket		⋄ Fins Damaged			
Igniter:	estes	Ignition				Describe any damage to the rocket:			
No. of tries to ignite:	1					⋄ Successfull		no damage	
						⋄ Caught on clips			
		⋄ Blow Out							
		⋄ Motor Failure							
Trajectory				Flight Grade					
⋄ Straight-Up	⋄ Spinning			⋄ Excellent					
⋄ Corkscrew	⋄ Non-vertical			⋄ Good					
⋄ Into the wind	⋄ Unstable			⋄ Poor					
Launch Notes		Lessons Learned		Rocket Project Suggestions					
It was pretty windy during the launch. The parachute didn't open all the way either.		make sure the parachute is not packed to tightly or folded too tightly. I think that is was more of the wind pushing in a different direction though. As for the assembly of the rocket, I would say don't use Mr. D's paint pens because they leak and will ruin the design of your rocket or at least be smart with the way you use them.							