

# Rocket Data Sheet and Launch Record

Rocket Description		Recovery Information		Altimeter Two Data	
Owner:	Nick Reetz, Brody	<b>Ejection Occurred</b>		Apogee Altitude:	448 Ft
Rocket Name:	Venom	⋄ During Ascent	⋄ At Apogee	Top Speed:	119 mph
Type:	ModelRockets.us	⋄ After Apogee	⋄ During Descent	Burn Time (burn):	1.93 sec
Length: (inches)	22.625 in.	⋄ Ejection Failure		Peak Acc (Pacc):	10.4 G
Diameter: (inches)	1.645 in.	<b>Parachute Deployment</b>		Avg Acc (Aacc):	2.8 G
Fins:	1/8 in. Balsa	⋄ Full	⋄ Partial	Coast Apogee (C2AP):	4.0 sec
Listed Mass: (g)	2.5 oz	⋄ Did not deploy		Apogee to Eject (AP2E):	1.1 sec
Date of Construction:	9/19/2014	<b>Parachute Descent</b>		Ejection Alt. (EALt):	424 Ft
Recommended Motors:		⋄ Stable Descent	⋄ Tangled lines	Descent Speed (dESc):	10 mph
C6-3, C6-5		⋄ Some swaying	⋄ Sprial descent	Flight Duration (durA):	35.5 sec
Center Gravity(CG):		<b>Reason for Recovery Failure</b>		<b>Altimeter Data Analysis</b>	
Center Pressure(CP):		⋄ Damaged Chute		Everything seems to be correct. Parachute came out after the apogee, which the numbers agree with.	
<b>Building Notes</b>		⋄ Tight Upper Body tube			
One fin slightly loose		⋄ Improper setup			
		⋄ Chute Separated			
		⋄ Motor Ejected			
Estimated Cd:	0.5	⋄ Unplanned Separation		<b>Prediction vs Actual Analysis</b>	
Predicted Altitude:	420 Ft	⋄ Other		We predicted 420 ft, and it went 448, so we were pretty close.	
<b>Prediction Notes</b>		<b>Descent Speed</b>			
company says 650 ft on C6-5		⋄ Slow	⋄ Average speed		
		⋄ Very fast	⋄ Ballistic		
		<b>Landing</b>			
<b>Launch Information</b>		⋄ Soft	⋄ Water	<b>Post Launch Information</b>	
Date:	9/25/2014	⋄ Tree	⋄ Caught on Wire		
Time of Launch:	9:30:00	⋄ Hard	⋄ Crash		
Location:	parking lot soccer f	⋄ Landed on Building			
Rocket Mass(g):	6930	<b>Recovery</b>			
Motor:	C6-5	⋄ Full Recovery	⋄ Lost		
Motor Mass(g):	24	⋄ Not Recoverable	⋄ Parts lost		
Altimeter Mass(g):	9.9	Distance & Direction from pad:			
Liftoff Mass(g):	6963.9	about 75 yards north of the pad			
Wind Direction:	from South	<b>Recovery Notes</b>			
Wind Speed:	1 mph	Came down pretty slow, but lines were tangled up. Brody caught it, but it would have landed softly on the grass.		<b>Describe any damage to the rocket:</b>	
Igniter:	Estes	<b>Lessons Learned</b>		none	
No. of tries to ignite:	3				
<b>Ignition</b>					
⋄ Successfull	⋄ Blow Out	Try to keep shock cord straight, it got tangled slightly. Don't put engine cap on too tight, or the rocket won't launch. Make sure clips are fully on the igniter.		<b>Rocket Project Suggestions</b>	
⋄ Caught on clips	⋄ Motor Failure			With no wind, the C6-5 seemed to work very well, maybe get more of those.	
<b>Trajectory</b>					
⋄ Straight-Up	⋄ Spinning				
⋄ Corkscrew	⋄ Non-vertical				
⋄ Into the wind	⋄ Unstable	<b>Launch Notes</b>			
Took a couple tries to launch. First time plug was in too tight. Second time igniter came off of clips. Third try successful.					