

# Rocket Data Sheet and Launch Record

Rocket Description		Recovery Information		Altimeter Two Data	
Owner:	Ben W & Tyler P	<b>Ejection Occurred</b>		Apogee Altitude:	367 Ft
Rocket Name:	Bill Murray	“ During Ascent	“ At Apogee	Top Speed:	105 mph
Type:	Modelrockets.us	“ After Apogee	“ During Descent	Burn Time (burn):	2.1 sec
Length: (inches)	22.625	“ Ejection Failure		Peak Acc (Pacc):	7.5 gs
Diameter: (inches)	1.645	<b>Parachute Deployment</b>		Avg Acc (Aacc):	2.3 gs
Fins:	3	“ Full	“ Partial	Coast Apogee (C2AP):	3 sec
Listed Mass: (g)	85 g	“ Did not deploy		Apogee to Eject (AP2E):	-.2 sec
Date of Construction:	9/4/2014	<b>Parachute Descent</b>		Ejection Alt. (EALt):	363 Ft
Recommended Motors:		“ Stable Descent	“ Tangled lines	Descent Speed (dESc):	11 mph
C6-3, C6-5		“ Some swaying	“ Sprial descent	Flight Duration (durA):	27.1 sec
Center Gravity(CG):	15	<b>Reason for Recovery Failure</b>		<b>Altimeter Data Analysis</b>	
Center Pressure(CP):		“ Damaged Chute		The data was a little bit below average of a normal rocket, but wasn't honestly that low. We predicted about the same height, so that was a plus.	
<b>Building Notes</b>		“ Tight Upper Body tube			
Small gap between fin and rocket		“ Improper setup			
		“ Chute Separated			
		“ Motor Ejected			
Estimated Cd:	0.5	“ Unplanned Separation			
Predicted Altitude:	350 Ft	“ Other		<b>Prediction vs Actual Analysis</b>	
<b>Prediction Notes</b>		<b>Descent Speed</b>		We predicted about 350 ft in the air, so it was actually pretty close to what we guessed. We didn't know how well it would fly because of the fins not being perfect against the rocket.	
Company predicts 650 feet		“ Slow	“ Average speed		
		“ Very fast	“ Ballistic		
		<b>Landing</b>			
		“ Soft	“ Water		
		“ Tree	“ Caught on Wire		
<b>Launch Information</b>		“ Hard	“ Crash		
Date:	9/26/2014	“ Landed on Building		<b>Post Launch Information</b>	
Time of Launch:	10:50:00	<b>Recovery</b>		<b>Flight Grade</b>	
Location:	Soccer Field Parkir	“ Full Recovery	“ Lost	“ Excellent	
Rocket Mass(g):	71.4	“ Not Recoverable	“ Parts lost	“ Good	
Motor:	C6-3	Distance & Direction from pad:		“ Fair	
Motor Mass(g):	24.8	50 feet east of launch pad		“ Poor	
Altimeter Mass(g):	9.9	<b>Recovery Notes</b>		“ Rocket cannot launch again	
Liftoff Mass(g):	106.1	Caught it as it came down, so no damage was done to the rocket		<b>Describe any damage to the rocket:</b>	
Wind Direction:	SSE			The rocket has a crack on one of the fins, and another fin is loose. Other than the damage on the fins, there is no damage, because we caught the rocket before it landed.	
Wind Speed:	10 MPH			<b>Rocket Project Suggestions</b>	
Igniter:	Estes	<b>Lessons Learned</b>		I think maybe one more suggestion is add one more rocket. The C6-3 and C6-5 worked well in their own environment, so I think adding another rocket could be a good medium for the both of them.	
No. of tries to ignite:	1	When making the rocket, make sure to finish the paint job and do a good job on the paint job. Also, don't sand the fins too hard, for they won't be flush against the rocket, which will make the rocket not go as far.			
<b>Ignition</b>					
“ Successfull	“ Blow Out				
“ Caught on clips	“ Motor Failure				
<b>Trajectory</b>					
“ Straight-Up	“ Spinning				
“ Corkscrew	“ Non-vertical				
“ Into the wind	“ Unstable				
<b>Launch Notes</b>					
Into the wind, came up and down verticle					