

Rocket Data Sheet and Launch Record

Rocket Description		Recovery Information		Altimeter Two Data	
Owner:	Mr Duhrkopf	Ejection Occurred		Apogee Altitude:	411 Ft
Rocket Name:	Big Sharky	¨ During Ascent	¨ At Apogee	Top Speed:	116 mph
Type:	Modelrockets.us	¨ After Apogee	¨ During Descent	Burn Time (burn):	1.54 s
Length: (inches)	22.625	¨ Ejection Failure		Peak Acc (Pacc):	9.6g
Diameter: (inches)	1.645	Parachute Deployment		Avg Acc (Aacc):	3.4g
Fins:	3	¨ Full	¨ Partial	Coast Apogee (C2AP):	3.9 s
Listed Mass: (g)	85 g	¨ Did not deploy		Apogee to Eject (AP2E):	-0.5 s
Date of Construction:	9/4/2012	Parachute Descent		Ejection Alt. (EALt):	396 Ft
Recommended Motors: (C only)		¨ Stable Descent	¨ Tangled lines	Descent Speed (dESc):	11 mph
C6-3, C6-5		¨ Some swaying	¨ Sprial descent	Flight Duration (durA):	28.5 s
Center Gravity(CG):	13.77 in from nose	Reason for Recovery Failure		Altimeter Data Analysis	
Center Pressure(CP):		¨ Damaged Chute		Apogee to eject indicates that the chute popped before apogee which is not what happened. Apogee looks good and so do all the other numbers	
Building Notes		¨ Tight Upper Body tube			
Had trouble with the stickers, fin is chipped at the base		¨ Improper setup			
		¨ Chute Separated			
		¨ Motor Ejected			
Estimated Cd:	0.5	¨ Unplanned Separation			
Predicted Altitude:	400 Ft	¨ Other		Prediction vs Actual Analysis	
Prediction Notes		Descent Speed		C6-3 worked well. No wind so prediction was very good compared to actual	
company says 650 ft which is way off. My mass is similiar to listed. Choosing a C6-3 for a better parachute deployment based on the previous years flights. Picked 400 ft due to the 4 previous flights. Wind will play a big factor		¨ Slow	¨ Average speed		
		¨ Very fast	¨ Ballistic		
		Landing			
		¨ Soft	¨ Water		
		¨ Tree	¨ Caught on Wire		
Launch Information		¨ Hard	¨ Crash		
Date:	9/23/2014	¨ Landed on Building		Post Launch Information	
Time of Launch:	2nd hour	Recovery		Flight Grade	
Location:	jh fb field	¨ Full Recovery	¨ Lost	Excellent	
Rocket Mass(g):	83.1	¨ Not Recoverable	¨ Parts lost	¨ Good	
Motor:	C6-3	Distance & Direction from pad:		¨ Fair	
Motor Mass(g):	23.9	50 yds north		¨ Poor	
Altimeter Mass(g):	9.9	Recovery Notes		¨ Rocket cannot launch again	
Liftoff Mass(g):	116.9	Shock cord and parachute had a little damage due to the exhaust gases. Lauryn beats Brody to the rocket. Brody needs form work		Describe any damage to the rocket:	
Wind Direction:	south			Parachute and shock cord had a little char damage but nothing that needed repair	
Wind Speed:	10 mph				
Igniter:	Estes	Lessons Learned		Get more C6-3's, better choice for the chute than a C6-5 due to the common windy days in Carroll. Lay tube flat when gluing the engine mount. Could put the fins in soon after if time to prevent slipping	
No. of tries to ignite:	1	Add one more sheet of wadding to help prevent melting of the chute and shock cord. C6-3 is a much better engine choice than the C6-5. Angle into the wind.			
Ignition					
¨ Successfull	¨ Blow Out				
¨ Caught on clips	¨ Motor Failure				
Trajectory					
¨ Straight-Up	¨ Spinning				
¨ Corkscrew	¨ Non-vertical				
¨ Into the wind	¨ Unstable				
Launch Notes					
Went to kids soccer field due to long grass in driving range. clip fell off no big deal. Angled slightly into the wind					