Rocket Data Sheet and Launch Record

Rocket Description

Owner:	Mr Duhrkopf
Rocket Name:	Big Sharky
Type:	Modelrockets.us
Length: (inches)	22.625 in
Diameter: (inches)	1.645 in
Fins:	3
Listed Mass: (g)	85 g
Date of Construction:	9/4/2012

Recommended Motors: (C only)

C6-3, C6-5

Center Gravity(CG):	13.77 in
Center Pressure(CP):	
Estimated Cd:	0.5
Predicted Altitude:	375 Ft

Prediction Notes

Prediction spreadsheet says 530 ft but last years launches were not even close to that. Last year was a bit windy so I am going with a value just a little higher.

Launch Information

Date:	10/7/2013
Time of Launch:	6th period
Location:	175 yd marker
Rocket Mass:	83.1 g
Motor:	C6-5
Motor Mass:	25.1 g
Altimeter Mass:	6.7g
Liftoff Mass:	115.8 g
Wind Direction:	West
Wind Speed:	Calm at launch
Igniter:	Estes
No. of tries to ignite:	1

Ignition

¨ Successfull	¨ Blow Out
¨ Caught on clips	¨ Motor Failure

Trajectory

¨ Straight-Up	¨ Spinning
¨ Corkscrew	¨ Non-vertical
¨ Into the wind	¨ Unstable

Launch Notes

Pushed parachute as far into the tube as possible to lower CG in an attempt to make it go straighter. Rocket was set to go straight up and wind was calm at time of the launch. Had planned to aim with the wind but forgot. Perfect launch really

Recovery Information

Ejection Occurred

¨ During Ascent	¨ At Apogee
¨ After Apogee	¨ During Descent
¨ Ejection Failure	

Parachute Deployment

¨ Full	¨ Partial
¨ Did not deploy	

Parachute Descent

¨ Stable Descent	¨ Tangled lines
¨ Some swaying	¨ Sprial descent

Reason for Recovery Failure

¨ Damaged Chute
¨ Tight Upper Body tube
¨ Improper setup
¨ Chute Separated
¨ Motor Ejected
¨ Unplanned Separation
¨ Other _____

Descent Speed

¨ Slow	¨ Average speed
¨ Very fast	¨ Ballistic

Landing

¨ Soft	¨ Water
¨ Tree	¨ Caught on Wire
¨ Hard	¨ Crash
¨ Landed on Building	

Recovery

¨ Full Recovery	¨ Lost
¨ Not Recoverable	¨ Parts lost

Distance & Direction from pad:

East by the blocking sleds

Recovery Notes

Perfect.

Lessons Learned

Calm wind makes for a better flight. Not always a choice though. Wind and drag are a big factor in performance of this rocket. Need to change your prediction if the winds are calm

Altimeter Two Data

Apogee Altitude:	445 Ft
Top Speed:	88 mph
Burn Time (burn):	2.1 s
Peak Acc (Pacc):	8.5
Avg Acc (Aacc):	1.9
Coast Apogee (C2AP):	6.8 s
Apogee to Eject (AP2E):	-3.5 s
Ejection Alt. (EALt):	393 Ft
Descent Speed (dESc):	9 mph
Flight Duration (durA):	32.5 s

Altimeter Data Analysis

Everything looks good except for the apogee to eject time and coast to apogee. Visually ejection was just after apogee so way before is not correct. Delay time is supposed to be 5 s so 6.8 s is curious. The flight was very normal

Post Launch Information

Rocket Damage

¨ No Damage
¨ Scuffed Paint
¨ Launch Lugs
¨ Engine Stuck
¨ Fins Damaged

Describe any damage to the rocket:

None

Flight Grade

¨ Excellent
¨ Good
¨ Poor

Rocket Project Suggestions

Buy Mr D Starburst