

# Rocket Data Sheet and Launch Record

Rocket Description		Recovery Information		Altimeter Two Data	
Owner:	Maddie Bock/ Hay	<b>Ejection Occurred</b>		Apogee Altitude:	383
Rocket Name:	Soarin', Flyin'...	During Ascent	At Apogee	Top Speed:	98
Type:	model rockets	After Apogee	During Descent	Burn Time (burn):	2.2
Length: (inches)	22.625	Ejection Failure		Peak Acc (Pacc):	7
Diameter: (inches)	1.645	<b>Parachute Deployment</b>		Avg Acc (Aacc):	2
Fins:	3	Full	Partial	Coast Apogee (C2AP):	3.6
Listed Mass: (g)	75.3	Did not deploy		Apogee to Eject (AP2E):	1.5
Date of Construction:	9/19/2014	<b>Parachute Descent</b>		Ejection Alt. (EALt):	347
Recommended Motors:	B6-2, C6-3	Stable Descent	Tangled lines	Descent Speed (dESc):	39
		Some swaying	Spiral descent	Flight Duration (durA):	13.3
Center Gravity(CG):	33.5 cm	<b>Reason for Recovery Failure</b>		<b>Altimeter Data Analysis</b>	
Center Pressure(CP):		Damaged Chute		only thing wrong was descent speed because altimeter fell off, so descent speed measured only altimeter and not whole rocket	
<b>Building Notes</b>		Tight Upper Body tube			
one of our fins broke when we were building.		Improper setup			
		Chute Separated			
Estimated Cd:		Motor Ejected			
Predicted Altitude:		Unplanned Separation			
		Other		<b>Prediction vs Actual Analysis</b>	
<b>Prediction Notes</b>		<b>Descent Speed</b>		400 vs. 383; 17 feet off	
400 feet		Slow	Average speed		
		Very fast	Ballistic		
		<b>Landing</b>			
		Soft	Water		
		Tree	Caught on Wire		
		Hard	Crash		
<b>Launch Information</b>		Landed on Building		<b>Post Launch Information</b>	
Date:	9/25/2014	<b>Recovery</b>		<b>Flight Grade</b>	
Time of Launch:	10:50:00	Full Recovery	Lost	Excellent	
Location:	soccer fields	Not Recoverable	Parts lost	Good	
Rocket Mass(g):	75.3	Distance & Direction from pad:		Fair	
Motor:	C6-5	20 yards southwest from pad		Poor	
Motor Mass(g):	24.7	<b>Recovery Notes</b>		Rocket cannot launch again	
Altimeter Mass(g):	9.9	tied zip-tie wrong, so lost altimeter		<b>Describe any damage to the rocket:</b>	
Liftoff Mass(g):	109.9			lost altimeter	
Wind Direction:	none			<b>Rocket Project Suggestions</b>	
Wind Speed:	none			Continue to allow C6-5; teach kids how to use a zip-tie	
Igniter:	Estes Igniter	<b>Lessons Learned</b>			
No. of tries to ignite:	2	need to learn how to use a zip-tie; launch on a day with no wind equals better results; if rocket looks like it's descending fast, run and try to catch the rocket to prevent damage			
<b>Ignition</b>					
Successful	Blow Out				
Caught on clips	Motor Failure				
<b>Trajectory</b>					
Straight-Up	Spinning				
Corkscrew	Non-vertical				
Into the wind	Unstable				
<b>Launch Notes</b>					
first launch unsuccessful because pink plug was pushed too far into engine. second launch successful					