

# Rocket Data Sheet and Launch Record

Rocket Description		Recovery Information		Altimeter Two Data					
Owner:	Caleb, Zach, Natha	<b>Ejection Occurred</b>		Apogee Altitude:	404 Ft				
Rocket Name:	#Pinseekers	“ During Ascent	“ At Apogee	Top Speed:	109 mph				
Type:	ModelRockets.us	“ After Apogee	“ During Descent	Burn Time (burn):	2.3 s				
Length: (inches)	22.625 in	“ Ejection Failure		Peak Acc (Pacc):	7.6				
Diameter: (inches)	1.645 in.	<b>Parachute Deployment</b>		Avg Acc (Aacc):	2.5				
Fins:	3	“ Full	“ Partial	Coast Apogee (C2AP):	3.3 s				
Listed Mass: (g)	70.8738g	“ Did not deploy		Apogee to Eject (AP2E):	-1				
Date of Construction:	9/18/2014	<b>Parachute Descent</b>		Ejection Alt. (EALt):	388 Ft				
Recommended Motors:		“ Stable Descent	“ Tangled lines	Descent Speed (dESc):	10 mph				
B6-2, C6-3		“ Some swaying	“ Sprial descent	Flight Duration (durA):	29.9 s				
Center Gravity(CG):	14.5 in	<b>Reason for Recovery Failure</b>		<b>Altimeter Data Analysis</b>					
Center Pressure(CP):		“ Damaged Chute		The apogee to eject says -1 seconds, but to the eye it looked like it was after apogee. Mr. Duhrkopf said there may be some error in that statistics and we think there is some.					
<b>Building Notes</b>		“ Tight Upper Body tube							
The bottom part of our three fins were completely put it correctly. There was a small gap between the fin and body tube that shouldn't have been there. Everything else		“ Improper setup							
		“ Chute Separated							
		“ Motor Ejected							
Estimated Cd:		“ Unplanned Separation		<b>Prediction vs Actual Analysis</b>					
Predicted Altitude:	375	“ Other							
<b>Prediction Notes</b>		<b>Descent Speed</b>							
We predict our rocket will be about 375 ft in the air. It is the first we have made and we don't have high expectations.		“ Slow	“ Average speed			Our prediction was 375 ft and our rocket went 404 ft. When we launched, it was not windy at all so it was perfect conditions for launching. We thought there would be some more wind affect while launching so our prediction was a little low.			
		“ Very fast	“ Ballistic						
<b>Launch Information</b>		<b>Landing</b>							
		“ Soft	“ Water						
		“ Tree	“ Caught on Wire						
Date:	9/26/2014	“ Hard	“ Crash	<b>Post Launch Information</b>					
Time of Launch:	11:00:00	“ Landed on Building							
Location:	Litte kids soccer pa	<b>Recovery</b>							
Rocket Mass(g):	72.2	“ Full Recovery	“ Lost			<b>Flight Grade</b>			
Motor:	C6-5	“ Not Recoverable	“ Parts lost			“ Excellent			
Motor Mass(g):	25	Distance & Direction from pad:		“ Good					
Altimeter Mass(g):	9.9	25 feet Southwest of pad		“ Fair					
Liftoff Mass(g):	107.1	<b>Recovery Notes</b>		“ Poor					
Wind Direction:	South	Recovery was very easy. Zach almost caught the rocket to prevent it from hitting the rocks in the parking lot.		“ Rocket cannot launch again					
Wind Speed:	5 mph			<b>Describe any damage to the rocket:</b>					
Igniter:	Estes Igniter								
No. of tries to ignite:	1								
<b>Ignition</b>		<b>Lessons Learned</b>				No major damage. A little chip in one of the fins but it doesn't compromise the rocket.			
“ Successfull	“ Blow Out								
“ Caught on clips	“ Motor Failure								
<b>Trajectory</b>				The bottom of our fins weren't in all the way so next time we need to make sure they are completely in before we glue them in. We should predict better and not account for as much wind as we did.				<b>Rocket Project Suggestions</b>	
“ Straight-Up	“ Spinning							The obvious ziptie tutorial would be one suggestion. Maybe if you would be able to check with our rockets before we glue everything down because we thought the fins were in right, but they weren't.	
“ Corkscrew	“ Non-vertical								
“ Into the wind	“ Unstable								
<b>Launch Notes</b>									
Perfect conditions to launch. Wind was 5 mph from the South but it didn't feel like any wind.									