

Rocket Description		Recovery Information		Altimeter Two Data	
Owner:	Tyler Thomas, Enri	Ejection Occurred		Apogee Altitude:	1744
Rocket Name:	Carroll FC	• During Ascent	• At Apogee	Top Speed:	234
Type:	Arcas	• After Apogee	• During Descent	Burn Time (burn):	1.46s
Length: (inches)	56	• Ejection Failure		Peak Acc (Pacc):	12.4g
Diameter: (inches)	2.6	Parachute Deployment		Avg Acc (Aacc):	8.9g
Fins:	4	• Full	• Partial	Coast Apogee (C2AP):	8.6s
Listed Mass: (g)	620	• Did not deploy		Apogee to Eject (AP2E):	-1.3s
Date of Construction:	spring 2016	Parachute Descent		Ejection Alt. (EALt):	1708
Recommended Motors: (G only)	G53-5J, G64-7W, G71-7R, G76-7G, G38-7FJ, G40-7W, G77-7R, G78-7G,	• Stable Descent	• Tangled lines	Descent Speed (dESc):	25mph
		• Some swaying	• Sprial descent	Flight Duration (durA):	54.8s
Center Gravity(CG):	39 1/2"	Reason for Recovery Failure		Altimeter Data Analysis	
Center Pressure(CP):	46.75	• Damaged Chute		Apogee was only 6 feet from our prediction, Ejection occured before apogee and chute did not deploy	
Building Notes		• Tight Upper Body tube		Prediction vs Actual Analysis Our prediction was very close to what the actual data and the launch was pretty straight	
One of the fins doesn't fit all the way in., and may need super glue to keep it together.		• Improper setup			
Estimated Cd:		• Chute Separated			
Predicted Altitude:		• Motor Ejected			
Prediction Notes		• Unplanned Separation			
After taking a look at other rocket launch results, the rockets with our engine have gone a fairly good height. Also, other rockest that had G76's with a slightly heavier rocket or similar weight also went close to this height. This was a		• Other			
Launch Information		Descent Speed			
Date:	5/3/2016	• Slow	• Average speed		
Time of Launch:	10:34	• Very fast	• Ballistic		
Location:	Outside	Landing			
Rocket Mass(g):	619	• Soft	• Water		
Motor:	G75-7M	• Tree	• Caught on Wire		
Motor Mass(g):	131	• Hard	• Crash		
Altimeter Mass(g):	9.9	• Landed on Building			
Liftoff Mass(g):	759.9	Recovery			
Wind Direction:	West	• Full Recovery	• Lost		
Wind Speed:	7 mph	• Not Recoverable	• Parts lost		
Igniter:	Copper	Distance & Direction from pad:			
No. of tries to ignite:	1	West onto soccer field			
Ignition		Recovery Notes			
• Successfull	• Blow Out				
• Caught on clips	• Motor Failure	Post Launch Information			
Trajectory		Flight Grade			
• Straight-Up	• Spinning	• Excellent			
• Corkscrew	• Non-vertical	• Good			
• Into the wind	• Unstable	• Fair			
Launch Notes		• Poor			
Parachute did not deploy, launched first try		• Rocket cannot launch again			
		Describe any damage to the rocket:			
		1 fin came out		Rocket Project Suggestions	
				Make a rocket to go along with the theme	