

Rocket Data Sheet and Launch Record

Rocket Description		Recovery Information		Altimeter Two Data			
Owner:	Sterling S, Ryan K	Ejection Occurred		Apogee Altitude:			
Rocket Name:	Batman	" During Ascent	" At Apogee	Top Speed:			
Type:	Sumo	" After Apogee	" During Descent	Burn Time (burn):			
Length: (inches)	39 in	" Ejection Failure		Peak Acc (Pacc):			
Diameter: (inches)	4 in	Parachute Deployment		Avg Acc (Aacc):			
Fins:	4 fins	" Full	" Partial	Coast Apogee (C2AP):			
Listed Mass: (g)	907 g	" Did not deploy		Apogee to Eject (AP2E):			
Date of Construction:	Februrary 2014	Parachute Descent		Ejection Alt. (EALt):			
Recommended Motors: (G only)		" Stable Descent	" Tangled lines	Descent Speed (dESc):			
G64W G76G G77R G80T		" Some swaying	" Sprial descent	Flight Duration (durA):			
		Reason for Recovery Failure		Altimeter Data Analysis			
Center Gravity(CG):	25 7/8	" Damaged Chute		Altimeter did not record any data because the rocket did not reach a high enough altitude for a pressure change			
Center Pressure(CP):	29.5	" Tight Upper Body tube					
Estimated Cd:	0.33	" Improper setup					
Predicted Altitude:	1000 Ft	" Chute Separated					
Prediction Notes		" Motor Ejected					
Our rocket is the only rocket that has been done with the G64-4W so it is kind of hard to predict the altitude so we tried to match the cd with the aerotech projected altitude. our mass is also less than the majority of the other rockets so this may also play a role in the height of the rocket.		" Unplanned Separation					
		" Other early delay charge					
		Descent Speed					
		" Slow	" Average speed				
		" Very fast	" Ballistic				
Launch Information		Landing					
Date:	4/22/2014	" Soft	" Water				
Time of Launch:	9:10:00	" Tree	" Caught on Wire				
Location:	CHS	" Hard	" Crash				
Rocket Mass:	1000 g	" Landed on Building		Post Launch Information			
Motor:	G77-4R	Recovery		Rocket Damage			
Motor Mass:	150 g	" Full Recovery	" Lost	" No Damage			
Motor Mass:	150 g	" Not Recoverable	" Parts lost	" Scuffed Paint			
Altimeter Mass:	6.7g	Distance & Direction from pad:		" Launch Lugs			
Liftoff Mass:	1156.7 g	went about thirty feet to the west		" Engine Stuck			
Wind Direction:	NNE	Recovery Notes		" Fins Damaged			
Wind Speed:	8 mi	rocket started well then the delay charge went off before the rocket got off of the rail and melted everything on the inside and spun off thirty feet away		Describe any damage to the rocket:			
Igniter:				Ignition		the tube bent and the inside of the rocket is blackened and the shock cord melted	
No. of tries to ignite:	1						
" Successfull	" Blow Out						
" Caught on clips	" Motor Failure	Trajectory					
" Straight-Up	" Spinning	Lessons Learned		Flight Grade			
" Corkscrew	" Non-vertical	unsure of what happened to the engine		" Excellent			
" Into the wind	" Unstable			" Good			
Launch Notes				" Poor			
				Rocket Project Suggestions			
				I enjoyed the rocket project. I dont have much to say for what should be changed. I all around liked it.			