

Rocket Data Sheet and Launch Record

| Rocket Description | | Recovery Information | | Altimeter Two Data | |
|---|--------------------|---|------------------|---|---------|
| Owner: | Jessi Savanna | <u>Ejection Occurred</u> | | Apogee Altitude: | 829 Ft |
| Rocket Name: | Packers | ¨ During Ascent | ¨ At Apogee | Top Speed: | 139 mph |
| Type: | G-Force | ¨ After Apogee | ¨ During Descent | Burn Time (burn): | 1.4 |
| Length: (inches) | 59 | ¨ Ejection Failure | | Peak Acc (Pacc): | 13.5 |
| Diameter: (inches) | 4.032 | <u>Parachute Deployment</u> | | Avg Acc (Aacc): | 4.5 |
| Fins: | 3 | ¨ Full | ¨ Partial | Coast Apogee (C2AP): | 6.2 |
| Listed Mass: (g) | 907 | ¨ Did not deploy | | Apogee to Eject (AP2E): | -3.3 |
| Date of Construction: | Feb 2014 | <u>Parachute Descent</u> | | Ejection Alt. (EALt): | 658 |
| Recommended Motors: (G only) | | ¨ Stable Descent | ¨ Tangled lines | Descent Speed (dESc): | 8 mph |
| G64-\$W, G76-4G, G77-4R, G80-7T | | ¨ Some swaying | ¨ Sprial descent | Flight Duration (durA): | 55.3 |
| Center Gravity(CG): | 39.5 inches | <u>Reason for Recovery Failure</u> | | <u>Altimeter Data Analysis</u> | |
| Center Pressure(CP): | 46 inches | ¨ Damaged Chute | | added powder. went very close to predicted altitude. Took a little bit before the parachute popped, would have liked it sooner. | |
| Estimated Cd: | 0.3 | ¨ Tight Upper Body tube | | | |
| Predicted Altitude: | 850 Ft | ¨ Improper setup | | | |
| <u>Prediction Notes</u> | | ¨ Chute Separated | | | |
| There was quite a few flights to compare my rocker to so I chose a Cd to fit my altitude I want. I think my altitude should be around 850 because it is a good average. | | ¨ Motor Ejected | | | |
| | | ¨ Unplanned Separation | | | |
| | | ¨ Other | | | |
| | | <u>Descent Speed</u> | | | |
| | | ¨ Slow | ¨ Average speed | | |
| | | ¨ Very fast | ¨ Ballistic | | |
| <u>Launch Information</u> | | <u>Landing</u> | | | |
| Date: | 4/22/2014 | ¨ Soft | ¨ Water | <u>Post Launch Information</u> | |
| Time of Launch: | 10:00:00 | ¨ Tree | ¨ Caught on Wire | <u>Rocket Damage</u> | |
| Location: | Carroll High Schoo | ¨ Hard | ¨ Crash | ¨ No Damage | |
| Rocket Mass: | 1070g | ¨ Landed on Building | | ¨ Scuffed Paint | |
| Motor: | G76-4G | <u>Recovery</u> | | ¨ Launch Lugs | |
| Motor Mass: | 0.143g | ¨ Full Recovery | ¨ Lost | ¨ Engine Stuck | |
| Motor Mass: | 0.143g | ¨ Not Recoverable | ¨ Parts lost | ¨ Fins Damaged | |
| Altimeter Mass: | 6.7g | Distance & Direction from pad: | | Describe any damage to the rocket: | |
| Liftoff Mass: | 1076.84g | SW, 500ft | | | |
| Wind Direction: | NE | <u>Recovery Notes</u> | | | |
| Wind Speed: | 10mph | chute popped right after apogee. parachute worked perfectly, landed softly. Ryan K and Stenbo recovered. | | | |
| Igniter: | copper head | | | | |
| No. of tries to ignite: | 2 | | | | |
| <u>Ignition</u> | | | | <u>Flight Grade</u> | |
| ¨ Successfull | ¨ Blow Out | | | ¨ Excellent | |
| ¨ Caught on clips | ¨ Motor Failure | | | ¨ Good | |
| <u>Trajectory</u> | | | | ¨ Poor | |
| ¨ Straight-Up | ¨ Spinning | | | <u>Rocket Project Suggestions</u> | |
| ¨ Corkscrew | ¨ Non-vertical | | | Loved the rally and was very happy with how my rocket did. | |
| ¨ Into the wind | ¨ Unstable | | | | |
| <u>Launch Notes</u> | | <u>Lessons Learned</u> | | | |
| make sure to use extra delay charge, engine needs to be taped in. | | Was good to use tape on the engine and the igniter. They may have fallen out otherwise. All in all a great day, lots of fun and very good food. | | | |