

# Flight Results for Demo Flights 2014

	<u>Flight #1</u>	<u>Flight #2</u>	<u>Flight #3</u>	<u>Flight #4</u>	Flight #5
Owners	Mr D	Mr D	Kelsey Magill, Maddie Peters	Sarah Pudenz, Kelsi Danner	
Rocket Name	Iowa State	Cracker Jack	Rocky	Tangled	
Rocket Type	Sumo	G-Force	Arcas	Astrobee	
Rocket Mass	1005 g	1033 g	594 g	807 g	
Motor Used	G77-4R	G64-4W	G64-7W	G80-7T	
Estimated Cd	0.38	0.6	0.35	0.675	
Estimated Altitude	825 ft	800 ft	1595 ft	1510 ft	
Apogee Altitude	700 ft	689 ft	1520 ft	1245 ft	
Top Speed	437 mph	126 mph	217 mph	326 mph	
Burn Time      burn	1.7 s	1.8 s	1.7 s	3.6 s	
Peak Acceleration    PAcc	22.8 g	8.1 g	17.1 g	13.8 g	
Avg Accerleration    AAcc	11.7 g	3.1 g	5.7 g	4.1 g	
Coast to Apogee      C2AP	1.8 s	5.2 s	8.2 s	4.7 s	
Apogee to Eject      AP2E	8.1 s	-0.5 s	-0.2 s	-	
Ejection Altitude    EALt	381 ft	654 ft	1516 ft	-	
Descent Speed        dESc	11 mph	9 mph	15 mph	22 mph	
Flight Duration      durA	33.2 s	54.9 s	74.6 s	46 s	
Notes	<p>Altimeter data is unreliable. Ejection happened on the way up and way more like 381 ft not 700 ft.</p> <p>Times are also messed up. Actual launch went well except for the early ejection.</p>	<p>Orange and Blue altimeters were the same results. Orange altimeter will be an emergency use only for now. Very windy launch, rocket landed on the school but recovered successfully</p>	<p>Took 2 igniters for launch. Also, trouble with pushing in the safety key to far which prevents the circuit when pushing the red button.</p> <p>Otherwise a normal launch and recovery.</p> <p>Video sources worked well. iPad will need a little work but is easy to use.</p>	<p>Had a delayed launch. Motor ignited and rocket went 1 foot in air then motor died. Rocket came down and fin fell off then engine reignited and rocket went up just fine. Heard the delay charge pop but rocket did not come apart. Came down sideways and landed not far from the launch pad. Samsung video worked great for close and was ok for the launch. iPad seems ok but is sideways on import and will not work with PlayMem. Mine will work for far away. Samsungs easy to snapshot</p>	