

Flight Results for Rocket Rally 2016

	Flight #1	Flight #2	Flight #3	Flight #4	Flight #5
Owners	Lexi and Kourtney	Chris, Tanner and Destiny	Patrick	Bryce and Matt	Austin and Eric
Rocket Name	Crayola	NuTech	US Army	Deadpool	Carrot
Rocket Type	Arcas	Sumo	Arcas	Arcas	Arcas
Rocket Mass	612 g	1035 g	630 g	600 g	624 g
Motor Used	G80-7T	G76-4G	G76-7G	G80-10T	G138-12T
Estimated Cd	0.54	0.34	0.62	0.538	0.6
Estimated Altitude	1880 ft	840 ft	1400 ft	1980 ft	2200 ft
Apogee Altitude	1819 ft		1282 ft	2042 ft	2300 ft
Top Speed	175 mph		217 mph	352 mph	415 mph
Burn Time burn	1.34 s		1.43 s	1.20 s	1.5 s
Peak Acceleration PAcc	11.3 g		13.1 g	15.8 g	21.3 g
Avg Accerleration AAcc	6.0 g		5.1 g	13.3 g	18.1 g
Coast to Apogee C2AP	8.7 s		8.1 s	10.0 s	9.8 s
Apogee to Eject AP2E	-1.0 s		-0.9 s	-0.8 s	-9.8 s
Ejection Altitude EALt	1801 ft		1276 ft	2032 ft	18
Descent Speed dESc	13 mph		26 mph	13 mph	0
Flight Duration durA	99.2 s		42.4 s	111.7 s	107
Notes	rocket cam	Bad Altimeter	Trouble getting the engine lit. Chute did not open up	Cut hole in chute	Cut hole in chute. Made a 12 sec delay

	Flight #6	Flight #7	Flight #8	Flight #9	Flight #10
Owners	David and Brent	Brittany	Hannah and Bianca	Zach	Jason, Tyler and Enrique
Rocket Name	Parental Advisory	Pop Rocks	Arlo	Oldschool Runscape	Carroll FC
Rocket Type	Arcas	Sumo	Sumo	Arcas	Arcas
Rocket Mass	658 g	1100 g	1007 g	621 g	619 g
Motor Used	G53-7J	G75-4M	G76-4G	G54-7J	G75-7M
Estimate Cd	0.315	0.36	0.32	0.378	0.49
Estimated Altitude	1375 ft	850 ft	800 ft	1238 ft	1750 ft
Apogee Altitude	1144 ft	926 ft	822 ft	1224 ft	1744 ft
Top Speed	202 mph	198 mph	180 mph	219 mph	284 mph
Burn Time burn	1.6 s	1.25 s	1.43 s	1.56 s	1.46 s
Peak Acceleration PAcc	9.3 g	8.8 g	14.2 g	10.8 g	12.4 g
Avg Accerleration AAcc	5.8 g	7.2 g	5.7 g	6.4 g	8.9 g
Coast to Apogee C2AP	6.4 s	5.6 s	4.8 s	7.6 s	8.6 s
Apogee to Eject AP2E	-0.6	-0.4 s	-1.6 s	-0.7	-1.3 s
Ejection Altitude EALt	1100 ft	859 ft	734 ft	1213 ft	1708 ft
Descent Speed dESc	12 mph	15 mph	11 mph	29 mph	25 mph
Flight Duration durA	67 s	45.5 s	49.9 s	36.9 s	54.8 s
Notes				Chute did not open, landed on edge of water	Chute did not open

	Flight #11	Flight #12	Flight #13	Flight #14	
Owners	Chandler, Peter and Tyler	Dakota	Josh and Ben	Ashley and Lexi	
Rocket Name	Slim Jim	Final Frontier	Black Cat	Laffy Taffy	
Rocket Type	Arcas	Arcas	Arcas	Arcas	
Rocket Mass	610 g	610 g	606 g	612 g	
Motor Used	G64-7W	G53-7J	G53-7J	G80-10T	
Estimated Cd	0.32	0.4	0.62	0.538	
Estimated Altitude	1500 ft	1275 ft	1077 ft	1850 ft	
Apogee Altitude	1533 ft	1265 ft	1273 ft	1991 ft	
Top Speed	234 mph	221 mph	221 mph	347 mph	
Burn Time burn	2.25 s	1.49 s	1.48 s	1.16 s	
Peak Acceleration PAcc	11.2 g	11.1 g	10.8 g	15.7	
Avg Accerleration AAcc	4.8 g	6.8 g	6.8 g	13.6 g	
Coast to Apogee C2AP	8.6 s	8.5 s	6.0 s	9.4 s	
Apogee to Eject AP2E	-1.0	-1.1 s	-0.7 s	-9.3 s	
Ejection Altitude EALt	1530 ft	1250 ft	1171 ft	33 ft	
Descent Speed dESc	15 mph	11 mph	24.6 mph	0	
Flight Duration durA	76.7 s	84.1 s	39.3 s	80.7 s	
Notes				Cut hole in chute	