

# Angelfire Flight Data

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Date: May 28, 2006  
Location: Mansfield Washington  
Elevation: 2262 feet MSL  
Temp: approx 65 F  
%RH:  
Wind: Approx 5 mph at ground level

Motor: Aerotech M1419W  
LO weight: 48 lbs

Comments: Good vertical launch trajectory!

## Flight Event Timeline

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Time (Sec)	Event	Altitude	Speed
0.00	Motor Ignition	0.0 ft	0.0 ft/sec
2.56	Peak Acceleration = 5.29 G's	314 ft	361 ft/sec
4.05	Altitude = 1000 feet	1,000 ft	601 ft/sec
6.44	Peak Velocity = 526 mph	2659 ft	771 ft/sec
6.48	Motor burnout (Accel = 0)	2688 ft	771 ft/sec
26.68	Barometric apogee detection	9965 ft	98 ft/sec
29.02	Drogue chute ejection charge fires	9775 ft	43 ft/sec
30.22	Accelerometer apogee detection	9700 ft	0.0 ft/sec
118.82	Main chute ejection charge fires	982 ft	
123.50	Main chute inflated	740 ft	
157.50	Touch down	0.0 ft	

Drogue chute sink rate      100 ft/sec  
Main chute sink rate        24.4 ft/sec

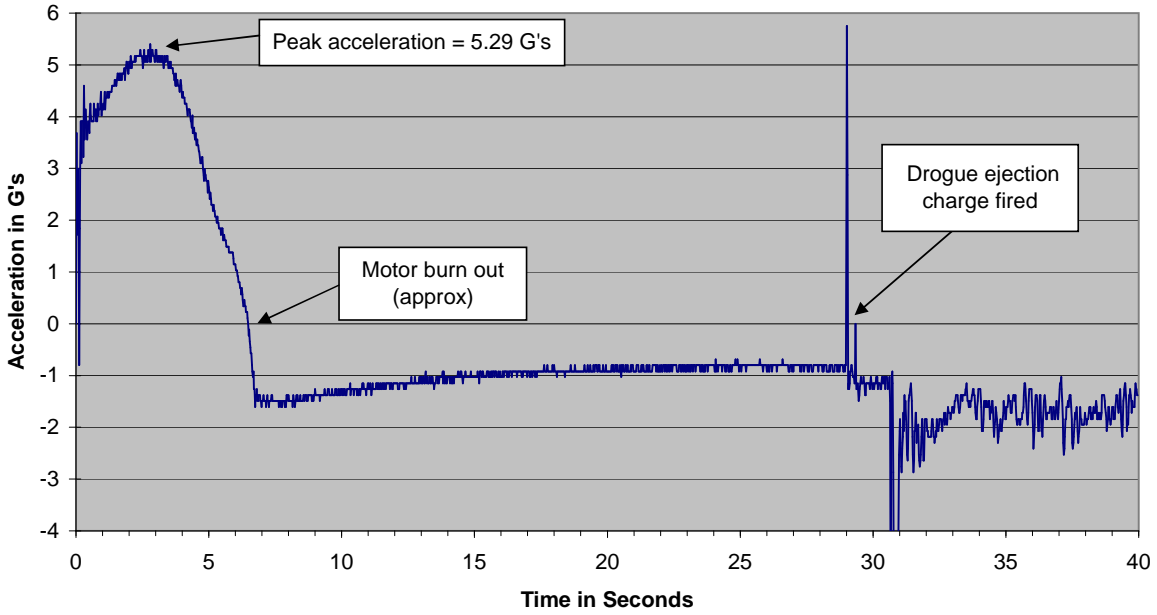
Time to apogee      26.7 sec   0.45 min  
Time on drogue      89.8 sec   1.50 min  
Time on main        38.7 sec   0.65 min  
Total flight time    157.5 sec 2.63 min

MissileWorks Altimeter #1:      10,435 ft  
MissileWorks Altimeter #2:      10,808 ft  
Avg:                                  10,622 ft

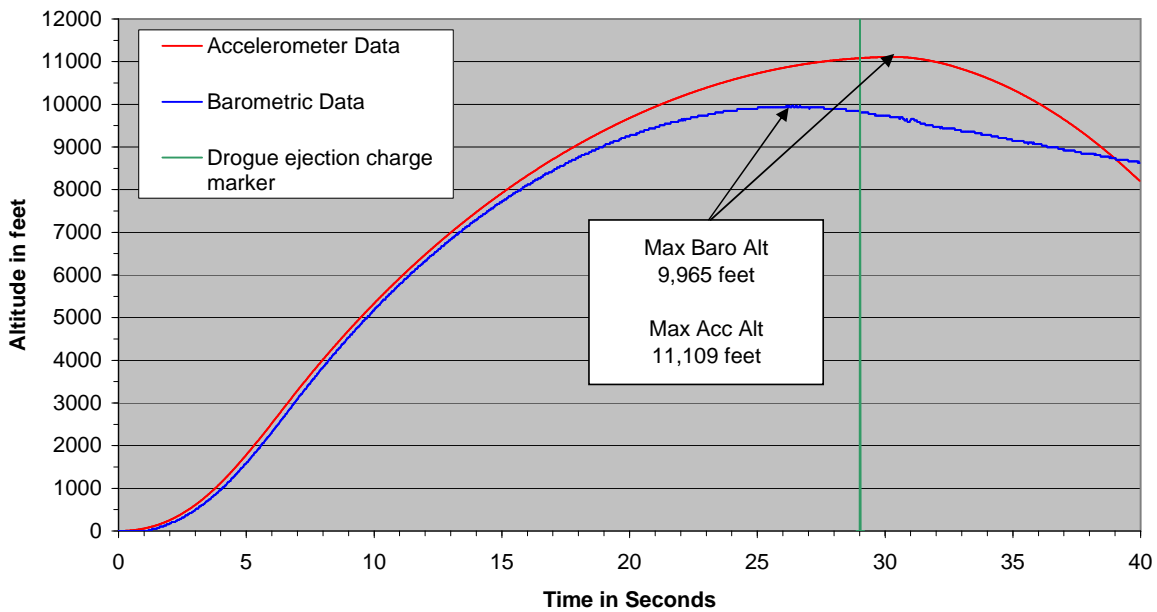
### NOTE

The MissileWorks altimeters were responsible for drogue and main parachute ejection charge firings.

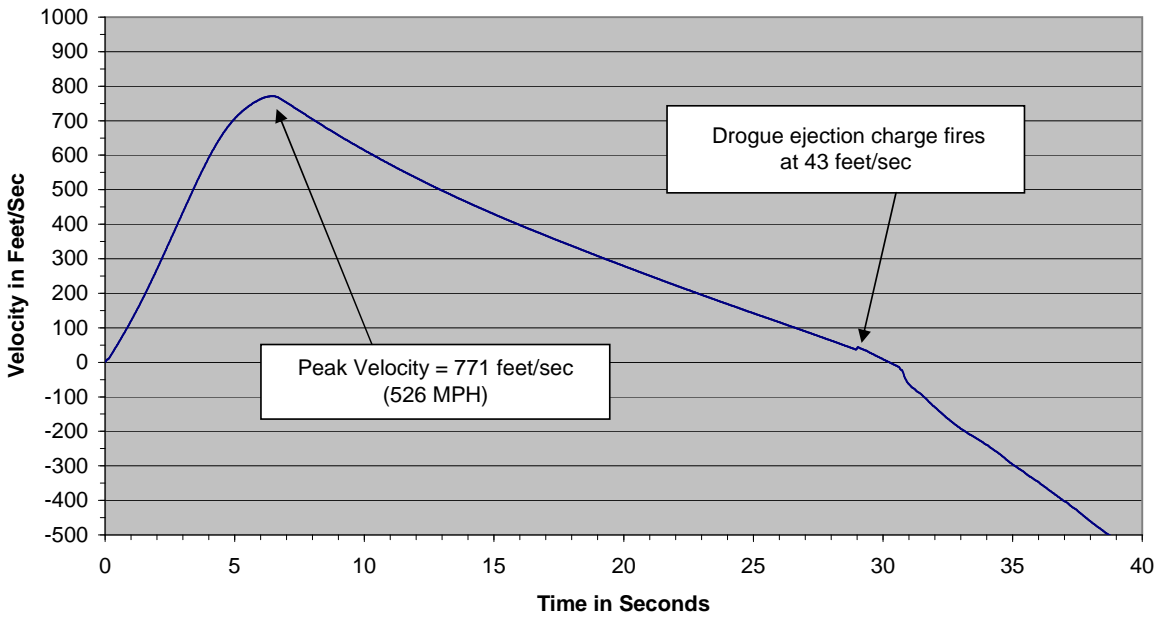
Angelfire Acceleration May 28, 2006 M1419 motor



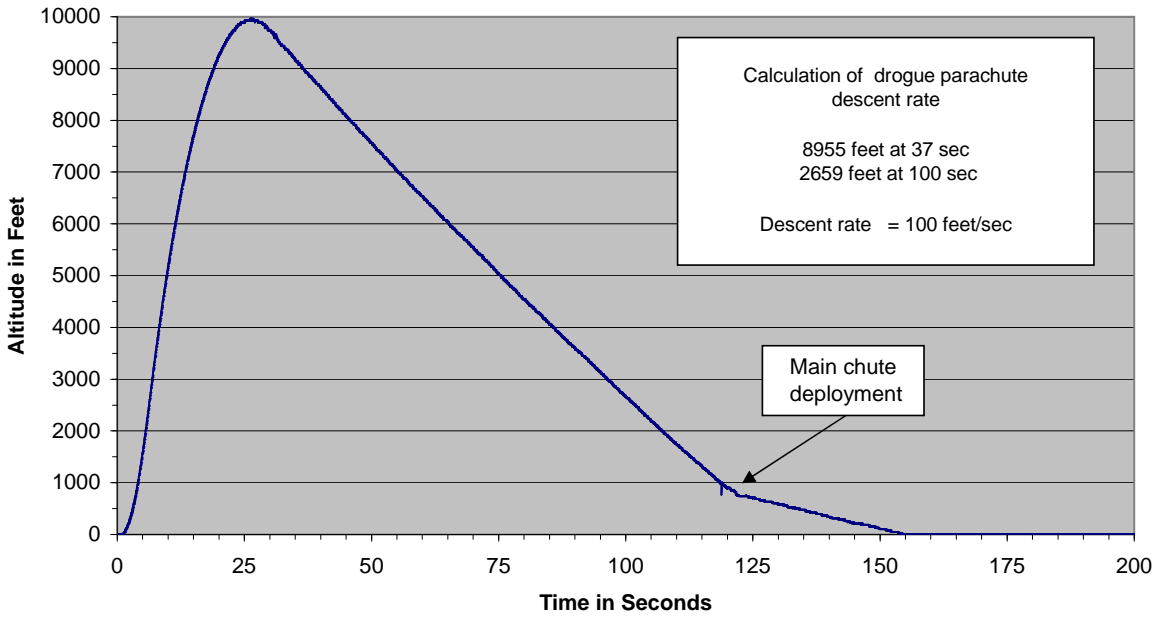
Angelfire Altitude May 28, 2006 M1419 motor



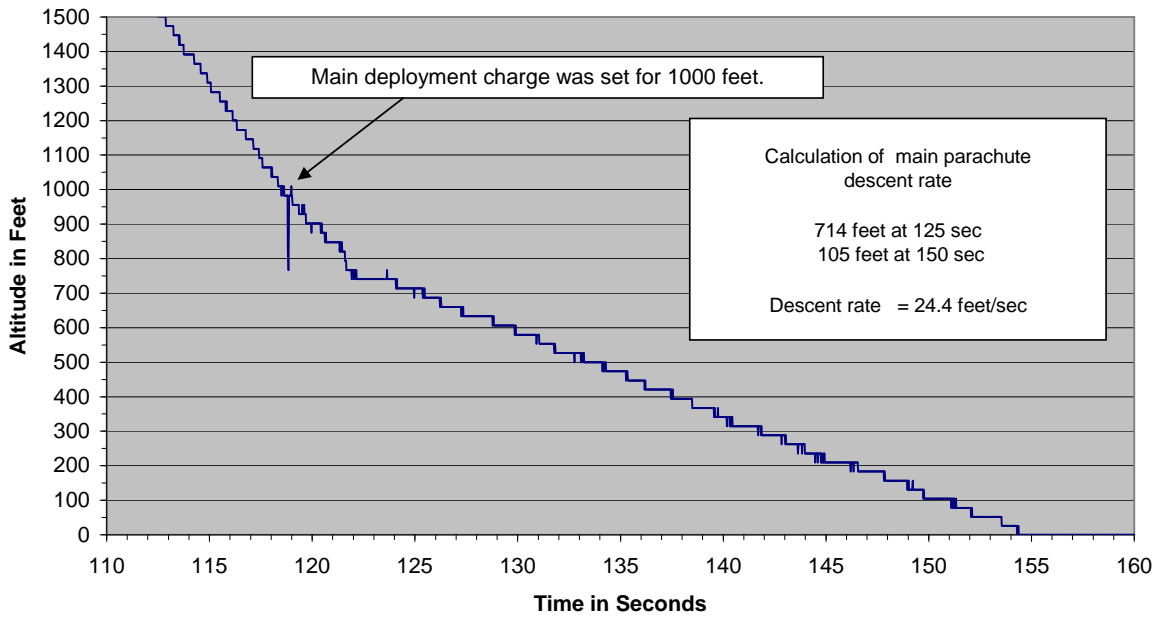
Angelfire Velocity    May 28, 2006    M1419 motor



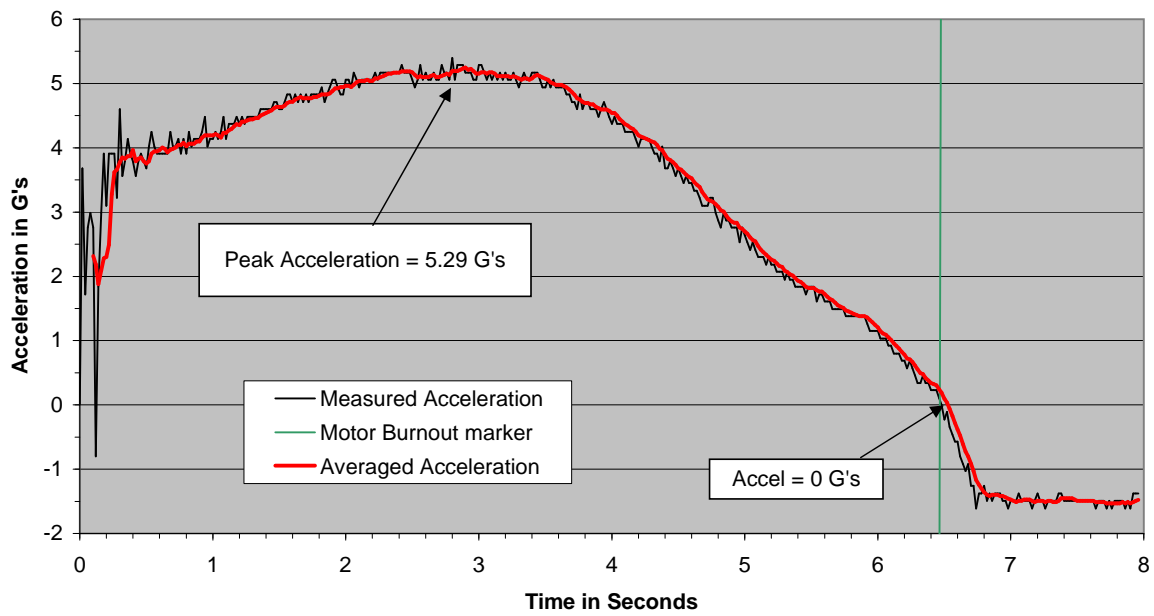
**Angelfire Altitude      May 28, 2006      M1419 motor**



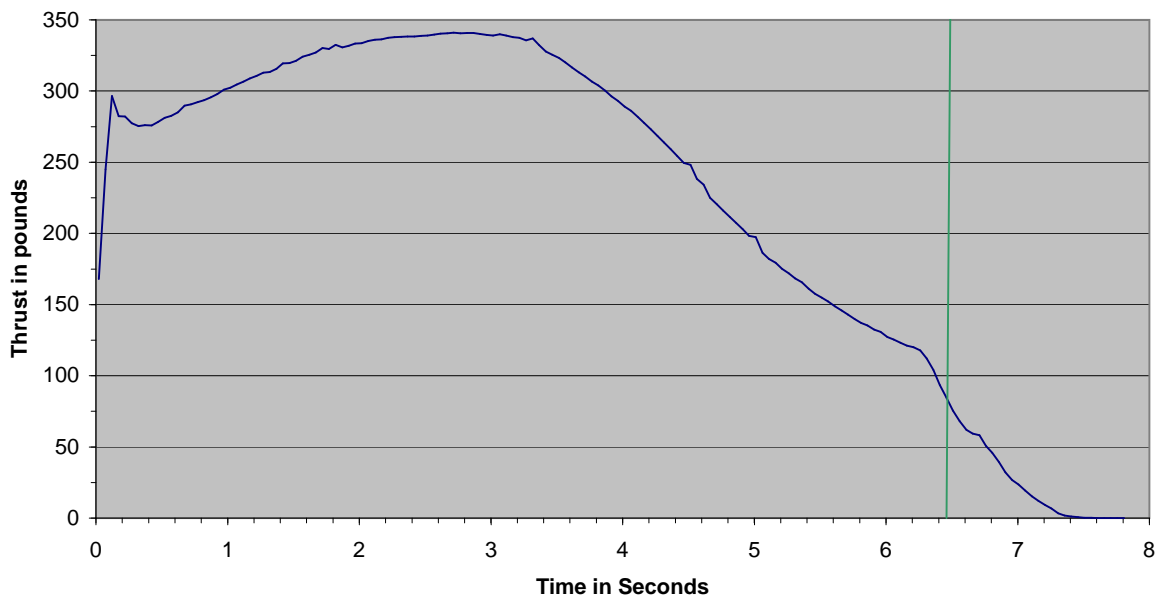
**Angelfire Main Chute Deployment      May 28, 2006      M1419 motor**



Angelfire Acceleration May 28, 2006 M1419 motor



AeroTech M1419 Nominal Thrust Curve



Angelfire Acceleration May 28, 2006 M1419 motor

