

Angelfire Flight Data

Date: June 18, 2006
 Location: Brothers Oregon
 Elevation: 4525 feet MSL
 Temp: 68 F
 %RH: 37%
 Wind: Approx 5 mph at ground level

Motor: Aerotech L952W
 LO weight: 47 lbs

Comments:
 Slow liftoff and not perfectly vertical.
 Main chute accidentally deployed at apogee.
 Landed 0.67 miles from flight line.

Flight Event Timeline

Time (Sec)	Event	Altitude (feet)	Speed (ft/sec)
0.00	Motor Ignition	0	0
1.98	Peak Acceleration 4.00 G's	197	206
4.39	Altitude = 1000 feet	1000	434
5.68	Peak Velocity 326.28 mph	1592	479
6.45	Motor burnout (Accel = 0)	1952	458
20.29	Barometric apogee detection	5132	36
21.55	Accelerometer apogee detection	5248	1
22.00	Drogue chute ejection charge fires	5245	-6
231.20	Touch down	0	0

Drogue chute sink rate n/a
 Main chute sink rate 22.8 ft/sec

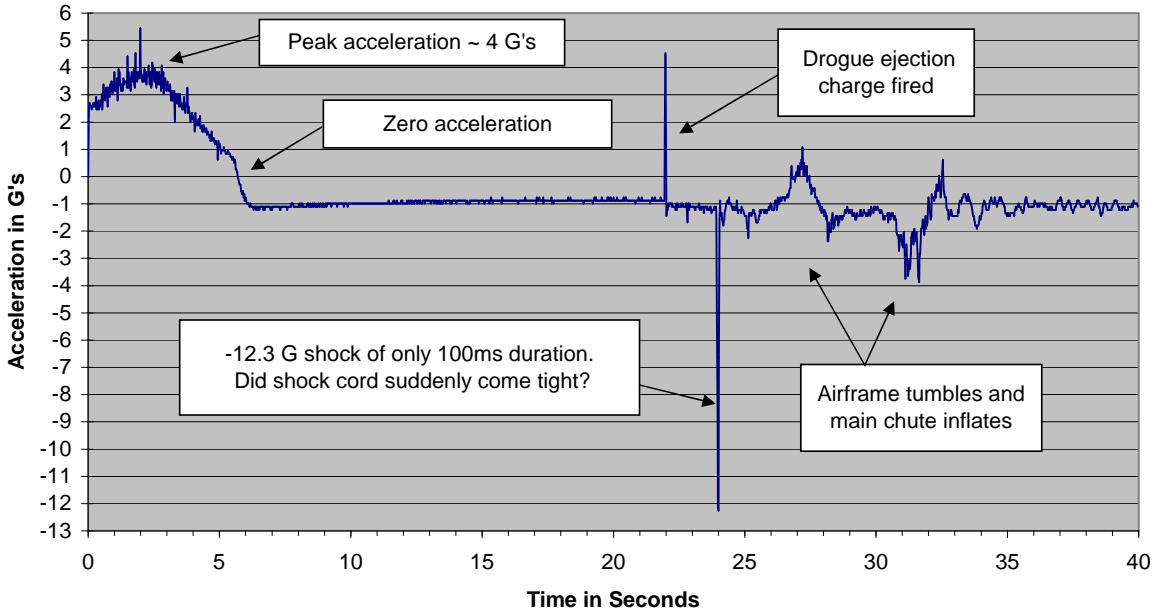
Time to apogee 21.6 sec 0.36 min
 Time on drogue n/a n/a
 Time on main 22.0 sec 0.37 min
 Total flight time 231.2 sec 3.85 min

MissileWorks Altimeter #1: 5,529 ft
 MissileWorks Altimeter #2: 5,591 ft
 Avg: 5,560 ft

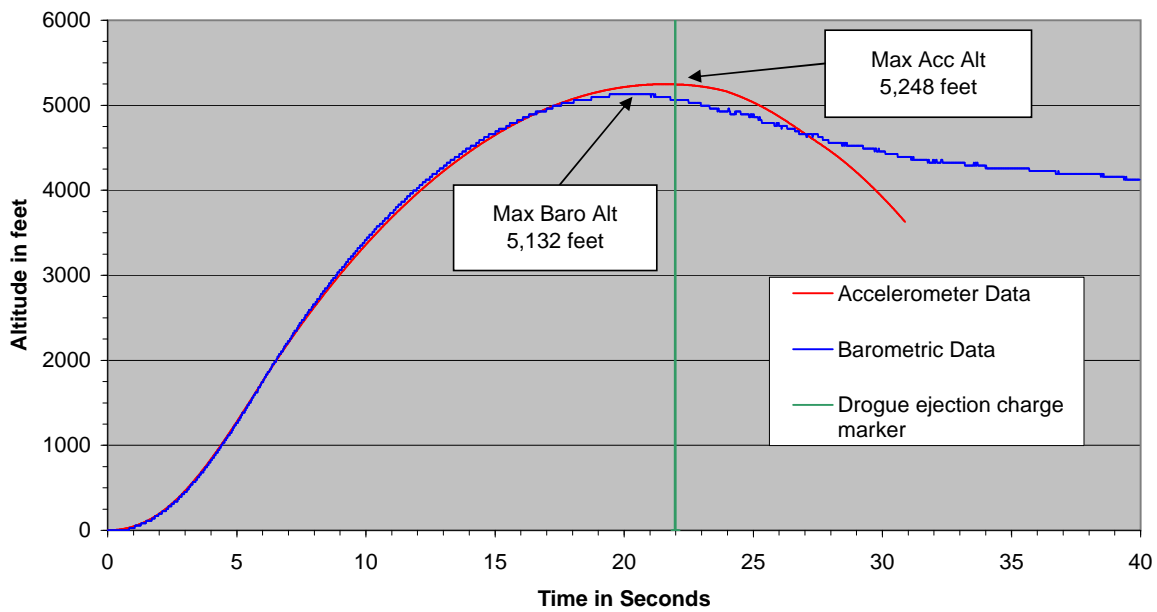
NOTE

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

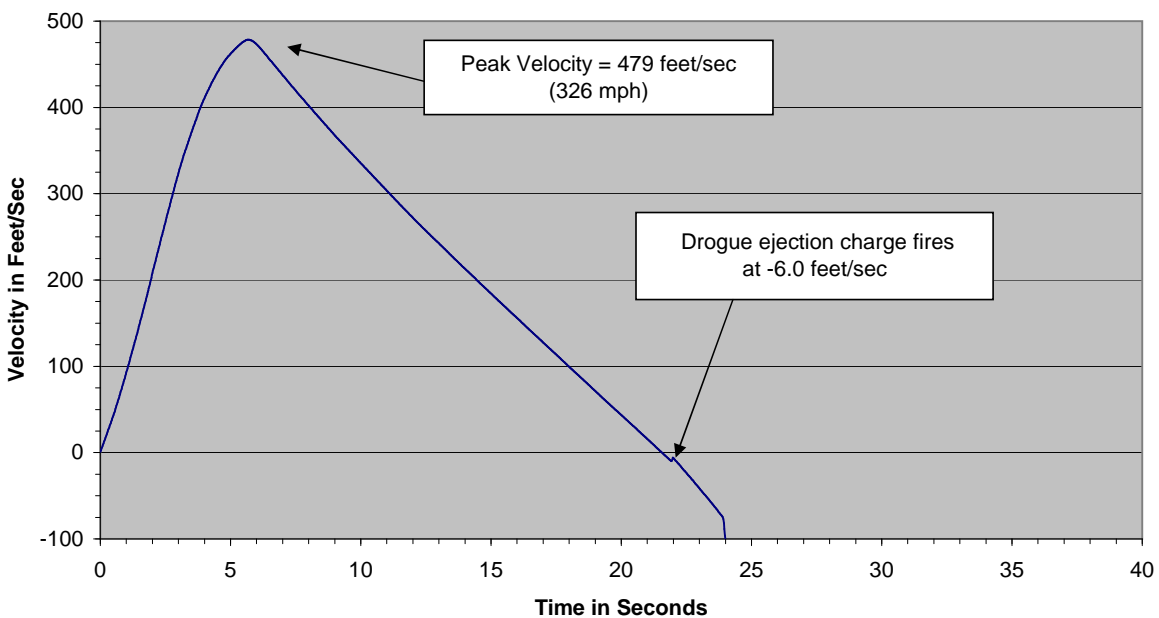
Angelfire Acceleration June 18, 2006 L952W motor



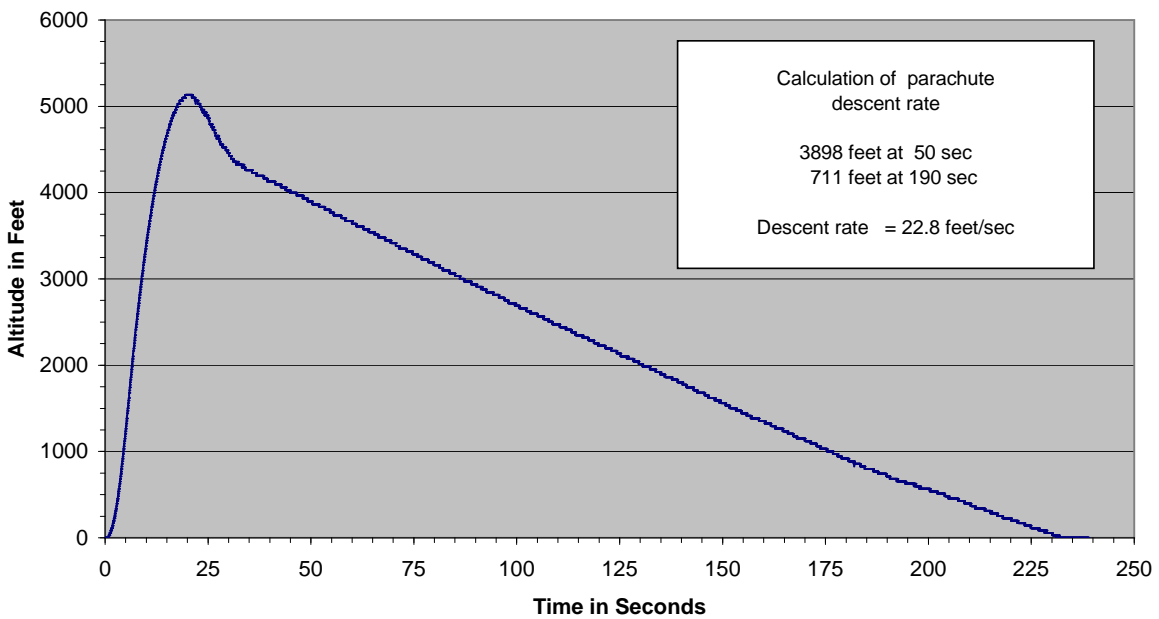
Angelfire Altitude June 18, 2006 L952W motor



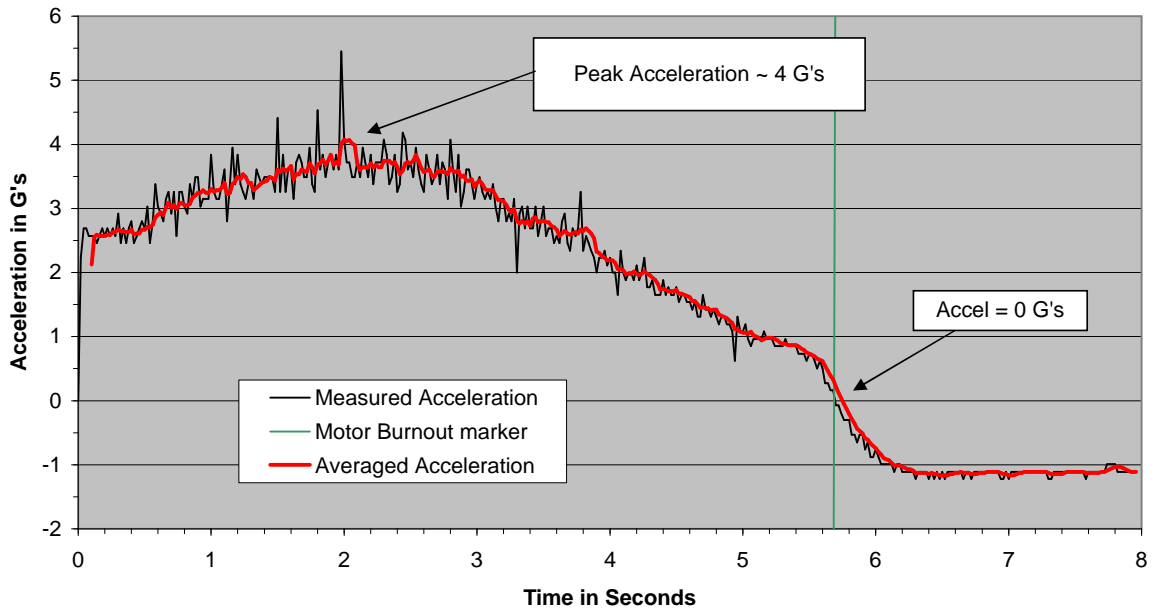
Angelfire Velocity June 18, 2006 L952W motor



Angelfire Altitude June 18, 2006 L952W motor



Angelfire Acceleration June 18, 2006 L952W motor



AeroTech L952W Nominal Thrust Curve

