

AEROTECH F52

CERTIFIED VALUES

Total Impulse: 78 newton-seconds
Delays: 5, 8, 11 seconds

Propellant Type: Composite
Propellant Mass: 36.6 grams

Casing Dimensions: 29 mm × 124 mm

Certification Date: 98-September-1
Contest Use Date: 98-October-31

Certification Type: Model Rocket

STATIC TEST DATA

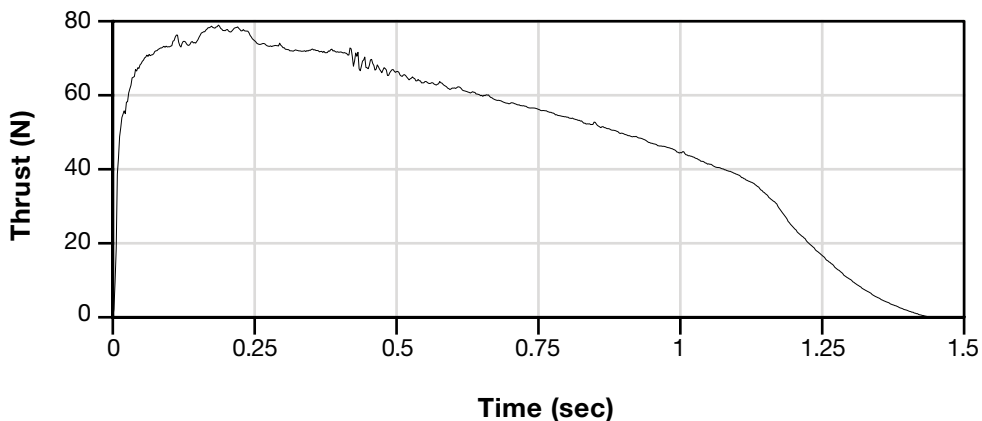
Date Tested: 98-August-29

Total Impulse: 72.95 newton-seconds (σ 0.88)
Peak Thrust: 78.95 newtons (σ 8.22)
Burn Time: 1.42 seconds (σ 0.12)
Average Thrust: 51.37 newtons

Mass After Firing: 77.5 grams

| Delay Time | Average Measured Delay | Initial Mass | Mfg Recommended Max Liftoff Weight |
|------------|------------------------|--------------|------------------------------------|
| 5 | 5.75 | 121.1 g | |
| 8 | 8.85 | 121.6 g | |
| 11 | 11.56 | 121.6 g | |

TYPICAL THRUST-TIME CURVE



REMARKS

Uses AeroTech RMS-29/40-120 Reload System and AeroTech F52 Reload Kit. No substitutions allowed.



; Aerotech F52 RASP.ENG file made from NAR published data
 ; File produced July 4, 2000
 ; The total impulse, peak thrust, average thrust and burn time are
 ; the same as the averaged static test data on the NAR web site in
 ; the certification file. The curve drawn with these data points is as
 ; close to the certification curve as can be with such a limited
 ; number of points (32) allowed with wRASP up to v1.6.

```

F52 29 124 5-8-11 .0366 .1214 A
0.012 46.899
0.033 61.778
0.056 69.441
0.097 73.483
0.115 76.636
0.130 74.381
0.153 74.820
0.168 78.422
0.182 78.950
0.206 77.963
0.238 77.504
0.258 73.892
0.314 72.974
0.390 72.046
0.428 70.679
0.501 65.699
0.565 62.975
0.688 58.874
0.749 56.150
0.837 52.517
0.901 49.793
0.971 46.161
1.088 39.365
1.144 34.386
1.173 29.417
1.222 20.376
1.275 13.151
1.339 5.461
1.389 1.838
1.420 0.000
  
```

