

AEROTECH D13

CERTIFIED VALUES

Total Impulse: 20 newton-seconds
Delays: 4, 7, 10 seconds

Propellant Type: Composite
Propellant Mass: 9.8 grams

Casing Dimensions: 18 mm × 70 mm

Certification Date: 93-August-5
Contest Use Date: 93-November-1

Certification Type: Model Rocket

STATIC TEST DATA

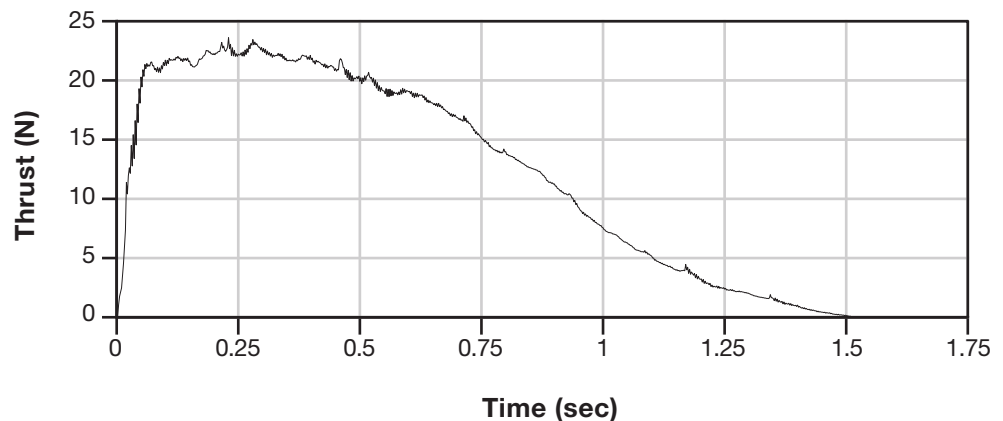
Date Tested: 91-November-3

Total Impulse: 19.26 newton-seconds (σ 0.64)
Peak Thrust: 23.61 newtons (σ 1.63)
Burn Time: 1.52 seconds (σ 0.05)
Average Thrust: 12.67 newtons

Mass After Firing: 18.1 grams

Delay Time	Average Measured Delay	Initial Mass	Mfg Recommended Max Liftoff Weight
4	3.32	31.0 g	454 g
7	6.80	31.4 g	318 g
10	8.27	31.9 g	227 g

TYPICAL THRUST-TIME CURVE



REMARKS

Uses AeroTech RMS-18/20 Reload System and AeroTech D13 Reload Kit. No substitutions allowed.

; Aerotech D13 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.

D13 18 70 4-7-10 0.0098 0.0314 A

0.030	13.462
0.061	21.171
0.085	20.618
0.127	21.605
0.158	21.042
0.182	22.306
0.217	22.592
0.227	23.610
0.248	21.891
0.279	23.155
0.317	22.039
0.366	21.338
0.383	21.901
0.449	20.648
0.462	21.486
0.480	19.947
0.507	19.947
0.521	20.509
0.559	18.693
0.580	19.118
0.660	17.578
0.743	15.337
0.861	12.406
0.947	9.329
1.068	5.834
1.155	4.158
1.172	4.720
1.231	2.762
1.328	1.928
1.404	1.093
1.520	0.000

