

AEROTECH E30

CERTIFIED VALUES

Total Impulse: 40 newton-seconds
Delays: 4, 7 seconds

Propellant Type: Composite
Propellant Mass: 19.3 grams

Casing Dimensions: 24 mm × 70 mm

Certification Date: 88-April-18
Contest Use Date: 88-July-17

Certification Type: Model Rocket

STATIC TEST DATA

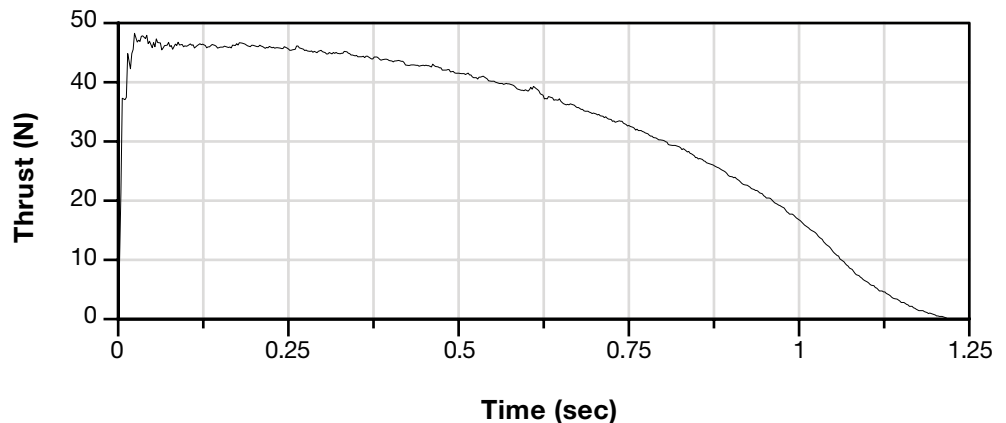
Date Tested: 95-September-3

Total Impulse: 39.51 newton-seconds (σ 0.29)
Peak Thrust: 48.27 newtons (σ 0.81)
Burn Time: 1.22 seconds (σ 0.01)
Average Thrust: 32.38 newtons

Mass After Firing: 19.8 grams

Delay Time	Average Measured Delay	Initial Mass	Mfg Recommended Max Liftoff Weight
4	4.25	43.4 g	454 g
7	6.56	43.2 g	301 g

TYPICAL THRUST-TIME CURVE



REMARKS

; Aerotech E30 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.

E30	24	70	4-7	.0198	.0433	A
0.013	38.8470					
0.020	45.6210					
0.041	48.2700					
0.059	46.5020					
0.110	46.5020					
0.166	45.9120					
0.184	46.7920					
0.217	45.9120					
0.265	45.9120					
0.319	45.0310					
0.383	44.1500					
0.482	42.0890					
0.594	38.8470					
0.615	39.4370					
0.628	37.3760					
0.684	35.3140					
0.742	33.2630					
0.804	30.0210					
0.880	25.6070					
0.962	20.0140					
1.038	12.9490					
1.089	7.3580					
1.151	3.2370					
1.186	1.1760					
1.220	0.0000					

