

NAR OFFICIAL CERTIFICATION LABORATORY

MODEL ROCKET ENGINE TESTING REPORT

Manufacturer and Type: AEROTECH E18 RELOADABLE

Effective Dates: NAR Certification: Dec 23, 1993 Contest Use: Mar 23, 1994

Certified Total Impulse (N-sec): 39.00 Delay Times: 4, 8, 10

Propellant Type: Composite Propellant Mass (gm): 20.7

Casing Diameter (mm): 24 Casing Length (mm): 70

- - - - - STATIC TEST DATA - - - - -

Number Tested: 12 Casing Date Codes: None
Date Tested: Nov 91 & May 92 Test Temp (°C): 22 Elevation (ft): 100
Total Impulse (N-sec): 36.54 std. deviation: 0.95
Peak Thrust (newtons): 30.08 std. deviation: 1.13
Burn Time (seconds): 2.14 std. deviation: 0.07
Casing Burnt Mass (gm): 31.5 Max Casing External Temp (°C): under 200

| | | | |
|---------------------|------|------|-------|
| Delay Time (sec) | 4 | 8 | 10 |
| Initial Mass (gm) | 58.9 | 58.8 | 59.0 |
| Avg. Measured Delay | 3.87 | 8.14 | 10.79 |

Remarks: Uses AEROTECH RMS-24/40 Reload System and AEROTECH E18 Reload Kit. No substitutions allowed.

Typical Thrust - Time Curve:

