

NAR OFFICIAL CERTIFICATION LABORATORY

HIGH POWER ROCKET ENGINE TESTING REPORT

Manufacturer and Type: AMW M1900

Effective Dates: NAR Certification: 4/1/04

Certified Total Impulse (N-Sec): 6100

Delay Times: Plugged

Propellant Type: Blue Baboon

Propellant Mass (GM): 2733

Casing Diameter (MM): 75

Casing Length (MM): 785

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

Number Tested: 2

Casing Date Codes: None

Date Tested: 3/27/04

Test Temp (°c): 17

Elevation (FT): 200

Total Impulse (N-Sec): 6040.87

std. deviation: 50.64

Peak Thrust (Newtons): 2324.70

std. deviation: 160.28

Burn Time (Seconds): 3.23

std. deviation: 0.16

Casing Burnt Mass (GM): 2505.1

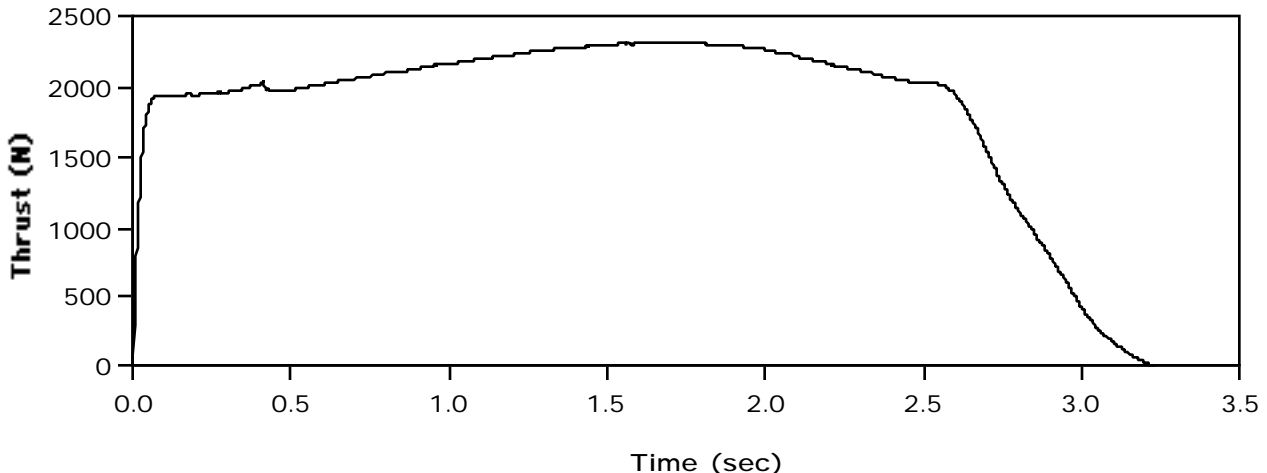
Max Casing External Temp (°c): under 200

Delay Time (sec)	Plugged
Initial Mass (gm)	5422.5
Avg. Measured Delay	None

Remarks:

Uses the 75-6000 motor case Smoke (how long)

Typical Thrust - Time Curve:



John Kane
NAR S&T Committee Chairman

; AMW M1900 RASP.ENG file made from NAR published data
 ; File produced April 19, 2004
 ; 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.

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M1900 75 785 P 2.733 5.4225 AMW
0.018 1109.215
0.044 1761.753
0.061 1910.647
0.085 1938.624
0.159 1929.634
0.290 1956.615
0.409 2031.562
0.438 1974.602
0.569 2011.576
0.815 2104.510
1.073 2197.444
1.401 2280.386
1.688 2324.700
1.905 2297.374
2.073 2241.413
2.254 2138.486
2.397 2063.539
2.479 2016.572
2.540 2025.566
2.581 2006.579
2.630 1885.666
2.716 1493.942
2.805 1120.207
2.887 840.605
2.972 569.996
3.046 299.488
3.119 150.193
3.168 56.829
3.230 0.000
  
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