

NAR OFFICIAL CERTIFICATION LABORATORY

HIGH POWER ROCKET ENGINE TESTING REPORT

Manufacturer and Type: AMW K700

Effective Dates: NAR Certification: 4/1/04

Certified Total Impulse (N-Sec): 1650

Delay Times: Plugged

Propellant Type: Blue Baboon

Propellant Mass (GM): 745

Casing Diameter (MM): 54

Casing Length (MM): 430

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

Number Tested: 3

Casing Date Codes: None

Date Tested: 3/27/04

Test Temp (°c): 17

Elevation (FT): 200

Total Impulse (N-Sec): 1607.60

std. deviation: 34.78

Peak Thrust (Newtons): 847.06

std. deviation: 102.29

Burn Time (Seconds): 2.24

std. deviation: 0.20

Casing Burnt Mass (GM): 739

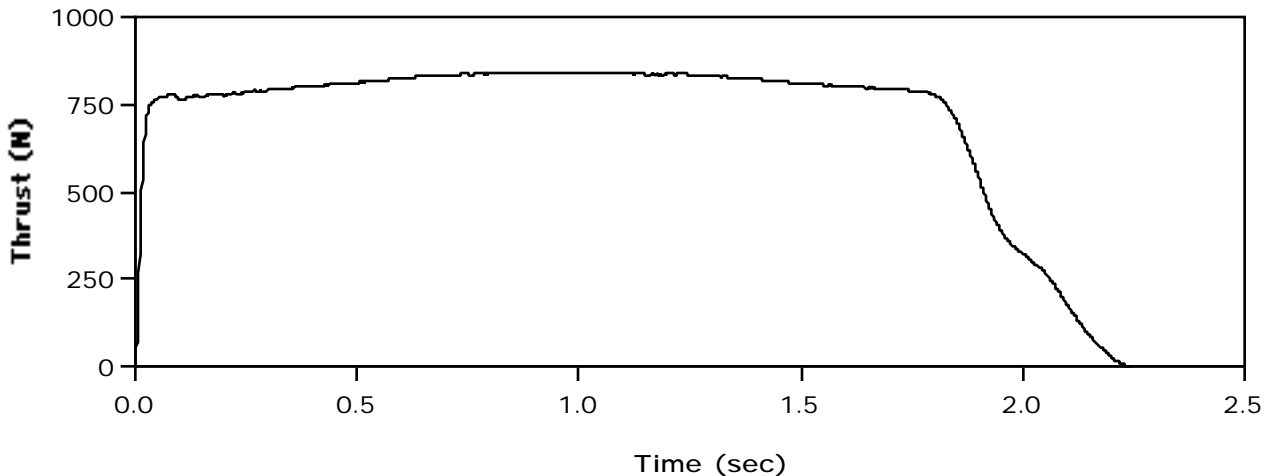
Max Casing External Temp (°c): under 200

Delay Time (sec)	Plugged
Initial Mass (gm)	1483.1
Avg. Measured Delay	None

Remarks:

Uses the 54-1400 case

Typical Thrust - Time Curve:



John Kane
NAR S&T Committee Chairman

; AMW K700 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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K700 54 430 P .754 1.4831 AMW
0.014 359.559
0.022 625.425
0.030 737.756
0.047 771.505
0.082 786.516
0.106 771.505
0.144 775.233
0.272 786.516
0.477 812.710
0.693 842.632
0.970 847.060
1.283 838.904
1.516 816.438
1.706 801.427
1.779 793.972
1.811 775.233
1.841 726.573
1.873 625.425
1.909 509.367
1.950 393.208
1.982 337.093
2.035 292.160
2.073 228.489
2.111 153.535
2.155 86.137
2.193 37.446
2.240 0.000
  
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