

NAR OFFICIAL CERTIFICATION LABORATORY

HIGH POWER ROCKET ENGINE TESTING REPORT

Manufacturer and Type: AMW K560

Effective Dates: NAR Certification: 4/1/04

Certified Total Impulse (N-Sec): 1480

Delay Times: Plugged

Propellant Type: Red Rhino

Propellant Mass (GM): 750

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): 1473.47

std. deviation: 6.98

Peak Thrust (Newtons): 625.73

std. deviation: 10.29

Burn Time (Seconds): 2.62

std. deviation: 0.04

Casing Burnt Mass (GM): 782.2

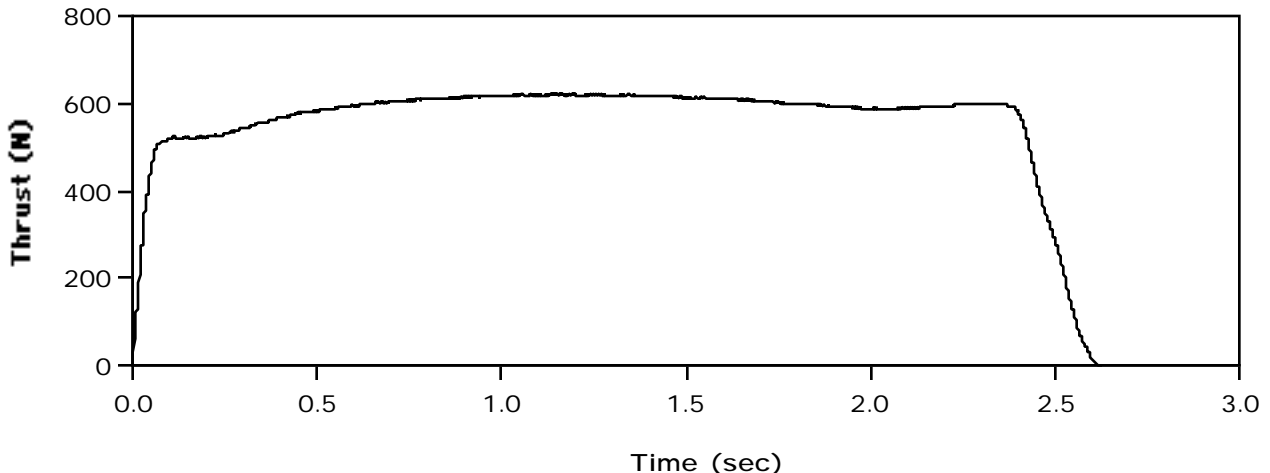
Max Casing External Temp (°c): under 200

Delay Time (sec)	Plugged
Initial Mass (gm)	1586.6
Avg. Measured Delay	None

Remarks:

Uses 54-1400 motor case

Typical Thrust - Time Curve:



*John Kane*  
NAR S&T Committee Chairman

; AMW K560 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.

```

K560 54 430 P .750 1.5866 AMW
0.023 229.130
0.046 415.135
0.059 485.264
0.078 512.268
0.106 525.670
0.154 523.050
0.211 528.390
0.261 536.451
0.369 560.734
0.511 587.738
0.657 603.860
0.770 612.022
1.096 625.750
1.358 620.083
1.627 612.022
1.839 603.860
2.057 590.459
2.218 598.520
2.335 609.301
2.385 601.240
2.407 585.018
2.426 533.831
2.467 385.511
2.507 283.037
2.542 164.441
2.576 67.399
2.595 29.653
2.620 0.000
  
```

