

NAR OFFICIAL CERTIFICATION LABORATORY

HIGH POWER ROCKET ENGINE TESTING REPORT

Manufacturer and Type: AMW L1080

Effective Dates: NAR Certification: 4/1/04

Certified Total Impulse (N-Sec): 3700

Delay Times: Plugged

Propellant Type: Blue Baboon

Propellant Mass (GM): 1717

Casing Diameter (MM): 75

Casing Length (MM): 497

----- 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): 3686.19

std. deviation: 19.43

Peak Thrust (Newtons): 1257.91

std. deviation: 10.95

Burn Time (Seconds): 3.39

std. deviation: 0.02

Casing Burnt Mass (GM): 1879.6

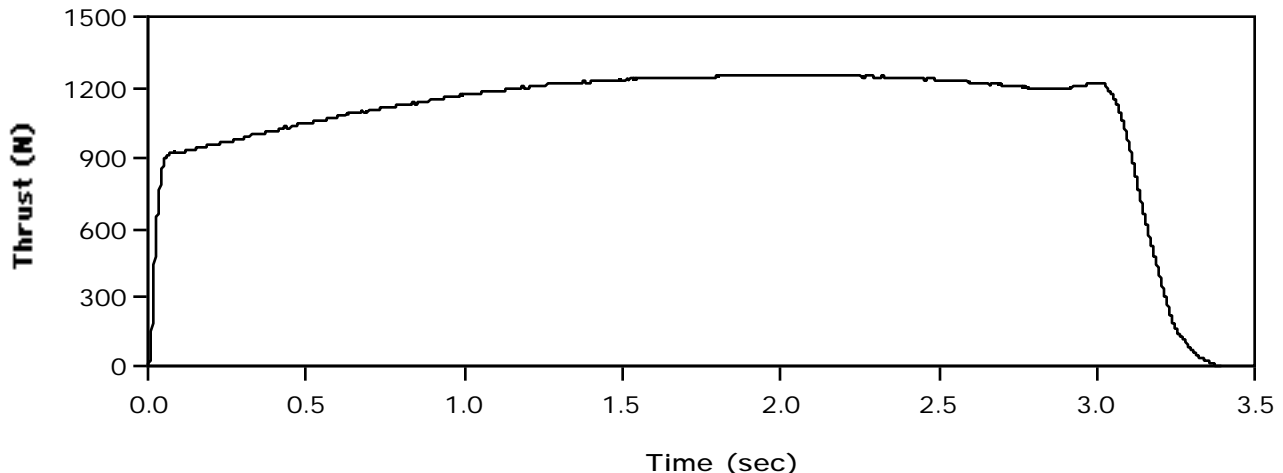
Max Casing External Temp (°c): under 200

Delay Time (sec)	Plugged
Initial Mass (gm)	3592.2
Avg. Measured Delay	None

Remarks:

Uses the 75-3500 motor case

Typical Thrust - Time Curve:



John Kane
NAR S&T Committee Chairman

; AMW L1080 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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L1080 75 497 P 1.717 3.5922 AMW
0.024 406.295
0.043 812.489
0.052 895.202
0.088 929.641
0.314 991.550
0.626 1087.695
0.988 1163.440
1.346 1218.986
1.638 1246.254
1.864 1257.910
2.247 1254.839
2.600 1218.986
2.766 1211.917
2.851 1197.778
2.942 1204.847
3.002 1226.056
3.033 1204.847
3.089 1040.228
3.124 874.499
3.150 660.999
3.191 461.336
3.232 275.408
3.268 144.622
3.303 75.744
3.339 41.316
3.390 0.000
  
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