

NAR OFFICIAL CERTIFICATION LABORATORY

HIGH POWER ROCKET ENGINE TESTING REPORT

Manufacturer and Type: AMW J480

Effective Dates: NAR Certification: 4/1/04

Certified Total Impulse (N-Sec): 1165

Delay Times: Plugged

Propellant Type: Blue Baboon

Propellant Mass (GM): 556

Casing Diameter (MM): 54

Casing Length (MM): 326

----- 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): 1161.15

std. deviation: 5.31

Peak Thrust (Newtons): 543.15

std. deviation: 7.48

Burn Time (Seconds): 2.49

std. deviation: 0.09

Casing Burnt Mass (GM): 655.8

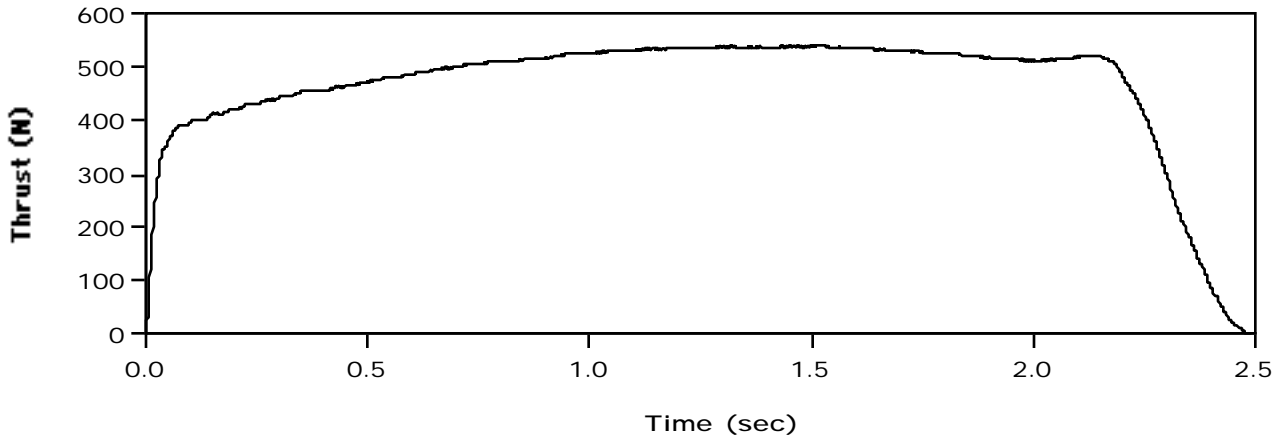
Max Casing External Temp (°c): under 200

Delay Time (sec)	Plugged
Initial Mass (gm)	1213.1
Avg. Measured Delay	None

Remarks:

Uses the 54-1050 motor case

Typical Thrust - Time Curve



John Kane
NAR S&T Committee Chairman

; AMW J480 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.

Time (sec)	Thrust (N)
J480	54 326 P .5560 1.2131 AMW
0.015	225.429
0.041	348.180
0.071	388.127
0.194	422.453
0.385	459.490
0.699	502.347
0.968	528.042
1.200	536.573
1.454	543.150
1.674	533.763
1.887	522.321
2.044	519.410
2.108	525.131
2.164	528.042
2.197	488.095
2.250	419.543
2.283	333.928
2.328	231.150
2.354	176.950
2.392	111.309
2.418	68.501
2.436	37.106
2.490	0.000

