

NAR OFFICIAL CERTIFICATION LABORATORY

HIGH POWER ROCKET ENGINE TESTING REPORT

Manufacturer and Type: AMW K605

Effective Dates: NAR Certification: 4/4/04

Certified Total Impulse (N-Sec): 2410

Delay Times: Plugged

Propellant Type: Red Rhino

Propellant Mass (GM): 1231

Casing Diameter (MM): 75

Casing Length (MM): 368

----- 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): 2401.13

std. deviation: 7.44

Peak Thrust (Newtons): 737.58

std. deviation: 10.69

Burn Time (Seconds): 3.95

std. deviation: 0.04

Casing Burnt Mass (GM): 1539.9

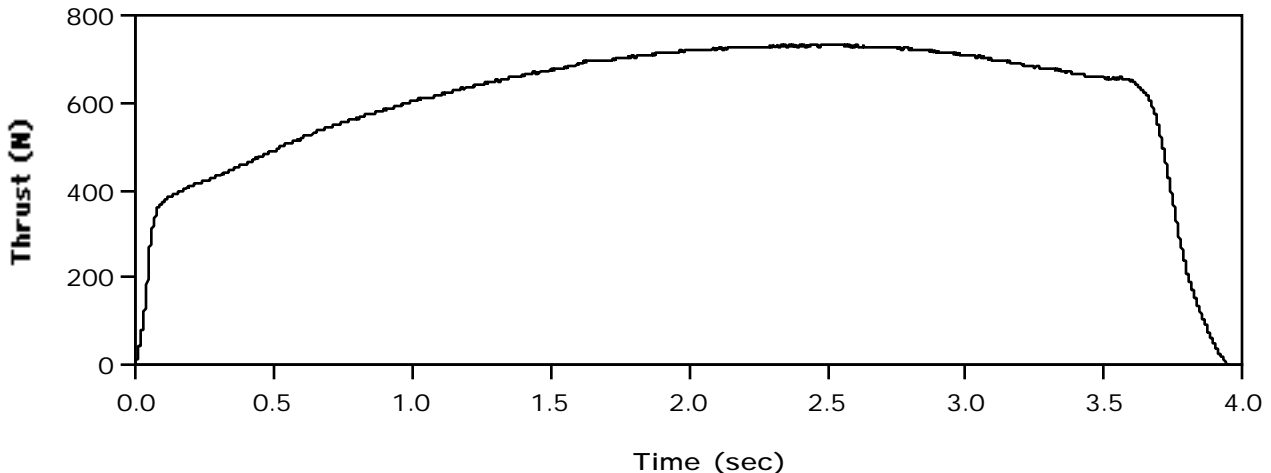
Max Casing External Temp (°c): under 200

| | |
|---------------------|---------|
| Delay Time (sec) | Plugged |
| Initial Mass (gm) | 2768.8 |
| Avg. Measured Delay | None |

Remarks:

Uses the 75-2500 motor case

Typical Thrust - Time Curve:



John Kane
NAR S&T Committee Chairman

; AMW K605 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.

| | | | | | | |
|-------|---------|-----|---|-------|--------|-----|
| K605 | 75 | 368 | P | 1.231 | 2.7688 | AMW |
| 0.030 | 165.845 | | | | | |
| 0.053 | 309.120 | | | | | |
| 0.077 | 361.916 | | | | | |
| 0.142 | 392.042 | | | | | |
| 0.527 | 501.412 | | | | | |
| 0.988 | 606.905 | | | | | |
| 1.515 | 682.370 | | | | | |
| 2.101 | 730.593 | | | | | |
| 2.355 | 737.580 | | | | | |
| 2.692 | 731.289 | | | | | |
| 3.000 | 712.497 | | | | | |
| 3.361 | 671.036 | | | | | |
| 3.503 | 663.479 | | | | | |
| 3.586 | 659.701 | | | | | |
| 3.645 | 633.353 | | | | | |
| 3.692 | 573.000 | | | | | |
| 3.734 | 444.838 | | | | | |
| 3.775 | 297.785 | | | | | |
| 3.828 | 162.066 | | | | | |
| 3.864 | 98.015 | | | | | |
| 3.905 | 41.471 | | | | | |
| 3.950 | 0.000 | | | | | |

