

# AEROTECH F39

## CERTIFIED VALUES

Total Impulse: 50 newton-seconds  
Delays: 3, 6, 9 seconds

Propellant Type: Composite  
Propellant Mass: 22.7 grams

Casing Dimensions: 24 mm × 70 mm

Certification Date: 94-April-10  
Contest Use Date: 94-July-9

Certification Type: Model Rocket

## STATIC TEST DATA

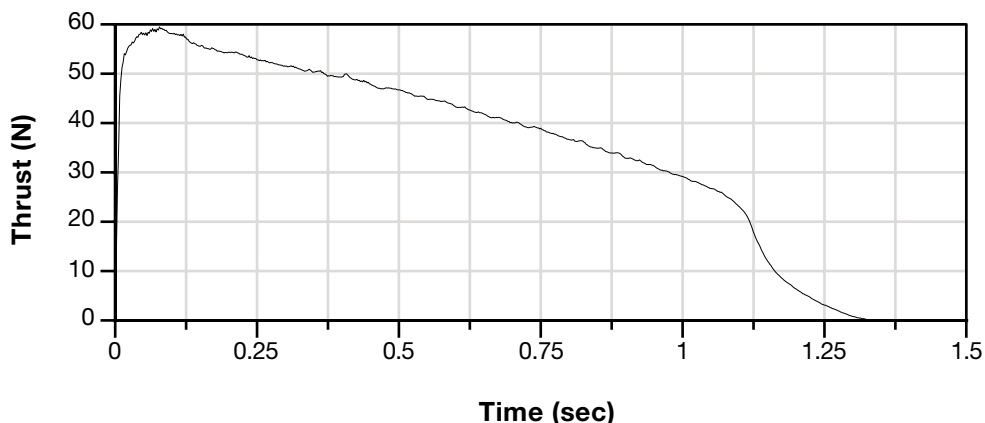
Date Tested: 94-April-9

Total Impulse: 49.66 newton-seconds ( $\sigma$  0.49)  
Peak Thrust: 59.47 newtons ( $\sigma$  5.29)  
Burn Time: 1.33 seconds ( $\sigma$  0.05)  
Average Thrust: 37.34 newtons

Mass After Firing: 30.3 grams

Delay Time	Average Measured Delay	Initial Mass	Mfg Recommended Max Liftoff Weight
3	3.17	59.3 g	511 g
6	6.27	60.0 g	397 g
9	9.56	60.6 g	255 g

## TYPICAL THRUST-TIME CURVE



## REMARKS

Uses AeroTech RMS-24/40 Reload System and AeroTech F39 Reload Kit. No substitutions allowed.



; Aerotech F39 RASP.ENG file made from NAR published data  
 ; File produced July 4, 2000  
 ; 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.

```

F39 24 70 3-6-9 .0227 .0600 A
0.010 45.057
0.016 54.131
0.046 58.321
0.079 59.470
0.103 58.311
0.130 57.253
0.172 55.491
0.235 53.738
0.321 51.271
0.363 50.566
0.387 49.509
0.408 50.203
0.426 48.804
0.453 47.746
0.480 47.041
0.680 41.059
0.716 39.649
0.752 38.944
0.809 36.487
0.860 34.382
0.893 33.324
0.917 32.619
1.000 28.752
1.075 25.247
1.105 22.095
1.126 17.201
1.144 13.001
1.174 8.109
1.219 4.606
1.261 2.500
1.330 0.000
  
```

