

# NCR G70

## CERTIFIED VALUES

Total Impulse: 90 newton-seconds  
Delays: 5, 7, 10 seconds

Propellant Type: Composite  
Propellant Mass: 62.0 grams

Casing Dimensions: 29 mm × 103 mm

Certification Date: 98-August-1  
Contest Use Date: 98-October-7

Certification Type: Model Rocket

## STATIC TEST DATA

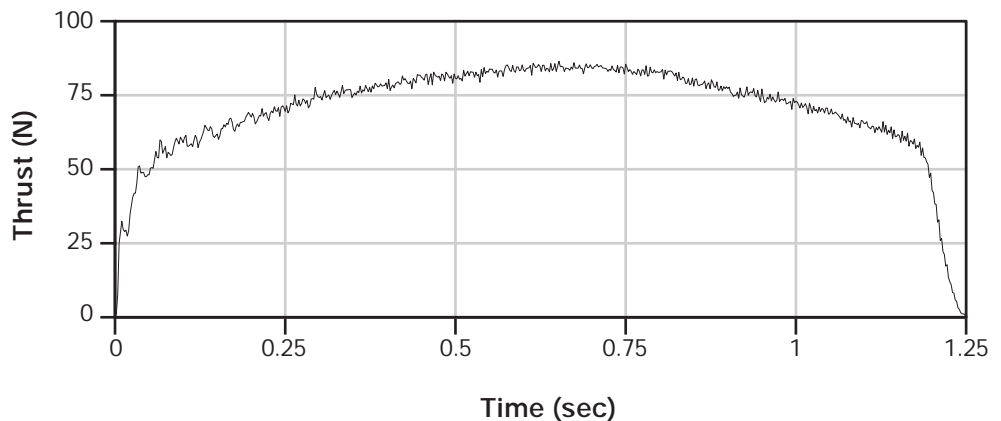
Date Tested: 96-June-2

Total Impulse: 87.88 newton-seconds ( $\sigma$  0.47)  
Peak Thrust: 86.50 newtons ( $\sigma$  1.04)  
Burn Time: 1.25 seconds ( $\sigma$  0.02)  
Average Thrust: 70.30 newtons

Mass After Firing: 53.6 grams

Delay Time	Average Measured Delay	Initial Mass	Mfg Recommended Max Liftoff Weight
5	4.13	120.0 g	
7	6.80	121.0 g	
10	9.78	121.8 g	

## TYPICAL THRUST-TIME CURVE



## REMARKS

The 10 second delay was certified on 98-September-1.

; NCR G70 RASP.ENG file made from NAR published data  
; File produced December 7, 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.

```
G70 29 103 5-7-10 .0620 .1209 NCR  
0.009 23.676  
0.015 33.423  
0.024 27.847  
0.036 48.736  
0.051 47.342  
0.070 59.877  
0.085 55.695  
0.118 59.877  
0.170 65.442  
0.242 71.018  
0.327 75.886  
0.406 79.371  
0.463 80.765  
0.530 82.159  
0.590 84.25  
0.648 86.5  
0.711 84.25  
0.772 83.553  
0.848 79.371  
0.905 77.28  
0.944 74.502  
1.026 69.624  
1.099 65.442  
1.132 62.664  
1.171 59.877  
1.186 56.392  
1.202 40.382  
1.214 23.676  
1.226 11.838  
1.250 0
```

