



Tripoli Motor Testing Division
223 NC Highway 54 West
Chapel Hill, NC 27514
(919) 357 5681 (c)

April 29, 2020

Gary Rosenfield
RCS Rocket Motor Components, Inc.
2113 West 850 North Street
Cedar City, UT 84721

Dear Mr. Rosenfield,

The Aerotech I175WS-13A DMS motor was tested on April 22, 2020 and is in compliance with NFPA 1125. The motor is certified for hobby rocketry use by the members of the Tripoli Rocketry Association and all approving organizations with reciprocal certifying agreements.

Motor Manufacturer	Aerotech Division, RCS Rocket Motor Components	
Manufacturer's Designation	I175WS-13A DMS [user selectable delays]	
Propellant	Super White Lightning	
TMT Nomenclature	333 I176	
Diameter	1.499"	38.07 mm
Overall Length	8.406"	213.52 mm
L Inside Thrust Ring	8.000"	203.2 mm
L Outside Thrust Ring	0.406"	10.32 mm
Loaded Mass	0.766 lb	347.5 g
Propellant Mass	?*	?
Burnout Mass	0.345 lb	156.7 g
* = unknown.		
Burn time	1.886 ± 0.031 sec	
Total Impulse	74.87 ± 1.326 lbf.s	333.04 ± 5.898 N.s
Max Impulse	58.543 ± 0.331 lbf	260.41 ± 1.47 N
Average Impulse	39.668 ± 0.464 lbf	176.45 ± 2.06 N

Number of Motors Tested

4

Delay Time Data

Nominal

13 s

Measured

10.658 s

9 s

9.85, 8.688 s

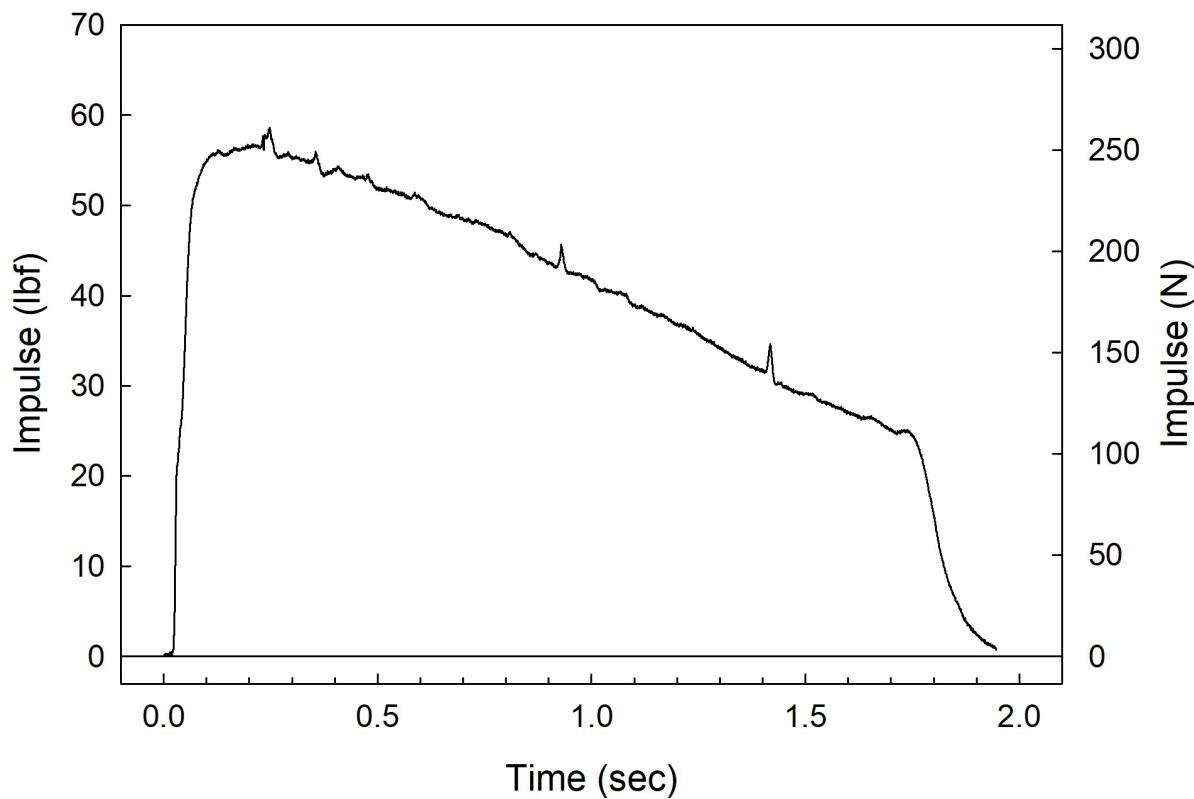
5 s

5.358 s

Casing Temp. [NFPA 1125 7.4.1]

Passed

Aerotech I175WS-13A DMS



Sincerely,

Alan C. Whitmore
Chair, Tripoli Motor Testing