August 14, 2020

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

Dear Mr. Rosenfield,

The Aerotech J99N-P redesigned reload kit was tested on August 14, 2020 and complies 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: RCS Rocket Motor Components, Inc.  
Manufacturer’s Designation: J99N-P [reload kit for the 54/852 hardware]  
Propellant: Warp 9  
TMT Nomenclature: 935 J87

Diameter: 2.127”  54 mm  
Overall Length: 9.467”  240.46 mm  
Length inside MMT: 9.090”  230.89 mm

Loaded Mass: 1.970 lb  893.51 g  
Propellant Mass: 1.0576 lb*  479.7 g*  
Burnout Mass: 0.8585 lb  389.4 g  
* = data provided by manufacturer

Burn time: 10.773 ± 0.357 sec

Total Impulse: 210.25 ± 2.35 lbf.s  935.24 ± 10.47 N.s  
Max Impulse: 28.61 ± .59 lbf  127.24 ± 2.61 N  
Average Impulse: 19.55 ± 0.84 lbf  86.94 ± 3.73 N  
Number of Motors Tested: 3
Delay Timing Data  
n.a.

Casing Temp. [NFPA 1125 7.4.1]  
Passed

Sincerely,

Alan C. Whitmore  
Chair, Tripoli Motor Testing