

Tripoli Motor Testing 7680 County Road 74 Windsor, CO 80550

October 16, 2025

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

Dear Mr. Rosenfield,

The AeroTech J550ST-14 RMS™ motor was successfully tested on October 6th, 2025 and complies with NFPA 1125 requirements. This motor is certified for hobby rocketry use in the configuration it was assembled and tested for the members of the Tripoli Rocketry Association and all approving organizations with reciprocal agreements.

Motor Manufacturer: RCS Rocket Motor Components, Inc.

Manufacturer's Designation: J550ST-14

Propellant: Super Thunder™

TMT Nomenclature: J557 (732 N-Sec)

Diameter: 54mm (2.12")

Overall Length: **231mm (9.11")** Motor Hardware: **RMS™ 54/852**

Loaded Mass: Loaded Weight: 828g (1.82 lbs.)

Propellant Mass: 371g (0.82 lbs.) Burnout Mass: 457g (1.00 lbs.)

Burn Time: 1.31 Seconds

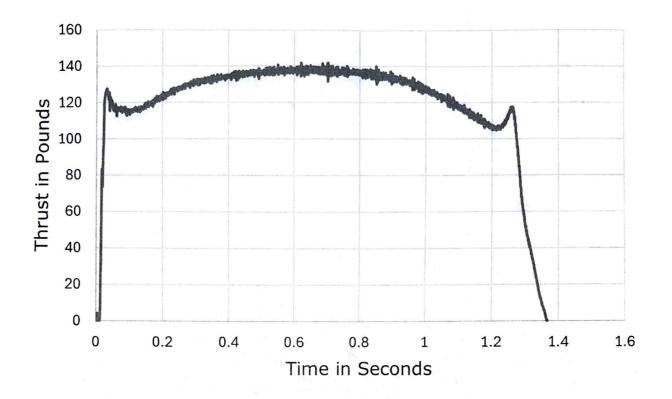
Total Impulse: **732 N-sec (164.56 lb.)** Max Impulse: **649 N-Sec (145.90 lb.)**

Average Impulse: 557 N-sec (125.21 lb-sec.)

Delay Time Data: 14 Seconds Only (not adjustable) or Plugged Forward Closure

Case Temp: Aft <77°C/171°F Fwd <77°C/171°F (NFPA 1125 7.4.1 220°C/428°F)

Number of Motors Tested: 6



Sincerely,

Art Hoag

Chair, Tripoli Motor Testing

ahoag@tripoli.org