Tripoli Certification Announcement

From: Paul Holmes

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To all,

I am pleased to announce new motor certifications and approval of a new motor system from AeroTech/RCS, Gary Rosenfield, head chef. AeroTech's new Warp Nine propellant features prominently in this announcement as there are three new motor reloads available in this formula.

The H669N-P is a two-grain version of the first motor (H999N) in the 38mm family of Warp Nine motors, with a 0.35 second burn time. This motor comes in as a 38% H motor with a 220 lb impulse spike at ignition, a sustained flat burn "square wave" curve at 160 pounds sustained thrust for 0.35 seconds, tailing to 120 lbs and then dropping immediately to zero at 0.34 seconds. The motor does not come with a certified delay as the speed of the Warp Nine propellant has a tendency to snuff delays, and the delay supplied is intended as a smoke device only.

Also in this new propellant line are the 54/852 and 54/1280 case offerings.

The J1423N-P is a two-grain 54mm BATES motor and comes in as a 32% J motor with a total impulse of 190 pound-seconds. The thrust profile is similar to the H669N and the H999N as a square wave rising to 350 pounds thrust, maintaining that for 0.45 seconds, dropping to 275 pounds until zeroing out at the 0.59 second point.

The J2135N-P is the 3-grain member of the 54mm Warp Nine family. This motor comes in as a 97% J (284.0 pound-second) offering. The curve is equally impressive with a 520 pound thrust square wave profile, maintaining that to 0.46 seconds then dropping to 400 pounds for the next 0.1 second when it tails to zero at the 0.59 second point. The flame is a white, yellow, orange with infinite mach diamonds, although as this is a "get up and go" motor, you may not have time to notice such details. This is definitely a high performance formula and as it is being offered in the smaller 38mm sizes (and there could be more), this gives a great many flyers the opportunity to 'push the envelope'.

The K250W-P has been redesigned from its single-use offering, and is the first Loadable Motor System (LMS) load. The Loadable Motor System is supplied as a case, all the bits required to assemble the motor with the exception of the closures (a standard 54mm aft closure, and extended plugged forward closure), which are not supplied and are the only reusable parts of the motor. The single piece grain is a modified D/C slot style geometry that comes in a special length aluminum case with phenolic liner, an aft grain spacer ring and an Aluminum forward seal disk. The K250W comes in as an 83% K, 8.6 second burn motor. The profile is a rise to 80 pounds of thrust, maintaining that to the 4 second point where there is a straight tail-off from 80 pounds to zero over the final 4.6 seconds.

Congrats to Gary and his team!!!!

Paul Holmes
Chairman, Tripoli Motor Testing