

# TMO April 2020 Launch Report



Saturday, April 23<sup>rd</sup> turned out to be the perfect day for flying rockets at Tripoli Mid-Ohio's launch site in Springfield.

Mark Coburn (left) attempted to fly his LOC "Magnum" on a Research L900 motor but the motor blew out its forward closure at ignition and the rocket never left the pad. Not much damage to the rocket though.

Steve Eves (right) flew his 4" scratch built rocket aptly named "Pieces and Parts" to 2800 feet on a J400 Research motor.

Chris Pearson (lower left) flew his LOC "Graduator" on a CTI G131 Smoky Sam motor.

The University of Akron rocket team (below) came down to fly their prototype sub-scale two-stage rocket, which was expected to hit 11K feet.







Andrew and Cheryl Kleinhenz (left) pose with his 4" Mac Performance "Scorpion" right before its flight on an ATJ450 Dark Matter motor and it was expected to hit 5K feet. A beautiful flight but it landed in the cover crop to the south of the field and was never recovered.

Steve Eves (left) getting ready to put his 4" "Mad Dog" on the pad. It flew to an altitude of 4600 feet on a Research K700 motor.



Dave Sears (left) with his 4" "X-Celerator" which he flew to 4969 feet with a Research K800 White motor.

Chris Pearson (right) flew his upscale Centuri "Orion" on a CTI H151 Red Lightning motor. Recovery was aided by a Jolly Logic Chute Release.







Mark Coburn (left) flew his 4" "Black Brant" which he nicknamed "Froot Loop" on a Research K500 Purple motor which took it to an altitude of 5308 feet.

Mark Hanna (right) with his 5.5" "Iris" which he flew on an AT K480 motor to an altitude of 4375 feet.

Mark also flew a 4" "Astrobee D" to an altitude of 2430 feet on a CTI J293.



The University of Akron "Akronauts" (left) pose with their two-stage sub-scale rocket which was to be part of the IREC intercollegiate competition to be held at Spaceport USA in New Mexico before COVID-19 cancelled it. The rocket was expected to hit 11.5K feet with a CTI K1440 in the booster and a CTI K250 in the upper stage. However at staging, the sustainer was 1 degree beyond the 15 degree tilting limit and sustainer motor didn't light. All the parts were recovered successfully.





Mark Hanna (above left) with his 4" PML "Patriot" which he flew with an AT I200 motor to an altitude of 1900 feet.

Chris Pearson (left) with a rocket he named "Grey Goose" after his favorite brand of vodka. This rocket was given to him by Andrew Kleinhenz and Chris flew it with a CTI I204 Imax motor to an altitude of 2415 feet.

Steve Eves (above) poses on the pad with his LOC "Magnum" which he flew on a 54mm 5 grain motor using NASSA K2 Fast propellant to an altitude of 4100 feet.



Andrew Kleinhenz (right) poses with his 5.5" scratch-built rocket he calls "High Visibility" which he flew on a 4 grain 54mm Purple Research motor which took it to an altitude of 3996 feet, and it was recovered without a scratch.



Dave Sears (left) with his 4" "Darkstar" right before its flight to 8900 feet on a Research L1200 White motor.



Chris Pearson (right) with his clone of the Centuri Enerjet 2250 sounding rocket which he flew with a cluster of 3 AT E30 motors to a modest altitude of 1426 feet.



Mark Coburn with his LOC HyperLOC, which he flew to an altitude of 4020 feet on a 54mm Research J420 motor.

Mark also flew a LOC EZ-I65 on a 54mm Research J485 motor to an altitude of 5228 feet using NASSA K2 Fast propellant.





A pair of LOC "Caliber ISP" kits! Steve Eves (left) with a rocket that was built back in the 80's by the founder of LOC/Precision, Ron Schultz. He flew it on an AT H238 with the assistance of a Chute Release.



Dave Sears (right) flew his "Caliber ISP" with a Research 54mm I200 White motor to an altitude of 2365 feet.





Chris Pearson with still another Centuri Enerjet clone. This one was a full-scale replica of the original 2650 rocket from the early 70's. Chris flew it with a cluster of three AT F50 motors, which took it to an altitude of 2050 feet. The big difference between this rocket and the original 70's version is that the modern ones have dual deploy instead of apogee deployment. And instead of using balsa wood parts and thin-wall model rocket tubing, they use fiberglass fins, thick-wall tubing and a plastic nose cone in addition to the electronics bay. The down side of this is that the rocket weighs TWICE as much as the original!

In both cluster rockets, all the motors fired with the help of "enhanced" Aerotech igniters.