



# SOUTHWEST OHIO ROCKETRY ASSOCIATION (SORA)

## LAUNCH REPORT MAY 12, 2023

### 1:00PM TO 5:00PM NAR SECTION #624

**Launch Conditions:** Clear skies, temperatures low 70's, gusts to 5MPH

**Total Number of Launches:** 34      **Rockets Recovered:** 34      **Lost:** 0      **Found Rocket (not launched):** 0

**Total Number of 100% Fully Successful Flights** (excluding simple fin breaks on landing, etc.): 32

**Success Rate:** 94%

**Number of Individuals Who Launched Their Rockets:** 10      **Number of Family/Friends/Observers:** 6

**Teams and Competitions:** 0      **Scouts/Home School/4-H:** One 4-H group

**Types and Number of Motors:** 15 total

A: 7    B: 4    C:12    D: 7    E: 1    F: 2    G: 1    H: 0    I: 0    Higher: 0

**Ground Fires:** 0      **Medical Incidents:** 0      **Damage to vehicles/facilities:** 0

**Donations and drink/food sale, sale of merchandise:**

straight out donations: \$38

mugs: 0 at \$10 = \$0

food and drinks: 3 at \$1 = \$3

t-shirts: 1 at \$20 = \$20

stickers: 0 at \$0.25 = \$0.0

**Total: \$ 61.00**

**Rocket Topics and Issues:**

1. What a GREAT day for rocket launching. Even though it was Mother's Day, we had an amazing crowd (which did include several mothers and family members!
2. There were multiple Firsts that occurred during the day.
  - a. Dave successfully launched his first rocket that used a rail system (Nike Smoke on a F26-6 Smokey Joe motor).
  - b. We used the new four foot medium/high power pad that just got welded together. It worked great.
  - c. Owen, a member of the rocket club at the Schilling School for Gifted Children, launched his first rocket. Not to make it easy on himself, he built a two stage Estes Mongoose rocket, and flew it perfectly with cheers from all the onlookers. WELL DONE!
  - d. We also had two other first timers: Alex and Josie. Both successful also!

- e. We did have an issue with the wireless system where a main cable became disconnected from its plug. Easy to repair but not on site.
  - f. We also had a rocket drag race. We put an Estes Birdie up against a Dare to be Square B/C motor versus a Dare to be Square D motor. When we hit the Launch button, nothing happened! Tried again. Nothing. Continuities all good. We disconnected the Birdie and tried again. The two Dare to be Square rockets flew perfectly. Went back to the Birdie and it launched fine. So, maybe the batteries were weak and could do three at a time???
3. Bob launched an Estes Green Eggs with a Jolly Logic Altimeter 2 flight data system. The rocket speed was 126 miles per hour, 9.0 G's of acceleration, max altitude of 313 feet with ejection of the parachute at 294ft, descent speed was 6mph, thrust time 0.63 seconds, with a total flight duration of 36.2 seconds. Amazing the things you can do with an electronic gizmo the size of wine cork.
  4. As usual, I spent WAY too much money at Lee Berry's Merlin Missile Works "rocket parts department store" on site. It is really great Lee comes down to help supply rocketeers with emergency needs during the day and to supply kits for future launches. I've got my next few months booked with building new rockets!

**Next Launch (Special): May 19<sup>th</sup>, Hisey Park**

**Next meeting: Tuesday June 4<sup>th</sup>, meet at Lebanon Library 6:30PM**

**Next Launch: Sunday, June 9<sup>th</sup>, Hisey Park**

**FUN FACTS: HOW MUCH DOG BARF TO USE.....**

**We often get questions about how many recovery wadding sheets or how much "dog barf" to use in a rocket. Paper recovery wadding sheets, and "dog barf" cellulose loose wadding are both treated with fire retardant and used to protect the parachute, shock cord and shroud lines from damage due to the motor ejection charge.**

**For wadding:**

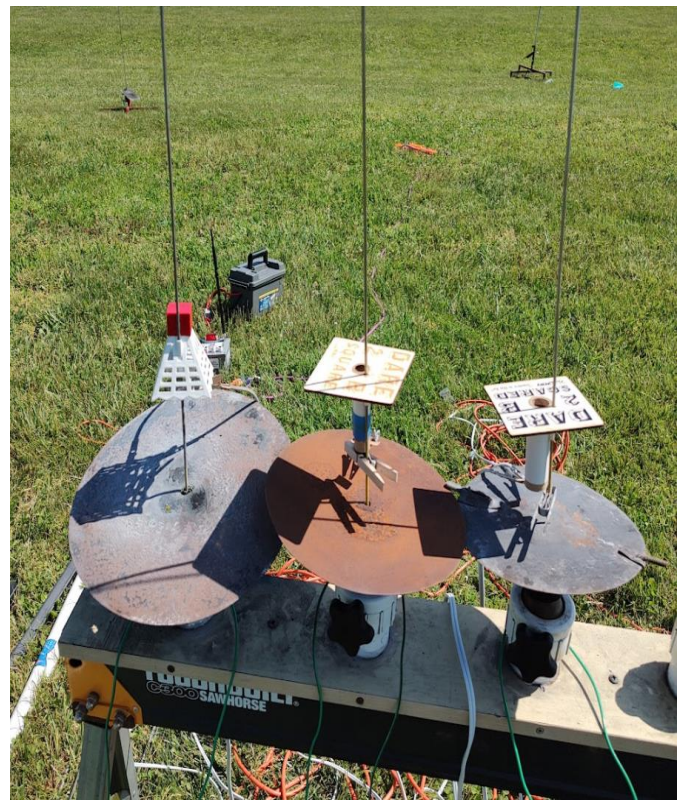
<b>Rocket Diameter in millimeters</b>	<b>Number of sheets (crumpled up)</b>
<b>19</b>	<b>2-3</b>
<b>25</b>	<b>3-4</b>
<b>34</b>	<b>5-6</b>
<b>41</b>	<b>7-8</b>
<b>66</b>	<b>10-11</b>

**For dog barf: Make a cylinder of wadding whose width is the diameter of the rocket airframe, and length that is twice the diameter of the rocket airframe. Don't compress it when inserting it into the rocket. Remember to loosely pack it in the airframe.**

**Remember that you don't have to use single use sheets or wads of treated "dog barf". You can reuse Nomex flame resistant blankets to protect your rocket components over and over again.**



Mom's Day at Southwest Ohio Rocketry Association



Birdie and two Dare To Be Squares drag race



Lee's Square Sword on a D12-3



Love those White Lightning Motors!



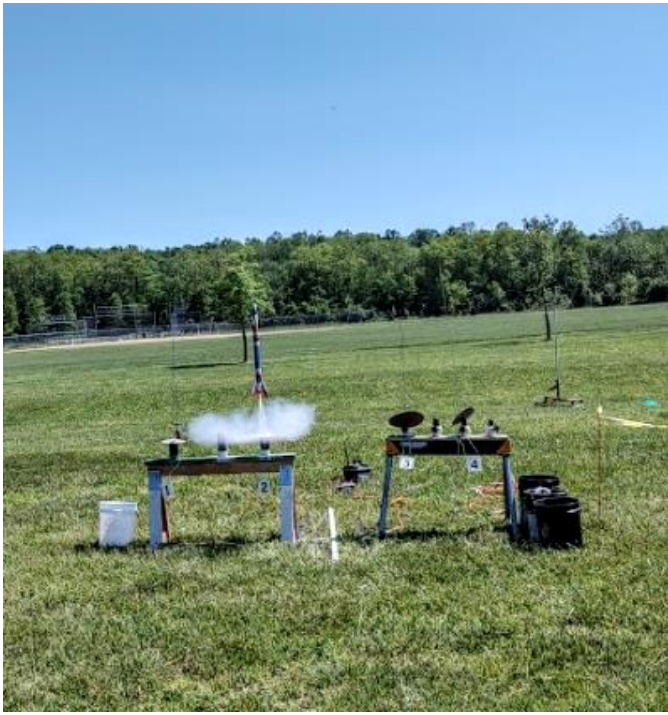
Beautiful day out on the pad.



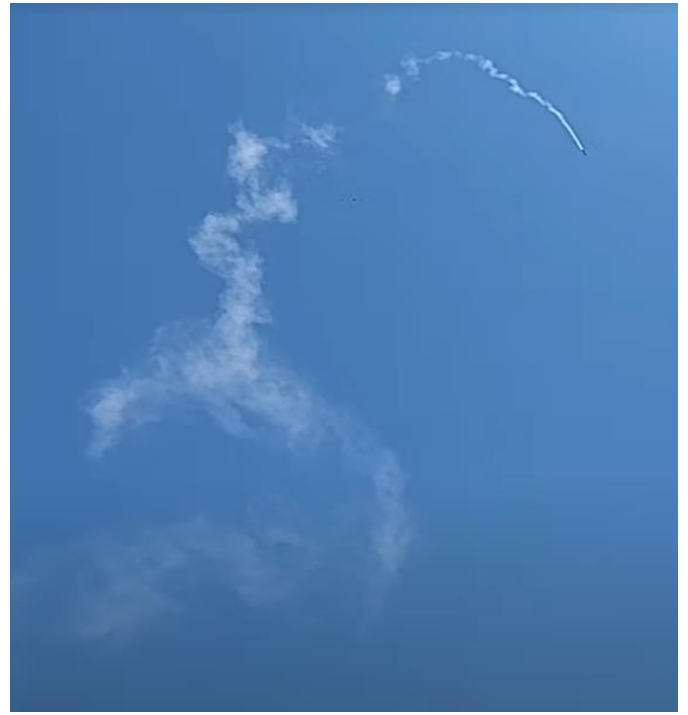
Heading into the sun. Where are those eclipse glasses when you need them?



Super sized Honest John.



**German 1 scratch-built Rocket**



**Apogee and beyond**



**Snarky on the new four foot wide MPR/HPR pad**



**Lee Berry and his granddaughter Elle**



**Never too young to get into rocketry!**

**The Club's Motto.....“Sapientia ducet ad astra” – “Wisdom leads to the stars!”**