SOUTHWEST OHIO ROCKETRY ASSOCIATION (SORA)
LAUNCH REPORT MARCH 17, 2024
1:00PM TO 5:00PM NAR SECTION #624

Launch Conditions: Partly cloudy skies, temperatures low 50's, gusts to 18MPH

Total Number of Launches: 15 **Rockets Recovered:** 15 **Lost:** 0 **Found Rocket (not launched):** 0

Total Number of 100% Fully Successful Flights (excluding simple fin breaks on landing, etc.): 10

Success Rate: 67%

Number of Individuals Who Launched Their Rockets: 7 **Number of Family/Friends/Observers:** 8

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

Types and Number of Motors: 15 total

A: 8 B: 4 C: 2 D: 0 E: 1 F: 0 G: 0 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: $50:50
mugs: 0 at $10 = $10
food and drinks: 0 at $.75 = $0
Total: $ 60.50

t-shirts: 0 at $20 = $40
stickers: 0 @$0.25 = $0.0

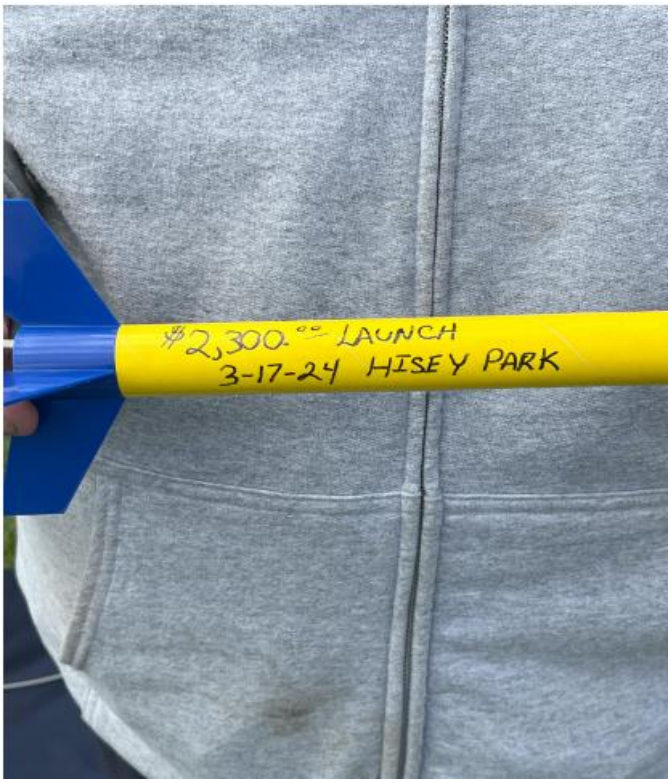
Rocket Topics and Issues:

1. This was an alternate launch date as the original schedule day's weather was bad. Starting off with high gusts of winds, the weather calmed enough to get 15 launches in. There was great camaraderie among everyone who attended. Lots of help was given to new rocketeers and a 4-H member who showed up to launch her first rocket.
2. The new electronic launch system was given its first test with complete success. Thanks to Dani for assisting Robb and Rick with the setup and operation.
3. Lee showed up with multiple interesting rocket configurations pushing the boundaries of thrust, impulse, and Cp/Cg. We always welcome people who do more than simply build a simple kit rocket.
4. There were two parachute failures that were interesting. In both cases, the new chutes ejected fully just fine, no shroud tangles or burn through, no lines around the chute, plastic not sticky, no melting. The

chutes simply did not open. Not sure if the 50 degree temperatures made the plastic stiff (they seemed fine on inspection) or if the wind pushed hard on them sideways to keep them closed.

5. Elijah (who is a Junior Level 1 high powered rocketeer with NAR) flew several rockets all successfully. Well done!

Next meeting: **Tuesday April 2, meet at Lebanon Library 6:30PM**
Next Launch: **Sunday, April 7 Hisey Park**

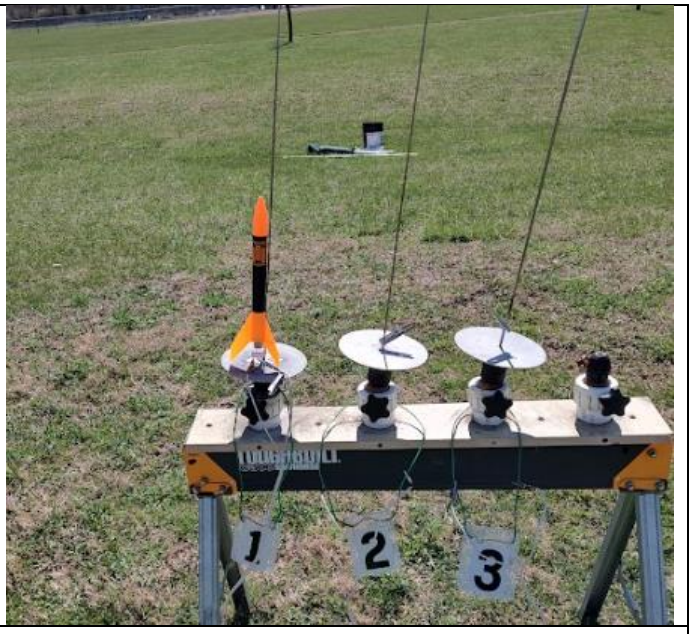
	
Bob and his Estes Rascal	**Was someone expecting to lose their rocket?**

The new wireless launch system controller

The rocket club Master hooking up the Master controller

Dani assisting Robb with the wireless igniter modules

Lee?

	
Klaus prepping his MIM-23 Hawk	**Alpha ready to soar.**

Inventions from the space program (Britannica Encyclopedia)

- Infrared ear thermometer

With support from NASA's Technology Affiliates Program, Diatek Corporation developed a lightweight aural thermometer that measures the amount of energy emitted by the eardrum via the same infrared technology astronomers use to measure the temperature of stars and planets. In addition to being extremely accurate, the thermometer avoids contact with mucous membranes, eliminating the possibility of cross infection.

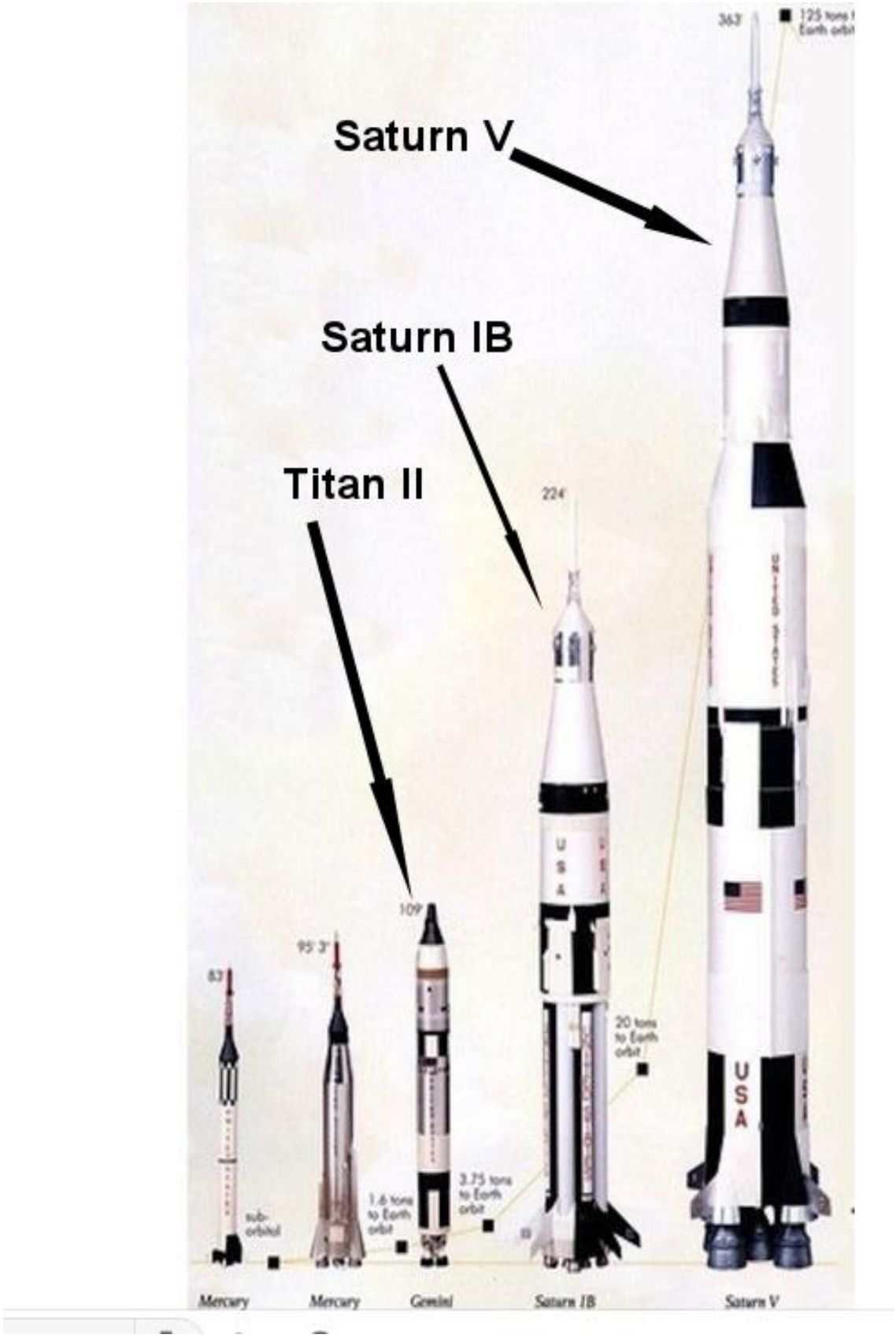
- Grooved pavement

NASA scientists worked hard to develop ways to minimize hydroplaning—a potentially catastrophic hazard to landing space shuttles. They found that cutting grooves into runways helped remove water quickly, an approach that can now be found on many highways and commercial airport runways.

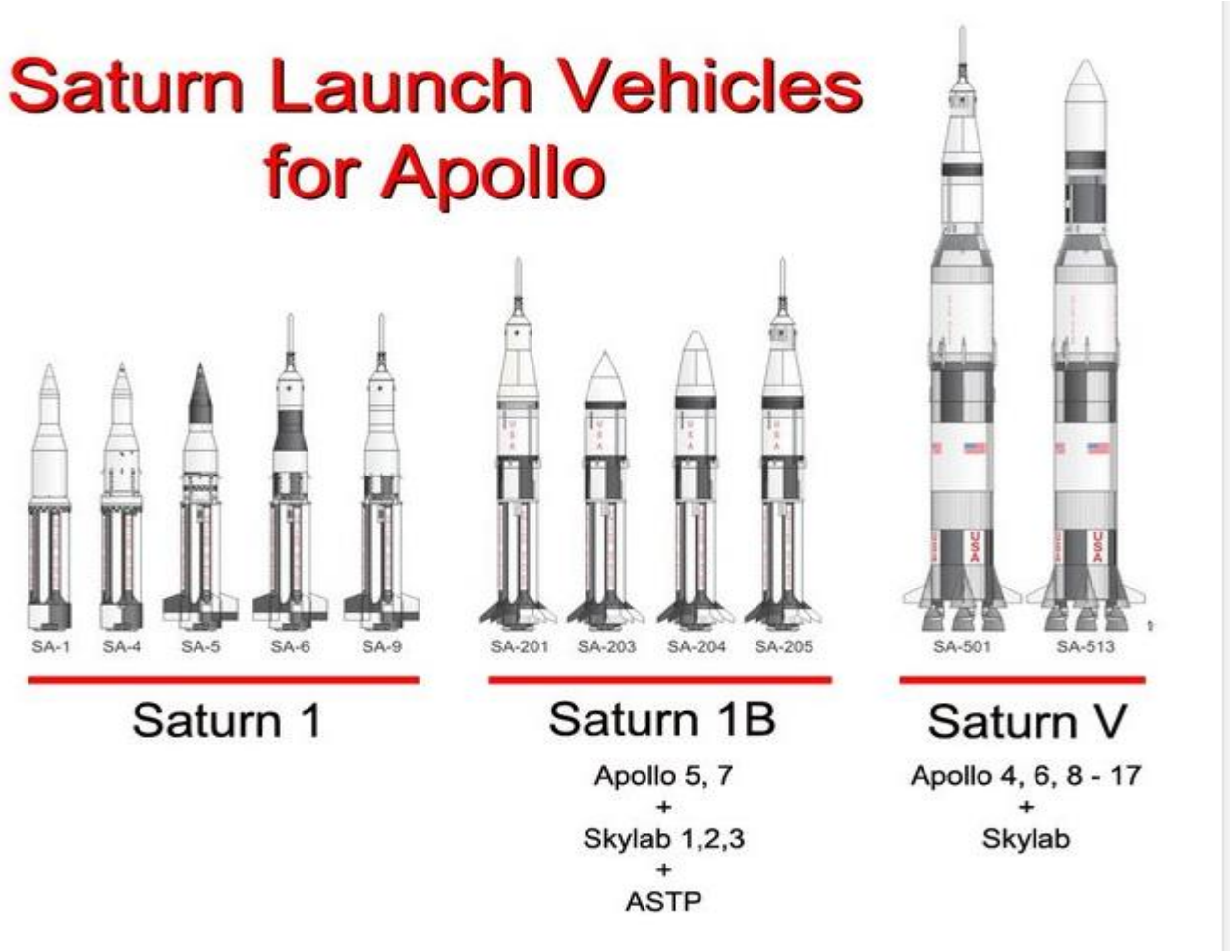
- Emergency blanket

A common component of emergency kits, reflective blankets were developed by NASA in 1964. The lightweight foil sheets are very effective at keeping people warm and are commonly used by long-distance runners to prevent dramatic changes in body temperature.

Did you know…size matters…..



Saturn, Starship, and SLS shuttle size comparison



The Club's Motto……"Sapientia ducet ad astra" – "Wisdom leads to the stars!"