



SOUTHWEST OHIO ROCKETRY ASSOCIATION (SORA)

LAUNCH REPORT APRIL 12, 2026

10:00AM TO 3:30PM NAR SECTION #624

Launch Conditions: clear skies, temps in mid 80S, wind gusts to 20mph

Total Number of Launches: 125 **Rockets Recovered:** 123 **Lost:** 2 **Found Rocket (not launched today):** 0

Total Number of 100% Fully Successful Flights: 97 **Success Rate:** 77.6%

Number of Individuals Who Launched Their Rockets: 32 **Number of Family/Friends/Observers:** 20

Number of First-Time flyers: 29 (approx)

Teams and Competitions: 0 **NARTREK:** 1 Junior Bronze, 2 Senior Bronze

Scouts/Home School/4-H Groups: 1 SuperSaturday group

Types and Number of Motors: 130 total

Micro	1/4A	1/2A	A	B	C	D	E	F	G
0	0	0	62	35	27	3	3	0	0

2-motor clustered rocket	4		Two-stage rocket	1
3-motor clustered rocket	0		Three-stage rocket	0
Other: 1 helicopter recovery				

Total Impulse: 585 N-s for low/mid power 0 for high power at Cedarville

(Note: the average of each motor range is now used as the default rather than the highest value for a specific motor class)

(March launch had 123.9 N-s Total Impulse)

Year To Date Total Impulse: 709.6N-s

Failures: 28 total: 13 chute tangles, 1 improper impulse, 1 motor fail due to manufacturing, 2 chute separation, 7 parachutes not ejected from airframe, 1 lost into woods out of range, 1 motor of cluster did not ignite, 1 shock cord broke, 1 motor ejected (one rocket landed too high in tree to recover safely (not counted as a failure)

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

FINANCES:

ITEM	COST EACH	# PURCHASED	TOTAL INCOME
Straight out donations	NA	0	\$0
t-shirts	\$20	0	\$0
Polo shirts	\$30	0	\$0
Baseball Caps	\$14	0	\$0
Food and Drinks	\$1	2	\$2
Stickers	\$0.25	4	\$1
Mugs	\$10	0	\$0
New/Renew Memberships	\$5	4	\$20
TOTAL			\$23

Note: entire box of potato chips went missing, value of \$16

Rocket Topics and Issues:

1. This was the largest number of launches conducted by SORA in one day! 125 rockets were launched from 10AM to 3:30PM. We certainly had our hands full.
2. The Super Saturday group brought out 32 mostly first-time rocketeers and had a great time. We had a 78% fully successful flight rate that included not only the Super Saturday group but also a few rockets by the regular SORA gang.
3. Learning included doing a better job of paperwork with such a large group. Luckily, we had several people out at the pad and at the first-time flyer rocket prep area to help things run smoothly.
4. We had several launches of clustered (dual tube) Estes Sidekick rockets. Very nice.
5. We also had several NARTREK Bonze attempts by Juniors and Seniors. Nice to see the rocketeers getting out of their conform zone and pushing their abilities.
6. Thanks to Robb, Rick, Harold, and Jon for running Launch Control, Range Safety, and helping at the pads.

Next meeting: Tuesday, May 5th at 6:00PM - 7:30PM. Lebanon Library lower-level meeting room.

Note the earlier start time! This gives us more time to build rockets!

Next Launch: Sunday, May 10, 2026. Meet at Hisey Park. Setup 11:00, launch 1:00PM

Please remember to renew your SORA membership for 2026. It's a great club!



The crowd starts to gather....



Love the hats!



It takes a lot of gear to do things safely.



Prepping on the pad



Keeping a safe distance



Multiple pads using the wireless launch system



Quite the crowd!



Love the action shots!



Remembering the day with phone cameras



Yes, it IS rocket science!



Beautifully crafted Bunda Blazer

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

FUN FACT: Glues are critical to building and flying model rockets. Below is some info on Titebond wood glue which is used a lot in model building. Titebond manufactures glues, construction adhesives, caulks, sealants for woodworking and additional products for flooring installations. There are over twenty types of glues and adhesive for general woodworking and cabinetry, but most rocketeers use three main glues listed below. There are many competitors (Gorilla Glue, Elmers, etc.) that produce wood glues, but the info gives you an idea of some of the characteristics of the three most popular woodworking glues from Titebond you can find easily at your local hardware store. The chart below was taken directly from their website.

Titebond ORIGINAL Good	Titebond PREMIUM Better	Titebond ULTIMATE Best
TYPE Aliphatic Resin	TYPE Cross-linking PVA	TYPE Proprietary Polymer
STRENGTH 3,600 psi	STRENGTH 3,750	STRENGTH 4,000 psi
CHALK TEMPERATURE ≥ 50°F	CHALK TEMPERATURE ≥ 55°F	CHALK TEMPERATURE ≥ 47°F
SHELF LIFE 2 years	SHELF LIFE 2 years	SHELF LIFE 2 years
DRIED FILM Yellow	DRIED FILM Orange	DRIED FILM Light Brown
CLEANUP Water	CLEANUP Water	CLEANUP Water
VOC 10.7 g/L	VOC 3.0 g/L	VOC 9.0 g/L
OPEN/TOTAL ASSEMBLY TIME 4-6/10-15 minutes	OPEN/TOTAL ASSEMBLY TIME 3-5/10-15 minutes	OPEN/TOTAL ASSEMBLY TIME 8-10/20-25 minutes

INTERIOR USE	EXTERIOR USE Weatherproof	EXTERIOR USE Waterproof
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Additional info from Rick....

Chalk temperature is a white appearance of a glue that has dried in too cold a temperature. It indicates that the glue bond will potentially fail.

VOC: Volatile organic compounds are organic gases given off as the glue dries. g/L is a gram of VOCs given off by a liter of glue. Always use glue in a properly ventilated space or outdoors.

Open assembly is when the glue is exposed to air prior to parts being put together. **Total Assembly time** is the time from spreading the glue to when you finally apply heat, pressure, and parts are held together.

Total drying time is not listed as it is dependent on a variety of factors such as temperature, humidity, air circulation, porosity of parts being glued, etc. Typically, most rocketeers wait 24-28 hours for the glue to reach its final strength. **Clamping** parts being glued always helps keep the parts aligned and increases penetration of the glue into the paper or wood.

Store wood glues below 75 degrees. At temperatures above 75, they can thicken over time and become more difficult to work.