



# **SOUTHWEST OHIO ROCKETRY ASSOCIATION (SORA)**

## **LAUNCH REPORT AUGUST 10, 2025**

### **1:00PM TO 6:00PM NAR SECTION #624**

**Launch Conditions:** partial clouds, temps in low 90's, wind 5mph

**Total Number of Launches:** 42      **Rockets Recovered:** 42      **Lost:** 0      **Found Rocket (not launched):** 0

**Number of First-Time flyers:** 1      Welcome Calvin McCarthy! He earned not only a First-Time Flyer free rocket kit for launching his first rocket (Estes Amazon on a B4-4), and also succeeded in winning the Closest-to-the Pad award yielding another free rocket kit! Well done, and welcome to the world of model rocketry!

**Total Number of 100% Fully Successful Flights:** 37      **Success Rate:** 88.1%

**Failures:** 4 total: 1 shock cord broke, 2 underpowered, 1 staged rocket no separation, 1 chute tangle on dual chute saturn

**Number of Individuals Who Launched Their Rockets:** 11      **Number of Family/Friends/Observers:** 6

**Teams and Competitions:** 1      **NARTREK:** 0      **Scouts/Home School/4-H:** 0

**Types and Number of Motors:** 46 total

Micro: 1   1/4A: 1   1/2A: 2   A: 7   B: 13   C: 12   D: 5   E: 3   F: 1   G: 1   H: 0   I: 0   Higher: 0  
1 clustered rocket, 3 2-stage rockets

**Total Newtons:** 664.7

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

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

straight out donations:	\$22	t-shirts:	0 at \$20 =	\$0	
mugs:	0 at \$10 =	\$0	stickers:	0 at \$0.25 =	\$0
food/drinks:	14 at \$1ea =	\$14	new memberships	0 @\$5 =	\$0
hats:	0 at \$10 =	\$0			

2 stickers and 2 rocket kits were given out to a new rocketeer and his brother for free. Carlton won closest-to-pad and received a second free rocket kit.

**Total: \$36**

**Total Deposited to account (\$26)**

## **Rocket Topics and Issues:**

1. It was a good day for flying with scattered clouds although very hot temperatures (low 90's). Dragonflies landed multiple times on the launch rods and even caused some delays until we shoosed them away to keep them from getting hurt!
2. Calvin made his first rocket launch ever with an Estes Amazon on a B4-4. Welcome to the wonderful world of rocketry!
3. Dave wowed the crowd with his higher-powered launches of E, F and G motors.
4. We improved our safety record this month. We went from 76% to 88% of fully successful launches. Well done!
5. It was nice to see a Mean Machine launch, and it flew well. It is always impressive to see such a tall rocket on the pad.
6. We had a lot of different rocket types flown ranging from multi-motor, gliders, helicopters, and scratch built. It great to see rocketeers stretching their wings and pushing the limits. Harold, Bill, and Brian launched 15 scratch-built rockets.
7. Please be sure to fill out the launch cards completely and legibly. RSOs need to carefully check the cards. We had three cards missing info needed for our records.
8. Rick's Green Eggs and Ham rocket successfully launched a raw egg into space and successfully landed it unbroken. Maybe he should join an America Rocket Challenge team that does egg lofting, but I think he is too old!
9. Jon was the hero of the day recovering Bill's rocket from the barn. It was looking pretty bad for the recovery at first as the nosecone/parachute were on one side of the peak of the roof and the airframe on the other side of the roof. With almost no wind to catch the chute and drag the airframe onto the other side, it looked like it might be up there for a long time. However, Jon was able to retrieve it just as the launch day was shutting down. Thanks!
10. We had a "Brace" competition. A "brace" is where you try to launch rockets all in one day with ascending order of motor total impulse. Rick's lofty goal for a brace was from micro (1/8A) through G motors. Rick launched motors (1/8A), 1/4 A, 1/2 A, A, B, C, D, and E. He ran out of time trying to get the full brace as we were already passed the 4pm window for shutdown by the time he got to the F motor rocket. But, Congrats to Rick! We love competitions and encourage more rocketeers to join in the fun! What should we do next time? Send us your ideas!
11. Thanks to Dave B, Robb W. and Rick F. for running Range Safety. Switching off allowed everyone to launch rockets.

**Next meeting:** Tuesday, September 2<sup>nd</sup>. Location will be determined in the next few weeks as the Lebanon Library where we normally hold our meetings will be in the process of a major renovation. Watch the website [rocketryohio.com](http://rocketryohio.com)

**Next Launch:** Sunday, September 7<sup>th</sup>, 2025. Meet at Hisey Park. Setup 11:30, launch 1:00PM

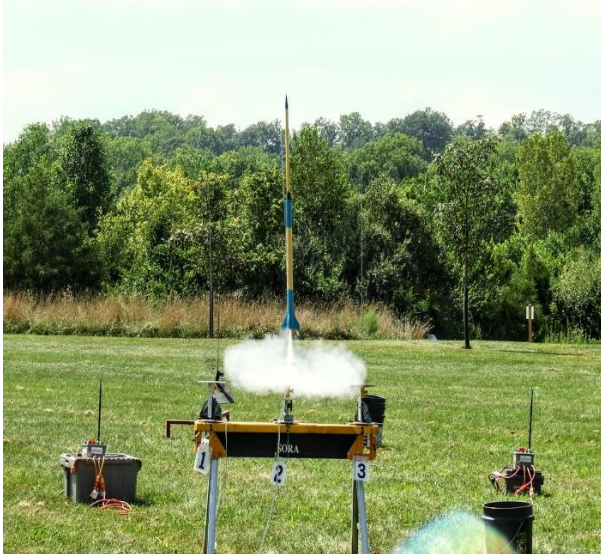
**The Club's Motto....."Sapientia ducet ad astra" – "Wisdom leads to the stars!"**





Beautiful day for a launch!

The first flight of Harold's scratchbuilt Castor Corporal



Harold's Castor Corporal perfect flight



Yes, it is supposed to do that! Helicopter fins give a soft nosecone-first landing





Robb's beautiful crafted Shuttle, perfect flight



Calvin's first rocket launch earned him a free rocket kit. Well done!



Rick's rockets for a "brace" from 1/8A through G motors





Fins that fold out after apogee



Dave's Totally Tubular



Up, up, and away!



Jon's Mercury Clato on a D12-3





Saturn on a E35



Quest Transporter with sweat bees on wing and on approach, micro 1/8A motor



Rick and his micro 1/8A motor rocket



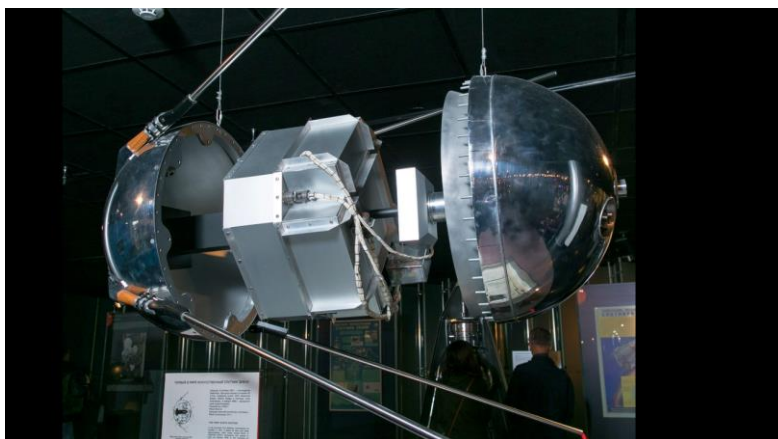
Keeping cool under the trees.

**FUN FACTS:** Brian successfully launched a Sputnik model rocket during the day's festivities, so we thought it might be fun to write a little about the original satellite.



"Sputnik" is a combination of the Russian prefix "s-" which means "fellow" and "putnik" which means "traveler". But fellow traveler only refers to a relationship in Russian. For example, in Russian, the moon is a "sputnik" to the Earth. Sputnik is not a proper noun name.

The 184-pound, 23-inch globe with four antennae (longest of which was 12.5 feet long) was launched on October 4, 1957 and its three silver-zinc batteries were designed to last two weeks. They lasted until October 26 when the world's first artificial satellite went dark. It burned up in the atmosphere on January 4, 1958. Along with the knowledge gained by monitoring the radio signals as it circled the Earth every 92 minutes, the results of monitoring the drag on the sputnik gave scientists valuable information about the density of the upper atmosphere and space. Its elliptical orbit that ranged from 134 to 583 miles.



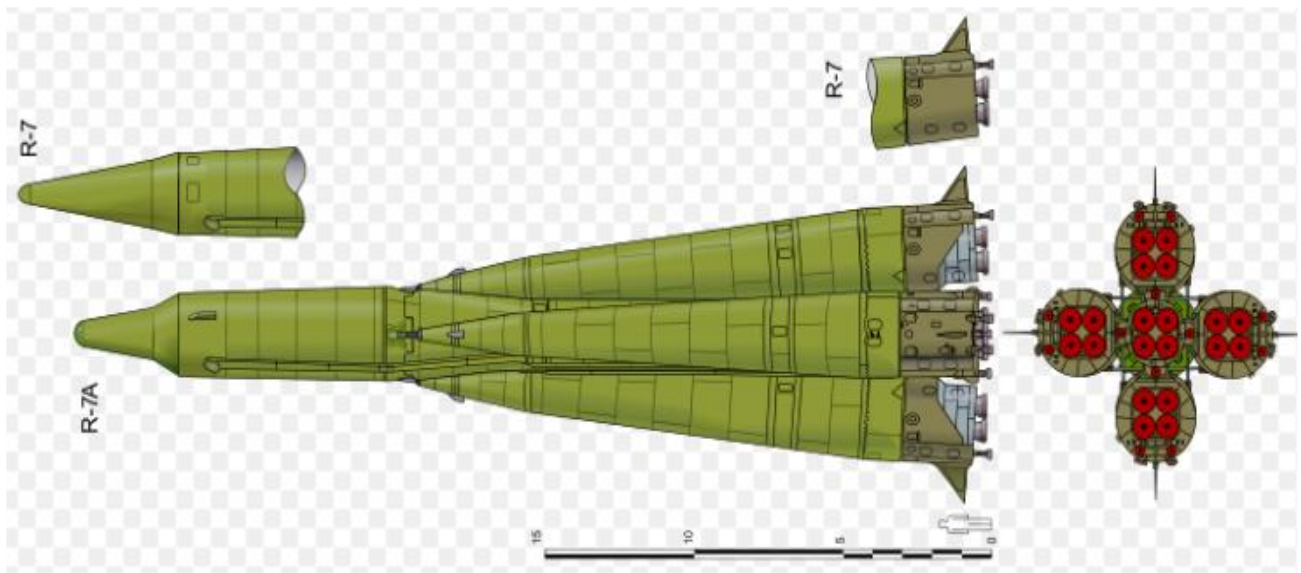
Although it could be seen by the naked eye, most people were probably watching the R-7 rocket body which also made it to orbit with its reflective tiles. At 112 feet long, 34' in diameter, the rocket used four strap-on boosters around a second stage core. It used kerosene/LOX propellant.

Sputnik-2 carried "Laika", the first earth animal launched into space, was a three-year old, calm, small, stray husky-spitz mix. Launched November 3, 1957, Laika was trained in small boxes, wearing space suits, and practiced launch conditions. The mission was never designed to bring Laika back to Earth but Laika passed away

from overheating and panic hours after reaching orbit. It is believed that the first stage did not separate from the capsule and the cooling system failed as a result.

Sputnik-3 was a full laboratory and carried instruments to measure radiation, plasma, micrometeor counts, composition of the atmosphere/space, magnetism, electric fields, heavy nuclei counters, pressure gauges, and other instruments. It also carried an experimental solar cell.

Sputnik-4 launched on March 9, 1961 was mostly biological in nature and carried a full human sized mannequin "Ivan Ivanovich", a dog named Chernushka, several mice, and the first guinea pig. It used a Vostok rocket instead of the ICBM-based R-7. During the descent the mannequin was ejected to test an ejection seat which used a parachute to slow descent. A 8x20cm piece of sputnik-4 crashed into the middle of North 8th Street in Manitowoc, Wisconsin, on September 5, 1962. It was later returned to Russia after being examined and copied.



The R-7 rocket.