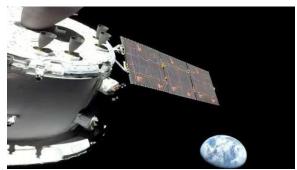


November/December 2022

Artemis I Moon Rocket Arrives at Launch Pad Ahead of Historic Mission



The Orion spacecraft shared its first view of Earth more than nine hours after launch. (NASA)

The historic Artemis I mission took flight in the early hours of November 16, 2022 after months of anticipation. This mission, expected to last 25 days, will travel 1.3 million miles round trip and then splashdown on December 11, 2022 off the coast of San Diego. The milestone event begins our journey to send an uncrewed spacecraft around the moon, which will pave the way for NASA to return astronauts to the lunar surface for the first time in 50 years. Despite being unmanned, this mission will collect data on human space travel since onboard are passengers of the inanimate variety, including some mannequins collecting vital data to help future live crews.

This mission is the first in a series of increasingly difficult Artemis missions.

NASA's goal is to establish a permanent outpost at the moon. Artemis II will follow Artemis I but will have astronauts on board. Finally, Artemis III, is expected to land a woman and a person of color on the lunar surface for the first time.

The River's Edge

Explore Scientific

Randy Harrison, owner of *Lookin' Up Optics*, invited area astronomy enthusiasts to a special weekend with Explore Scientific. On Friday night, Tyler Bowman, customer service representative for Explore Scientific demonstrated the new Unistellar line and the Explore Scientific, 127 mm refractor at Kaskaskia college. Unfortunately, clouds and raindrops prevented views of the sky, however Dan Brandon saved the day with his radio telescope demonstration.

On Saturday, Randy invited all to a daytime event at his shop. This provided a great networking opportunity to meet and greet with members from other parts of bi-state area, including guests from Bloomington Illinois (Twin City Astronomy Club), from Carbondale (Southern Illinois Astronomy Club), from St. Louis (St Louis Astronomical Society), from the Astronomical Society of Kansas City, as well as a good turn out and support from Riverbend Astronomy Club.

A raffle was held for an Explore first light 130 mm Newtonian telescope on a twilight one mount. The winner was one of Randy's customers named Cloud, despite multiple entries by a SLAS member who will remain unnamed!

Randy held Tours of *Lookin' Up Optics* for guests, which is a challenge as we try to count how many telescopes will fit into a former garage!

RBAC Outreach for 2022

Benchmark	2022	2021
Outreach Events	33	13
Event hours	71	39.5
Venues	31	9
Number of Towns	19	5
Visitors	1268	655
Member hours	364	201.5

Gallery



Hillsboro 4H member testing magnification power of telescope at Illinois Extension Office, Hillsboro, IL, 2/21/22. (Photo by Terry Menz)



Randy Harrison shows view of the Moon displayed on a laptop at Tri-Township Library, Troy, IL, 3/15/22. (Photo by Terry Menz)



Participant views the Sun at Madison County ROE STEM Camp, Troy, IL, 6/15/22. (Photo by Terry Menz)



Participant makes Moon Phase Cookies at Madison County ROE STEM Camp, Troy, IL, 6/15/22. (Photo by Terry Menz)



Comet Chef Jeff (Act 1) at East Alton Public Library, 6/23/22. (Photo by Terry Menz)



Comet Chef Jeff (Act 2) at Camp Torqua, Edwardsville, IL, 6/23/22. (Photo by Terry Menz)



Randy Harrison with visitors to Mississippi Valley Library in Collinsville, IL, 6/25/22. (Photo by Terry Menz)



Terry Menz discusses the Earth Timeline with visitors to the Breese Public Library, Breese, IL, 7/25/22. (Photo courtesy of Breese Journal).



Randy Harrison (r) and Jeff Menz at DobFest held at Jefferson College in Hillsboro, MO, 9/17/22. (Photo courtesy of SLAS)



Terry Menz explains the Library Telescope Program to visitors at DobFest held at Jefferson College in Hillsboro, MO, 9/17/22. (Photo courtesy of SLAS)



Cheryl Brinkmann (r) and Terry Menz demonstrating Space Rocks kit from the Night Sky Network at Mac's Family Fun Time, Highland, IL, 10/8/22. (Photo by Jeff Menz)

Library telescope



SLAS John Beaury discussing tips to modify library telescopes with RBAC members Randy Harrison, Jeff Menz, Kerry Brethauser, and Jim Reagan. (photo by Terry Menz)

Following supply chain issues and isolation precautions resulting from the Covid pandemic, the Library Telescope Program in the Metro-East area experienced an increase in activity. In 2022, the following Illinois libraries were added to the program: Mascoutah, Maryville, Waterloo, Troy, Granite City, and Carbondale. Since suppliers now have telescopes in stock, in 2023 we will reach out to area libraries not currently owning a telescope or binoculars. We will also issue a news release to remind residents of the metro-east to utilize this resource when it is available in their local library.

Eclipse News

Through an exciting new partnership, NASA is partnering amateur astronomers with undergraduate students to engage 500 underserved communities off the central paths of the eclipses, both before and between these incredible events. Cheryl Brinkmann has been chosen as an official NASA Partner Eclipse Ambassador for the upcoming annular eclipse in 2023 and the total solar eclipse in 2024. She is currently seeking an undergraduate student in this area to partner with her.

Together, Cheryl and the student will train together with others across the country in a three-week workshop and learn new tools and techniques for explaining eclipses and inspiring awe. The goal is to engage underserved audiences in our community with effective outreach. They will receive a toolkit full of materials to enhance their outreach, including hands-on activities and hundreds of safe solar viewing glasses.

As a NASA Partner, they will be recognized for their commitment to public astronomy engagement with a special badge and certificate. Their efforts will be supported by a dedicated team at the Astronomical Society of the Pacific.

Awards and Achievements

Astronomical League Awards:

Outreach : Mike Veith (Basic) Night Sky Network Outreach Awards (2 events in 2022: Randy Harrison, Terry Menz, Jeff Menz, Jim Reagan, Mike Veith, Cheryl Brinkmann, Spencer Chapman, Karen Fajardo, Rich Dietz, Dave Kirsch, Kerry Brethauser, Mike Donaldson, Brandon Runyon, Dan Brandon, Daniel Vrolijk

New Members:

Cheryl Brinkmann Lauren Craft David Doyle Dave Eacho Chris Hansen Bill Poletti Jacob Raby Dennis Tuchalski Daniel Vrolijk Adam Wallace

Upcoming Events:

RBAC Meeting, Sat, Jan 21, 7pm, Salem UCC Girl Scout Event, Jan 28, Ballard Nature Center, 5pm

RBAC Meeting, Sat, Feb 18, 7pm, Salem UCC

RBAC Meeting, Sat, Mar 18, 7pm, Salem UCC

