

The Observer

The Official Publication of the Lehigh Valley Amateur Astronomical Society

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November 2025

Volume 65 Issue H



LVAAS General Meeting - Public Welcome!

Sunday, 11/09/25, 7 p.m. at South Mountain HQ

Prospective new members who wish to attend, please email: membership@lvaas.org.

"Meteorites and Their Origins"

presented by

LVAAS Member and Former Director

Ray Harris



Ray Harris, former director and life member of LVAAS, will speak on the classification of various kinds of meteorites, the properties which make them unique and what this tells us about their origins.

Ray is the son of a career Naval officer and grew up mostly near Naval facilities in Virginia and California, graduating high school on the Naval base in Guantanamo Bay, Cuba. He attended Yale University and upon graduation spent five years in the Navy supervising reactor operations on a nuclear submarine. Ray left the service for a career in civilian nuclear power. He joined PPL in Allentown in 1980 as staff supporting the Susquehanna nuclear power plants in Berwick. He later moved into PPL corporate IT before retiring in 2009. He got bored with retirement and currently works part-time as a school bus driver.

In 1984, Ray bought a C-8. He joined LVAAS in 1985 and began exploring and photographing the night sky (back before the digital imaging age). His photo of the Horsehead Nebula appeared in the January 1990 issue of *Sky & Telescope*. In 1987 he purchased a pair of celestial charts published in 1741. He discovered a couple of deep-sky objects on these charts and for the past 38 years, Ray has been researching and collecting early celestial charts and atlases. Ray's article "The First Deep-Sky Atlas" appeared in the January 2022 issue of *Sky & Telescope* and his article "The Constellations of Petrus Plancius" appeared in the February 2023 issue. Ray resides in Macungie, PA, with his wife who does not share his interest in astronomy, but who does share his love of early celestial charts as works of art.



LVAAS South Mountain Headquarters, Allentown, PA

Via Sandy Mesics, Programs Chairperson

Upcoming LVAAS General Meeting Speakers

November: **Ray Harris** will speak in person on "Meteorites."

December: **Nico Carver** (via Zoom) "Telescopes for Astrophotography and How to Choose the Right One for You"

January: **John Conrad** will speak (via Zoom) on "Deep and Deeper – NASA Space Telescopes"

February: **Bruce Ruggeri** will speak (via Zoom) on the Europa Clipper Mission

- ▶ Please contact astrosandy@gmail.com if you have ideas for speakers, or would like to do a talk yourself.

Via Claudio M. Stabile, Scouting Activities Coordinator

We are excited to announce the launch of the 2026 LVAAS Youth Sponsorship Program. Applications are now open through January 16, 2026. Find more information on next page of this publication. A great opportunity for younger members to get involved in astronomy! Apply [here](#) and good luck!

THANK YOU, LVAAS VOLUNTEERS!

LVAAS and Star Party Director **Aidan Berger** would like to thank the following members for their help with our October Star Party: **Earl Pursell, Kyle Kramm, Bill Dahlenburg, Linda Prince, Dr. Becky Frank, Jamie Elovski, Tom Duff and Bill Dahlenberg.** LVAAS especially thanks **Linda Prince and Dave Moll** for their presentations! Thanks to **Claudio Stabile** for presenting during Scouts weekend. A big thank you goes out to the work party who cleaned out the 40" Observatory at Pulpit Rock on October 11. Pictured, left to right, **Claudio Stabile, Ben Long, Phil Doherty, Andrew Heilman, Bruce Balthaser, Aidan Berger, Kyle Kramm.**

A big LVAAS thanks goes out to **Ron Kunkel** and his grandkids **Dillon and Colton** who removed trees and some large stones to clear the roadway to Pulpit Rock Astronomical Park in preparation for Scouts camping during the weekend Oct 10-12. They also shop-vac'd the field to clean up after the deer, and laid down Deer Mace to help keep them off the park grounds. After mowing the grass Ron supervised as Colton and Dillon dismantled a twig and branch shelter that someone had built behind the Kaweck Observatory.

Anyone wishing to volunteer please check the contacts page of our website to learn what projects are being planned.



Via Earl Pursell, UACNJ Liason

UACNJ also has its own YouTube channel and the schedule of videos is on its website. Check out the list of winter programs [here](#) Please visit uacnj.org to watch and /or subscribe.



Cover image: Messier 8: The Lagoon Nebula Imager: Terry Pundiak

Subject imaged with a Seestar S50 with mosaic framing and on an equatorial wedge sitting on a modified table sitting within reach of my bedroom window in Palmer Township, near Easton PA. 2-hour image (resulting in 46 minutes of 10-second frames). Post-processed loosely using Siril. The Lagoon Nebula is a giant star-forming region of gas and dust located about 4,000 light years away from Earth in the constellation Sagittarius.

Terry enjoys the relative ease of astrophotography the Seestar S50 provides. LVAAS has this telescope available for rental to members, as well as more traditional scopes. Why not stop by?



Minutes from the LVAAS General Meeting – October 12, 2025

The October 2025 LVAAS General Meeting was conducted electronically using an online service and at the South Mountain headquarters. Approximately 40 people were in attendance. Director Benjamin Long opened the meeting at 7:00 p.m.

[Tonight's presentation was "New Mexico Astronomy: a Visit to APO, VLA, and the New Mexico Space History Museum" by Dr. Becky Frank. Becky's presentation covered her visits to several astronomical points of interest in New Mexico, namely The Apache Point Observatory (APO), the Very Large Array (VLA) and the New Mexico Museum of Space History. The APO is located in the Sacramento Mountains near Sunspot, New Mexico. Becky gave a brief history of the complex and presented several photographs of the facilities which she toured with her father and a guide in August 2025. She photographed several of the large telescopes in this complex: a 3.5 meter scope owned by ARC (Astrophysical Research Consortium), a 2.5 meter scope used for the Sloan Digital Sky Survey (SDSS), a 1 meter scope used to train students at the New Mexico State University (and also prior to training on the 3.5 meter scope), and a 0.5 meter ARCSAT also used for training and photography, and which is available to people of different institutions.

The SDSS has observed over 1 billion sky objects from this dark site, scanning 8,000 square degrees of sky from its precipice on a cliff face, locating galaxies and quasars, looking deep into the Milky Way, identifying red giants and calculating the expansion rate of the universe; most recently mapping black holes. This presentation included many excellent photographs and information about touring the sites, so please contact Jamie Elovski to obtain the recording if you'd like to see it for yourself if you missed it, or to watch it again to pick up the finer details.

Many thanks to Becky for a well-received presentation that was thrown together hurriedly to fill in for a speaker who canceled due to illness.] *editor*

There was a short break before members assembled for the remainder of the meeting.

Membership: Rich Hogg and Joe Zitarelli

- The following members completed their second readings and are now full members:
Usman Chaudhary
Mersim Gjonbalic (family membership with Algerta Malellari)
- The following members completed their first readings:
Nathaniel Bryant
Barry McMickle
- The following members have previously completed a first reading and are still eligible to complete a second reading to become full members:
Brian A. Brown
Marissa Chitty
Jay Copin
Matt Daniels
Glenn Garcia (family membership with Jacqueline Blas)
Gunasekaran Anandhan Rajan
Paul Shanahan
Zechariah Ziegenfus

General Comments:

- All those nominated to elected positions are unanimously elected. They are:
 - Director: Benjamin Long
 - Assistant Director: Kyle Kramm
 - Treasurer: Wojciech Maziarz
 - Secretary: Becky Frank

AstroImaging Group – Tom Duff

- Feel free to join no matter your ability or skill level.
- The next meeting is on Nov. 15 at 7 p.m.

South Mountain Maintenance – Bill Dahlenburg

- Volunteers meet every Saturday morning with no set agenda. Stop by to tour the observatories or get help operating your telescope. Anyone wishing to volunteer with maintenance is welcomed.
- The Library was reshelfed.
- A contractor was in to level ground.
- Rental scopes are available to members!

Pulpit Rock Observatories – Ben Long

- There has been much work done at the site recently.
- Volunteers have been busy cleaning and repairing the observatories and fixtures.
- LVAAS now has meteor cameras pointed in each direction.

Stargazers - Kyle Kramm

- The next meeting is Nov 14 at 7 p.m.
- This is the perfect group to help beginners get comfortable with their equipment and to socialize with other members.

Next General Meeting:

- Our next general meeting will be November 9, 2025 at 7:00 p.m. at South Mountain.

The October 2025 general meeting was recorded. Contact Jamie Elovski for the link.

The meeting was adjourned at approximately 8:25 p.m.

Submitted by Dr. Becky Frank, Secretary



2026 LVAAS Youth Sponsorship Program
Proudly Administered by
Astronomy in the Community



APPLICATIONS ARE OPEN!
APPLICATION DEADLINE IS JANUARY 16, 2026
LVAAS Youth Sponsorship Program - 2026 Application

The Lehigh Valley Amateur Astronomical Society is pleased to introduce the first annual LVAAS Youth Sponsorship Program for 2026, proudly administered by Astronomy in the Community.

To give back to our LVAAS community for your support during 2023 and 2024, Claudio T. Stabile and Ava Stabile, founders of Astronomy in the Community, proposed this initiative to provide similar opportunities to future youth members.

This astronomy project focused program aims to foster astronomy interest among young LVAAS members by providing financial and in-kind support for ambitious astronomy related projects. By recognizing and rewarding their dedication, we inspire future generations of astronomers within our community.

One applicant will be selected in January 2026 and awarded a \$1,000 monetary grant along with support from LVAAS members to accomplish their project. The program is open to LVAAS members in good standing, up to 25 years old, having volunteered at a minimum of 4 LVAAS events in 2025, and with a strong astronomy project proposal. The application deadline is January 16, 2026.

For more information, please visit <https://lvaas.org/page.php?page=YouthSponsorshipProgram>





**L. Vaas
wants YOUR
astro photos
for the 2026 calendar!**

- **Share Your Universe in Our 2026 Calendar!** Have you captured a stunning celestial scene? We invite you to submit your best astrophotography for a chance to be featured in the official **LVAAS 2026 calendar!**
- **All Cosmic Subjects Welcome!** We're looking for a wide range of astronomical wonders, including deep-sky treasures like galaxies and nebulae, breathtaking planetary and lunar images, and captivating nightscapes that blend Earth and sky. All forms of media are welcome as well. Feel free to submit your sketches, paintings, composites, etc.
- **Let Your Talent Shine!** All selected photographers will receive full credit for their work in the calendar, including your name and a link to your personal website or social media, if you wish.
- **Ready to Submit? Here's How:**
 - » Email your high-resolution images to m.huber614@gmail.com
 - » Please use the subject line: "2026 Calendar Submission".
 - » Include a title and a brief description for each submission.
- **Don't Delay!** The deadline for all submissions is September 30th.
- **We can't wait to see the cosmos through your lens!**



Peter Detterline's
Night Sky Notebook
for
November 2025

Night Sky Notebook

<http://nightskynotebook.blogspot.com/>



Please remember to like and subscribe!



The Atomic Age and Surplus Optics

By Sandy Mesics

Last month we talked about the effect of the dawning of the atomic age on the Lehigh Valley Astronomical Society. But the implications of this new era were being discussed nationally, especially in the pages of the November 1945 issue of *Sky and Telescope*. The cover photo showed the Van de Graaff generator at the Massachusetts Institute of Technology, and the editorial "In Focus" said that "... in peacetime, astronomy will be one of the sciences to benefit from our advancing knowledge of the atom."



The lead article in that issue was "Cosmogonical Implications of the Atomic Bomb" by Felix Cernuschi, a Guggenheim Fellow at Harvard University. This was the first in a series of three articles that ran in consecutive issues.

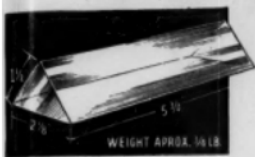


Cernuschi postulated: "Perhaps chain reactions produced by the impact of neutrons in stars with neutron cores may explain not only supernovae, but also ordinary novae; some types of pulsating stars which cannot be interpreted with Eddington's theory and the known modifications of his theory; the formation of double stars and in general the origin of multiple-star systems; the origin of cosmic dust and meteors; the behavior of those stars which do not fit into the known models of the internal constitution of stars; the strong ionization of helium in the sun's atmosphere, by modifying Saha's theory of the solar corona; the origin of the chemical elements; the evolution of the universe in a rather different manner from previous proposals, and phenomena resulting therefrom."

Sky and Telescope also had a regular column for amateur telescope makers entitled "Gleanings for A.T.M.s." In the November 1945 issue written by Earle B. Brown, the column discussed war-surplus optical components. The author pointed out that these components fell into two categories: excess production for instruments that had become obsolete and components that were rejected for wrong specifications, flaws or defects. He described the availability of achromatic lenses, eyepieces, and prisms.

Indeed, for the next two decades, surplus equipment enabled amateur telescope makers to flourish, utilizing surplus equipment in creative ways to build not only telescopes but other instruments as well. Companies such as Edmund Scientific, A. Jaegers, and others flourished during this period.

UNUSUAL WAR BARGAINS in LENSES and PRISMS

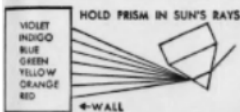


TANK PRISMS

In order that the tank driver shall not get shot in the face, 2 of these Silvered Prisms are used to make a Periscope. We have secured a number of these that are very slightly chipped, making possible their sale at a very low price. They are 90-45-45 degree Prisms of huge size—5 1/2" long, 2 1/2" wide, finely ground and polished. Used to build a Periscope . . . excellent also for experiments, class-room demonstrations. Some of our ingenious customers have used these prisms to make camera strobos, attachment, range finder, etc. From easy converted into desk name plate by affixing gold letters. 100 gold letters supplied at only 10c. (Order Stock #3008-Y). Normally these Prisms would retail from \$24 to \$30 each.

TO SEE THE COLORS OF THE SPECTRUM.

Hold a plain tank prism in sun's rays as shown in drawing. White incident light which passes through prism is then broken up into a band of primary colors known as the spectrum—a beautiful sight! By looking through a tank prism at a certain angle, you can see a world of colors everywhere. Truly amazing!



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Set #1-Y — "Our Advertising Special" — 15 lenses in \$1.00 Postpaid, plus 15-page idea booklet. For setting, ULTRA CLOSE-UP SHOTS! macrophotography, experimental optics, magnifying and for using a two power 1 1/4" Telephoto Lens. "Dummy Camera." Kodachrome Viewer, DETACHABLE RE-REVIEW-FINDER for 35 mm. cameras, telescopic viewer, ground glass and enlarging focusing lens. TELESCOPE, low power Microscopes and for many other uses.

Set #2-Y — "The Experimenter's Dream" — 42 lenses, Prisms and Optical Items, and New 50-page book, "Fun With Chipped Edge Lenses." \$15.00 Postpaid. The variety of Lenses and Prisms in this set will enable you to conduct countless experiments, build a great variety of Optical Equipment. A sensational buy.

NEW 50-PAGE IDEA BOOK "FUN WITH CHIPPED EDGE LENSES" Contains wide variety of projects and fully covers to fascinating uses of all Lenses in sets listed above . . . only \$1.00 Postpaid.

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ALL ARE ACHROMATIC LENSES. GALILEAN TYPE—Simplest to Make but has Narrow Field of View.

Set #3003-Y—Power of either 5, 8 or 10 \$1.00 Postpaid

Set #3004-Y—Small 2 Power Pocket Scope \$1.00 Postpaid

TERRESTRIAL TYPE—Have Much Wider Field of View than Galilean Type.

Set #3007-Y—11 Power Telescope \$3.25 Postpaid

Set #3008-Y—20 Power Telescope \$3.45 Postpaid

Set #3009-Y—40 Power Telescope \$7.45 Postpaid

PRISM TELESCOPES—Use Prism instead of lenses to Erect Image and are much shorter than Terrestrial Type. Have wide field of view.

Set #3010-Y—4 Power Telescope \$3.00 Postpaid

Set #3011-Y—11 Power Telescope \$3.25 Postpaid

Set #3012-Y—20 Power Telescope \$7.25 Postpaid

MISCELLANEOUS ITEMS

Stock No. Item Price

3234-Y—13 Pieces Circular A.I. Plate Glass (Diam. 31 mm.—for making Filter) .25

3235-Y—Right Angle Prism 40 mm. wide (3rd grade), Each .25

3236-Y—Six Threaded Metal Reticle Colls. .25

3237-Y—First Surface Aluminized Mirror, Diam. 1 1/4" .25

3238-Y—Neutral Ray Filter, size 4 1/2" x 2 1/2" .25

3239-Y—Round Wedge, 45 mm. Diam. Each .50

3240-Y—Amici Roof Prism (3rd grade), Each .25

4009-Y—Heat Absorbing Glass 4" x 6", Each .35

4010-Y—Heat Absorbing Glass 2" x 3", Each .19

72-Y—Inclinometer—Aluminum type, Each .25

704-Y—Lens Cleaning Tissue, one ream (400 sheets), Vine 7 1/2" x 1 1/4" .150

1030-Y—2" Diam. Reducing Lens, Each .25

1031-Y—Perfect 6 Power Magnifier, Diam. 20 mm. 2043-Y—Standard Crossline Reticle, Diam. 2" mm. Each .50

1034-Y—Burning Glass Lens, Each .25

(Minimum Order on Above—\$1.00)

RAW OPTICAL GLASS

An exceptional opportunity to secure a large variety of Optical Pieces, both Crown and Flint glass (seconds) in varying stages of processing. Many prism blanks.

Set #703-Y—8 lbs. (min. weight) . \$5.00 Postpaid

CLEANING BRUSH SET . . . For Lenses, Optical instruments, etc. Perfect quality—12 inch Flexible Plastic handle, hollow circular cone. Range from stiff to very soft. 4 Brushes to set.

Set #304-Y—(Reg. \$6.00 value) . . . Price \$1.00

PRISMS

Stock No.	Type	Base Width	Base Length	Price
3040-Y	Right Angle	30 mm.	23 mm.	\$1.00
3042-Y	Right Angle	40 mm.	40 mm.	1.00
3043-Y	Right Angle	70 mm.	160 mm.	8.00
3051-Y	Leiss Abbe	20 mm.	14 mm.	2.00
3052-Y	Porro-Abbe	9 mm.	9 mm.	.25
3053-Y	Porro	12 mm.	25 mm.	1.00
3054-Y	Porro	40 mm.	21 mm.	.75
3055-Y	Porro	45 mm.	22 mm.	.75
3056-Y	Dove	16 mm.	65 mm.	1.25
3057-Y	90 Degree Roof	60 mm.	36 mm.	4.00
3058-Y	Rhomboid	20 mm.	17 mm.	.50
3059-Y	Right Angle	40 mm.	167 mm.	10.00
3060-Y	Right Angle	53 mm.	103 mm.	4.00
3061-Y	Roof Prism	18 mm.	34 mm.	2.50

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Complete Set Mounted Components

Rugged, strong, originally constructed for U. S. Tank Corps. Consists of 2 Tank Periscope Mirrors mounted in metal and plastic. Perfect condition. Only plywood body frame is required to finish this exceptional Periscope. First surface mirror is well protected by glass windows.

Set weighs 25 lbs. Overall length of mount 40 1/2" width 2 1/4". Would normally retail at \$40 to \$50.

Set #700-Y—\$3.00 Complete Set Postpaid

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WIDE ANGLE EYEPIECE—Perfect coated optics, mounted in a focusing cell, 2" clear aperture, 1 1/4" F.L., 3 achromatic lenses. Value \$125.00 ea. 9.50

9 PERFECT LENSES to make 5X Tank Artillery Scope. Value \$140.00 10.00

METAL PARTS to make a complete 5X Tank Artillery Scope. Diagram included

COMPLETE SET OF OPTICS from Periscope Rifle Sight. Value \$24.00 2.25

5 LBS. OPTICAL GLASS Lens & Prism blanks, Index and dispersion "marked" 4.75

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PERISCOPE EYEPIECE Lens Set 1" Dia. 1.50

ACHROMATIC OBJECTIVE Perfect coated and cemented 44 m/m Dia. 7 1/2" F.L. Mounted \$3.50. Unmounted 2.50

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12 mm Dia. 80 mm F.L. ea. \$.50

23 mm Dia. 162 mm F.L. coated, ea. 1.00

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25 mm Dia. 126 mm F.L. coated, ea. 1.35

26 mm Dia. 104 mm F.L. coated, ea. 1.25

31 mm Dia. 172 mm F.L. coated, ea. 1.25

DOVE PRISM 49 m/m long \$.75

DOVE PRISM 75 m/m long 1.50

LEMAN PRISM 2 1/4" long 3.00

PENTA PRISM 26 m/m x 28 m/m Face, ea. 3.00

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RIGHT ANGLE PRISM 47 m/m Face 2.50

GIANT RIGHT ANGLE PRISM 41 m/m x 57 m/m Face (flint glass) 3.00

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Reference

Sky and Telescope, November 1945, October 1946.



Comet Lemmon, imaged with Seestar s50 10/26/2025 from Upper Saucon Twp PA, by Jamie Elovski



The Andromeda Galaxy, imaged by Terry Pundiak, using Seestar S50 from Palmer Township, near Easton PA

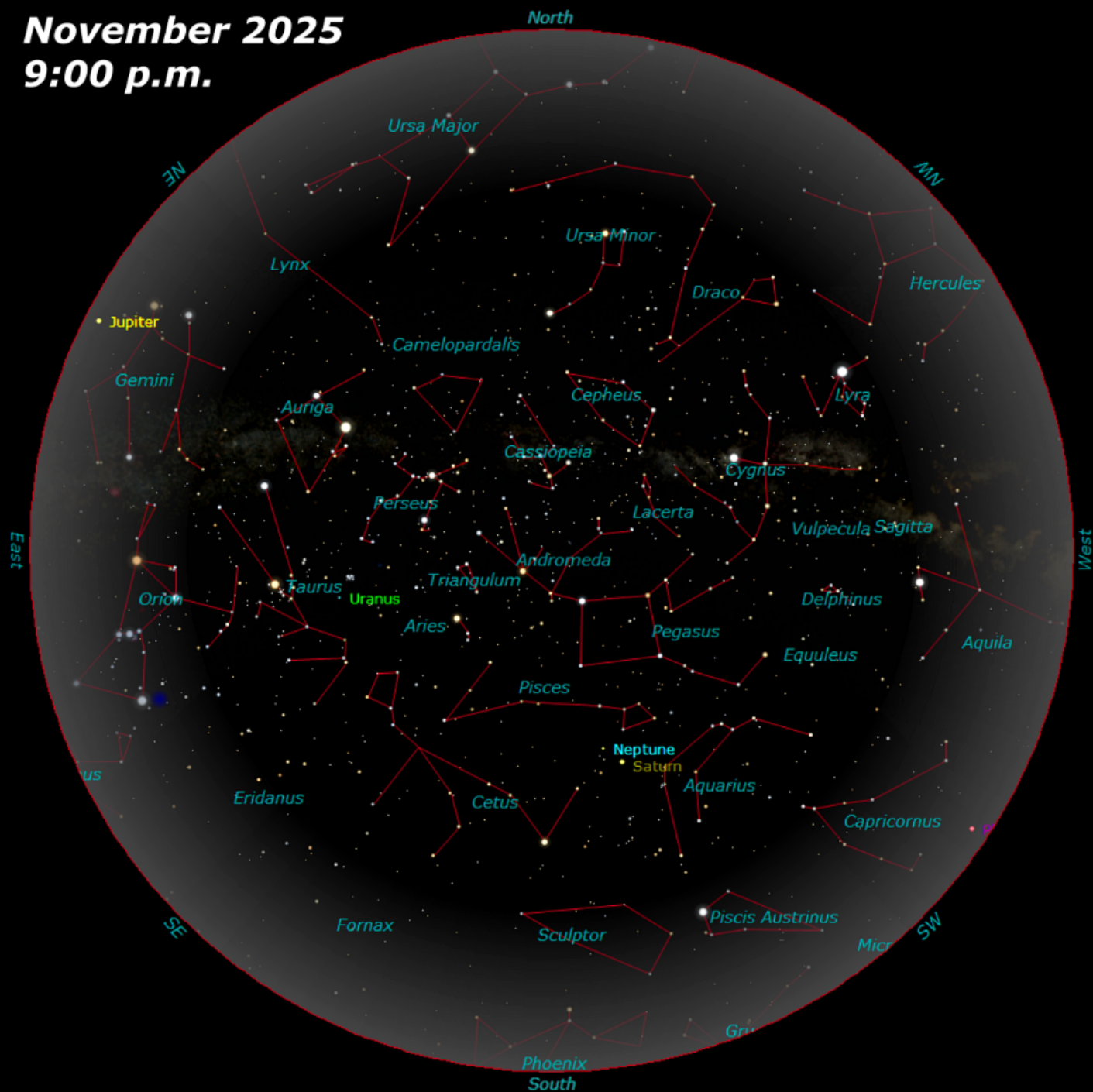


Three Words Misunderstood

I began my enjoyment of astronomy on a shoestring budget, so a good telescope was out of the question. For my 11th or 12th birthday, my parents bought me a spyglass telescope with a singlet, a single lens element that produced an image of Saturn with one side of the rings a vibrant red and the other a deep blue, a sure sign of a severe optical defect called chromatic (color) aberration. I knew nothing about this problem and thought how "cool" it was that Saturn would have these two wonderful colors associated with it. * Even with a makeshift holder that my dad had designed, the small, unsteady tripod to which the holder was attached made finding objects a real challenge. So the little telescope with its colorful prismatic lens went mostly unused. I resorted to observing the sky visually through my grandfather's binoculars. * For my 16th birthday, I received an Edmund Scientific 8-inch mirror grinding kit and went to work for the next 18 months sculpting the main mirror for a reflecting telescope. With the help of master optician, Paul Shenkle, who worked for the crème de la crème of telescope manufacturers, Questar, near New Hope, PA, and my father's mechanical skills, a truly fine instrument emerged. My new telescope with its (Mike) Spacek Mount saw its first light on my high school graduation night, June 9, 1968, when the nearly full moon skimmed under the bright red giant, Antares, the heart of Scorpius the Scorpion. The next day was my 18th birthday. * However, not having had a working telescope until the cusp of college, my focus remained fixed on the macro sky. I looked at the big picture rather than the micro sky, what could be revealed through an eyepiece of a telescope. * Meteor observing catalyzed my burgeoning interest in astronomy, and poring through numerous books that I had in my small but growing library, I became acquainted with three words, two that were misused continuously by both

amateur and professional astronomers alike. They were a **meteor**, a **meteoroid**, and a **meteorite**. * A **meteor** is the flash of light created by a **meteoroid** slamming into the Earth's tenuous atmosphere at speeds that can approach 30 miles per second. These small dust particles excite and ionize a tube of air through which they pass, causing the air to glow. The heating of the atmosphere by the vaporized meteoroid excites electrons in atoms and molecules of mostly nitrogen and oxygen at altitudes of 50 to 75 miles. Outer electrons jump away from the nuclei of the atoms gaining energy in distinct increments or become completely detached (ionized). In the blink of an eye, electrons reattach themselves to other atoms, descending the energy ladder in no particular order. Some of the transitions release visible light, which creates the meteor phenomenon. Meteors are born from meteoroids, the dross (dust) from comets when they are near the sun. Comets lose these small particles as the ices, from which they are embedded, vaporize (sublimates) from the sun's heat. * A **meteorite** is created from a much larger meteoroid (or asteroid) that makes it to Earth's surface. These particles are not born from comets, but rather from the asteroid belt, larger bodies, mainly between Mars and Jupiter, broken apart through past collisions. They enter the Earth's atmosphere and make it to the surface producing spectacular fireballs as they decelerate and often detonate in the atmosphere. Meteoroids released from comets never become meteorites. They are too small and fragile. * The reason for this misconception may stem from Meteor Crater near Winslow, Arizona, created about 49,000 years ago by a meteorite that was 100-160 feet across. Listen closely next time a professional astronomer talks about a "meteor striking the Earth" and understand that they should be referring to a meteorite. Ad Astra!

November 2025
9:00 p.m.



For access to more features, please click [here](#)

Contributed by
Gary A. Becker

NOVEMBER 2025

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						01
Daylight Savings Time Ends 02	03	Election Day 04	Full Moon 05	06	07	08
General Meeting 7:00 PM South Mountain 09	10	Veteran's Day 11	Last Quarter Moon 12	13	Stargazers Group Meeting 14	Astroimaging Meeting - 7:00 PM 15
16	17	18	19	20	21	22
Deadline for submissions to the Observer 23	24	25	26	Thanksgiving Day 27	First Quarter Moon 28	Star Party 29
LVAAS Board of Governors Meeting 30						

DECEMBER 2025

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	01	02	03	Full Moon 04	05	06
Pearl Harbor Remembrance Day 07	08	09	10	11	Last Quarter Moon 12	Astroimaging Meeting - 7:00 PM 13
General Meeting / Holiday Party (tentative) 14	15	16	17	18	19	20
Winter Solstice 21	22	23	Christmas Eve 24	Christmas Day 25	26	First Quarter Moon 27
Deadline for submissions to the Observer						
LVAAS Board of Governors Meeting 28	29	30	New Year's Eve 31			

2025 LVAAS EVENT CALENDAR

Contributed by Bill Dahlenburg

2025 LVAAS Event Calendar											
	<u>Sundays</u>			<u>Saturday</u>			<u>Observer</u>	<u>Moon Phase</u>			
	General Meeting time/date	location	Board meeting	Astro- Imaging	Star Parties	Stargazers Group	Submission Deadline	New	1 st	Full	3 rd
January	3:00 PM 12	Muhlenberg	26	no meeting	no meeting	no meeting	19	29	6	13	21
February	3:00 PM 2	Muhlenberg	23	no meeting	no meeting	no meeting	16	28	5	12	20
March	3:00 PM 9	Muhlenberg	30	no meeting	8	14	23	29	6	14	22
April	7:00 PM 13	S.M.	27	26	12	11	20	27	5	13	20
May	7:00 PM 4	S.M.	25	17	3	9	18	27	4	12	20
June	7:00 PM 8	S.M.	29	14	7	13	22	25	3	11	18
July	5:00 PM 12 (13)	S.M.	27	19	5	11	20	24	2	10	17
August	7:00 PM 23 (24)	Pulpit	31	16	2	8	24	23	1 31	9	16
September	7:00 PM 14	S.M.	28	13	27	12	21	21	29	7	14
October	7:00 PM 12	S.M.	26	11	25	10	19	21	29	7	13
November	7:00 PM 9	S.M.	30	15	29	14	23	20	28	5	12
December	2:00 PM 14	?	28	13	no meeting	no meeting	21	20	27	4	12

July, Aug & Dec are Saturday meetings with rain date on Sunday
 Jan, Feb & March meetings are at Muhlenberg College
 August meeting is at Pulpit Rock
 December meeting / Holiday Party (TBD)

NEAF 4/5 – 4/6
Mega Meet 8/22 -- 8/24
CSSP 6/19 – 6/22
Stellafane 7/24 – 7/27
BFSP 9/19 -- 9/21

Publishing images is a balancing act!

When preparing your images for publication in *The Observer*, please consider the following guidelines:

Put the quality in:

- ▶ Considering the "print" size of the image, make sure you have at least 150 pixels/inch.
- ▶ Use a reasonably good quality for the JPEG compression ratio.

But watch the "waistline"!

- ▶ Don't go too much above 400 pixels/inch max.
- ▶ Use the lowest JPEG quality that still looks good!
- ▶ Shoot for 400kb for a 1/2 page image or 1MB for a full page.

Tip: If you're not Photoshop-savvy, you can re-size and compress undemanding images ("human interest" not astroimages), with an online tool such as:

<https://imageresizer.com/resize/download/6779bd945d63ac1a3032f37d>

It will also tell you the pixel size and file size of your original, even if you don't download the processed copy.

The Observer is the official monthly publication of the Lehigh Valley Amateur Astronomical Society, Inc. (LVAAS), 620-B East Rock Road, Allentown, PA, 18103, and as of June 2016 is available for public viewing. Society members who would like to submit articles or images for publication should kindly do so by emailing *The Observer* editor, France Kopy, at observer@lvaas.org.

Astroimaging Director, Tom Duff is our new Astroimaging editor, and welcomes all image submissions.

Articles submitted prior to the Sunday before the monthly meeting of the board of governors (please see calendar on website) will appear in the upcoming month's issue. Early submissions are greatly appreciated. PDF format is preferred. Articles may be edited for publication. Comments and suggestions are always welcome.

LVAAS members please feel free to submit ads for astronomy equipment you have for sale, and additionally you may sponsor a maximum of three ads from non-members per year. Please submit your finished ad as a PDF, with pictures, text and contact information, by the submissions deadline, which is listed on our website calendar. Every attempt will be made to include submissions in a timely manner.

Every effort will be made to properly credit the sources of the material used in this publication. If additional credit is required, please notify the editor.

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