



# The W.A.S.P.

Volume 57 Issue 09

September 2025

The Warren Astronomical Society Publication

## Astronomy



## At the Beach

September 26,27

# 2025

Kent Lake Beach  
Island Lake Recreation Area

Recreation Passport or  
Park entry fee needed

Bring  
Your  
Telescopes!

# The WASP

Published by  
Warren Astronomical Society, Inc.  
P.O. Box 1505  
Warren, Michigan 48090-1505

Dale Thieme, Editor

## 2024 Officers

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The Warren Astronomical Society, Inc., is a local, non-profit organization of amateur astronomers. The Society holds meetings on the first Monday and third Thursday of each month, starting at 7:00 p.m.

First Monday meeting:	Third Thursday meeting:
Cranbrook: Institute of Science	Macomb Community College
1221 North Woodward Ave	South campus, Bldg. E, Room 208
Bloomfield Hills, Michigan	14600 Twelve Mile Rd.
	Warren, Michigan

## Membership and Annual Dues

Student	Individual	Senior Citizen	for families
\$17.00	\$30.00	\$22.00	add \$7.00

Astronomical League (optional) \$9.00

Send membership applications and dues to the treasurer:

**c/o Warren Astronomical Society, Inc.**

**P.O. Box 1505**

**Warren, Michigan 48090-1505**

Pay at the meetings

Also via PayPal (send funds to treasurer@warrenastro.org)

- Among the many benefits of membership are
- Loaner telescopes (with deposit). See 2nd VP.
- Free copy of each WASP newsletter.
- Free use of Stargate Observatory.
- Special interest subgroups. See chairpersons.

The Warren Astronomical Society Publication (WASP) is the official monthly publication of the Society.

Articles for inclusion in the WASP are strongly encouraged and should be submitted to the editor on or before the end of each month. Any format of submission is accepted. Materials can either be transmitted in person, via US Mail, or by email (publications@warrenastro.org)

Disclaimer: The articles presented herein represent the opinion of their authors and are not necessarily the opinion of the Warren Astronomical Society or this editor. The WASP reserves the right to edit or deny publication of any submission.

Stargate Observatory is owned and operated by the Society. Located on the grounds of Camp Rotary on 29 Mile Road, 1.8 miles east of Romeo Plank Road, Stargate features an 8-inch refractor telescope under a steel dome. The observatory is open according to the open house schedule published by the 2nd VP.

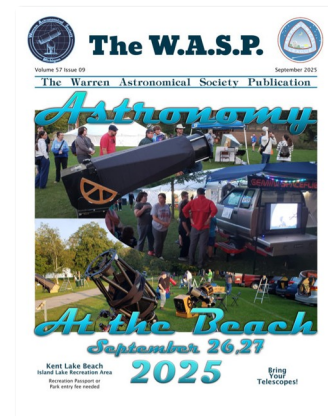


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## About the Cover

This month's cover features scenes from previous Astronomy at the Beach events at Island Lake Recreation Area, including our Big Dob, Jeff MacLeod's Gemini simulator, and assorted personal telescopes that wandered in to catch and share a view of the night sky (once the sun got out of the way.) Photos courtesy of Doug Bock.





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June 27, 2025

Warren Astronomical Society  
Attn: David Baranski  
PO Box 1505  
Warren, MI 48090

Dear David,

I want to extend my many thanks to the Warren Astronomical Society for your generous gift to the Michael Stafford Freshwater Forum Fund. Your support helps carry forward Dr. Mike Stafford's enduring legacy while powering some of the Institute's most impactful environmental education initiatives.

The Freshwater Forum is at the heart of our mission to inspire future generations to become stewards of Michigan's precious water resources. With your contribution, we are able to continue offering dynamic programs like Water on the Go!, which brings environmental learning to K-12 students across the state. Your support also helps sustain important community events such as the Rouge River Water Festival and the Great Lakes Effect planetarium show. In all, the Freshwater Forum has impacted over 500,000 Michiganders since its creation thanks to supporters like you.

Thanks to your generosity, we can ensure that these vital programs remain accessible and continue to inspire the next generation of environmental leaders. We are deeply grateful for your partnership in this important work.

Thanks again for your support. Your commitment is greatly appreciated.

Sincerely,



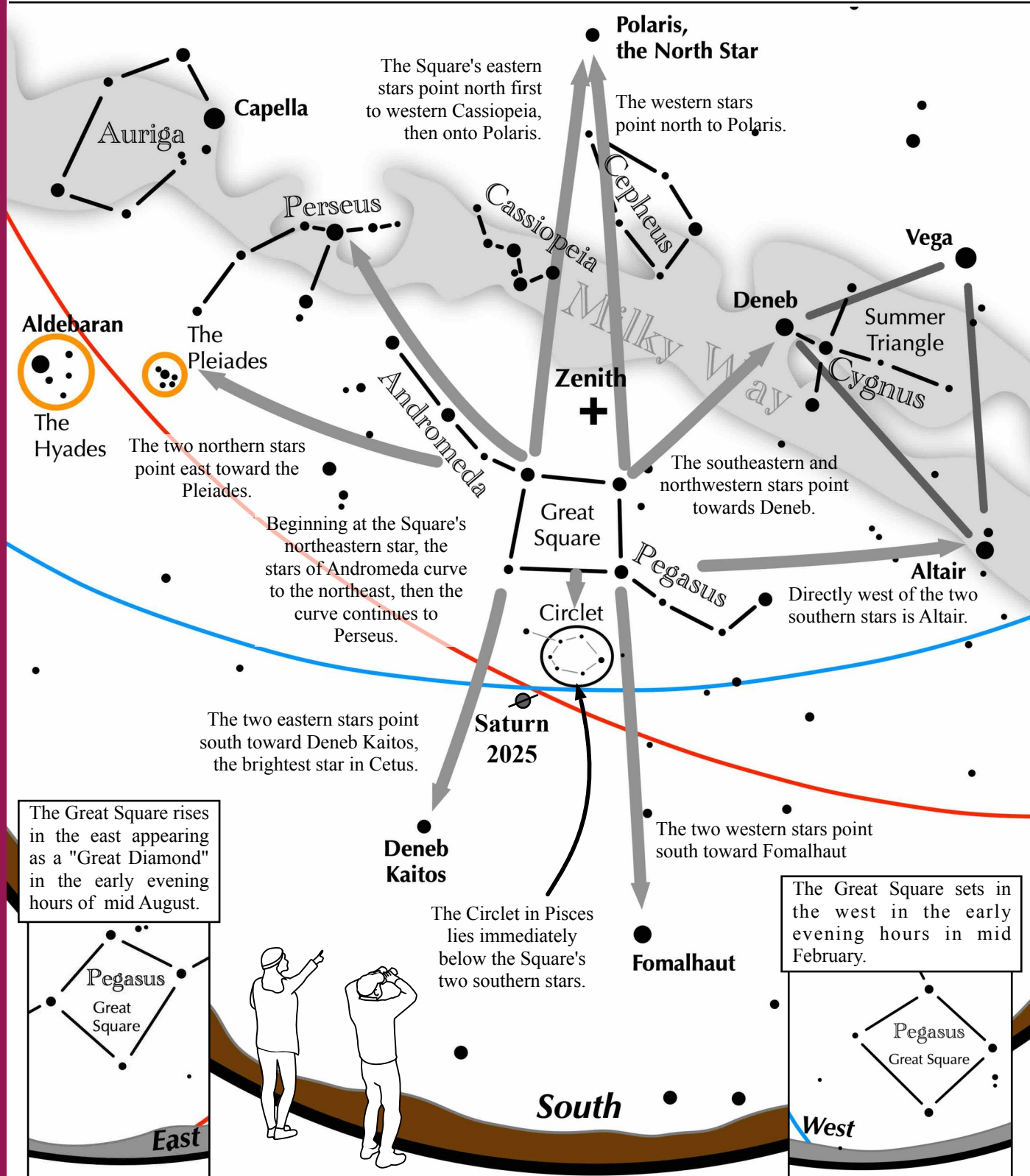
Elizabeth Parkinson  
Head of Freshwater Forum  
Cranbrook Institute of Science



# Navigating the mid Autumn Night Sky: Great Square Guide



Befriend these four stars, slightly dimmer than those of the more famous Big Dipper, and they'll guide you on a tour of the Autumn sky.





# WAS Apparel Price List

## T-SHIRTS

Black – Navy – Gray (Pink or Yellow if desired) – one imprint

Small – XL .....	\$15.00
2XL .....	\$18.00
3XL .....	\$19.00

## LONG SLEEVE T-SHIRTS

Black – Navy – Gray - one imprint

Small – XL .....	\$19.00
2XL .....	\$21.00
3XL .....	\$22.00

## IMPRINT LOCATIONS:

Front left chest (3 ¼" logo)

Front or back (9" or 10" logo)

Back (12" logo for jackets or sweater)

Combination front left chest (3 ¼" logo) and back (9", 10" or 12" logo) – add \$7.00

Choose when placing order

## HOW TO ORDER:

Place order at the Cranbrook meeting on the first Monday of month –

Select garment type - color of garment – logo imprint and color scheme –

Pay in full for order to be placed –

Your order will be ready for pickup at next Cranbrook meeting –

(Your order may possibly be ready for the Macomb meeting following the Cranbrook meeting of that month – you will be notified if that is the case)

Contact Mark Kedzior @ [bazonga952@hotmail.com](mailto:bazonga952@hotmail.com) with any questions

## CREW NECK SWEATSHIRT

Black – Navy – Gray - one imprint

Small – XL .....	\$22.00
2XL .....	\$24.00
3XL .....	\$25.00

## HOODIE W/Pockets

Black Only (at this time) – one imprint

Small – XL .....	\$27.00
2XL .....	\$33.00
3XL .....	\$34.00

## LOGO COLOR SCHEMES:

Black background with gold/yellow artwork and lettering

Black background with blue lettering and gold/yellow artwork

Choose when placing order

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## IMPRINT ON YOUR OWN CLOTHING ITEM: Logo + Imprint Charge

3 ¼" Logo - \$8.00

9" – 10" Logo - \$12.00

12" Logo - \$15.00

## LOGO COLOR CHOICES



Gold/Blue



Gold-3D

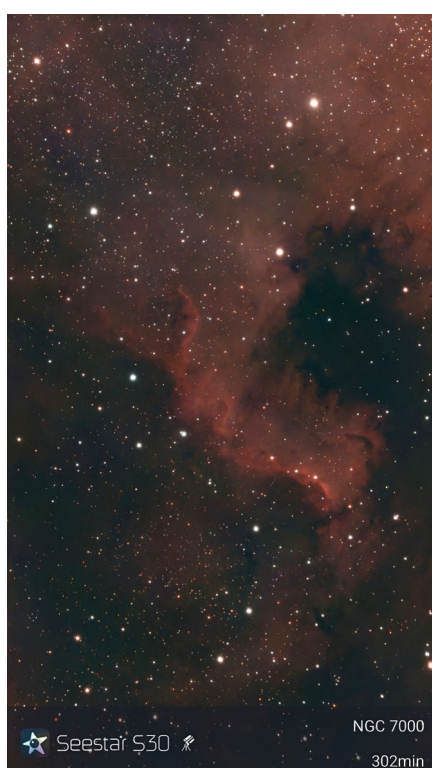
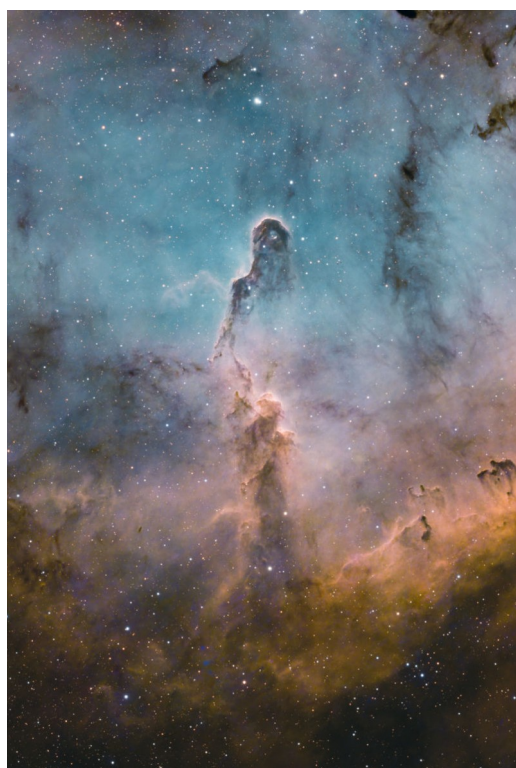


Legacy



# WAS Astrophotos

Here is a collection of images sent in by Dale Hollenbaugh. To the right is Saturn with a Titan transit (7/18/2025). Below, left: IC 1396A, middle: the North American Nebula (NGC7000), and, below right: the Trifid Nebula (M20).





# 2025 W.A.S. Picnic

This year's picnic was well attended, despite the threat of showers. Mark Kedzior (right and center) manned the grill, turning out some fine hot dogs and burgers.

As cooking commenced, the WAS brain trust of Riyad Matti, Dale Partin, and Jeff MacLeod (below) met to discuss things astronomical, gastronomical and meteorological.

Bottom left, long time (and lifetime) member, Doug Bock (left) made it to the picnic from Howell, MI, along with Dale Thieme (right) who came in from Kalamazoo.

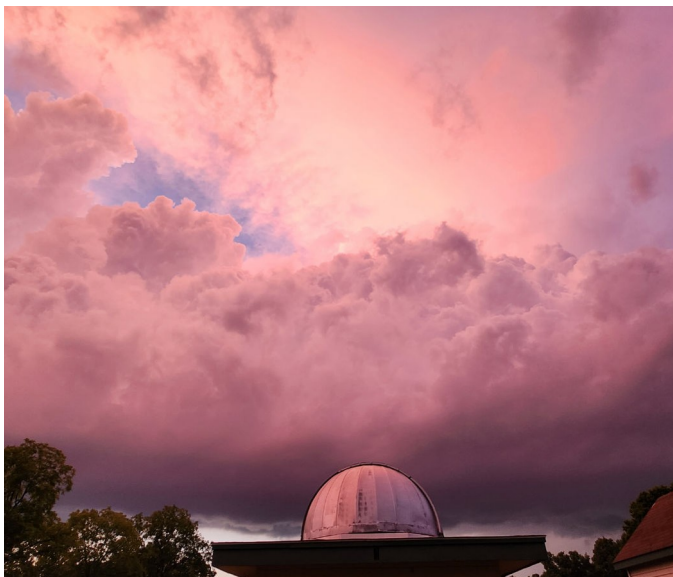
Below right, food inspection was undertaken by Bob Trembley, who deemed the fare delicious.



*Photos by Vatshalya Dandibhotla, unless noted otherwise.*







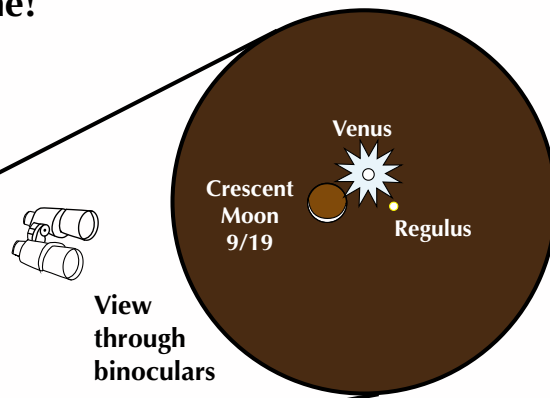
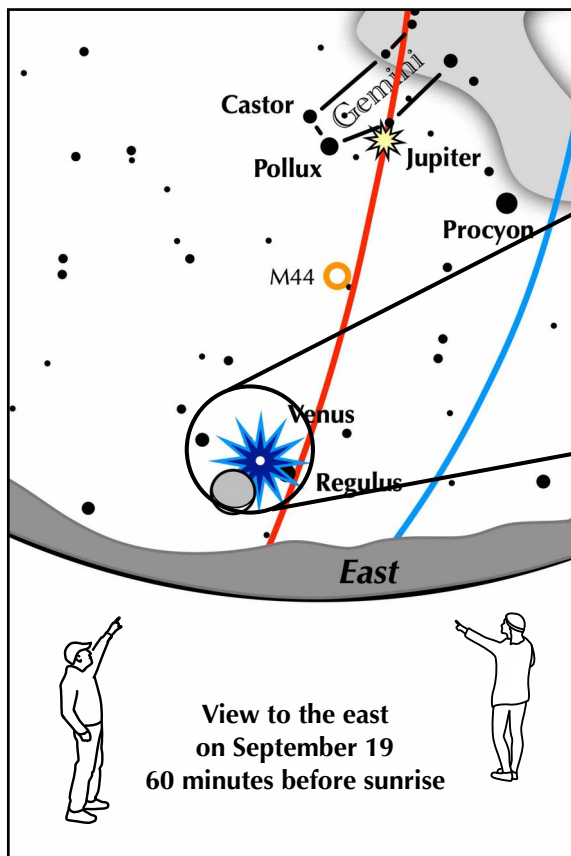
Above: the clouds looked quite ominous, following the picnic, but we were undeterred as Jeff MacLeod set up his Gemini simulator (above right) for members to take a ride to the moon and beyond. Seen here at the right is Jonathan Kade and Diane Hall, cruising around the moon.

Of course we took a group photo. Note the constellation of the triple Dales (Dale Thieme, Dale Partin and Dale Hollenbaugh) around the dome of Stargate in the background.





If you can see only one celestial event in the morning this September, see this one!



### Crescent moon meets brilliant Venus and the star Regulus

On the morning of September 19, the crescent moon, full with earthshine, joins brilliant Venus and the brightest star in Leo, Regulus, for a dramatic sight. Look low in the east-northeast 60 minutes before sunrise.

Be sure to use binoculars to cleanly separate this celestial trio!

Above them all shines bright Jupiter, itself forming an attractive isosceles triangle with the twin stars of Gemini, Castor and Pollux. To their lower right shines the bright star Procyon.



## WAS Merchandise

Available at Cranbrook and Macomb meetings

### WAS Logo Stickers



\$1.00 ea.  
\$5.00 for 7

### WAS Pins



\$2.50  
Each

### WAS Bandana



\$5.00  
Each

Endorsed by  
the Unicycle  
Cowboy!



Astronomical Bandanas, featuring 33 Glow in the dark constellations and a WAS logo.

# Presentations

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## Cranbrook

7:00 pm, September 8, 2025

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### Main Talk

## The Way We Found The Universe

By Jim Shedlowsky

This presentation will describe a fascinating 30 year period beginning in 1898, during which our entire concept of the universe was transformed. The presentation will discuss the events, the controversies, the people, the technologies, and the circumstances that revolutionized our understanding of the universe.

### About the Speaker

Jim Shedlowsky graduated from the University of Michigan in 1960 with a degree in Engineering Physics. After spending 2 years as an artillery officer in the US Army in Germany, he worked for 36 years at General Motors as a Vehicle Development Engineer/Manager specializing in Acoustics, Noise and Vibration, retiring in 1999. In his spare time he wrote and recorded music for Epic and Roulette Records as one of the "Skee Brothers", appearing on Dick Clark's American Bandstand in 1958.



### Short Talk

## A Short History of Stargate

By Dale Thieme

In this presentation, we take a brief look at the beginnings of Stargate and how we got to the Stargate we enjoy today.

### About the Speaker

Dale, joined the WAS in 2007, starting in 2012 served on the board for eight years in the capacity of secretary, treasurer and publications director. He has edited the WASP for eight years and earned the Mabel Sterns Newsletter Award from the Astronomical League in 2021. He is an ardent armchair astronomer, as well.



## Macomb

7:00 pm, September 18, 2025

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### Feature

## Spark of a New Sun: A visit to Kaali crater

By Diane Hall

Former WAS President Diane Hall takes a trip to an impact site in remote Estonia whose formation may be recounted in the epic Kalevala. Prepare to leave with a desire to pack your bags for the Baltics.

### About the Speaker

Diane Hall is a former President of the Warren Astronomical Society, the quondam movie reviewer for the WASP, a lover of Space Shuttles and historic observatories, and a binocular enthusiast. She and her lifelong observing partner Jonathan Kade look forward to spending more time with the 24" Causland Reflector beneath the dark skies of Alcona County.



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## Next Month

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### Cranbrook

Pizza party and astro quiz

### Macomb

*New Digital Telescopes*

## WAS PRESENTATIONS

If you would like to present either a short talk (10-15 minutes) or a full-length talk (45-60 minutes) at a future meeting, please email Dale Partin at:

[firstvp@warrenastro.org](mailto:firstvp@warrenastro.org).





David H. Levy

Thirty-two years ago, Carolyn and Gene Shoemaker and I discovered a comet that was eventually named Shoemaker-Levy 9. It was the ninth periodic comet that we found together, although there were a few other non-periodic comets that we also located, plus the nine other comets I found on my own since I began my comet search in the fall of 1965. The discovery of this particular comet and its subsequent collision with Jupiter, coincidentally my favorite planet, were the most important parts of my professional life, second only to my meeting Wendee. Sixteen months after our discovery the 21 pieces of this shattered comet collided with Jupiter, in one of the most decisive science stories of the twentieth century. I may not have been aware of how significant this was until, at this year's Adirondack Astronomy Retreat, I watched the July 16, 1994 press conference during which Gene, Carolyn, and I tried to express the significance of this event. I remembered how much smarter I might have been back then, being able to speak in complete sentences, compared to my waning personality now. What I was not aware of back then is that what we were witnessing might have been an example not only for our own lifetimes but for the vastly larger history of the Earth we live on.

Sixty-six million years ago, the Cretaceous period of Earth's geologic history ended rather abruptly with the mass extinction of about three quarters of all the species of life on Earth. The theory proposed by Luis Alvarez and his son Walter was based on the large amount of iridium that was found, eventually at exposed rock sites all over the world. The discovery in the early 1990s of the 200-mile wide impact crater the center of which was near the coastal town of Chicxulub Pueblo, in present-day Mexico, began a long stretch of evidence that leads most scientists to conclude that the impact of an asteroid (or less likely a comet) had a lot to do with the Cretaceous-Paleogene mass extinction.

More recently, some evidence has emerged that the impact in the Gulf of Mexico was not the only one that occurred at that time. The 15-mile wide Boltysh crater in Ukraine, and the 12-mile wide Silverpit crater in the North Sea, not far from Great Britain, might have been formed at about the same time. These structures, and others that have been found or speculated, are all between North latitude 20 and 70 degrees.

Could these structures be impact craters, and if they are, could they have formed in connection with the Cretaceous-Paleogene extinction? This suggests the possibility of near-simultaneous multiple impacts. But the operative word has to be suggests. The evidence is there, but it is speculative and not strong, that the Chicxulub impactor might have been just one of a series of impacts. According to a paper



by Krisopher Dekan of the University of Gothenburg, "To conclude that a mass extinction of this sort is not associated with immense extraterrestrial impact is to break the rules of a respected scientist. There is too much evidence in favor of a least two large impacts and no other factor can explain the (Iridium) anomaly that is globally widespread in both sides of the paleomagnetism of that time, being normal and reverse near the K/Pg boundary."

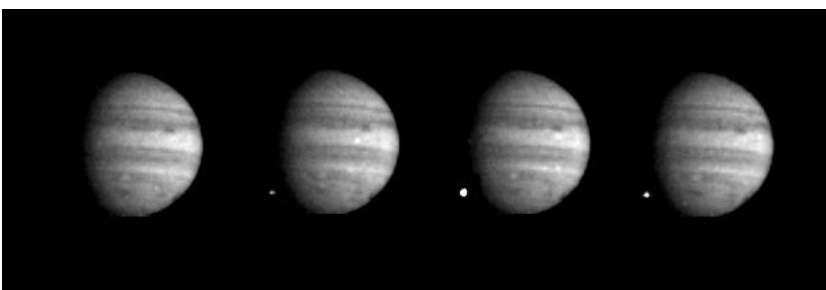
We will never know what upended the Earth's biosphere 66 million years ago, because we were not there. But at this juncture I would like, not to ignore the methods of modern science, but to take science out for a walk in the desert. We will never know, but what if a Shoemaker-Levy 9-style multiple impact is what caused the elimination of most of the species of life on Earth?

What if? I think it is fun to speculate on this question. From my own perspective, as I take that fictitious walk in the desert, my decision to begin hunting for comets when I was a teenager in 1965 might have led to a personal communion with a major event on the planet that has given me so much pain, and so much more much joy.

## Images:

*Above: The discovery images of Comet S-L 9 taken Gene and Carolyn Shoemaker, and David Levy.*

*Left: A NASA image sequence of one of the impacts taken by the Galileo probe.*





# Over the Moon



With Rik Hill

## BULLIALDUS

After you have worn yourself out on Eratosthenes and Copernicus and see all the features around Plato, 8-9 days after new moon, you may notice a beautifully terraced crater in the south just west of Arzachel and Rupes Recta. This is Bullialdus (63km dia.) with a floor 3.5km below the rim and a multi-peaked “central peak” rising over a kilometer above that crater floor. This formation is only 1.1-3.2 billion years old making it of Eratosthean age, before Copernican but after Imbrian ages. Its isolation on the surrounding plain of southern Mare Nubium makes it stand out. There is a good hatch work of ejecta outside the crater walls extending out about a crater radius. South of this crater is Bullialdus A (26km) a shallow crater undoubtedly filled with ejecta from the Bullialdus impact, and a bit farther south is slightly smaller Bullialdus B (21km) and then west (left) of that is a rather polygonal but similarly sized crater, Konig (23km). Apollo 16 got a splendid view of these group and it's worth looking up on the web.

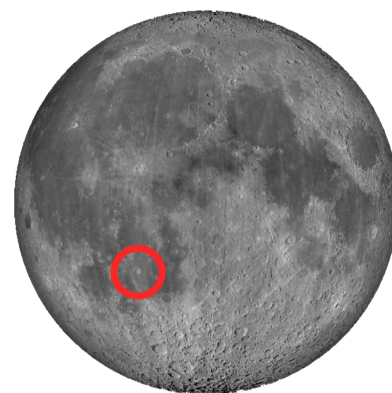
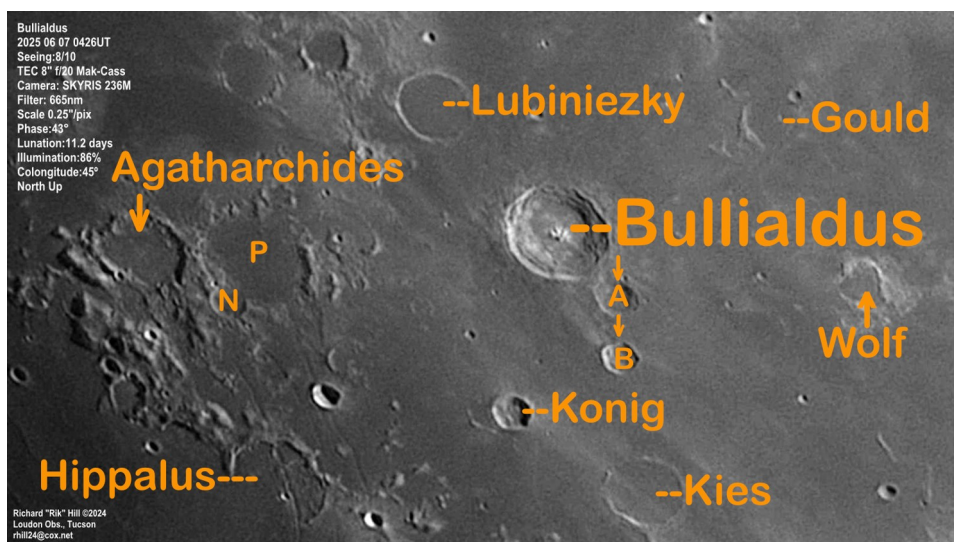
There are a number of ghost and partial craters in this frame surrounding Bullialdus. The most obvious can be seen at the top and bottom of the image, Lubiniezky (40km) and Kies (46km) respectively. Due west of Bullialdus you can see two more ruined, nearly ghost, craters. The closest one is Agatharchides P (65km) with the little cirque cut out in the lower left which is Agatharchides N (21km) and a little further west is Agatharchides itself (51km). South of these craters is another ghost crater crossed by rimae, or stretch marks from Mare Humorum farther to the west. When that mare cooled there was a subsidence as the rock contracted leaving the parallel arc graben like rimae



you see here. The crater in question is Hippalus (57km) listed by the Virtual Moon Atlas as an “Exceptional formation” but as shown here, not at all unique in Mare Nubium.

On the opposite side of Bullialdus, to the right or east is an unusual ghost crater, Gould (32km) that is mostly just the west wall of the crater. South of this is a heart-shaped crater, Wolf. It is listed as 25km diameter but it is anything but circular. This formation, which includes the irregular walls and flooding, probably consists of at least 3 separate impacts. The thing I find fascinating about this feature is how it changes with changing illumination during the lunar day, but that's another article in itself! Don't hesitate to explore this area when it is available. Your efforts will be well rewarded.

This image was made from two AVIs stacked with AVIStack2 and further processed with GIMP and IrfanView.



Location Maps by Ralph DeCew





# History S.I.G.



## September 1995

We lead off in this issue with "SMURFS 95" (Southern Michigan Universal Regional Festival of Stargazers) by Thomas Bader, a recounting of his experiences at the event.

Here's a twist, "Recent Headlines" -Submitted by Lorna Simmons, is a list of articles that she sent in. The editor deemed them too long to include in the issue and encouraged members to see Lorna if they wanted to read the articles.

The club librarian offers these nuggets in "LOUIE THE LIBRARIAN'S BOOK OF THE MONTH" (Louis Namee): "SEEING THE SKY" by Fred Schaaf and "Astronomical Fun Factors" by Val Germann.

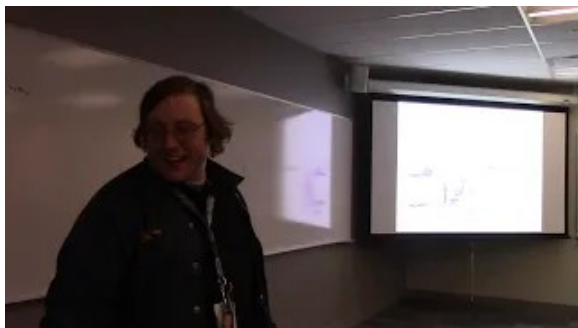
## September 2005

Astro Chatter by Larry Kalinowski covers the upcoming Astronomy at the Beach, over at the Kensington Metro Park, Nowadays we're at Island Lake and it's this month, too! Don't forget. He also mentions other astronomical news and club activities. In "Note from the President" Ken Bertin reminds us that officer elections is approaching. Larry Phipps visits "The Warren Rupp Observatory in Ohio" and in NASA Space Place, "Improbable Bulls-Eye" by Dr Tony Phillips.

## From the Scanning Room

I'm giving a short talk this month: A short History of Stargate. Back in 2019, Jonathan Kade gave a full length treatment which you can watch [here](#).

Dale Thieme,  
Chief Scanner



**MAGAZINE REVIEW**  
This month's edition of *Scientific American* (August, 1995) has an 8 page spread on the Comet Shoemaker-Levy 9 impact with Jupiter. The article gives the history of the discovery of the comet as well as a record of the event as it took place. The pictures are nice (no "new" shots) and the article is well written. For those who may have been living in a cave during July of 1994, this is a great way to relive the event. It's been a year since this celestial event occurred. Many of us watched out in the field we looked at down loaded images from NASA and the Hubble Space Telescope of the comet pieces nearing Jupiter. Finally, we looked at the dark markings left behind in the atmosphere after the comet chunks collided with Jupiter. A year later you can still see something. The big dark spots have disappeared and in their place is a very thin line that encircle the planet. Most likely none of us will ever have the chance to view an impact of another planet. But those of us who witnessed this event are not likely to ever forget it.

### COMPUTER CHATTER

Larry F. Kalinowski

The computer group is planning to use Mt. Wilson's 24 inch, CCD equipped, reflector. Plans are being made as to dates and subjects to photograph. Mac users will be glad to hear that there's a new operating system about to emerge next year called Copland or system 8. It'll mean faster operation, easier multitasking, less crashing and uses less memory because it's based on the PowerPC. Compatibility? That's the one major disadvantage. It means you have to throw away some old software. On June 28, the evening of Detroit's fireworks spectacular, I caught a glimpse of the sky. MIR appeared first, moving from NW to SE, about 10:15 in the evening. It was

continued on page 3



Articles on any astronomically related topic can be submitted to the editor. See information on page 2.



The WASP (Warren Astronomical Society Paper) is the official monthly publication of the Society. Each new issue of the WASP is mailed to each member and/or available online [www.buonitelli.net/wasp](http://www.buonitelli.net/wasp). Requests by other Astronomy clubs to receive the WASP, and all other correspondence should be addressed to the editor, Cliff Jones, email: [cliffjones@ameritech.net](mailto:cliffjones@ameritech.net). Articles for inclusion in the WASP are strongly encouraged and should be submitted to the editor on or before the first of each month. Any format of submission is accepted, however the easiest forms for this editor to use are plain text files. Most popular graphics formats are acceptable. Materials can be submitted either in printed form in person or via US Mail, or preferably, electronically via direct modem connection or email to the editor. The disclaimer: The articles presented herein represent the opinions of the authors and are not necessarily the opinions of the WASP or the editor. The WASP reserves the right to deny publication of any submission.

### Astro Chatter

by Larry Kalinowski



Here's a view of Comet Temple 1 right after the impact. The fly-by probe took this picture from behind the comet. The comet shows an illuminated phase of a little less than 90 degrees, putting the Sun to the right in the picture. The plume still exists and probably will be visible for quite some time after the impact. The Deep Impact probe may have another comet to investigate. If funding comes through, comet 85P/Boethin will be the next comet scrutinized by its cameras. That'll be sometime in 2006.



How would you like to see three suns in the sky? It could happen in some other planetary system. The

discovery of a three star system with a large planet has astounded astronomers. The planet is slightly larger than Jupiter and it takes about three days to orbit the larger star. The planet is too close to its parent sun to have any life on it because of the extreme radiation. It was because of the extreme radiation. It was thought that such a three star system couldn't support planets because of the weird gravitational interaction. In this case, the other two stars are in a long elliptical orbit which keeps them far from the planet. Our theories concerning planetary formation are way out of touch with reality.



One of science fiction's most beloved actors passed away recently. James Doohan, the chief engineer on the starship Enterprise, was lovingly known as "Scotty". He was also the man that transported the Enterprise team down to

This chart shows the sky as it appears at approximately 9pm EDT near mid-month at northern mid-latitudes.

# SEPTEMBER 2025

## Notable Sky Happenings

### Sep. 1 - 7

The Full Moon on the 7th is the Harvest Moon. It's the full moon that occurs closest to the September (Fall) Equinox, which is on the 22nd.

### Sep. 8 - 14

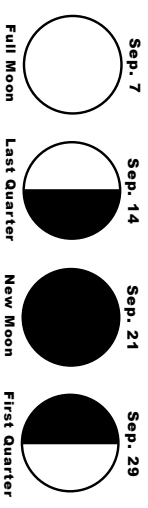
Moon is to the left of Saturn on the 8th (ESE eve.).

### Sep. 15 - 21

Moon is at the upper left of Jupiter on the 16th E morning). Venus is above Regulus on the 18th, and a very nice conjunction (grouping) on the 19th: Moon is upper left of Venus which is upper left of Regulus (E morning).

### Sep. 22 - 30

The September (Fall) Equinox occurs at 2:19pm EDT on the 22nd. The Moon is to the left of Antares on the 27th (SW evening).



## Now Showing

### "Lamps of Atlantis"

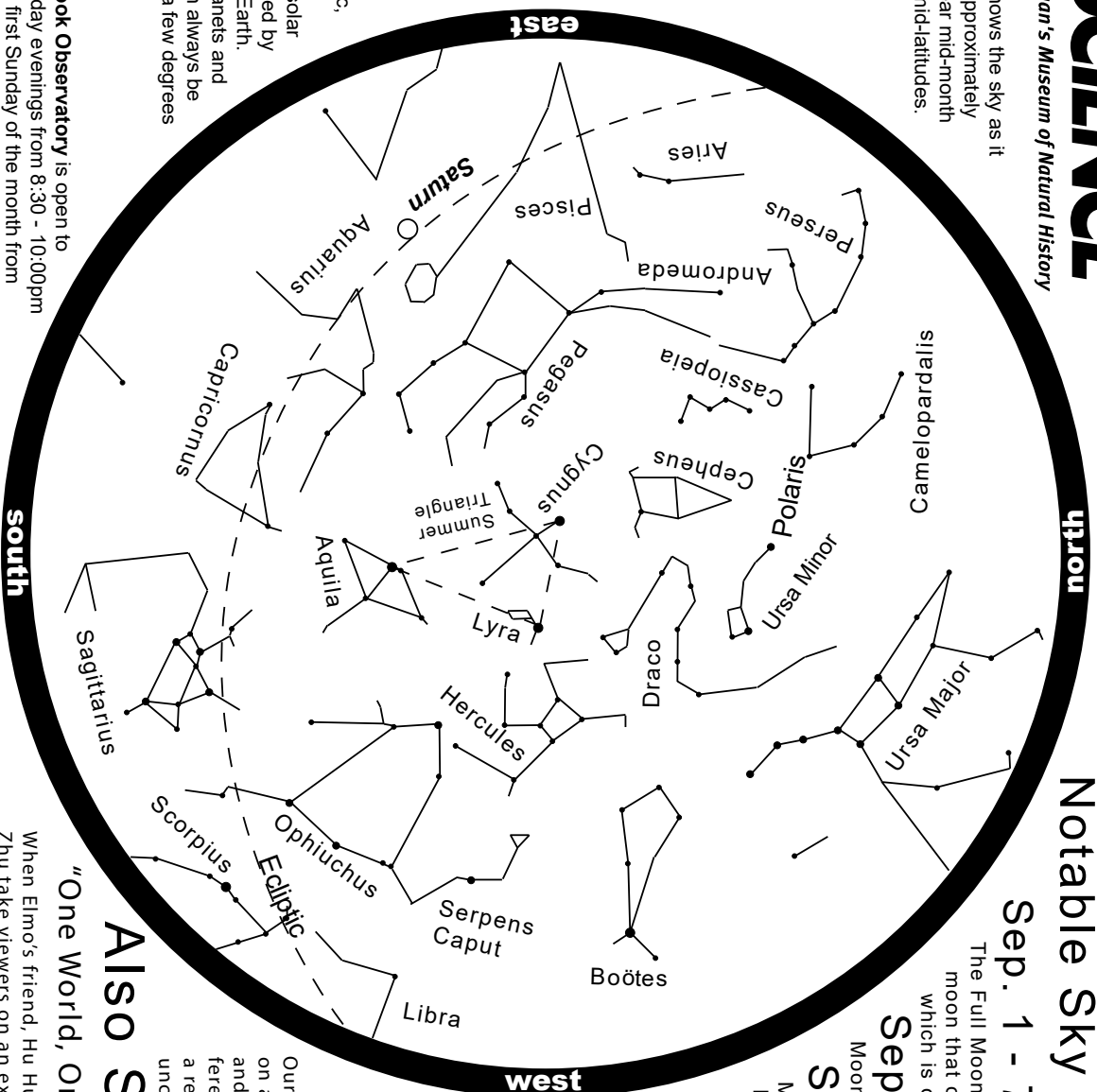
Our search for the lost continent of Atlantis takes us on a journey through the astronomical knowledge and understanding of the ancient Greeks. What different patterns did ancient cultures see? Was Atlantis a real place? Did it really sink into the sea? We will uncover clues to help us solve this age-old mystery.

## Also Showing

### "One World, One Sky: Big Bird's Adventure"

When Elmo's friend, Hu Hu Zhu, visits from China. Big Bird, Elmo and Hu Hu Zhu take viewers on an exciting discovery of the Sun, Moon, and stars. They learn about the Big Dipper and the North Star and take an imaginary trip to the Moon where they learn that the Moon is a very different place.

For astronomy information visit <http://science.cranbrook.edu>



What is that dashed line? It's the ecliptic, the reference plane of the solar system, defined by the Sun and Earth. The major planets and the Moon can always be found within a few degrees of this plane.

The Cranbrook Observatory is open to the public Friday evenings from 8:30 - 10:00pm EDT, and the first Sunday of the month from 1:00 - 4:00pm for solar viewing.

For observatory information visit <http://science.cranbrook.edu/explore/observatory>





Jonathan Kade - August 11/12 Aurora

September

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
	Labor Day					
7	8	9	10	11	12	13
Total Lunar Eclipse; mag=1.362 FULL MOON	Cranbrook		Moon at Perigee: 364781 km			
14	15	16	17	18	19	20
LAST QUARTER MOON				Macomb		
21	22	23	24	25	26	27
Partial Solar Eclipse; mag=0.855 NEW MOON	Navratri Autumnal Equinox			Great Lakes Star Gaze	Great Lakes Star Gaze Moon at Apogee: 405552 km	Great Lakes Star Gaze Stargate Astronomy Day
28	29	30				
Great Lakes Star Gaze	FIRST QUARTER MOON					





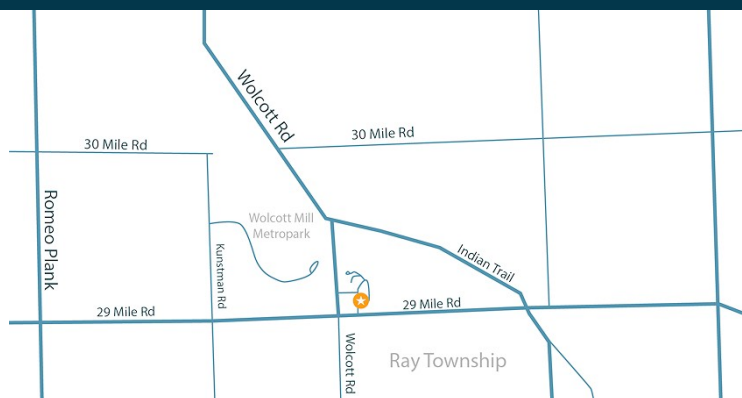
# Stargate Observatory

Monthly Free Astronomy Open House and Star Party  
7:30 PM, September 27

Wolcott Mill Park - Camp Rotary Entrance

**Advisory:** Concerns are circulating in the amateur astronomy community about a possibility of COVID-19 being passed from one person to another via contact of different persons' eyes with a telescope eyepiece. Sharing telescopes may be considered by some to be high-risk due to the possibility of eyes touching eyepieces. Masks are encouraged, mandatory for children.

- Sky tours.
- See different telescope types in operation.
- Get help with your telescope.
- We can schedule special presentations and outings for scouts, student or community groups.
- Contact: outreach@warrenastro.org
- Find us on Meetup.com



20505 29 Mile Rd (1.8 miles east of Romeo Plank Rd) Ray, MI 48096  
82° 55'04" West Longitude, 42° 45'29" North Latitude

## Observatory Rules:

- Closing time depends on weather, etc.
- May be closed one hour after opening time if no members arrive within the first hour.
- Contact the 2nd VP for other arrangements, such as late arrival time. Call 586-909-2052.
- An alternate person may be appointed to open.
- Members may arrive before or stay after the scheduled open house time.
- Dates are subject to change or cancellation depending on weather or staff availability.
- Postings to the Yahoo Group and/or email no later than 2 hours before starting time in case of date change or cancellation.
- It is best to call or email the 2nd VP at least 2 hours before the posted opening with any questions. Later emails may not be receivable (secondvp@warrenastro.org).
- Generally, only strong rain or snow will prevent the open house... the plan is to be there even if it is clouded over. Often, the weather is cloudy, but it clears up as the evening progresses.

# Stargate Report

## August Open House

### August 23, 2025

The August Picnic and open house started about 4 pm. Roughly 30 members attended the picnic. Mark Kedzior cooked the meats to perfection as usual, and members brought side dishes to share, including salads, desserts, fruits, water, and soft drinks.

Everyone enjoyed the picnic, and thanks to all who attended and participated.

The weather during the picnic was partly cloudy but very nice. The clouds became thicker after the picnic when we moved to the observatory, and it started raining at sunset. The rain stopped after about half an hour, and it started clearing up about 10:30 pm.

Jeff Macleod brought his Gemini space capsule simulator, which many members and visitors used, and they all enjoyed the experience. We also used the 10" Dobsonian telescope to observe a few deep sky objects, double stars, and Saturn. The observatory was closed at 12:10 am.

Thanks to everyone who participated and helped with the events.

## September Open House

The next observatory open house event is scheduled for Saturday, September 27, 2025 at 7:30 pm.

**Riyad I. Matti**  
2025 WAS 2nd VP,  
Observatory Chairperson

# Treasury Report

## Report for August 31, 2025

### BOA Checking/cash

Balance..... \$22,422.33

#### Income

Memberships & A.L..... 179.00

#### Expenses

Credit card payment..... 157.75

Picnic groceries, supplies..... 196.00

### Credit Card

Balance..... 0.00

### PayPal

Balance..... \$524.60

#### Income

Memberships..... 191.11

#### Expenses

Astronomical League ..... 9.00

## Astronomical Events For September 2025

Add one hour for Daylight Saving Time

Source:

<http://astropixels.com/almanac/almanac21/almanac2025est.html>

Day	Time (h:m)	Event
7	13:09	FULL MOON
7	13:12	Total Lunar Eclipse; mag=1.362
7	18:08	Moon at Ascending Node
8	15:09	Saturn 4.0°S of Moon
10	7:09	Moon at Perigee: 364781 km
12	16:48	Pleiades 1.0°S of Moon
12	22:28	Mars 2.0°N of Spica
13	6:00	Mercury at Superior Conjunction
14	5:33	LAST QUARTER MOON
16	6:06	Jupiter 4.6°S of Moon
16	12:58	Pollux 2.4°N of Moon
19	3:57	Venus 0.4°N of Regulus
19	6:11	Regulus 1.3°S of Moon
19	6:46	Venus 0.8°S of Moon: Occn.
20	18:13	Moon at Descending Node
21	0:00	Saturn at Opposition
21	14:42	Partial Solar Eclipse; mag=0.855
21	14:54	NEW MOON
22	13:20	Autumnal Equinox
23	6:00	Neptune at Opposition
23	16:31	Spica 1.1°N of Moon
24	9:50	Mars 3.9°N of Moon
26	4:46	Moon at Apogee: 405552 km
27	12:34	Antares 0.6°N of Moon
29	18:54	FIRST QUARTER MOON

## Membership

Members: ..... 120

We wish to welcome new members Dennis Kevin, the Eaton family, Jacqueline Hamric, the Horner family, Michael Johnson, and Larry Kolasa.

**Dave Baranski,**  
Treasurer

# Meeting Minutes

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## Warren Astronomical Society

### Board Meeting

June 30, 2025

Officers attending: Bob Trembley, Dale Partin, Riyad Matti, Dave Baranski, Charles Strackbein, Jeff Macleod, Vatsalya Dandibhotla, and member Dale Thieme.

Bob started the meeting at 7:00 pm by wishing everyone a Happy Asteroid Day

### Officer Reports

First VP: Featured presentations are booked through the end of the year and well into 2026, featuring presentations by Ken Bertin, Dr. Dale Partin, Dr. John Monnier, Rik Hill, and Bob Berta. There are openings for short (10 – 15 min.) presentations.

Second VP Observatory Chair: Riyad reports everything is in good shape.

Treasury Report: Dave Baranski reports Checking: 23K, PayPal: 600, Cash: 170. David & Dale Thieme had a meeting with Comerica. Dave further researched and recommended that we move our bank account to Comerica. Dale shared his experience with Quicken Software and recommended it. Charlie moved, to move the bank account to Comerica, as per Dave's research and advice. Second by Jeff. Approved by all.

Secretary Report: Charles Strackbein reports meeting notes are in progress.

Outreach Report: Jeff reported on several past and upcoming events, focusing on our participation in AATB (Astronomy at the Beach).

Publications Report: Latest WASP was published on May 31st; further development of the website and social media.

### Old Business

In the old business, we recognized that the GLAAC \$500 club table fee was approved at the last meeting. Bob emailed Liam Finn and Tim Campbell about how to get that to GLAAC.

A Speaker for the annual banquet was discussed. Bob Trembley made a couple of suggestions, including the Liam and Tim Show, as noted in the May Board minutes.

David led a discussion about a Square/credit card reader and the need for some type of accounting software. Snacks at Meetings were discussed. A 2025 Snacks Sign-up Sheet at meetings, Connect by Email with membership. One idea discussed was having pizza occasionally.

Board Member Compensation was discussed. Motion by Charlie to make a certificate for board member service. Bob added that we should make them for our speakers. Along with a certificate of service, we voted to waive the Board member fee for future years. Jeff made a motion, Riyadh seconded, and it passed.

### Website updates

Vatsalya Dandibhotla reports that information on the Paul Strong Scholarship has been added.

The Info on the website about Paul Strong needs to be condensed.

### Stargate Update Sub-committee

Charlie Strackbein met with Steve from Metro Parks on June 15 to discuss Stargate Ideas. Correspondence continues.

Also discussed at our board meeting were the McMath-Hulbert Observatory, Bob Trembley to create a Bluesky Account, Jeff Macleod to procure a Vinyl Sign for the Stargate door, update the URL on the Dob Trailer, and bring a brochure box for Stargate

### New Business

The Perseids - Aug 12 - with the event at Stargate on the 9th. Riyad Matti will be at Stargate.

We discussed contacting Metroparks about Wolcott Mill, Stargate, and The Perseids, including the need to advertise on social media and Mailchimp, and we require a new Scout contact. Restarting a Discussion Group was discussed. Mentioning it at the Cranbrook Meeting and emailing the membership in July. If interested in Astronomical League Observing programs, now is the time to act. Several members could be eligible for the Outreach award. Advertising AATB was discussed, Mailchimp, social media, and Newsletter

7:45 PM Dale Partin called to adjourn, Charlie 2nd. Approved.

Respectfully submitted

Charlie Strackbein  
WAS Secretary 2024, 2025

## Warren Astronomical Society

### Board Meeting

July 28, 2025

Bob Trembley called the meeting to order at 7:00 pm

Officers present: Bob Trembley, Dale Partin, Riyad Matti, Dave Baranski, Charles Strackbein, Jeff Macleod, and member Dale Thieme.

Officer Reports

President

Bob: Vatican Observatory lighting study paper published.

First VP: Dale reports that he needs speakers for next year and discusses ideas for the banquet speaker.

Second VP Observatory Chair: Riyad Matti reports that about 20-25 scouts and a couple of members showed up; it was cloudy. The Scout troop called, and Bob Berta and Riyad met them at the Observatory open house, which had low attendance but interest from a potential new member. The Perseids meteor shower



event is scheduled for August 9, with Cranbrook also hosting an event.

Treasury Report: Dave Baranski reports checking: 22951, PayPal: 342, cash: 183. Orders for Stargate event supplies were confirmed.

Secretary Report: Charlie reports meeting notes are in progress. See Stargate Update Sub-Committee Notes

Outreach Report:

Jeff reported on several past and upcoming events, focusing on our participation in AATB (Astronomy at the Beach). Orders for Stargate event supplies were confirmed.

Publications Report

The latest WASP was published on June 30; further development of the website and social media.

## Old Business

GLAAC \$500 club table fee is in process, waiting on information to provide to the bank.

Stargate Update Sub-committee

Charlie Strackbein met with Steve from Metro Parks on June 15 to discuss Stargate Ideas. Correspondence continues. The Stargate project is progressing, with potential site work costing \$5,000 and a dome from Ash Domes, with estimated beginning costs of \$10,000. Riyadh advised against any fiberglass dome.

Certificates of Appreciation. Charlie to create draft designs for the board member and speaker certificates and share with the board. Square/credit card reader - David and Dale Thieme had a meeting with Comerica. Our Treasurer brought up the need for some accounting software. Dale T. shared his experience with accounting software. Snacks at Meetings were discussed.

Discussed Board member compensation, and it needs to be added to the Bylaws. Board member's fee waived. Jeff made a motion, Riyadh 2nd, and it passed.

Also discussed were certificates for board member service and speakers. The McMath-Hulbert Observatory, Jeff Macleod to procure a Vinyl Sign for the Stargate door, update the URL on the Dob Trailer, and bring a brochure box for Stargate.

## New Business

The Board needs to verify that the WAS dates and calendar dates are correct. Contact Metroparks about the Perseids event at Stargate on the 9th. The actual Perseids date is Aug 12, and we need to advertise with Mailchimp and on social media about Stargate on the 9th. Bob T. mentioned restarting the Discussion Groups, which he had also mentioned at the July Cranbrook meeting.

AL Observing Programs - Now is the Time to Get Involved. Several members could be eligible for the AL Outreach award. Start advertising AATB—create information for the message board. 1961... Community as-set.

New Social Media & Promotions Sub-Committee: Could be the Publications Chair, could be a subcommittee under Publications

Promotions:

### *Paul Strong Scholarship*

Dale P is currently putting together an article for the WASP about Paul Strong and the scholarship.

Dale P discussed a picture of Paul Strong in the article. This will be used to create a Press release.

Also discussed getting a couple of quotes from folks who knew Paul Strong?

Dale Partin mentioned Paul Strong taught physics and astronomy at the Macomb South Campus. He remembers Paul Strong as being a friendly and relatively quiet person who championed getting us a place to meet on the Macomb South Campus. The WAS originally met in a physics lab room and were given access to some cabinets there to store our library. This went on for MANY years. After he retired after more than 40 years of teaching at Macomb, we had to move our library to Cranbrook. We established the Paul Strong Scholarship a few years before his passing in 2019.

Create a social media - Blog post of a Press Release, Contact news channels, find reporters and weather persons. Get the reporter out at Stargate and AATB.

Dale Partin moved to adjourn at 8:15 p.m., Riyadh seconded, approved by all.

Respectfully submitted

**Charlie Strackbein**  
**WAS Secretary 2024, 2025**

## Warren Astronomical Society

### Cranbrook Meeting

**August 4, 2025**

Bob Trembley began the meeting at 7pm with introductions and roll call. There were 30 at Cranbrook, 14 on Zoom, and 4 on YouTube.

Bob reminded the attendees that WAS wearables are purchasable from Mark Kedzior and WAS Stickers are available too from Dave Baranski. He went on to say Astronomy at the Beach, September 26th & 27th at Island Lake State Park, is coming up and the WAS will have a table under the Club tent. We could use a couple members both nights to crew the WAS table!

Astronomy at the Beach is hosted by the Great Lakes Association of Astronomy Clubs. Their meetings are held the 2nd TUESDAY of the Month. If you are interested in helping plan, or advertise Astronomy at the Beach, they could use your help.

### Officers' Reports

President: Bob announced this was his 41st anniversary being married to Connie!

Also, elections are coming up in Nov. A couple board members are term-limited out of their positions and Board members get a free membership!

1st VP: Dale Partin needs presentations (especially SHORT)

2nd VP: Riyadh Matti mentioned a Perseids open house on the 9th at Stargate

Treasurer: David Baranski updated the club on the status of our funds

\* Secretary: Charlie Strackbein said we're working with the Metroparks about upgrade ideas to Stargate, focusing first on sidewalk repairs/replacement.

Outreach: Jeff Macleod announced the Detroit Library lecture program was firing up again, typically the fourth Tuesday of the month. Still looking for volunteers for AatB.

## Astronomy In the News

3rd interstellar comet 3I/ATLAS. Discovered on July 1st, showing a coma. With the Vera Rubin Telescope being online, it's likely we'll discover a boatload of these interstellar objects.

Cosmic Rays Could Support Life Just Under the Ice. A team of researchers looked at the process of radiolysis, which occurs when cosmic rays slam into water or ice. The high-speed particles break water molecules apart, which releases electrons, and some bacteria on Earth use those for energy. Could the same thing happen to possible life forms on icy worlds of the outer Solar System?

### Asteroid Update

1,457,753 total asteroids - up several thousand

38,985 Near Earth Objects - up almost 150

### Exoplanet Update

5,967 Confirmed Exoplanets

7,658 Candidates

The NASA Exoplanet archive added 27 new spectra to their Atmospheric Spectroscopy Table, which brings its holdings to more than 1,000 transmission, eclipse/emission, and direct imaging spectra for exoplanet characterization!

This week's exciting news is about planet candidate TWA 7 b, a Saturn-mass object directly imaged by JWST. If confirmed, it would be the first exoplanet discovered by the space telescope using direct imaging—and also the lightest planet ever seen with this technique outside our solar system.

## Special Interest Groups

### Nova

The predicted nova of T Coronae Borealis has still not occurred. You can keep track via the sidebar on Spaceweather.com

### SOLAR

We got Spots

Double Star (Riyad at Stargate)

### Short Talk

Dale Partin introduced Adrian Bradley, who gave a short talk on "How to Take the BEST Milky Way Pictures Ever."

### Main Talk

Following the Snack Break, Dale Partin then introduced Nancy Chabot with her lecture on the Dart mission.

The meeting adjourned at 9:18pm

Respectfully submitted

Charlie Strackbein

WAS Secretary 2024, 2025

Warren Astronomical Society

Macomb Meeting

August 21, 2025

Bob Trembley called the meeting to order at 7:03 PM, with about 20 in attendance.

## Announcements

WAS wearables are purchasable from Mark Kedzior.

GLAAC - The Great Lakes Association of Astronomy Clubs Meetings are on the 2nd TUESDAY of the Month.

The GLAAC board would like two representatives from active clubs to ensure that information is filtered back to their clubs and advertisements are disseminated accordingly. Jeff MacLeod added we could use another member attending these meetings.

Astronomy at the Beach Sept. 26 & 27 at Island Lake State Park. Br. Guy is the speaker.

GLAAC plans and runs AATB. If you are interested in helping, we need your help this year.

## Officer Reports

President: Bob reported that GLAAC member clubs would be interested in having speakers from other clubs. Bob announced we need more photos for the Calendar and invited everyone to the Annual Picnic this Saturday! Hot dogs, hamburgers, and pop will be provided.

1st VP: Dale Partin reported that he needs more short presentations.

2nd VP: Tina Wong, reporting on behalf of Stargate, noted that it was very overcast at the last open house, and few people came out.

Treasurer: David Baranski reported on our balances, posted in the newsletter.

Secretary: Charles Strackbein reported that the meeting notes are in progress—no new mail. We're working with the Metroparks about upgrade ideas for Stargate. Currently, we're focusing first on sidewalk repairs/replacement.

Outreach: Jeff MacLeod reported on outreach events.

Publications: Vatsalya Dandibhotla reports that we are still accepting images for the calendar and could use a few more. August 2025 Newsletter was published on July 31st.

## Astronomy In the News

We have a 3rd interstellar comet, and it is cruising! 3I/ATLAS was discovered on July 1st, and the closest approach to Earth is about 1.8 astronomical units. It will pass pretty close to Mars, and we have a fleet of spacecraft there, some with telescopes. Scott Manley has a great video about it on YouTube. The Vera Rubin Telescope is online.

AN IMPACT FLASH ON SATURN? An impact flash may have been observed on Saturn on July 5th between 09:00 and 09:15 UT. If it is confirmed, it would be the first-ever impact flash detected on Saturn.

### Asteroid Update

Total: 1,455,752 - up 5K

NEOs: 39,083

### Exoplanet Update

5,983 Confirmed

7,658 Candidates

This week's 11 new planets include BEBOP-3 b, a circumbinary planet discovered through radial velocities, which makes it the first radial velocity exoplanet detection of a previously unknown circumbinary system.

## Special Interest Groups

Nova: The predicted nova of T Coronae Borealis has still not occurred. The sidebar on Spaceweather.com indicates a slight decrease in brightness.

Solar: From [spaceweather.com](http://spaceweather.com). If you're on Facebook, check out CME Alerts and the Solar Activity Group.

Arctic Aurora Season has begun: As summer comes to an end, skies are darkening around the Arctic Circle--and aurora season has begun. A solar wind stream on Aug. 19-20 sparked the first easily visible Northern Lights in months.

If anyone wishes to start a special interest group, great! Suggestions include Radio, Computers and Technology, Education, Light Pollution, and Podcasting.

## Feature Talk

After the break, Dale Partin introduced Rik Hill who started to speak on "Solar Cycle 25" via Zoom, but two slides

in lost connection and efforts to reach him were futile. Jonathan Kade stepped in and gave an impromptu talk about his and Diane's visit to Rik and Delores years earlier.

Bob ended the meeting at 9:21 PM.

Respectfully submitted

**Charlie Strackbein**  
WAS Secretary 2024, 2025



# For Sale

## Meade 10" Schmidt-Cassegrain

Mark Zauner would like to get this telescope into the hands of someone who will use it. Asking \$400 for the lot but is flexible on the price. He can be contacted at [zman91357@aol.com](mailto:zman91357@aol.com).





The Warren Astronomical Society is a proud member of the

## Great Lakes Association of Astronomy Clubs

GLAAC is an association of amateur astronomy clubs in Southeastern Michigan who have banded together to provide enjoyable, family-oriented activities that focus on astronomy and space sciences.

Club Name and Website	City	Meeting Times
Astronomy Club at Eastern Michigan	University Ypsilanti/EMU	Every Thursday at 7:30PM in 402 Sherzer
Capital Area Astronomy Club	MSU/Abrams Planetarium	First Wednesday of each month 7:30 PM
Farmington Community Stargazers	Farmington Hills	Members: Last Tuesday of the month Public observing: 2nd Tuesday of the month
Ford Amateur Astronomy Club	Dearborn	Fourth Thursday of every month (except November and December) at 7:00 PM
McMath-Hulbert Astronomy Society	Lake Angelus	Board and paid members-First Sunday of the month
Oakland Astronomy Club	Rochester	Second Sunday of every month (except May)
Seven Ponds Astronomy Club	Dryden	Monthly: generally the Saturday closest to new Moon
Sunset Astronomical Society	Bay City/Delta College Planetarium	Second Friday of every month
University Lowbrow Astronomers	Ann Arbor	Third Friday of every month
Warren Astronomical Society	Bloomfield Hills/Cranbrook & Warren/MCC	First Monday & third Thursday of every month 7:30 PM

## Club and Society Newsletters

Warren Astronomical Society:	<a href="http://www.warrenastro.org/was/newsletter/">http://www.warrenastro.org/was/newsletter/</a>
Oakland Astronomy Club:	<a href="http://oaklandastronomy.net/">http://oaklandastronomy.net/</a>
McMath-Hulbert Astronomy Club	<a href="http://www.mcmathhulbert.org/solar/newsletter/">http://www.mcmathhulbert.org/solar/newsletter/</a>
Ford Amateur Astronomy Club:	<a href="http://www.fordastronomyclub.com/starstuff/index.html">http://www.fordastronomyclub.com/starstuff/index.html</a>
University Lowbrow Astronomers:	<a href="http://www.umich.edu/~lowbrows/reflections/">http://www.umich.edu/~lowbrows/reflections/</a>

## WAS Member Websites

**Steven Aggas:** <http://apache-sitgreaves.org/>  
**Jon Blum:** [Astronomy at JonRosie](#)  
**Doug Bock:**  
Facebook: Northern Cross Observatory: <https://www.facebook.com/NorthernCrossObservatory>  
Boon Hill and NCO Discussion <https://www.facebook.com/groups/369811479741758>  
Flickr (astrophotography album): <https://www.flickr.com/photos/141833769@N05/>

YouTube channel: <https://www.youtube.com/channel/UC-gG8v41t39oc-bL0TgPS6w>  
**Bob Trembley:**  
<https://www.vaticanobservatory.org/profile/rtrembley>  
**Vatican Observatory Foundation Blog**