



Celebrating Sixty Years of the Warren Astronomical Society



The W.A.S.P.

Vol. 53, no. 8

Winner of the Astronomical League's 2021 Mabel Sterns Award

August 2021

The Warren Astronomical Society Publication

Warren Astronomical Society Annual Picnic August 28, 2021 Pavilion, Rotary Park and Stargate Observatory



Once again, the grill team of Mark Kedzior and Dale Thieme will be on grill duty.

Swap meet this year at the picnic. Bring along astronomical gear you wish to sell/swap. Going up for sale from a donation to the club is this Galileo brand telescope shown below. Check with Dale Partin, firstvp@warrenastro.org if you have any questions about bringing something to sell/swap.



Plus, if weather permits, there will be swapping, selling and telescoping.



We are going ahead with picnic plans, but, the board may elect to cancel the event based on COVID-19 State and Federal health mandates and recommendations. This will be determined as we get closer to the date of the picnic.

Even though the event is outdoors, we still recommend social distancing, wearing of face masks when not eating, and not sharing eyepieces for safety.

This is a members and immediate family only event. No pets, please.



The WASP



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

Dale Thieme, Editor

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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 7:30 p.m.

First Monday meeting:	Third Thursday meeting:
Cranbrook: Institute of Science	Macomb Community College
1221 North Woodward Ave	South campus, Bldg. J, Room J221
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)\$7.50

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.

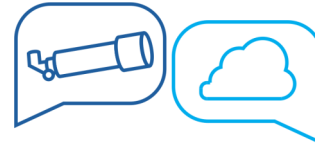
The Warren Astronomical Society Publication (WASP) is the official monthly publication of the Society. Articles for inclusion in the WASP are strongly encouraged and should be submitted to the editor on or before the end of each month. Any format of submission is accepted. Materials can either be transmitted 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.

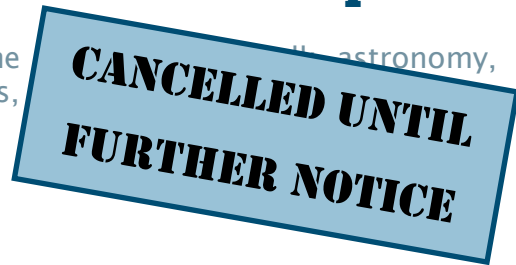
Snack Volunteer Schedule

The Snack Volunteer program is suspended for the duration. When it resumes, volunteers already on the list will be notified by email.



Discussion Group Meeting

Come discuss astronomy, space news,



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Join us in celebration of the League's 75th year!

ALCon 2021 Virtual!

ALConVirtual.org

August 19 - 21, 2021



Presented by
Your Astronomical League

Free Registration !!

**Door Prizes valued
at more than
\$7500**

**Grand Prize - Explore Scientific
Firstlight 127mm Mak-Cass Telescope
with Twilight Mount valued at ...**

\$750 !

AL Con Speakers and Presentations ...

- Dr. Jocelyn Bell Burnell, "The Discovery of Pulsars in Context"
- David Eicher, "Galaxies"
- Dr. Richard Gott, "The Cosmic Web"
- Dr. David Levy, "Poetry in the Heavens"
- Kelly Beatty
- Dr. David Dunham, "Near-Earth Asteroid Occultations"
- Paul Cox "SLOOH"
- Alan Dyer

And more!

Astronomical League Awards

- Library Telescope Drawing
- Mabel Sterns Newsletter Award
- Web master Award
- Peltier Award
- National Young Astronomers
- Horkheimer Youth Awards
- GR Wright Award
- Special Service Awards

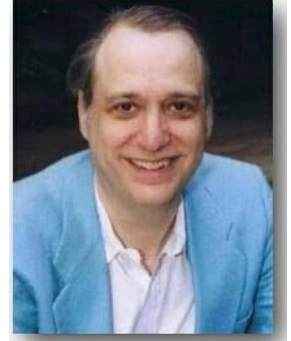
**Saturday Night:
Global Star Party**



Dr. Jocelyn Bell Burnell



David Eicher



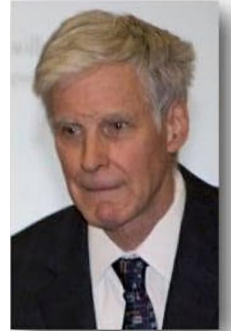
Dr. Richard Gott



Dr. David Levy



Paul Cox



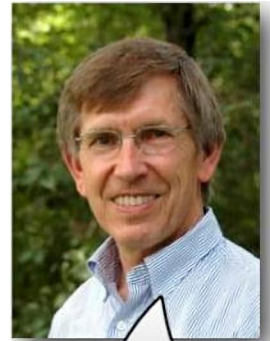
Dr. David Dunham

J Kelly Beatty

Alan Dyer



Virtual Tour of the Very large Array





President's Field of View

A gibbous moon, pink as a flamingo feather, in the evening sky. A sunset and then sunrise whose light fell across the landscape like a thick amber syrup. An afternoon sun so veiled by haze that large sunspots or a transiting planet might've been easily glimpsed on its disc with no additional filter.

Climate change played hell with astronomers this past month as the smoke from western wildfires hovered over Michigan for days on end and flooded rivers escaped into streets and basements. We speak of light pollution and its hazards as part of our mission, but this July served as a timely reminder that Earth is a planet, that planetary science is earth science, and no astronomer stands alone under the sky.

Astronomy may seem at times an isolated pursuit; the amateur astronomer who can afford \$20,000 for an imaging set-up (or \$30,000 for their own dark-sky site, or \$45,000 for that eclipse tour with Sky and Telescope) may feel that they've escaped the surly bounds of Earth for a night or five. But that escape, that solitude, is an illusion—the lights zipping through our darkest skies are Starlink sats,

not the Perseids. As we approach the open of another unconventional school year, it's worth it to remind ourselves of what we'll leave future generations of stargazers. Will they be able to see the Milky Way, or even the dimmest star in the Big Dipper? Will their sun and moon be veiled by smoke? How high will those waters rise?

The astronauts of the Apollo era celebrated the contributions of their photos like "Earthrise" and "Blue Marble" to the nascent environmental movement. Spaceship Earth and all that. Let this, too, be our legacy as astronomers.

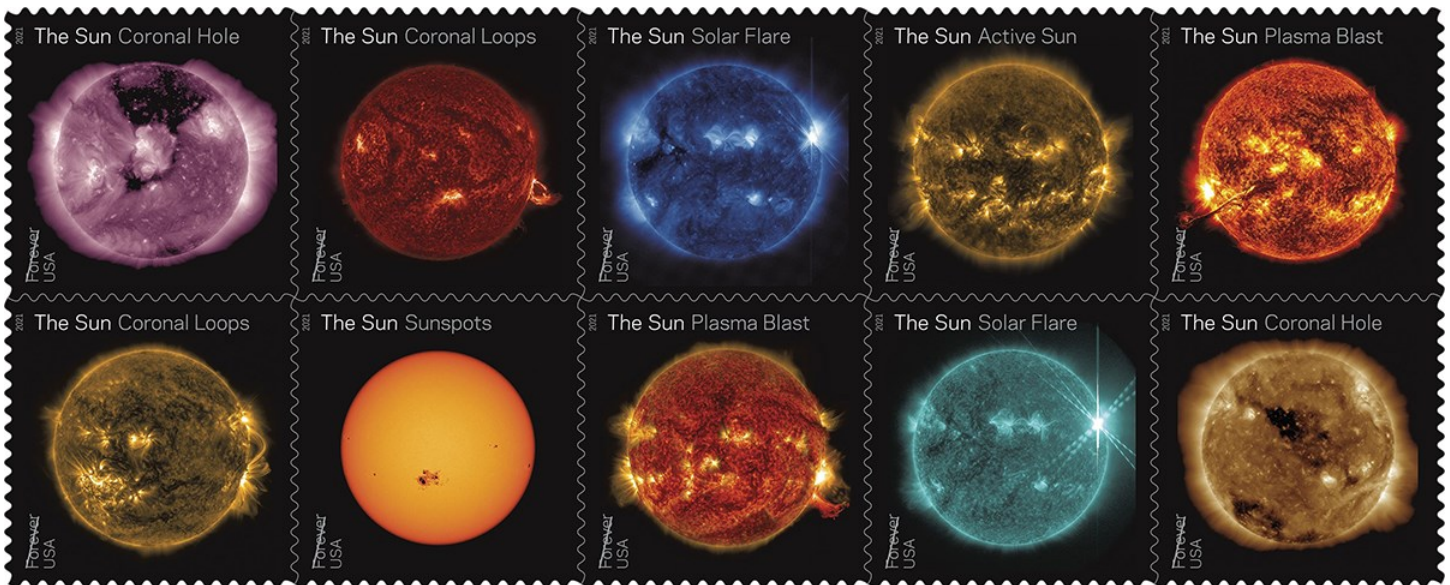


Warren Astronomical Society
Your Name
Here

**Club Member
Name Tags**

Email publications@warrenastro.org for
your personalized name tag

SUN SCIENCE COMMEMORATIVE FOREVER™ STAMPS



The U.S. Postal Service issued the Sun Science stamps June 18. The Forever stamps were dedicated during a ceremony at the Greenbelt Main Post Office and are now for sale at Post Offices nationwide. They can also be ordered online: https://store.usps.com/store/results?Ntt=Sun+Science&_requestid=74649

There is a video about it, as well:

https://www.facebook.com/watch/live/?v=3085375135024659&ref=watch_permalink

In Memoriam
Mike Simonsen
1956-2021

It is with a great sense of loss we note the all too soon passing of Mike Simonsen, past Second Vice-President (2000) and President (2001) of the Warren Astronomical Society.

Mike Simonsen also joined the AAVSO in 1998 and had submitted over 88,000 variable star observations to the AAVSO International Database. He had been involved in many of the AAVSO's activities: he coordinated all variable star chart production for the AAVSO, and oversaw CHOICE, the AAVSO's online education institute, as well as the AAVSO Mentor Program, Speakers Bureau, Writers Bureau, CVnet, and was the leader of the AAVSO Cataclysmic Variable Section. In 2007 Mike joined the AAVSO staff as Membership Director and Development Officer in which post he was in charge of membership services and fundraising.

He started a research program of Z Cam type of dwarf novae, and was the author or co-author of more than twenty peer-reviewed papers on cataclysmic variables. The latest of his Z Cam papers was published in *The Journal of the American Association of Variable Star Observers* (JAAVSO 42.1, 2014, p. 177)

In 2005, Mike Simonsen received the AAVSO's highest honor, the AAVSO Director's Award. In October 2011, Mike became only the third recipient of the Charles Butterworth Award, the British Astronomical Association Variable Star Section's highest honor. In 2012 Mike received the Leslie Peltier Award from the Astronomical League. Then awarded the American Astronomical Society's Chambliss Amateur Achievement Award for exemplary research by an amateur astronomer. The AAS specifically cited



Mike's multiyear Z CamPaig which was dedicated to the long-term study of Z Camelopardalis stars. "Simonsen's research," the AAS announcement stated, "...promises to have a long-lasting impact on the field of accretion-disk theory."

Main belt asteroid 367732 is named Mikesimonsen in his honor.

Mike's observatory, named after legendary AAVSO observer and chart maker, Charles E. Scovil, housed two 12-inch LX200 telescopes, one for visual use and one for CCD observations, or as Mike liked to joke, "One for each eye!"



Observing Reports



Photo: Adrian Bradley

From Adrian Bradley:

Smoke from the Canadian wildfires stomped on what would have been a beautifully clear new moon to observe and image with. Objects at the zenith such as Cygnus can be targeted for classic Astrophotography, but nightscapers are pretty much screwed. Here are a couple of images that prove that.

(Continued on page 7)



Photo: Adrian Bradley

(Continued from page 6)

This is a shot of the Milky Way when the clouds were clearing on Thursday night.

Next comes the smoke. Obscuring the Milky Way like you're looking through a pane of smoky glass.

However, with around 40 frames minimum you could still image the region of Cygnus. It was just about the best thing to observe as well.

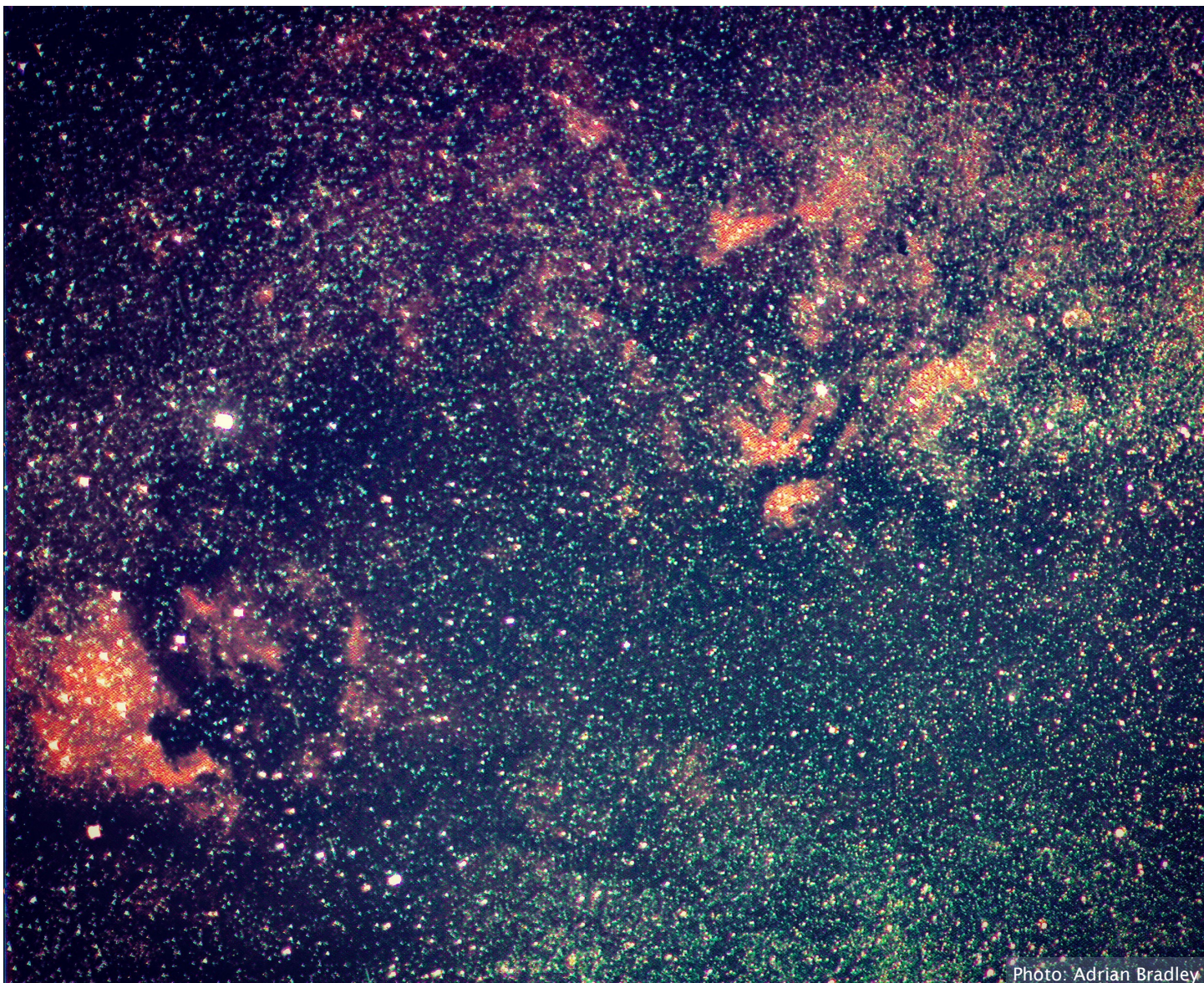


Photo: Adrian Bradley

More Observing Reports

1 - 2 July

Jupiter. North Aequatorial Belt definitely bifurcated in latitude, fainter component toward aequator. Orange. North Temp. Belt prominent with no analogue on opposite hemisphere. The S. Aequatorial Belt essentially gone!

Faint linear trace.

Seeing fair. Transparency good.

4" refractor @ 170X

3 - 4 July

Jupiter. N. Aequatorial Belt decidedly doubled. South Aeq. Belt much fainter with possible hint of Great

Red Spot on E. limb but difficult to be sure.

Transparency poor, long distance smoke. Seeing fair.

4" refractor @ 170X

10 - 11 July

Rst 3220 Sgr -- Could not see 14th mag. companion. Star too low?

(Immediately W. of Upsilon Sgr)

S 716 Sgr -- Nearly same field as above. Could make out very close B companion, to ~ S.E. of A.

V1942 Sgr -- Carbon star per earlier obs'n. Observer and W. Beers agreed on reddish-orange.

SZ Cam/ N.G.C. 1502 Cam complex -- At one end of

(Continued on page 8)

(Continued from page 7)

Kemble's Cascade. Stunning "cat's eyes" in midst of small open cl. The double stars are Sigma 485 with 18 arc-sec. sep. Per Hirschfeld and Sinnott, the B star is SZ of period 2.7d. Observer estimated B star 0.2 mag. fainter than A (actually 7.0 / 7.3), the double are 09 and B1, essentially identical, but one might mistake for "later" classification. The separation of the bright pair is unchanged from 1830 to 1967. *ATLAS BOREALIS* depicts jumble of close stars which H. & S. list as a host of multiples per extended entry.

Transparency excellent. Seeing good

10" f /6 Newtonian w/o drive, push-to, go-to, any L.E.D.s, auto-focus, but with Tel-Rad (not employed). Various mags.

13 - 14 July

Jupiter, on meridian. North Aequatorial Belt very prominent and bifurcated in latitude, reddish-orange. Trace of N. Temp Belt, w/o analogue in southern hemis. To this instrument the S. hemis. has become quiet: return to prominent N. as in recent years.

Transparency fair, seeing excellent.

5-cm. F /11 refractor @ 85X

18 - 19 July

No observing report, intentions not withstanding. The smoke over S. Mich. was HORRIBLE last night. Reminds me of a public night last summer at the Veen.

19 - 20 July

Jupiter. Well past meridian @ approx. 08.45 U.T. too



Photo: Fred Pompei

Smokey Moon—from July 19, 2021
(near meridian, not horizon)

late to use 4-in. f /15 refractor from home site. Planet was orange, never before seen.

Transparency poor, seeing unknown.

Naked eye obs'n

24 - 25 July.

Jupiter. Fascinating tableau at 1st light. Callisto at greatest E. elong., whilst very near W. planet limb Io and Ganymede very close to each other. Io just minutes from "eclipse disappearance". Ganymede had emerged from "transit egress" ~ an hr. prior. (OBS. HAND. p. 233) Europa was invisible in transit.

The N. Aequatorial Belt seemed to have lost colour from prev. obs'n, but proximity to gibbous Moon? First impression = S. Temperate Belt unusually well defined, but actually the "upper" reach of the South Aequatorial belt.

Again, Belt continued subdued.

Moon. Terminator cutting Mare Crisium. With sunlight low on Cleomedes immediately N., seemed a central peak well defined, but actually "B" crater.

Rima Cleomedes not visible, prob. from low magnif. Libration moderately favourable on that portion of lunar limb.

Transparency fair. Seeing good.

6-cm. refractor* ~ 55X

COMMENTARY: Kopal's *NEW PHOTOGRAPHIC ATLAS (1971)* of limited utility here.

While preliminary pages are spent on tangential exposition and (non Moon) photographs, the index is poor, cf. no mention of Cleomedes. Per contra, the several columns per page in fine print in Kopal's *ATLAS*, differentiated by type of terrain.

* W/o electronics, reclaimed wood fittings on mount made with steel safts of unknown provenance, and counter-weight of stacked large washers, tube reclaimed from an earlier telescope (?), and wooden surveyor's tripod.

Saddle of reclaimed wood, tube secured in place by thin gauge Al flashing.

Original telescope maker lost to history, with new wood fashioned by "Handsome Joe" McBride, 4th greatest astro-photographer in Michigan.

Addendum: A truly rigorous treatment in the Veen Obs. library: *ATLAS AND GAZETEER OF THE NEAR SIDE OF THE MOON* (N.A.S.A. 1971) Photographic compendium in large format. This Observer deems the book the greatest lunar plates/photogrammetry after publication of the *Lunar Airforce Charts* (sheets) in the 1960's. Cleomedes has numerous entries *seriatim*, some of marginal value, but 53-1 shows the crater very well. Prominent Cleomedes B could be mistaken for a central peak with low magnif. at sun-setting illumination. There is a modest peak near-by, in addition.

GM Ross



Letters

Letter to W.A.S.P.

The Grand Rapids Association had a fairly successful public night at the Observatory, the 17th. Even though I deployed the 6" Newtonian the Rosses made when Eisenhower was president, I went up in the west dome as a gas station cowboy 'till end of twilight.

A member was operating the Mighty Borr, a man with planetarium experience.

He was talking with a very young woman about Caroline Herschel, weighty figure in early 19th c. science. Miss Herschel was mother-wife-scientific resource for her energetic brothers in Bath. She worked in to very old age.

Then came the strangeness: Allegations that she had faced gender discrimination. Allegation that her brothers presented her astronomical work with out credit since a woman had performed it. About twenty-five years ago I did some horse-back research on Caroline for an Association lecture, but never encountered any of this. I do know -- *nota bene* -- she was the first woman elected to the Royal Society, whether posthumously I can not recall.

More: It was said women scientists were discriminated or diminished after and *before* Herschel. Repeat: "before" Caroline Herschel. When they were done, I talked to the young visitor to tell her of Hypatia, mathematician and daughter of one in late antiquity Alexandria. She came to a very bad end, the reason therefor is probably clouded by retellings and excuses.. (Possibly an even worse end given a recent film starring, improbably, Julia Roberts.)

"Before", do tell. *What* women scientists? Any women scientists before 1800 would have naturally been in the west. The Far East? The Subcontinent? Forget it!

To the best of my reckoning, the only female in what might be called natural philosophy or natural history was Saint Hildegardis in mediaeval Germany, a polymath if there ever was one. She even played chess with Frederick Barbarossa.

True, there might have been women who took an interest in the natural world, in the nobility or *haute bourgeoisie*. If so their letters or record books are long gone. They left no trace in the provincial world of the Middle Ages or Renaissance. The best potential candidates would have been in the lay orders, like the above, or in university towns with available books.

But the absence of evidence is not evidence, save for maundering conspiracy theorists. In more modern times, I doubt if any empiricists or encyclopaedists could be identified in the famous *salon* circles of 17th c. Paris.

It is not this thesis to deny the truncation of females' education, even in the very upper classes.

In the royal families of five centuries ago, what was the level of girls' literacy? The question is of course rhetorical.

In conclusion, one should not indulge in revisionist history to satisfy contemporary complaints. Women of science were not "discriminated against".

There were none. Rebuttals perfectly welcome.

G. M. ROSS

Concerning Caroline



- She was the first woman to receive a salary as a scientist.
- She was the first woman in England to hold a government position.
- She was the first woman to publish scientific findings in the Philosophical Transactions of the Royal Society, to be awarded a Gold Medal of the Royal Astronomical Society (1828), and to be named an Honorary Member of the Royal Astronomical Society (1835, with Mary Somerville).
- She was also named an honorary member of the Royal Irish Academy (1838). The King of Prussia presented her with a Gold Medal for Science on the occasion of her 96th birthday (1846).
- Lived to be 97

Image credit: By Ölgemälde: Melchior Gommars Tieleman; Foto des gemeinfreien Gemäldes: unbekannt - Michael Hoskin: [Discoverers of the Universe: William and Caroline Herschel](#)



Star Trails From the Northern Skies Follow Circular Logic

Image by Ray Bosshard-taken mid-June



NGC 7023 - Iris Nebula

Stellarvue SVX080T-3SV
ZWO ASI2600MC Pro
72x600sec (12 hours integration)

Image by Dale Hollenbaugh

(Continued on page 11)

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More Astrophotography



Elephant Trunk Nebula, IC1396A, in HOO

Stellarvue SVX080T-3SV
ZWO ASI2600MC Pro
Optolong L-eXtreme duo-narrow-band filter
32x600sec (5.3 hours integration)

Image by Dale Hollenbaugh

W.A.S.P. Photo and Article Submissions

We'd like to see your photos and articles in the W.A.S.P. Your contribution is ESSENTIAL! —

This is YOUR publication!

Send items to: publications@warrenastro.org

Documents can be submitted in Microsoft Word (.doc or .docx), Open Office (.ods), or Text (.txt) formats, or put into the body of an email. Photos can be embedded in the document or attached to the email and should be under 2MB in size. Please include a caption for your photos, along with dates taken, and the way you'd like your name to appear.

The View From C.W. Sirius Observatory

Planetary Nebula Abell 39

Abell 39 is an almost perfectly spherical planetary nebula with a low surface brightness. It is located some 6800 light-years away in the constellation of Hercules and about 4,600 light-years above the Galactic plane — the plane in which the majority of the Milky Way galaxy's mass lies. With a diameter of about 5 light-years it is one of the largest known spheres. It is the 39th entry in George Abell's 1966 Abell Catalog of Planetary Nebulae (and 27th in his 1955 catalog) of 86 old planetary nebulae which either Abell or Albert George Wilson discovered before August 1955 as part of the Palomar Observatory Sky Survey. Planetary nebulae have nothing to do with planets except that to early astronomers these round objects looked like the planets Uranus and Neptune. Planetary nebulae are the last stage of life for stars like our Sun. After billions of years, stars reach a point where there is little hydrogen gas to burn. To help convert their stellar furnaces to burn other elements such as helium, the star balloons in size to become a red giant. Eventually, however, the star collapses back on itself. This increases the temperature at its core and most of the stars material is catapulted into space, forming a bubble around the star. Then the star cools down to become a white dwarf. Abell 39 is also formed as a once Sun-like star expelled its outer atmosphere over a period of thousands of years. Still visible, the nebula's central star is evolving into a hot white dwarf. Abell 39's central star is slightly offset west of center by about 0.1 light-years. This nebula has a nearly uniform spherical shell. However, the eastern limb of the nebula is 50% more lu-



minous than the western limb. Additionally, irregularities in the surface brightness are seen across the face of the shell. The source of the east-west asymmetry is not known but it could be related to the offset of the central star. The bright rim of the planetary nebula has an average thickness of about 0.34 light-years. The color of this nebula is due to excited atoms of oxygen which emit light that appears teal. The oxygen was released from the central star during its evolution into a white dwarf. Even though oxygen's glow dominates the nebula, oxygen is twice as abundant in our own sun.

This image was taken through my 11" SCT telescope using a one-shot color camera. It is composed of 12, 15 minute exposures for a total of 3 hours integration time using no filters on the camera. Abell 39 is pretty faint. You will need a large telescope, 14" or greater, in dark skies to view it. I also recommend using an OIII filter on your eyepiece. I'm a big fan of blue colored nebula, so I will probably be imaging more of them in the future.



About CW Sirius Observatory:

C.W. (Cadillac West) Sirius Observatory is located 15 west of Cadillac Michigan. Owned and operated by WAS member Bill Beers. The dome is an 8' Clear Skies Inc dome which houses an 11" f/10 SCT telescope, a 102mm f/7 refractor telescope, Celestron CGEM DX mount, and uses an ASI ZWO 071 color CMOS camera, as well as a QHY8L color CCD camera. The telescope can be remotely operated from inside Bills house.

Anyone interested in learning about astrophotography, or any questions regarding equipment, or how to take astrophotos using your iPhones, or any related questions, can contact Bill at: BEEZOLL@AOL.COM





This month the weather has been poor with cloud cover and wildfire smoke inhibiting imaging, but I did manage to do some work on the night of July 1-2, 2021.

This time we have a new ZWO asi2600MC PRO camera to work with on the 10" f/8 RC telescope. (~2010mm focal length).

The target this month was NGC 6946, the Fireworks galaxy.

NGC 6946, sometimes referred to as the Fireworks Galaxy, is a face-on intermediate spiral galaxy with a small bright nucleus, whose location in the sky straddles the boundary between the northern constellations of Cepheus and Cygnus. Apparent magnitude: 9.6



Data Acquisition: 37 x 300 second subs, at a gain of 100, temp 0C, along with darks and flats.

(Continued on page 14)

Presentations

Monday, August 2, 2021

Virtual Presentations

Main Talk:



Exploring the Galilean Moons

By Dale Partin

We've come a long way from the time when Galileo discovered the four largest moons of Jupiter. They are far from the Sun where they were expected to be very cold. However, these moons are now known to be warm enough that at least one of them likely has liquid water, and potentially life. More missions to these fascinating moons are in the works now. These moons, with Mars, are currently "hot spots" in the search for extraterrestrial life in our Solar System.

In this talk, Dale will explore the history of past robotic explorations and look to future ones and how they help piece together the story of the Galilean Moons.

About the Speaker

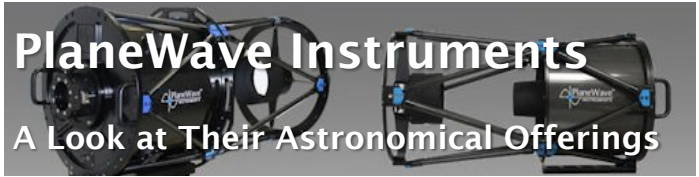
Dr. Dale Partin is an amateur astronomer and he teaches astronomy at Macomb Community College. He has B.S. and M.S. degrees in physics and a Ph.D. in electrical engineering. Until his partial retirement, he worked in advanced research in the auto industry. He has over 80 scientific publications and 38



(Continued on page 16)

Thursday, August 19, 2021

Virtual Presentation



PlaneWave Instruments

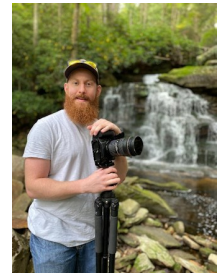
A Look at Their Astronomical Offerings

By Matt Dieterich

In this presentation Matt will talk about the technology PlaneWave Instruments has developed for the astronomical community. Installing their products at observatories is an important step for ensuring the equipment is fully utilized by the end user, so he will detail a few of the systems they installed recently. Lastly, Matt will discuss about some of the astrophotography he has captured over the last few years.

About the Speaker

Matt first attempted astrophotography in 2006 and was instantly hooked after taking an astronomy class. He began the learning curve of using a telescope, camera, and post-processing software to create photos that he could share with friends and family of objects in the Universe captured from his backyard. After finishing his Master's in Geology and Planetary Science in 2015, he served as an Astronomy Ranger at Mount Rainier National Park. He was honored to have his astrophoto of Mount Rainier selected by the US Postal Service to become a Forever Stamp celebrating the National Park Service Centennial. That summer, he also received his first NASA Astronomy Picture of the Day (APOD) of the Perseid Meteor Shower over Mount Rainier. Currently, he continues his love for astronomy and technology by working at PlaneWave Instruments installing telescope for astrophotographers, researchers, and University clients around the world.



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

(Continued from page 15)

patents, and is a fellow of the American Physical Society and a member of Sigma Xi and of the American Scientific Affiliation.

Short Talk:

What in Astronomy makes you say "Wow!"?

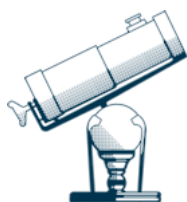
By Bob Trembley

When Bob Trembley posted this question to social media, he wasn't expecting all the different responses! In this short presentation, Bob takes you on a whirlwind tour of multiple topics and events related to astronomy that have made him and others say *WOW!*

Whirlwind because Bob says that a great number of the topics he's going to cover could be full-length presentations of their own!

About the Speaker

Bob is fantastically interested in asteroids, near-Earth objects (NEOs), and meteorites. Bob is a HUGE fan of educational space-related PC software such as: NASA's Eyes on the Solar System, Universe Sandbox, SpaceEngine and Kerbal Space Program. Bob and his wife Constance, a middle-school science teacher and also a Solar System Ambassador, run an after-school astronomy and space science club at Connie's school called the "Endeavour Space Academy."




Space Pirate Radio

Tune in to Captains Marty Kunz and Diane Hall for live radio
Wednesday nights at 9:00 pm ET
on
Astronomy.fm

Join the Astronomical League!

Only \$7.50 (membership starts July 1)



- Get the Reflector
- Participate in the Observing Program
- Avail yourself of the League Store
- Astronomy Books at a discount

alcor@warrenastro.org

Saw a Fireball?

Report it to the American Meteor Society!



www.amsmeteors.org/members/fireball/report-a-fireball



Rebirth of an Observatory.

“How would you like to go to prison?” was one of the first things that Frank Lopez asked me. My stunned expression prompted Frank to clarify: “The Federal prison off Wilmot Road has an astronomy club.” That was enough: we enjoyed two wonderful evenings down there, and even showed Orion to the group using one of my favorite telescopes.

I dealt with Frank once again in the last few months, as our Jarnac Observatory’s Shaar house, the major observatory building in my back yard, threatened to collapse earlier this year. The Shaar name is from the Hebrew word for “gate” or “opening” and I use the name because the structure resembles a miniature version of our Shaar Hashomayim synagogue in Montreal. The observatory is as much a temple for me as the Shaar was.

Frank brings a lifetime of experience to the observatories he builds and repairs. He came up with a plan that would restore my building with a brand new sliding roof. Working occasionally with assistants but mostly alone, the construction took several months, virtually all last winter and spring. (Actually my sliding roof is the entire top half of the building.) During this time I learned a lot about Frank’s work ethic. He does not rush things. He takes his time and works steadily for three days a week with construction and maintenance; the rest of his time he manages his “Stellar Vision” astronomy store in Tucson. I learned that he built most of the observatory complex for Dr. Tim Hunter’s Grasslands observatory southeast of Tucson near Sonoita, and a large observatory structure for David Rosseter’s 25-inch Dobsonian northeast of the city center.

Throughout most of southern Arizona, Frank’s Stellar Vision observatory business is really the best game in town. He knows what he is doing and brings his decades of experience to each project. Frank builds observatories with energy, strength, and even humor.

<https://stellarvisiontucson.com> These structures do a lot more than house telescopes over many years. They store the memories of a thousand and one nights under the stars. They offer stories of terrible

nights when a telescope fell off its mount, of only slightly less frustrating nights when cameras failed to work. They protect their telescopes from the winds and the rains that Arizona occasionally goes through. But mostly they protect memories of precious nights under the stars. Finally, I like to imagine that long after I have closed up and gone to bed, the telescopes talk to one another about what they have seen, and what they have yet to see.

One recent evening after a big monsoon storm after the Shaar was finally completed, I went out and discovered that the telescopes inside were safe and dry. On a drier night I went out, opened its big roof, and stared at the stars. I felt as though I was starting my love of the night sky all over again.



Wendee Levy took the picture. It shows the new building; the Shoemaker-Levy dome is off to the far left.



Astronaut Wives Club

<https://abc.com/shows/the-astronaut-wives-club>

Episode Ten: Landing

So now it's time for Apollo 11 and none of the Original Seven are on the flight. Al (Desmond Harrington) is in the stands alongside his childhood hero Charles Lindbergh, Wally (Aaron McCusker) is on TV sitting alongside Walter Cronkite, Deke (Kenneth Mitchell) is overseeing things in Mission Control with special guest John Glenn (Sam Reid) on hand. We open with a fake documentary featuring each of the seven AstroWives in turn, now rocking end-of-decade fashions that show how far they've superficially all come from Episode One. We quickly learn it's our old friend Max the ex-LIFE magazine guy (Luke Kirby) behind the camera, filming a documentary produced by his wife. Sorry, Louise (Dominique McElligott).

Remember Xavier (Ellison Booker)? He doesn't watch the moon landing; he tells his mama it's pro-Nixon propaganda and proceeds to attend a rally where a Gil Scott-Heron stand-in is reciting "Whitey on the Moon," which was released the following year but whatever. Cops start beating on Xavier and Annie Glenn (Azure Parsons) rescues him, only to be told off by Xavier, who disappears forever back into his crowd of fellow protestors. This subplot was... flawed. Speaking of flaws, despite having ten episodes to cover Gordo Cooper's (Bret Harrison) degradation from hot-shot pilot to a guy perpetually in trouble for his car-racing and treasure-hunting gigs on the side, when Al outmaneuvers Gordo to grab the top slot on Apollo 13, we get an info-dump from Deke to explain the hard truth to Trudy (Odette Annable). Come the hell on, show. You had plenty of time to convey this on-screen so the audience would know the score even if Trudy was blind to it. THEY. ARE. MAIN. CHARACTERS.

Anyway, ultimately Al doesn't end up on Apollo 13 but Jim Lovell (Matty Ferraro) does, and then things go boom and Wally has to rush back to the news desk while Al and Deke run the emergency troubleshooting game in Houston and aaaaaaall the Wives gather around Marilyn Lovell (Holley Fain) so that Trudy can explain CO2 buildup in a capsule. Long-time readers of this column will remember my complaint that the feature film Apollo 13 featured real events but fabricated dialogue to "Hollywood up" said events. This episode goes even deeper into the realm of "cool story



bro/sis but that's not how this happened." But the characters on this show have exactly ONE response to a crisis, any crisis, and that's "everyone get together in a big room, every time," and after a point it seems less like teamwork culture and more like all these rocket jockeys and their wives are essentially co-dependent.

Well, except Rene and Scotty Carpenter (Yvonne Strahovski, Wilson Bethel). Good for them. They're so self-actualized they can divorce and remain best friends, which in this universe seems like a fabulous outcome compared with most of the other couples.

Our buddy Max narrates the ending montage in which Al sets foot on the moon, Deke gets clearance to fly into orbit at long last, John wins his Senate race at long last, Rene gets a talk show at long last, Betty (JoAnna Garcia Swisher) sues the hell out of North American Aviation, etc. I'm not sure if it's a clever piece of writing or a daft piece of writing that we don't ever actually see dramatized the thing that all these characters were after in the first place: Al touching down on the moon while Louise listens on the NASA squawk box, three missions after the world really gave a damn. One of the Seven gets to the finish line and it's an afterthought. OK. Great writing or even solid writing could really make something of that, but this ain't it.

On the plus side: appealing actors inhabiting some well-crafted characters, lovely costume and set design, a great use of music that doesn't lean on moldy old 1960s radio classics to set the tone, like the splendid use of a modern cover of Simon and Garfunkel's "America" for the Apollo 11 scenes here. On the minus side... highly variable script quality and utter philosophical/moral incoherence. All in all, a spectacular misfire that looked great on launch but couldn't land.

Three Moons out of Five for this finale.





Over the Moon with Rik Hill

From Aristoteles to Atlas

Such a magnificent expanse when the moon is just past six days old.

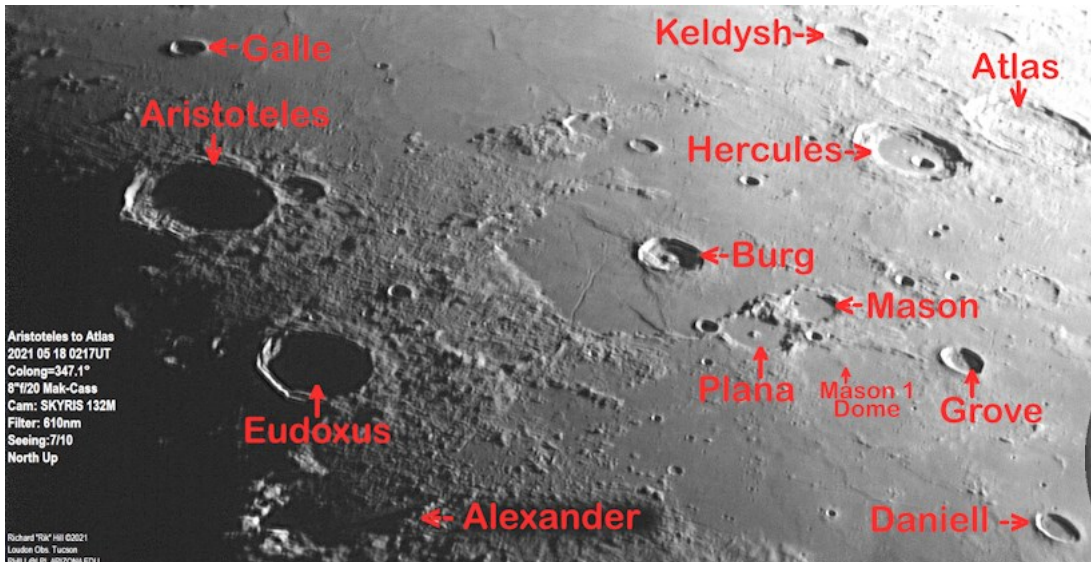
Starting from the upper left and going down we have the small crater Galle (22km dia.) at the top edge with the monster Aristoteles (90km) just coming into the sunlight with little Mitchell (31km) on its sunward side (east). Going further south we come to Eudoxus (70km). Now below Eudoxus is an area with ragged boundaries. This is the crater Alexander (85km) a very old, very eroded non-round crater dating back possibly over 4 billion years! Just right of the center of this image is the crater Burg (41km) sitting in the middle of the hexagonal mare Lacus Mortis (Lake of Death). Notice the 4 or 5 rimae radiating from Burg to the outer wall of the Lacus. They are not all the same morphology and the better resolution you apply the more interesting they get. The twin craters to the south of Burg are Plana (46km) to the left and Mason (44km) to the right.



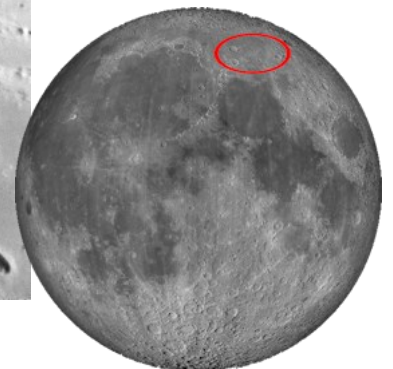
South of them in the flat area that is Lacus Somniorum is a little bump that is Mason 1 dome. Further to the south is a relatively young crater Grove (29km) and in the corner of the image is Danielle (31km).

At the top of this image in the upper right corner are twin large craters, Hercules (71km) with the smaller Hercules A (13km) on its floor and next to it is Atlas with its system of rimae on its floor. So much going on inside this crater that can be studied at a better libration.

One last crater is Keldysh (34km) above these two bigger craters. This whole region offers so much early in every lunation.



This montage was made from two 1800 frame AVIs that were stacked using AVIS-tack2 (IDL) and then finish processed with GIMP and IrfanView.



Location maps by Ralph DeCew

History S.I.G.

August 1982

Before we dive into the content, I'd like to point out something interesting about the cover besides the ubiquitous drawing of Stargate that graced a number of issues. The subtitle of the W.A.S.P. is "Journal of the Warren Astronomical Society". Hardly fits the acronym. But hardly an outlier, either. Starting in April 1975, the WASP was apostrophized with "*THE MONTHLY JOURNAL OF THE WARREN ASTRONOMICAL SOCIETY" or "*WARREN ASTRONOMICAL SOCIETY'S MONTHLY JOURNAL" (August '75). We returned to the "Warren Astronomical Society Paper" subtitle that September. "The Journal of the Warren Astronomical Society" became a thing in March of '76. It continued though the VESPA period (and back to the WASP) until December '78, when we displayed "The Warren Astronomical Society Publication" The "Journal" appellation would sporadically pop up until December 1979 when it became a staple until March '84, when we went back to "publication", well actually we flip-flopped between the two for some time, then, in February of '85, we came back to "Paper", then reverting to Journal in October. We made a clean slate in January '86 and "Paper" it is. However, we bounce back to "Journal" in October-I'm beginning to sense a pattern. Yep, heading to the new year with the Dec/Jan issue, we have "Paper". "Paper" continues from then on, only disappearing from Jan 2014-December 2016. It has remained the "Paper" until June of 2021 when my keyboard was haunted by the ghosts of editors past and we're back at "Publication." June is also the issue cited by the selection committee for the Mabel Sterns award, so good luck getting me to change back.

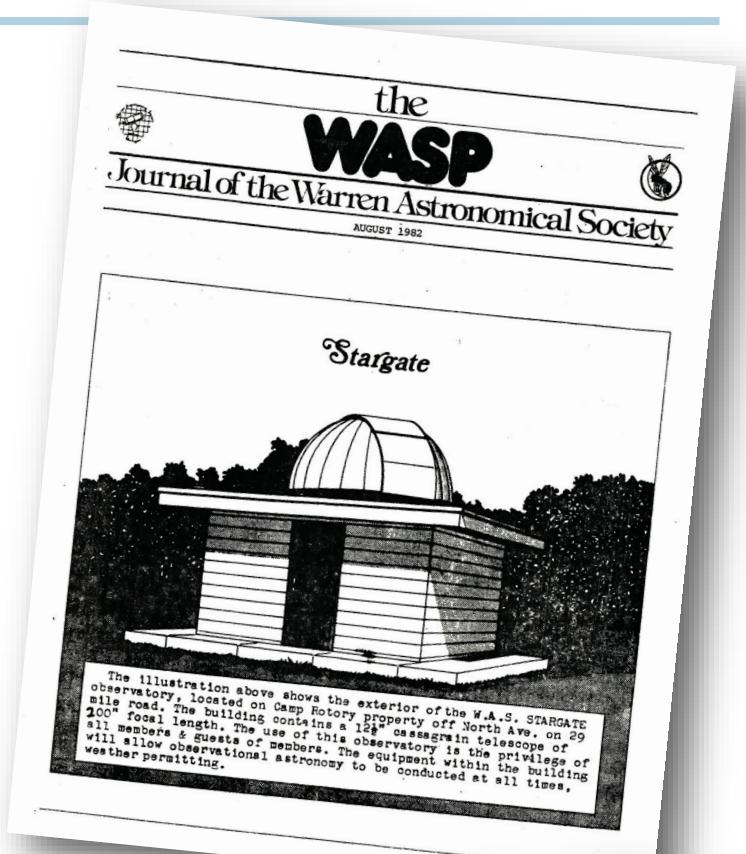


Inside, we find "Some Astronomical Reflections - PART VII", where John J Wetzel tackles spectrography. Then Ken Kelly comes up with "A Program to Print Ecliptic Limits."

August 1992

Still displaying the "W.A.S. Paper", we note. The stalwart contribution, Computer Chatter by Larry F. Kalinowski, is the lone member entry. The rest comes from NASA Space Links: "NASA's Hubble Space Telescope Snapshots Probe the Early Universe"; "Compton Observatory Detects Active Galaxies"; "NASA's Hubble Finds New Evidence for Massive Black Hole"; "NASA Announces Plans for Small Planetary Missions" are the headliners.

Dale Thieme,
Chief scanner



AUGUST 2021

Notable Sky Happenings

Aug. 1 - 7

Saturn is at opposition on the 2nd. It's closest to Earth and its brightest for the year (SE eve.). Moon is to the left of Aldebaran, the "eye" of Taurus the bull, on the 3rd (E predawn).

Aug. 8 - 14

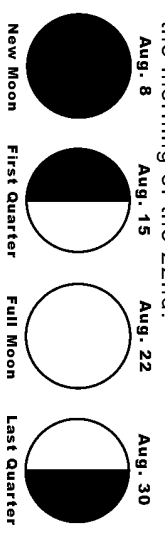
The Moon is to the right of Venus on the 10th (W evening twilight) and to the right of Spica on the 12th (WSW evening). The Perseid meteor shower peaks on the 12th & 13th between midnight and dawn. Expect 50-60 meteors per hour.

Aug. 15 - 21

Jupiter is at opposition on the 19th. Moon is below Saturn on the 20th and lower right of Jupiter on the 21st (visible in the SE evenings).

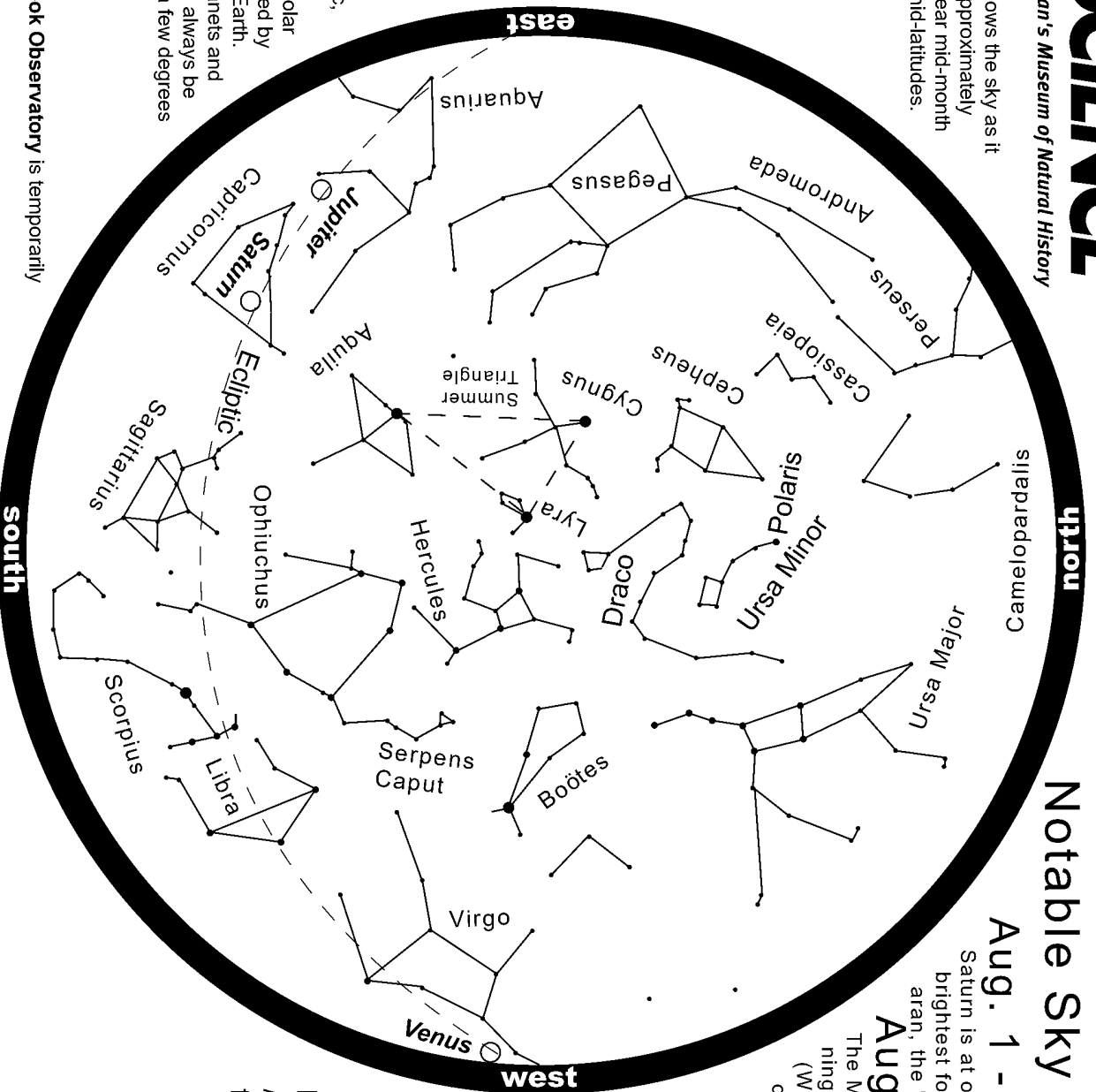
Aug. 22 - 31

The Moon is to the left of Jupiter in the SW the morning of the 22nd.



Now Showing

Please visit science.cranbrook.edu/explore/acheson-planetarium for our program schedule.



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 temporarily closed.

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

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





Ken Meloche - Messier 27 The Dumbbell Nebula

August 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 Saturn at Opposition Cranbrook Virtual Meeting	3	4	5	6	7
8 New Moon	9	10	11	12 Perseids	13	14
15	16	17	18	19 Jupiter at Opposition Macomb Virtual Meeting	20	21
22 Full Moon	23	24	25	26	27	28 Virtual Stargate
29	30	31				



Stargate Observatory

Special Notice

Due to the measures taken during the Covid-19 pandemic On-site Star Parties and group events are cancelled.

During this time, you are encouraged, when the skies co-operate, to join the livestream with Northern Cross Observatory on the open house schedule (4th Saturday of the month)

Past livestream are available on the Warren Astronomical Society's YouTube channel:

<https://www.youtube.com/channel/UC12jUX4Gmweg6fTtUuqa8CQ>

Observatory Rules:

1. Closing time depends on weather, etc.
2. May be closed one hour after opening time if no members arrive within the first hour.
3. Contact the 2nd VP for other arrangements, such as late arrival time. Call 586-909-2052.
4. An alternate person may be appointed to open.
5. Members may arrive before or stay after the scheduled open house time.
6. Dates are subject to change or cancellation depending on weather or staff availability.
7. Postings to the Yahoo Group and/or email no later than 2 hours before starting time in case of date change or cancellation.
8. 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).
9. 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.

Advisory: Concerns are circulating in the amateur astronomy community about COVID-19 being passed from one person to another via contact of different persons' eyes with a telescope eyepiece. While we are not medical experts, we thought we should pass on this concern. Sharing telescopes may be considered by some to be high-risk due to the possibility of eyes touching eyepieces.

Stargate Report

Stargate observatory and the Dob shed along with all equipment are in good condition as of July 23, 2021.

Unless there are unforeseen upcoming State or Local health restrictions due to COVID-19, the WAS board plans to go forward with the WAS picnic set for the open house date on August 28 starting at 4:00 pm. The observatory will not be used however, members may set up their telescopes near the observatory. Members are encouraged to wear personal health protective breathing masks to protect the unvaccinated including all children 12 years of age and under.

Virtual observing from Northern Cross Observatory (NCO) by Doug Bock is not planned for the picnic however, it may be offered in the future. The WAS board thanks Doug Bock for his generous offer and continued open house virtual observing sessions he hosted throughout the pandemic. These sessions have been extremely popular, educational, and entertaining.

Riyad I. Matti
2021 WAS 2nd VP, Observatory Chairperson

Treasurer's Report

Current memberships: 179

Let's welcome 2 new members to the Warren Astronomical Society!

- Joseph DeStefanis, from Seattle WA
- Clifford Lockhart, from Clyde MI

Bank Accounts as of 7/28/2021:

- Main - Bank of America - \$22,814.43
- GLAAC - Bank of America - \$3,279.84
- PayPal - \$728.14

Astronomical League Dues were due on 6/30. I have renewed subscriptions for many of the members. Please contact me if you have questions about whether or not you are on the roster for our A.L. membership.

Speaking of the Astronomical League, don't forget about the upcoming virtual event from August 19-21st. Our award-winning newsletter editor will receive his award during the online conference (scheduled about 5:50 EDT on Thursday), which is free to register and join. There will also be door prizes for some lucky attendees!

-Adrian Bradley
Treasurer

Astronomical Events for August 2021

Add one hour for Daylight Savings Time

Source:

<http://astropixels.com/almanac/almanac21/almanac2021est.html>

Day	EST (h:m)	Event
01	09:00	Mercury at Superior Conjunction
02	00:00	Saturn at Opposition
02	02:35	Moon at Apogee: 404412 km
02	21:51	Moon at Ascending Node
06	14:42	Pollux 3.1°N of Moon
08	08:50	NEW MOON
09	19:42	Mars 4.3°S of Moon
11	02:00	Venus 4.3°S of Moon
12	14:00	Perseid Meteor Shower
15	10:20	FIRST QUARTER MOON
16	11:04	Moon at Descending Node
16	13:34	Antares 4.5°S of Moon
17	04:23	Moon at Perigee: 369127 km
18	22:00	Mercury 0.1°S of Mars
19	18:00	Jupiter at Opposition
20	17:19	Saturn 3.7°N of Moon
21	23:52	Jupiter 4.0°N of Moon
22	07:02	FULL MOON
29	21:22	Moon at Apogee: 404100 km
30	00:13	Moon at Ascending Node
30	02:13	LAST QUARTER MOON

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If you're shopping on Amazon, make sure to use Amazon Smile. It costs you nothing, and if you select us as your charity, Amazon will donate 0.5% of every purchase you make to the Warren Astronomical Society.

Outreach Report

Hubble back in operation These early snapshots demonstrate Hubble's return to full science operations, following correction of a computer anomaly aboard the spacecraft. Normal science observations were restarted on July 17, at 1:18 pm EDT. Among the early targets are globular star clusters in other galaxies and aurorae on the giant planet Jupiter, in addition to a look at bizarre galaxies. - [NASA](#)

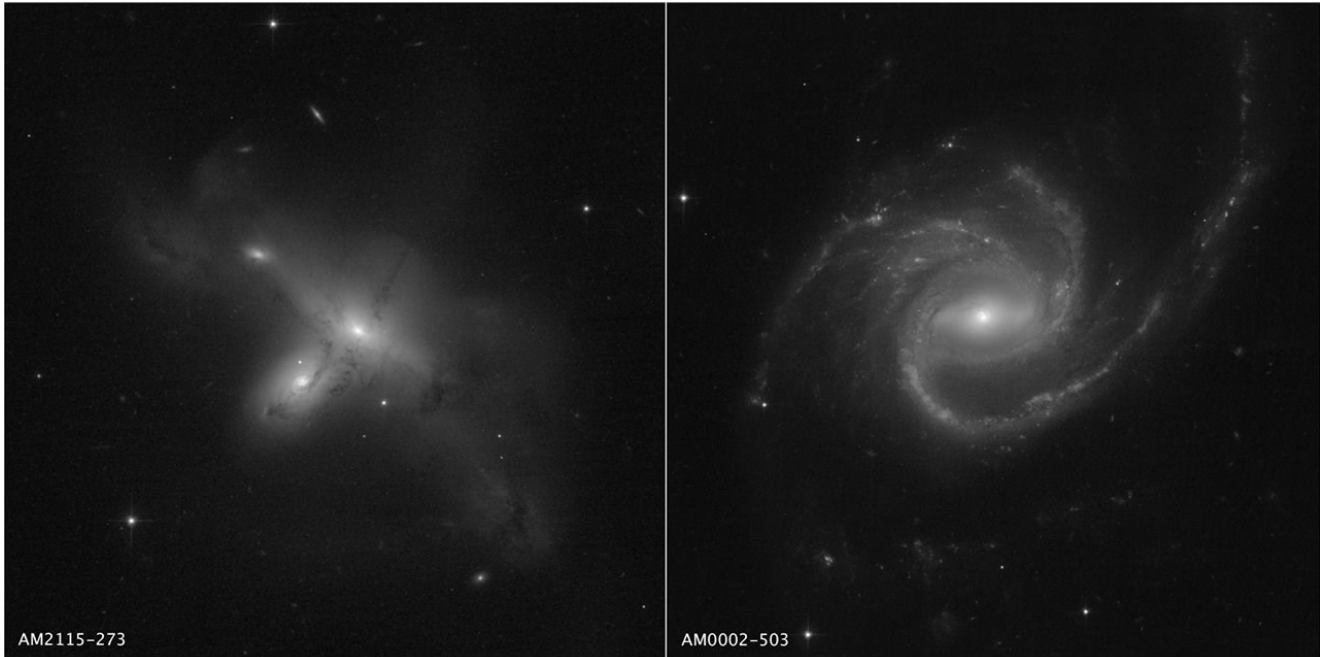


Image Credit: NASA/JPL-Caltech

Trip to Keweenaw Peninsula Connie and I took a much needed vacation to Michigan's U.P. in mid-July. We crossed the bridge at 8:16 AM, the Sun was 21° above the horizon, and it was blood red due to smoke from the wildfires out west. I snapped a shot going over the bridge.



We stayed at a friend's home in Calumet, and visited several waterfalls and rock shops. I was wearing a [Planetary Society](#) tee, and one of the rock shop owners and I got into a discussion about astronomy, and this fellow he knows up there with a "big telescope."

I wrote in a recent [post](#) for the Vatican Observatory:

(Continued from page 25)

The Upper Peninsula has the darkest skies in Michigan, with occasional aurora! Michigan Tech has an [observatory](#), and offers several astronomy classes. The [Keweenaw Mountain Lodge](#) has applied for an IDA dark sky designation, and is holding dark sky/astrophotography [events](#). And yet, neither an MTU student astronomy club, nor a public astronomy club exists in the Keweenaw Peninsula – *I'm completely mystified.*



Space & the Middle-Schooler w/ Constance Martin-Trembley

Vatican
Observatory

Vatican Observatory Podcast Featuring W.A.S. Member Connie Trembley!

While we were in the U.P., Br. Guy and I recorded two more [podcasts](#) - one with my wife Connie about teaching science to middle-school students! It was a lot of fun to record!

<https://www.vaticanobservatory.org/general/space-and-the-middle-schooler/>

If you are giving presentations or doing other astronomy outreach, *please let me know!* [Use this link to send me a quick email report.](#)

Astronomy at the Beach 2021 - September 24 & 25th

Our 25th Anniversary!

“Back to Basics”

Telescopes out on the field
No keynote speaker (or crowded tent)
Hands-off viewing where possible.
If it rains, the day is cancelled.

More info on the GLAAC website: <https://www.glaac.org/>



Great Lakes Association of Astronomy Clubs Board Meeting

July 8, 2021 - ONLINE, 7pm

<https://umich.zoom.us/j/584733345>

AATB 2021: September 24/25, 2021 until 11 pm

(Continued on page 27)

(Continued from page 26)

Call to order: 7:08pm

Online:

- Adrian Bradley - GLAAC President, Lowbrows
- John Wallbank - GLAAC Vice President, Lowbrows
- Jeff Kopmanis - GLAAC Secretary, Lowbrows
- Mike Ryan - Ford
- Brian Ottum - Lowbrows
- Bridget Harwood - MI DNR
- David Snyder - Lowbrows
- Tim Campbell - Ford

Announcements:

Reminder: Jeff will not be present until after 10pm on Sept 24

Discussion:

Account: still at ~\$3200 in account

Survey Results - BO

27 public: look through telescopes and online

Public didn't like the idea of online-only

Telescope volunteers:

1/3 was unsure based on unsafe

2/3 said yes, but be careful

Data are not conclusive and mitigate towards caution

DNR Assessment

Cell signal: Beach can be OK

FAS is at Island Lake, but it's club-only and what the state requires

WAS is still virtual

Lowbrows are bound by UMich rules

No limits for crowd size or masking

Discussion: What will AATB '21 be?

Public and surveys say outdoor event would be welcome

NOTE: Children 12 and under are NOT protected with vaccines

Online-only not well received

Taking temps and restricting access points

Social distancing is key

Even a normal temp might not reveal contagious individuals

To be safe, masking might be required to look through or be near telescopes

"Mask-free" zones could be equipped with camera/monitor setups. Social distancing would still be recommended.

Registration might help gauge attendance in the field, but it still comes down to an honor system.

TC: what if online was on one night and telescopes were on another (weather-driven)?

Limiting in-person to 1 night can reduce risk

Live event: One night for club-only onsite; one night for general public

JK Suggestion: Each night: 2-3 speakers before dark; 1 solar; 1-2 demos/live view; in-person scopes

Bridget suggests that presentations and food draw and keep the public in park

Decisions:

Masking & social distancing - 7Y, 0N

Full masking at entire in-person event (from parking lot) - 7Y, 0N

2 nights of in-person 6Y, 0N, 1 either

2 nights of online 6Y, 1N Rescinded 8-0

2 nights rain or shine, in-person event. All extras are a bonus 8-0

(Continued on page 28)

(Continued from page 27)

AATB 2021 - "Wheels back on the ground"

2 nights

Masking and Distancing at entire event, from parking lot onward

For safety of unvaccinated and children under 12

Bridget suggests a census of participation of the clubs and numbers of people that will be there for logistics

Rain or shine: volunteers encouraged to bring tents or tarps

Much more informal than in past live events

Post signs at entrance that masking and distancing will be required - KISS

No food vendors - health risk factor

Streaming from the field isn't mandatory, but is up to the volunteer

TC: volunteer laser pointer display of the night sky

Will need a program or list of things to see

Sunset: 7:30pm, Dark by 9:00pm

Park closes at 11pm

Adjourn:

Motion to adjourn by [AB](#), seconded by [JK](#). Approved by unanimous vote.

Meeting Adjourned at 9:20 pm

TODO - July:

JW/JK: Starlink, Hughes, AT&T?, Comcast? (Colts and Cows) Sponsorship?

AB: test Verizon and AT&T hotspots

Next GLAAC Meeting: August 12th @ 7:00 PM

Save the Date!

AATB 2021: September 24/25, 2021

Michigan Dark Sky Update

(Edited from emails from Sally Oey)

- **Mon, July 12, 7pm:** Annie Blackwell will lead a family activity, [Dark Sky Watch with Michigan Dark Skies](#) hosted by Chelsea Library, featuring the MIDS KIDS activity that she developed with Sophie Grillet and Shari Thompson. Thanks to Meg Gower for organizing!

- **Wed, July 28, 12:00:** Sally Oey presented an AIA course on Outdoor Lighting: Best Practices for Sustainability, Health, and the Environment. Please contact Theresa Angelini to register if you're not an AIA member: tangelini@angeliniarchitects.com

- **Tue, August 2, 7pm:** Ann Arbor Planning Manager Brett Lenart says that the **Ann Arbor Lighting Ordinance** will hopefully be presented for its first reading to City Council. Fingers crossed, as it will be only a couple weeks shy of its approval by the Planning Commission a year ago. [Watch this space](#). We may ask for citizens to provide public comment in favor -- please look out for a call for volunteers.

- **Chelsea:** The Community Development Director notified Kathie Gourlay that Chelsea will use shielded versions of the acorn lights going forward. **Congratulations to the Chelsea Dark Skies group!!**

- **July 2021 is Dark Sky Awareness Month in Michigan**, per State Senate [Resolution 69](#), adopted June 24. Robert Parrish, founder of the Dr. T. K. Lawless International Dark Sky Park in Cass County, organized this resolution through the office of Senator Kim LaSata (R - Cass County). Senator Rosemary Bayer (D - Oakland County) co-sponsored. Robert, along with Erica Briggs and Mary Adams, tried to get the resolution introduced into the House via various Representatives, but the short timeline and preoccupation with the budget stymied the effort. Nevertheless, a wonderful resolution. Thanks to Bee Friedlander for alerting us. We also welcome Robert to MIDS -- he is an outreach Delegate of the International Dark-Sky Association (IDA).

- **Washtenaw County & Scio:** Thank you so much to those who wrote to the Washtenaw County Road Commission (WCRC) requesting adherence to the lighting standards of the Illuminating Engineering Society (IES)

(Continued on page 29)

(Continued from page 28)

for new roundabouts. According to Scio Supervisor Will Hathaway, DTE has confirmed to WCRC that the planned Liberty/Zeeb roundabout should have the lower level illumination, as we have argued. The WCRC director confirmed that they intend to reduce the wattage from the original plan. However, she stopped short from confirming that it would be compliant with the IES standard. They are now waiting for revised plans from DTE. Hathaway says the Liberty/Zeeb project has been rescheduled for next year due to cost. He also said WCRC does respond to public pressure, and also urged folks to provide public comment at their meetings. **Please let me know if you'd like to do so.**

- **Upper Peninsula:** The Environmental Law and Policy Center kicked off their campaign to name four federal Wilderness Areas in the U.P. with a [press release](#) and [website](#). MIDS is a co-sponsor. Please contact Tyler Barron for more info: TBarron@elpc.org

- **July 12 - 16** NSF's NOIRLab and the American Astronomical Society will host another virtual conference on satellite constellations, [SATCON2](#). There are Working Groups on Observations, Algorithms, Community Engagement (including indigenous rights), and Policy.

- **Oct 3 - 7:** Registration is open for [Dark and Quiet Skies for Science and Society II](#), a conference in the Canary Islands, Spain, sponsored by IAC, the United Nations, IAU, NOIRLab, ESO, etc. Attend in person, or virtually. Thanks to Michael Meyer for sharing.

- **June 14, 2021:** Sally Oey presented to the Scio Township Planning Commission on light pollution.

- **Reminder:** Please review our [Wish List of Action Items](#). If you can help move forward any items, please add your name and let us know, including adding new items. There's tons to do!



Image from [NASA's Black Marble Website - World View Portal](#)

Meeting Minutes

WARREN ASTRONOMICAL SOCIETY MINUTES OF (VIRTUAL) BOARD MEETING

JULY 5, 2021 @ 6:30PM

Meeting was called to order at 6:40 PM by President Diane Hall. Board Officers in attendance: Dale Partin, Riyad Matti, Mark Kedzior, Adrian Bradley, Bob Trembley & Dale Thieme (quorum present).

President Diane Hall announced and congratulated our Publication Chair Dale Thieme on receiving the Astronomical League's Mabel Sterns Newsletter Award for 2021. (Chuck Allen, Vice-President of the Astronomical Society, wrote this in his letter to Dale in announcing his selection for the award - "Newsletters are the lifeblood of most of our league member societies and your newsletter, *The W.A.S.P.*, impressed all of our newsletter judges who included past Mabel Sterns winners" - "Congratulations, again, on creating and maintaining such a content-rich, visually attractive, and easily navigated newsletter."). Diane also reported conversation with Mike Narlock of Cranbrook in regard to possibly resuming in-person meetings at Cranbrook in September - the Cranbrook venue is large enough to promote social distancing in the auditorium - more to follow - Diane also mentioned if there are officers who will not be returning to their elected positions on the board to begin to recruit and find a replacement for their soon to be vacant office, unless term limited (Bob Trembley is only term limited officer currently on Board).

1st VP Dale Partin reported on Macomb College cautiously moving forward towards opening the campus - meetings at Macomb are still on hold until pandemic restrictions at the institution are lifted - the presentation schedule is filled up to the end of the year but are always looking for presenters for future 2022 meetings.

2nd VP Riyad Matti reports his regular inspection of Stargate and the Dob Shed shows everything is in good shape, and that there is some wasp activity but only on the outside (they're looking for a way in to observe through the K2 refractor - not going to happen -) - along with Dale Partin, looking for a way to use inexpensive foam pipe insulators to fit over eyepieces when using telescopes for safety purposes at our public viewing events through our telescopes - looking at being able to use them at our August open house - may need a possible replacement for his position as 2nd VP for the 2022 year.

Secretary Mark Kedzior reports he will stay on as Secretary for the 2022 year, is practicing his bar-

b-que skills for the picnic and that the minutes of both June meetings are posted in the July edition of the W.A.S.P.

Treasurer Adrian Bradley reports that Astronomical League dues were processed for WAS members with PayPal, and reported on the balances in the WAS, GLAAC and PayPal accounts.

Outreach Chair Bob Trembley reported on outreach activities of Adrian Bradley with Explore Scientific webcast, Ken Bertin with his regular Facebook astronomy presentation, and reported on the results from the GLAAC survey regarding the AATB event for September 24-25 - he also reported that an area near Calumet, Michigan, may be a possible dark sky site in the near future.

Publications Chair Dale Thieme reports that the award winning W.A.S.P. has been posted online, and thanks everyone for their well wishes and congratulatory notes in receiving the 2021 AL Mabel Sterns Newsletter Award.

OLD BUSINESS

WebEx Duties: Jonathan Kade made an instructional video on how to post and run a WebEx meeting. Looking for three individuals who can share the duties when WebEx is needed for our virtual meeting format.

NEW BUSINESS

WAS Picnic Duties discussion - food preparation workers will be wearing PPE in their duties - Mark Kedzior and Dale Thieme will be the grillmeisters, the Swap Meet will be coordinated by Dale Partin, Adrian Bradley will procure the grilling meats and condiments from Costco, the Observatory will be coordinated by Riyad Matti, hopefully utilizing a video camera from Doug Bock & Revolution Imager from Adrian Bradley through a telescope and projected onto the exterior east wall projection screen on the Dob Shed for members to view selected objects of the evening. The time for setup for the picnic will be between 2-3PM. There will be no potluck items to pass around and are asking members to bring their own side dishes that they wish to have for the picnic (the WAS is providing all the grilled meats and veggie alternatives for our members in attendance).

Meeting adjourned at 7:23PM by President Diane Hall.

Respectfully submitted,
Mark Kedzior, Secretary

(Continued on page 31)

(Continued from page 30)

WARREN ASTRONOMICAL SOCIETY CRANBROOK (VIRTUAL) MEETING

JULY 5, 2021 7:30PM

The meeting was called to order at 7:30PM and a welcome to all by President Diane Hall. She then reviewed the ground rules, meeting format and etiquette of this virtual meeting and presentation so as to be enjoyed by all in attendance.

(Attendance on WebEx and YouTube was 35 at 8:30PM).

IN THE NEWS (presented by Diane Hall - of note):

1) Hubble Space Telescope troubles with computer - put into safe mode & looking to switch to backup systems - 2) Life on Venus? Not enough H₂O activity in atmosphere - planet is dry - 3) Mars subsurface ice findings - 4) Largest comet discovered in Dark Energy Survey -

IN THE SKY - July 12-14 Mars & Venus in telescope field of view 34" apart -

OFFICER REPORTS:

President Diane Hall reports on the WAS Picnic on August 28th - Burgers, dogs, buns & condiments supplied by WAS - bring own side dishes for yourself and not to pass around - food prep handlers will be wearing PPE for safety - Dale Partin will coordinate Swap Meet - observing later in evening with camera through telescope projected on Dob Shed screen - Officer elections recruitment - Bob Trembley is term limited as Outreach Chair - announces that Publications Chair Dale Thieme has been awarded the 2021 Astronomical League's Mabel Sterns Newsletter Award for producing an outstanding publication (with kudos to Gary M. Ross for alerting the AL to check out our stellar publication) and also acknowledging all the work of previous editors who have made the W.A.S.P. the outstanding newsletter that we have come to know.

1st VP Dale Partin reports on the Swap Meet at the picnic and requests that you bring a blanket or card table to display and sell your astronomical items. The future WAS presentations at upcoming meetings: at the Macomb meeting on July 15th, Dr. Brian Ottum of the GLAAC will discuss "How to Get Started in Astrophotography - Maximize Joy and Minimize \$" - at the August Cranbrook meeting on August 2nd, Dr. Dale Partin with the main presentation "Exploring the Galilean Moons", preceded by a short presentation by Outreach Chair Bob Trembley with "What Makes You Say "WOW" When It Comes to Astronomy" - at the August 15th Macomb meeting Matt Dietrich of PlaneWave Instruments will be discussing their offerings on their product line of astronomical observing equipment.

2nd VP Riyad Matti reports that his regular inspec-

tion of our facilities at Wolcott Mill Metropark are in good condition - observatory still closed due to pandemic restrictions, and a virtual open house with Doug Bock is on tap for Saturday, July 24th.

Secretary Mark Kedzior reported the June meeting minutes are in the W.A.S.P.

Treasurer Adrian Bradley gave the balances of the WAS, GLAAC and PayPal accounts, and that Astronomical League dues are paid for the upcoming year.

Outreach Chair Bob Trembley reports outreach activities by Adrian Bradley with Explore Scientific, Ken Bertin with his weekly FaceBook tutorial "Objects in Space" - the GLAAC sent out a survey regarding the AATB event in September, with a majority preferring a in person event, but final determination will be by the Island Lake Park system.

Award winning Publications Chair Dale Thieme reports the July issue of the W.A.S.P. is online, and gave thanks to all who have contributed in making this the outstanding newsletter that it is.

SPECIAL INTEREST GROUPS:

Solar - no report but noted sunspot AR 2835 is prominent - Double Star Group - will resume observing on August 28th with list of stars provided - possible live images projected on Dob Shed screen from camera/telescope setup - Astronomical League dues sent in for following year - Discussion Group suspended for time being - hoping to resume in September.

OBSERVING REPORTS:

David Levy reports observing large sunspot along with a total of 11 observed - also viewed 15 prominences, followed by a reading from Stephen Crane - Adrian Bradley reports observing Milky Way from Lake Hudson State Park before views were limited by the smoke in the atmosphere from the western Canada wildfires - Kevin McLaughlin reports on binocular observing in western Nebraska - Dale Partin reports he observed fireworks during the 4th of July celebrations.

SHORT PRESENTATION:

1st VP Dale Partin introduced former WAS President and noted observer Gary M. Ross with his presentation "In Search of R Fornacis" - a long period variable star (387 days per Burnham's Celestial Handbook) in the constellation of Fornax, with a magnitude ranging from 7.5 to 13.0 - using a 5cm refractor at 30 - 45x, he described his efforts at observing this object in 2020, especially on the dates of 3-4 September, 10-11 September, 16-18 September, 14-15 October, 1-2 December and 9-10 December, using resources from Sky & Telescope, *Practical Skywatching*,

Atlas Eclipticalis and the venerable *RASC Observer's Handbook* to aid his search. Questions and discussion followed his presentation.

MAIN PRESENTATION:

After twenty minute break, 1st VP Dale Partin introduced (with bio) former WAS President and Lifetime Member Doug Bock with his presentation "Ten Questions You Have Asked or Will Ask During Your Astronomy Hobby" (Doug reprised this presentation he gave previously to the Northern Michigan Astronomy Club, and along the way the questions went from ten to twelve – these are also the same questions many of us have been asked during our outreach activities, either manning a telescope or when giving an astronomy presentation).

The Ten Questions (yes, there are twelve - drum roll, please):

1. What telescope should I get?
2. What are the different telescope designs?
3. What are the different mount designs?
4. What eyepieces should I get?
5. How do I calculate magnification?
6. What are the different eyepiece designs?
7. What is collimation?
8. What is culmination, zenith, meridian and circumpolar?
9. How do I find objects in the sky?
10. What is integrated magnitude?
11. What is averted vision?
12. Weather – What is seeing and transparency?

Doug wrapped up his presentation not with a question, but to stress –

"Most importantly – have fun!!". Questions and answers followed his informative presentation.

To view both of tonight's presentations in their entirety, go to:

<https://www.youtube.com/warrenastro>

Meeting ended at 9:42 PM.

Respectfully submitted,
Mark Kedzior
Secretary

WARREN ASTRONOMICAL SOCIETY MACOMB (VIRTUAL) MEETING

JULY 15, 2021 7:30PM

Meeting was called to order at 7:30 PM and a welcome to all by President Diane Hall. WAS Board members in attendance: 1st VP Dale Partin, 2nd VP Riyad Matti, Secretary Mark Kedzior, Treasurer Adrian Bradley, Outreach Chair Bob Trembley & Publications Chair Dale Thieme (WebEx attendance at 8PM – 22).

OFFICER REPORTS:

President Diane Hall reported the sad news of the passing of former WAS President, Mike Simonsen, on July 11, at the age of 64. (At the website "Universe Today", an article Mike authored on February 8, 2012, had this biographical information preceding his article: "Mike Simonsen is one of the world's leading variable star observers. He works for the American Association of Variable Star Observers as Membership Director and heads the organization's Cataclysmic Variable Section, Chart Team, Mentor Program, Speakers Bureau and Writers Bureau. He writes the astronomy and variable star blog, Simostronomy and is a cast member of the Slacker Astronomy podcast. An animated and enthusiastic speaker, Mike has given dozens of talks on stellar astronomy and variable star science for astronomy clubs, star parties, planetariums and university groups throughout the United States. He is author or co-author of dozens of peer-reviewed papers on cataclysmic variable stars. Mike's observatory houses two 12" LX200 telescopes, one for visual use and one for CCD observations, or as Mike likes to joke, "One for each eye!" He is now amassing both visual and CCD observations from home and robotic telescopes.")

Diane reported on the WAS Picnic plans that are underway – the picnic is scheduled for August 28th but will be monitoring the recent Delta variant surge taking place to see if it affects picnic plans. Dale Partin will be point person for Swap Meet at the picnic – bring a blanket or folding table to display your astronomical items at the event.

1st VP Dale Partin reports on the upcoming WAS presentation schedule: at the Cranbrook August 2nd meeting, Outreach Chair Bob Trembley with "What Makes You Say "WOW" When It Comes to Astronomy", followed by Dr. Dale Partin's main talk "Exploring the Galilean Moons". At the August 19th Macomb meeting, Matt Dietrich of PlaneWave Instruments will be talking about their product line.

2nd VP Riyad Matti reports our facilities at Stargate and the Dob Shed are in good condition, and is encouraging people to bring a mask to the picnic in the event there is observing through telescopes. On July 24th our virtual Open House with Doug Bock from the NCO Observatory will take place.

Secretary Mark Kedzior reported that the Warren Public Library applied for the NASA@ My Library grant, and asked if the WAS would be willing to partner with them providing an outreach program as part of the grant requirements for the library patrons. Only 60 grants will be awarded throughout the United States, and regardless if the grant is not successful, the WAS will provide

some outreach activity/presentation in the near future. A letter was sent from the WAS to the library to confirm that we would partner with them as part of the application process. All applications for this grant will be reviewed by NASA starting July 19.

Treasurer Adrian Bradley gave the balances on the WAS, GLAAC and PayPal accounts, and stated that the GLAAC's AATB event will be an outdoor event at Island Lake State Recreation Area on September 24-25.

Outreach Chair Bob Trembley is updating the GLAAC website - also connecting with area libraries for outreach activities, and reports Mark Muzzin is now working as STEM coordinator for 4th grade programs for the Macomb ISD.

Publications Chair Dale Thieme reports the July WASP is up on our website and is getting the August issue ready for the presses.

SPECIAL INTEREST GROUPS REPORTS:

Solar - no report. Double Star Group - will resume observing at the August 28th picnic with a prepared list of target stars. Astronomical League - the AL Conference will be a virtual event - Adrian Bradley will send info for the online registration process - David Levy will be one of the presenters at this event. Astrophotography - no report. Adrian Bradley commented on the western Canada wildfires and their effect on imaging - longer exposures required, but sunsets look remarkable.

The WAS is in need of a librarian and merchandise caretaker. WAS Elections in November - Bob Trembley is term limited as Outreach Chair - if anyone is interested in running for this position or any other elected positions please notify the WAS Board.

OBSERVING REPORTS:

David Levy reported observing 25 prominences around the sun - Doug Bock shared an image taken on 1-2 July of NGC 6949 - the Fireworks Galaxy with ASI 2600 one shot color camera - Dale Hollenbaugh showed his images of the Iris Nebula totaling 3 nights of imaging - Adrian Bradley reported on his trip to the Michigan Thumb for some Milky Way images and observed the reflection of Jupiter on the waters of Lake Huron.

IN THE NEWS - presented by Dale Thieme: 1) NASA Solar Sail cubesat asteroid mission readies for launch on Artemis I - 2) First video & sounds from China's Mars Rover on June 27th in the region of Utopia Planitia intrigues scientists - 3) Study predicts record flooding in the 2030's caused by global rising sea levels in coastal regions along with the gravitational effect of the moon - 4) NASA identifies "possible cause" of Hubble Space Telescope glitch that has kept it

out of commission for over a month - 5) Richard Branson didn't go into space - but did go very high - did not orbit the earth.

IN THE SKY: Perseid meteor shower is now starting and will peak in August, with earth passing through the debris particles from the orbit of Comet 109B Swift-Tuttle - Friday July 16th ideal for observing Lunar X in the early evening along terminator around 9PM EDT - Tuesday, July 20 one can observe the Apollo landing sites all night long - Wednesday, July 21 Venus at magnitude -3.93 passes Regulus in Leo after sunset - Saturday, July 24th finds moon below Jupiter and Saturn - Thursday, July 29th finds Mars near Regulus - close enough to observe both in telescope field of view.

MAIN PRESENTATION:

After customary break, Dale Partin introduced with bio, Dr. Brian Ottum, Ph.D, with his talk on "How to Get Started in Astrophotography - Maximize Joy and Minimize \$". In his presentation he stated that this talk was geared towards beginners getting into astrophotography, and provided helpful advice for those who want to pursue this activity. He explained the easiest images to take, the ideal first equipment setup in terms of costs to begin taking images, talked about the post processing of images and how-to-guides available to process your images. Port Crescent State Park and Lake Hudson State Park are two dark sky sites mentioned to capture images for the beginner.

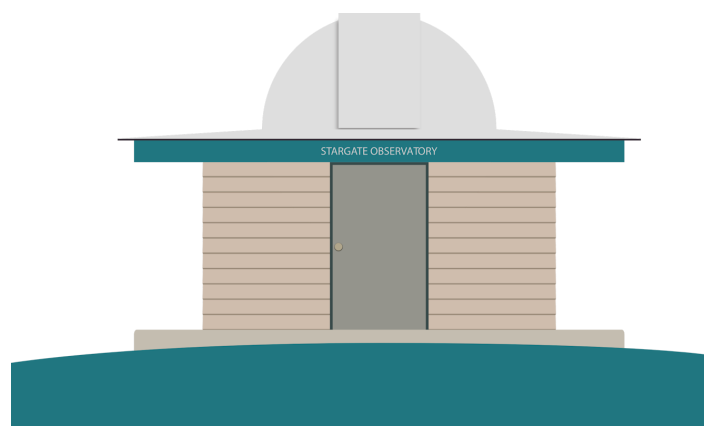
MANY questions and LOTS of discussion, tips and advice followed his excellent and informative presentation on this subject.

To see his presentation in its entirety, go to:

<https://www.youtube.com/watch?v=warrenaastro>

Meeting ended at 9:54PM.

Respectfully submitted,
Mark Kedzior
Secretary



The Warren Astronomical Society is a Proud Member of the Great Lakes Association of Astronomy Clubs (GLAAC)

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.

GLAAC Club and Society Meeting Times

Club Name & 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 Public open house—first Saturday at 11 am
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

GLAAC Club and Society Newsletters

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

WAS Member Websites

Jon Blum: [Astronomy at JonRosie](#)
 Bill Beers: [Sirius Astro Products](#)
 Jeff MacLeod: [A Life Of Entropy](#)

Bob Trembley: [Balrog's Lair](#)
 Bob Trembley: [Vatican Observatory Foundation Blog](#)

Doug Bock: <https://boonhill.org>
 Facebook: Northern Cross Observatory <https://www.facebook.com/NorthernCrossObservatory>
 Boon Hill and NCO Discussion <https://www.facebook.com/groups/369811479741758>
 YouTube channel: <https://www.youtube.com/channel/UC-gG8v41t39oc-bL0tGpS6w>



This article is distributed by NASA Night Sky Network

The Night Sky Network program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit nightsky.jpl.nasa.gov to find local clubs, events, and more!

Corner the Great Square of Pegasus

David Prosper

The Summer Triangle may be the most famous seasonal star pattern, but during early August evenings another geometrically-inclined asterism rises: the Great Square of Pegasus. This asterism's name is a bit misleading: while three of its stars - Scheat, Markab, and Algenib - are indeed found in the constellation of the winged horse Pegasus, its fourth star, Alpheratz, actually sits in the constellation Andromeda, and is that constellation's brightest star!

August evenings are a great time to start looking for the Great Square, as it will be rising or will have already risen in the east after sunset. If it's not obvious at first, wait for this star pattern to rise a bit above the murky air, and remember that depending on your point of view, it may appear more like a diamond to you than a square. Look for it below the Summer Triangle at this time, or to the southeast of nearby Cassiopeia. As the Square rises in prominence during autumn evenings, it becomes a handy guidepost to finding more constellations, including some of the dimmer members of the Zodiac: Aries, Pisces, Aquarius, and Capricornus. Like the Summer Triangle, the Great Square of Pegasus is also huge, but Pegasus itself is even larger; Out of the 88 constellations, Pegasus is 7th in size, and it feels even larger as the stars in its neighboring constellations are much dimmer.

There are many notable deep-sky objects found within the stars of Pegasus - ranging from easily spotted to expert level targets - making it a great

constellation to revisit as your observing skills improve. Notable objects include the densely-packed stars of globular cluster M15, a great first target. The potential "Milky Way look-alike" galaxy NGC 7331 is a fun target for more advanced observers, and expert observers can hop nearby to try to tease out the much dimmer interacting galaxies of Stephan's Quintet. A fascinating (but extremely difficult to observe) object is a gravitationally-lensed quasar famously known as the Einstein Cross. Pegasus has quite a storied history in the field of exoplanet research: 51 Pegasi was the first Sun-like star discovered to be host to a planet outside our solar system, now officially named Dimidium.

While observing Pegasus and its surroundings, keep your eyes relaxed and ready to catch some Perseids, too! August 2021 promises an excellent showing of this annual meteor shower. The crescent Moon sets early on the evening of the shower's peak on August 11-12, but you can spot stray Perseids most of the month. If you trace the path of these meteors, you'll find they originate from one point in Perseus - their radiant. Giant planets Jupiter and Saturn will be up all evening as well. Look south - they easily stand out as the brightest objects in the faint constellations Aquarius and Capricornus.

Pegasus truly holds some fantastic astronomical treasures! Continue your exploration of the stars of Pegasus and beyond with NASA at nasa.gov.



While the stars of the Great Square of Pegasus are not as bright as those of the Summer Triangle, they still stand out compared to their neighbors, and make a great foundation for exploring this area of the night sky. Note that the brightness of the stars near the horizon is exaggerated in this picture.



Stephan's Quintet is one of the most famous deep-sky objects in Pegasus. First discovered in 1877, it contains the first galaxy group discovered (which includes 4 of the 5 galaxies making up the Quintet) - and has been studied extensively ever since. One day this group will merge into one supergalaxy! While famous, these galaxies are hard to spot in all but the largest backyard telescopes - but are a favorite target of astrophotographers. Take a virtual flyby of these galaxies with a tour created from Hubble data at: bit.ly/quintetflyby

Credit: NASA, ESA, and G. Bacon, J. DePasquale, F. Summers, and Z. Levay (STScI)

For Sale

From Mark Kedzior:

TWO (2) CORONADO PST H ALPHA TELESCOPES WITH CASES — Price Reduction

I have available for purchase two (2) Coronado PST H Alpha Solar Telescopes. Both telescopes Photonics with sealed epoxied edges to eliminate “rusting” as with earlier production models). Included with each scope is an eyepiece – one has a 20mm Kellner and the other has an 18mm Coronado eyepiece, and each scope has a dovetail mounting wedge attached to install on tripods that have that mount. If not needed, the mounting wedge can be removed and then the scope can be placed on a standard photo tripod with ¼-20 thread. Both telescopes have new 656nm ITF filters installed from Maier .

Each scope will come with a case I provided after purchase for no extra cost. One case (on left) has a defective latch – the other works fine. The other case has both latches in good working order.

I am willing to sell each scope individually for **\$475** (currently a new PST retails for \$699) , **BUT**, if you have the urge to build yourself a bino H Alpha setup with two matching eyepieces (Howie Glatter used to make PST Bino mounts for this purpose – one may be able to find one online or know of someone who can fabricate such a mount) I will be willing to sell the pair for the firm price of **\$875**. If this is what you are looking for, please email Mark at: bazonga952@hotmail.com with CoronadoPST in subject line, or text me at: 586-246-8288.





What a long, strange trip this has been.

We have always had a newsletter we could take pride in, but it reached dizzying heights with the editorships of Debra Chaffins and Bob Trembley-Debra adding the layout and graphics elements to form an elegant newsletter, Bob then increased the page count to steroid pumping levels. I started hearing comments toward the end of Bob's tenure (two years consecutive was the limit) that no one could match or top that, so why try being editor? Rather than let our publication collapse, I decided to be editor and lower the bar of expectations.

It looks like I have failed miserably, a comment from A.L. VP Chuck Allen bears witness: "Dale...has taken The W.A.S.P. to new levels. His June, 2021, edition featured an astounding 41 pages of articles, club information, sky events, president's notes, observing reports, treasurer's reports, images, and much more." -Yikes!

But happily, it is because of tremendous support from contributing club members. From the board members continuing to supply monthly reports showing our club's activity, to regular columnists like Rik Hill (who recently expressed surprise he had a column—I reckon he forgot about our arrangement), David Levy, Diane Hall and the monthly sky charts put together by Raymond Bullock. A huge thanks to Brian Thieme for his graphic skills—the current layout design is based on his original concepts. And he continues to assist any time I need some graphical pop. Speaking of eye-popping graphics, I cannot forget the astrophotographic contributions of Bill Beers, Doug Bock, Adrian Bradley, and Dale Hollenbaugh. Plus, we may be adding Ray Bosshard as a regular, too.

Mabel Sterns Newsletter Award



The League presents an annual Mabel Sterns Award for outstanding editing of a League-society newsletter. Acknowledging the important role of the newsletter editor, in 1988, the Astronomical League established the Mabel Sterns Newsletter Award to recognize these essential people. The Award is named in honor of the first newsletter editor of the League, Mabel Sterns, who served in that capacity from 1948-1952.

Other articles from various members, like Joe Tocco and Jonathan Kade, plus the guest articles from Tulsa Astronomy Club luminary, Brad Young fill out the issues with delightful content.

Efforts to get us an award have been going on for some years, I am told. Brian Thieme did garner second place in 2018 (*really thought ours was the better-Ed.*). Then, more recently, Gary Ross threw our name in the hat and here we are, the 2021 winner, thanks to the contributions of our members.

So, while I happily accept the honor of the Mabel Sterns Newsletter Award on behalf of the club, it is on the efforts of all the contributors that this honor rests. I only arrange this all in as pleasing a format as I can. Thank you all for your support of this publication and thank you to the Astronomical League for this singular honor.

-and keep them cards and letters coming. We have an issue to fill.

Dale Thieme,
Editor



More Congratulations

(from Facebook)

Congratulations on winning the Astronomical League's Mabel Sterns Award! well deserved!

Kenneth Wilson

Email

Dale,
Add my congratulations to the chorus...I didn't catch your Mabel Stearns Award when I read the Observer, but luckily I saw the letters in the WASP. Well deserved!

Brad Young, PE

Congratulations!

Ray Bullock