



August, 2022

Celebrating 90 Years of the MAS

These milestones don't come often! On a hot August afternoon, a couple dozen members came to throw a celebration and picnic at the observatory grounds. Jill Roberts, MAS President, organized raffle prizes, and members brought and grilled food as they got to meet each other.

The Milwaukee Astronomical Society has come a long way since 1932 when Luverne Armfield and his friends decided there might be enough interest to organize an astronomy club and purchased an ad in the Milwaukee Journal on Sunday, Sept. 18, 1932.

Look for more historical flashbacks in the newsletters this year, as we take a look back at what 90 years of being an Astronomical Society looks like through our own member experiences, just like this one.



Amateur Star Gazers Plan an Organization

Amateur students of heavenly bodies who are interested in organizing an amateur astronomical association have been asked to attend an organization meeting at 8 p. m. Wednesday at the home of L. E. Armfield, 2046 S. Fifty-ninth st., West Allis.

A Time Capsule

Browse the MAS website for photos, articles and history spanning 90 years, maintained by our club historian, Gene Hanson.

[Learn More >](#)

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September Meetings

Our first in-person **General Membership Meeting** will be held on **Monday, Sept. 19th**, at **8pm** at the **Quonset Meeting Hall** and will feature a talk by NASA Solar System Ambassador, Dr. Dennis Roscoe, who will provide updates on the James Webb Space Telescope mission! The **Board Meeting** will start prior, at **7pm**, all are welcome!

The next **MAS Open House** will be held on **Friday, September 16th**, at **6:30 PM** rain or shine at the MAS. Randy Culp will be leading a discussion on Mars and planets. If the weather is clear, we will offer observing on all attended MAS scopes. Volunteers will be needed, as we expect a larger public turnout.

The **First Wednesday** meeting will be held in person at the Observatory grounds on **Wednesday, Sept. 7th** at **7:30 PM**. New members are especially encouraged to attend this meeting. It is a chance to gain hands-on experience, receive tips on how to get started and/or get more involved in the Club's activities.

The **Imagers Interest Group** is being restarted, and will continue in an all virtual format, to allow participation from a variety of locations. Look for communications in our private MAS Google Group on how to attend the first meeting on **Wednesday, Sept. 14th** at **7pm**.

Observatory Director Report

B-dome has been fixed in anticipation of a full open house. Parking areas and public areas were mown prior to the open house. The automatic focuser on A-scope is also available to use, and an extension has been installed to allow reach to the ladder velcro for imaging.

Russ Blankenburg, Lee Keith
Asst. Observatory Directors

Treasurer's Report

\$11,462.65	Starting Balance as of 07/16/22
	<u>Expenditures</u>
\$7.27	PayPal fees
\$38	Tractor Gas
\$60.70	WE Energies
\$105.97	TOTAL Expenditures
	<u>Revenue</u>
\$386.00	Membership dues
\$50	Public Donations
\$4.00	Grants
\$440.00	TOTAL Revenue
\$11,796.68	Ending Balance as of 08/13/2022

Sue Timlin, Treasurer

Membership Report

Membership brochures are available for distribution, located in the Quonset meeting hall, and I have begun distribution of fliers – members interested in helping should grab brochures, make sure to stuff them with the latest open house dates insert, and distribute.

Since the last Report we received 7 new membership applications and welcome: Anurag Deshmukh, Brett Fisher & Family, Ronald Lundgren, Brett Rose & Family, Ryan Thiel & Family, Richard Hoffman, Erica Christensen. The total number of active members is 223.

Matthew Ryno, Membership Chair

Minutes

An in-person board meeting was held at the Quonset Meeting Hall, on Aug 15th. The meeting was called to order at 7:04pm by MAS President, Jill Roberts. In attendance were: Gene Hanson (FM), Paul Borchardt, Russ Blankenburg, Jill Roberts, Matthew Ryno, Sue Timlin, Brian Ganiere (FM), Dennis Roscoe, Jim Bakic, Mike Wagner, Mike Bauer, Jim Schroeter, William Gottemoller, Colin Boyton. **Minutes** of the prior board meeting, and **Reports** were submitted by officers for review prior to the meeting and approved; including new membership applications.

New Business: Internet Service - Dennis Roscoe, chair of the Internet Committee, relayed that Internet is on the way. A cable will be laid and the junction box will be put on the side of the building. An engineering group needed to bury a line and put a box outside of the building. A high speed modem and router have been donated to the initiative.

Discussions – Observatory Director, Paul Borchardt, relayed the notes from an observatory committee meeting, covering priorities of A scope, headless communications (between F scope and the office), as well as fixing building steps – going with wooden steps as opposed to concrete. He also noted that he would like to simplify the amount of keys needed on grounds. He felt good in having structure to improve the place – no conclusions yet.

Membership Chair, Matthew Ryno, relayed to the board an expected high volume turnout for an Aug. 19th, Open House, and noted a need for volunteers, citing 28K reach for the event on social media, with 900+ responses at the time, following a high response rate to Facebook posting on a Milwaukee Events group.

The board discussed Quonset meeting capacity, and reaffirmed a decision to *not* allow private events at the club. Brian Ganiere, noted current zoning criteria and capacity on square footage.

Gene Hanson, webmaster, also noted he will be re-writing a part of the website, allowing a login for each member of the club. More information will be available at a later date.

A motion to adjourn was made at 7:55 pm.

Matthew Ryno, Secretary

ALCon Travelogue: An Award-Winning Haul!

Editor's Note: William Gottemoller was recently featured in the *Reflector Magazine* for his recent service and imaging wards. He also received an expenses-paid trip to the annual Astronomical League Convention, to receive the award. The following is William's account of the event, as told over a few Milwaukee Astronomical Society Facebook posts in July and August, and edited for length. To view William's interview with the president of Explore Scientific, [click here](#).

It was an honor and also very easy to write the nomination for William's service and imaging awards. I encourage members to [join the Astronomical League](#), for \$8 on our low-priced membership dues, to support some of the work the AL provides to groups in Wisconsin and nationwide. If you are under the age of 18, or interested in any of the [AL Awards](#), please contact the editor for assistance in preparing a project.

ALCon Travelogue:

Onward to New Mexico!

By William Gottemoller

July 26

Hello, everyone! It is William Gottemoller with the Milwaukee Astronomical Society. We arrived safe and sound in Albuquerque and are prepared to begin #alcon2022 tomorrow!

For now, I thought it would be best if I told you all a little bit about the awards. I won the Horkheimer/Smith and Horkheimer/Parker awards, two of the four Horkheimer youth awards run by the Astronomical League.

The Horkheimer/Smith Award is an award for youth service - more like "science and astronomy communication." I won this award for my leadership at our club - besides my board member and keyholder status, I have also assisted with large observatory projects like the two new sets of scientific-grade camera equipment we got last year (entirely with money from our member dues and donations!!!), and I have played a strong role in publicizing the club and addressing and fixing issues with some of our telescopes. I was also recognized for my work with the astronomy club at my high school -



William Gottemoller with Chuck Allen, the Vice President of the Astronomical League; with the Horkheimer/Smith Youth Service Award, and the Horkheimer/Parker Youth Astrophotography Award.

Menomonee Falls High School. Two years ago, I founded - with help from friends and three teacher advisors - an astronomy club, which now has taken three field trips - including a private tour to Yerkes Observatory - and also has a membership of over forty students, a set of donated equipment that includes two telescopes, and a forty-student membership to Slooh - a remote astronomy program.

The Horkheimer/Parker Award is an award for youth astrophotography. I won it for an image of Melotte 15 - a part of the Heart Nebula - that I took using the Milwaukee Astronomical Society's flagship telescope, G-scope. Although the image did not save well (it turned out much brighter than I expected), I was nevertheless proud of the image for its background story, rather than its aesthetic quality. The picture features 5.5 hours of data over several nights, taken as the first images with G-scope's new imaging train - which I spent almost two months configuring and troubleshooting (even after we took this image).

The picture represents the grind that our club put in to make our observatory an even better, more advanced facility; and even though it is visually imperfect (you will see halos, for example), the circumstances behind the results make it sentimentally perfect.

I would not be in Albuquerque right now if it were not for the Milwaukee Astronomical Society - I am serious.

July 28th

Hello again, everyone! I would like to speak about the Astronomical League and its remarkably strong affiliation with the Milwaukee Astronomical Society.

The Astronomical League is an umbrella organization of astronomical societies (like MAS) formed in 1946. The Milwaukee Astronomical Society was one of the founding member societies of the organization, making MAS a "charter society" of the Astronomical League. The League has over 22,000 members, some of whom are MAS members.

The Milwaukee Astronomical Society's connections with the Astronomical League trace back to the start of both. MAS charter members such as Ed Halbach played a significant role in forming the Astronomical League; for example, Ed Halbach, the longest active member in the history of our club (78 years!), was the League's first President, serving from 1947 to 1948.

The Milwaukee Astronomical Society is a continued affiliate with the Astronomical League; through our MAS coordinator with the Astronomical League, Sue Timlin, MAS has many members that are also members of the Astronomical League, including myself.

Many MAS members besides myself [have won Astronomical League-sponsored awards](#): seven MAS members have won its Leslie Peltier Award, the League's highest amateur honor; three have

won the Astronomical League award, the League's highest honor; and one, Gene Hanson, won the Webmaster's Award, the League's honor for outstanding astronomy club websites.

And I have won the two major Horkheimer awards, one for public service to the advancement of astronomy, and the other for outstanding astrophotography. I am, nevertheless, one of countless MAS members to be involved with the Astronomical League, and one of many to win an award through them.



The award-winning photo of Melotte 15 was also judged in context of the background involved in updating G-scope with a new imaging train.

August 3

I would like only to highlight our organization's crucial involvement in these awards:

I joined the Milwaukee Astronomical Society in September 2020 and was quickly embraced with open arms; the enthusiasm of our club members to accentuate my excitement and mentor me, a young

astronomer, led me to my receiving my keys to the observatory and to my election for our club's board of directors. MAS members gave me the idea AND the advice leading me to start our high school's astronomy club; using their ideas, I started the club - we now have 45 members, two telescopes, and three field trips under our belts, and our first field trip was to the MAS observatory. MAS member Frank Kenney introduced me to Slooh, of which I am now an ambassador and have helped to provide 40 memberships to the service for our MFHS astronomy club members.

MAS Secretary and board member Matt Ryno gave me the idea to join the Astronomical League, and he, alongside MAS Treasurer, wrote my nomination and nominated me for the two awards, both of which I ended up winning. Without the club, I would not have even know of the Astronomical League; without the members of MAS, I would not have known about the awards, and I would never have been nominated for them.

I have said to my friends and fellow teenagers for several years that they should do everything that they are even remotely interested in, because they might find their passion. I made the small, expense to join, without knowing that the club would become the focal point of my extracurricular life, one that was responsible for every astronomy activity and award that I have ever achieved. Had I never joined this club, the MFHS astronomy club would not exist, I would not be involved with Slooh (a great organization, by the way), I would never have joined the Astronomical League, and I would never have won awards and been flown down to New Mexico to accept them. My common app. college essay, even, would be focused on something completely different, as even one of the most important pieces I will ever write focuses entirely on our observatory in New Berlin and my family connections to it.

With my posts, I only seek to encourage you all, young or old, interested or not interested, to join our club. It may be a cost for you now, but it may be priceless, so valuable that no number could describe it, to you later, as it was for me. Incredible things may (will) happen, as they did to me.

In my seven days there, I met and talked to Harrison Schmitt, a man who walked on the moon; I traveled to a hopeful future workplace and the #1 thing on my bucket list (the Very Large Array); I saw the Milky Way through the clouds in one of the darkest skies I have ever been under; I listened to the most comedic presentation from Seth Shostak, the director of the Search for Extraterrestrial Intelligence (SETI); I



learned of an amazing B&B called SQM22 Bed and Telescope; I interviewed with the CEO of Explore Scientific; and, above all, I met so many incredible people, many of whom I am still connected with after the trip.

Editor Note: A detailed message from William, individually thanking members of the MAS is available on his blog, *Essays by William*. [Read More >](#)

Former MAS President, Tamas Kriska, processed the [final version of the Melotte 15 image](#), which William assisted with, on our [Showcase Page](#), also via Tamas' [Astrobin page](#) and shared with Milwaukee Astronomical Society membership.



William took this photo at the General Nathan Twining Observatory (GNT0) July 28th, using a Canon EOS Rebel T5i and an exposure time of three minutes; the image is unedited. Below, William with Harrison Schmitt, and visiting the GNT0.



A Whopper of an Open House!

Starting with a special announcement in the August Board Meeting of heavy online interest and over 900 responses to the August Open House, MAS officers and Open House Planning Committee members had an inclination this month was going to bring a lot of people to the club. Final estimates of about 200-400 in attendance, did not disappoint, and was larger than seen in recent memory — during cloudy skies at that!

The committee members, who organize the events, promotions and volunteers, agreed that this month saw a renewed interest in space with the James Webb Space Telescope launch over summer, as well as recent Aurora announcements drawing attention to the club. Others driving the organic promotion of the event, managed to draw a record 30,000 online impressions, as a testament to the public thirst for events following a year of restricted social gatherings during Covid-19, as well as increased online presence and activity.

Observatory directors, committee members, and volunteers sprang in to action to help deliver the event, including mowing the grass, parking cars and performing last-minute maintenance on B-scope, shown here on the right. Grian Ganiere and Mitzi Keadle also helped park at least 120 vehicles all around the property during the event, and nearly ran out of places to put them!

All agreed more help will be needed for the next **Open House** this **September 16 at 6:30pm**. A heavy public turnout is again expected, so members interested in volunteering to attend to MAS telescopes, direct traffic or pass out membership information, should contact [Colin Boyton](#), [Sue Timlin](#), or [Matthew Ryno](#) to sign up to help, rain or shine. Randy Culp will be leading a presentation on Mars and the planets, and starting telescope targets are available!

We will also be using a digital map for this next event, courtesy of our Webmaster, Gene Hanson, which is available for preview at: <https://www.milwaukeeastro.org/map>. Attendees will be encouraged to check off the sites on their phone, as well as our printed maps, they see as they look through our scopes.



MAS Observatory Wi-Fi is Online!

After a special Internet committee was organized earlier this summer, wireless Internet is now flowing to the Milwaukee Astronomical Society. A group of MAS Members have also helped with consulting, installation or donation of devices to the cause, including the router and a cable modem.

As Mike Wagner notes, “Wi-Fi Internet is available in the 'A' building and the Quonset Hut all the way to the north wall. The Wi-Fi signal is not useful outside or in other buildings. The project is not complete and we are waiting for additional equipment. Spectrum finished the installation this week after several visits to our site and the team is proceeding to acquire the devices to distribute the signal across our observatory.”

MAS director Dennis Roscoe and the Internet committee will provide all MAS members with further communication once access information is more permanent, and ready to be distributed. Internet will not yet be available for the upcoming General Membership Meeting, which will be in person, as testing will need to be done.

Membership Meeting : Webb's First Light

Dr. Dennis Roscoe, NASA Solar System Ambassador, will be kicking off our first in-person MAS Membership Meeting of the year on **Monday, September 19, 2022 at 8pm** at the Quonset Meeting Hall. This is our first in-person membership meeting of the year, and more membership meetings will be announced in the future as reservations are made.

Due to the public nature of the subject, the public is also invited to stop by — so MAS members are encouraged to invite their family and friends to this special opportunity. Hear the insights Dennis is able to share, due to his connection to the latest news and insights, and come with questions! Most of all, be ready to be amazed by what you see!

Dennis will plan to discuss the first color images and spectra from the James Webb Space Telescope, as well as discussing the content and significance of this first public release of data, which “changes what we know about the cosmos.”



The Imagers Interest Group Zoom Meetings Return

The astrophotography imagers interest group virtual Zoom meetings are returning, on the **Second Wednesday of the Month**, starting on **September 14th at 7 pm**.

Topics will focus on astrophotography processing, telescope automation, astrophotography imaging equipment, and software (planning, acquisition, analysis, etc.) and other topics suggested by members. Meeting may have formal presentations as well as time for sharing projects, tips, ideas, and troubleshooting. Reminder notices will be sent out a day or two before the meeting.

If you'd like a zoom invite, please email [Kevin Shea](#) or [Dennis Roscoe](#). The same link will work for the next 12 months. To ensure Zoom license terms compliance, the link and embedded password is private for membership, and cannot be shared on publicly accessible sites, including this newsletter.

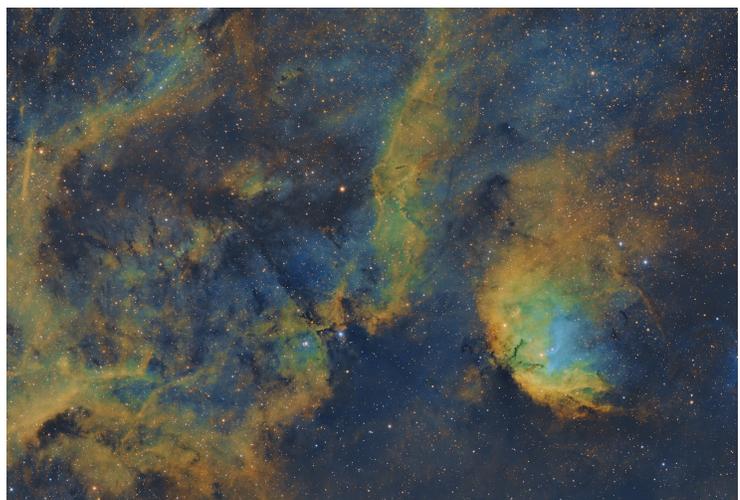
All interested in photography are encouraged to attend to get to know other club members and their imaging techniques and strategies. All joining are also being [invited to join our Slack group](#), the Southeastern Wisconsin Astro-Imaging Group, for regular chats and conversation on imaging.

Take Two on the Tulip Nebula

MAS member and astrophotographer, Chad Andrist, [shared his photo of the Tulip Nebula](#) recently, which took 2 seasons to get a "somewhat paltry" 21 hours of data over 8 nights, many of them partial due to clouds stopping the photon gathering party. It's also the first time he has combined data collected with 2 different telescopes to bring out the Cygnus X-1 bow shock.

Chad said the determination of time needed for a target can be a loose process. "I generally go to Astrobin and look at the images that get the awards and use the integration times as a reference. From there, I determine how long I want to spend before moving onto another object. Even though I have the convenience of a home observatory, I still have the limits of Wisconsin weather piling on to put a damper on things. I try to get a minimum of 10 hours integration on most targets, less if it's a really bright object, more if it's something really dim. If I can get a string of clear nights within a month, I will always push for more time."

"Using 2 separate telescopes was not my intention all along. After using the SV105 for imaging all of last year, I decided to finally switch over to the 10" reflector," he said. "Consolidating the data seemed to be the the best option, so I calibrated and registered the data to the wider FOV of the SV105 (588mm with the reducer). The first integration pass blended the SII and Ha data seamlessly, but the OIII master light clearly revealed a rectangular seam where the frames overlapped. Now, I hadn't normalized the data up to this point because I wasn't sure I needed to because it was all narrowband data and I was trying to avoid another process in my workflow. I went back to the registered OIII data and ran it through the NormalizedScaleGradient script and then integrated again. The OIII master came out perfectly seamless. I normalized the SII and Ha data to match the OIII, and proceeded with integration and post processing."



Adopt a Telescope Program - Signup Sheet

	Adopter	Scope	Location
1	Sue Timlin/John Hammetter	18" F/4.5 Obsession	Wiesen Observatory
2	Steve Volp	12.5" F/7.4 Buckstaff	B Dome
3	Robert Burgess	12.5" F/9 Halbach	A Dome (Armfield)
4	Russ Blankenburg	9-1/4" F/10 Celestron	Albrecht Observatory
5	Jeff Kraehnke	14" F/7.4 G-scope	Z Dome
6	Lee Keith/Tom Kraus	12" F/10 LX200 EMC	Tangney Observatory
7	Colin Boynton	10" F/6.3 LX200	Ray Zit Observatory
8	Tamas Kriska	Stellarvue SVQ 100 F/5.8	Jim Toeller Observatory
9	Paul Borchardt	Solar scope	SkyShed POD



MAS Observatory

18850 Observatory Rd
New Berlin, WI 53146

www.milwaukeeastro.org

[www.facebook.com/
milwaukeeastro](https://www.facebook.com/milwaukeeastro)

At Your Service

Officers / Staff

President	Jill Roberts	262-765-7092
Vice President	Sue Timlin	414-460-4886
Treasurer	Sue Timlin	414-460-4886
Secretary	Matthew Ryno	414-248-1455
Observatory Director	Paul Borchardt	262-993-8870
Asst. Observatory Director	Russ Blankenburg	262-938-0752
Asst. Observatory Director	Lee Keith	262-875-9103
Newsletter Editor	Matthew Ryno	414-248-1455
Webmaster	Gene Hanson	262-269-9576
Membership Chair	Matthew Ryno	414-248-1455

Board of Directors

Jim Bakic	414-303-7765
Matthew Ryno	414-248-1455
Jill Roberts	262-765-7092
Sue Timlin	414-460-4886
Jason Doyle	414-678-9110
Dennis Roscoe	608-206-0909
Lee Keith	262-875-9103
Jim Schroeter	414-333-3679
Mike Bauer	262-894-1253
Mike Wagner	262-547-3321
William	262-442-3686
Gottemoller	

September Keyholders

09/03	Jeff Kraehnke	414-333-4656
09/10	Matthew Ryno	414-248-1455
09/17	Lee Keith	414-425-2331
09/24	Gene Hanson	414-269-9576