



The Night Sky

The Newsletter of
The Astronomy Club of Akron

www.acaoh.org

August 2022

ACA MEETING - Sunday, September 11th, 2022 AT 2:00 PM

President's Column

By Cathy Loboda

Greetings, ACA Members and Friends!

As August brings us closer to the end of summer, I am looking forward to the beginning of ACA's 2022-2023 series of lectures and meetings. Our first meeting of the year is 2:00 pm on SUNDAY, September 11th at the Portage Lakes Kiwanis Civic Center. I also encourage you to mark your calendars for the remaining 2022-2023 meetings. Dates are listed below:

- October 16
- November 20
- December- no meeting
- January 15
- February 19
- March 19
- April 30
- May 21

Please note the Kiwanis Civic Center has ample room for social distancing if you are concerned about rising COVID cases as cooler weather brings us indoors. Masks are not presently required, but feel free to wear one. I assure you there will be no judgement made. We are all doing what we deem necessary for our and other's safety.

If you haven't been to an ACA star party lately, please make time to do so. Observatory Director Ron Kalinoski has done a wonderful job maintaining the ACA Observatory Schedule and scheduling impromptu star parties as the weather permits. Thanks, Ron, for all you do! Our next scheduled star party is August 20th at 8:45 pm.

As many of you already know, September marks ACA's renewal period for memberships. If you have not already done so, please send your membership dues for 2022-2023 to treasurer Dave Hartsook. Information and Dave's address are in this newsletter. Dues help support observatory maintenance and insurance, speaker gratuity, membership picnic entree, pavilion fees, and any costs incurred in support of our outreach programs. Your membership is needed, and ACA appreciates your continued support as we strive to serve Akron and its surrounding communities!

Looking forward to seeing you on September 11th!

Cathy

OFFICERS 2022 — 2024

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E-mail: vice.president@acaoh.org

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E-mail: newsletter.editor@acaoh.org

Trustee: position vacant

E-mail:

Trustee: position vacant

E-mail:

Trustee: position vacant

E-mail:

Statutory Agent: Mark Kochheiser

E-mail: statutoryagent@acaoh.org

OTAA Representative: Lou Poda



Observatory Report

By Ron Kalinoski

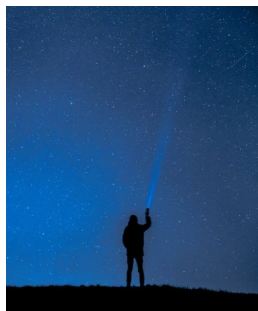
Observatory Report

On July 10th, we had our first solar observing event in many years. We had four telescopes set up on the observatory grounds with equipment offering H-alpha, white light, and high contrast viewing of sunspots using a Herschel Wedge with continuum filter. We had a nice crowd to view the Sun with excellent viewing conditions and a very active Sun! There were a few learnings that will help us host a better solar observing event in the future. The first was the 90mm H-alpha telescope I was using had a bad blocking filter which produced a poor image. I tried to perform a telescope checkout beforehand, but clouds moved in and I only got part of the checkout completed. Fortunately, Randy Leeson brought out his H-alpha telescope that did produce a beautiful image of the Sun. Tom Alexander was using our newly donated Celestron C8 with white light filter that also performed well during the event. Reece Davis was operating our 5 inch refractor fitted with a Herschel Wedge and continuum filter. The telescope produced a beautiful image of the Sun with high contrast and detail of sunspot activity. The only issue was the eyepiece was at a low elevation making it difficult to view the Sun for our older crowd. We plan to purchase a 4 inch x 12 inch pipe nipple and 4 inch coupling to raise the telescope mount to bring the eyepiece to a more comfortable elevation when telescope is pointed close to zenith. For planet viewing when planets are located at a low elevation in the sky, the current pier height provides good eyepiece elevation for comfortable viewing. Thanks to Tom Alexander, Reece Davis, Randy Leeson, and Dave Hartsook for helping out with this event. And, recently, we received a donated 8 inch white light filter to match our donated 8 inch Celestron C8.

The ACA board approved the purchase of a Herschel Wedge package manufactured by Baader. The beauty of the Baader Herschel wedge is that it produces a very high contrast image of the Sun which is not obtainable unless extremely high quality optics are being used. The Baader Herschel Wedge does this by blocking all wavelengths of light except a narrow bandwidth of green light that achromatic lenses use as design criterion. The Baader Herschel Wedge would be one piece of equipment in our arsenal of solar telescopes. We also have an 8 inch Celestron fitted with a white filter and several member owned H-alpha telescopes. So, we would have at least three very distinct and different views of the Sun at our solar viewing events.

For those members interested in OTAA events, Mahoning Valley Astronomical Society is hosting an OTAA event on August 27, 2022 with registration starting at 5pm. This event is a premier event with great food and many quality telescopes to view the night sky. There is a registration fee for the event. In past years, the fee was \$5.

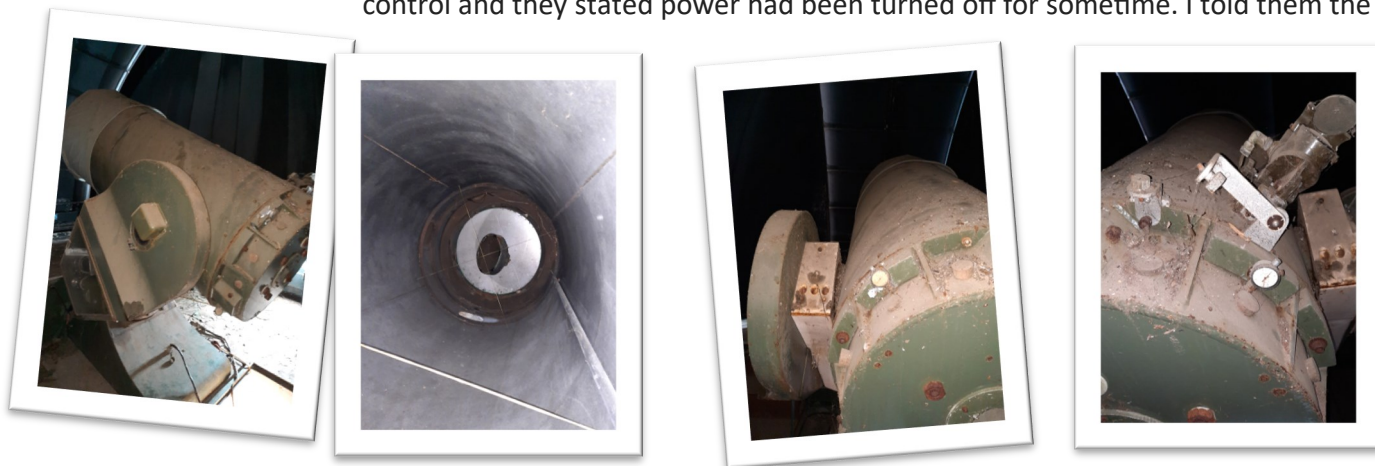
We plan to have another maintenance day at the observatory this Autumn. One issue we need to address is the 5 inch refractor pier coupling. The coupling, that is secured in the ground south of the observatory, has deteriorated threads. At a minimum, the threads need to be cleaned out as we can only thread the pier into a few threads resulting in a mount that is less stable than required. Does anybody have any ideas about how to clean out 4 inch steel pipe coupling threads?



Telescope Postmortem

By Ron Kalinoski

I got a call from a couple that just purchased a property with a 1960's observatory on it. They asked if I was interested in purchasing the equipment, as they were going to tear down the buildings. I asked about environment control and they stated power had been turned off for sometime. I told them the



equipment may be ruined if it has no environment control. I visited the site with our maintenance coordinator Gary Ciesielczyk. The observatory has a 12.5 inch Newtonian telescope and a 24 inch Schmidt telescope with a Coude focus and a lot of 1960s electronics. The electronics appears to have been used for radio astronomy or radio communications, not sure.

The condition of the telescopes are poor as they have been left for many years, maybe decades with no environmental control. By environment control, I mean air conditioning during the summer and heating during the winter. The mirrors on both telescopes are oxidized to the point that I cannot see any reflection. The cabling is dry-



rotted. The 24 inch was used for research and is set up with a Coude focus. There is no eyepiece to observe celestial objects. The light path is directed out of the telescope through the declination axis by a third mirror placed directly in front of the primary mirror, then directed by a fourth and fifth mirror to instrumentation.

The 12.5 inch telescope is nearly identical to the 12 inch telescope ACA replaced with the Meade 14 inch SCT. That telescope was replaced because of concerns about having the public using a ladder to observe through an elevated eyepiece. When the telescope was pointed at zenith, an observer's feet were roughly 4 feet off the ground to reach the eyepiece and that was deemed unsafe by ACA, so we replaced that telescope with the Alt-Az mounted 14 inch SCT. The 12 inch Newtonian telescope was given to Scott Horstman. The main difference is the telescope given to Scott Horstman was in excellent condition.

The 24 inch telescope would take a ton of money to refurbish and would need to be redesigned for visual obser-

vation. There is no eyepiece for visual observations. There is a half-silvered mirror that directs a small quantity of light to an eyepiece after the fifth mirror to center light onto instrumentation, but this is not for visual observation as we know it.

The couple plans to tear down the buildings soon for their property landscaping project. Gary & I are looking to salvage what we can before that demolition takes place.

I attached photos of the 24 inch telescope. Please notice condition of primary

mirror, as you cannot see a reflection of the tertiary mirror directly in front of primary. Also, note the ladder to observatory deck. It is a difficult climb. Not sure why it is like that. One needs to lift themselves up from the ladder onto deck as there are no handrails to help. The other thing I wanted to point out is the observatory is covered in dust and deteriorated paint from floor that most likely contains lead as the observatory was built in 1963. After my first visit, I used a half face respirator to limit breathing of dust. The design of the observatory to naturally circulate air to equilibrate air temperature, also keeps dust in the air constantly.

The got a quote from Canton Erectors to use a crane to remove the telescope and place the telescope on the ground. Canton Erector's quote \$3800.

The telescope has an oil pump and 15 gallon oil reservoir located in the telescope wedge (see photo). The oil pump assembly, piping, pump, and filter is located inside the pier.



New Day and Time and Return to Kiwanis Hall for Club Meetings this Fall! (this message is a re-run)

By Marnie Sanders

EXCITING NEWS!!!! ADVANCE NOTICE!!!

Our Fall 2022 Meeting schedule is CHANGING!

NEW SCHEDULE: 2 pm on the THIRD SUNDAY of most months!

(Exceptions are holidays and the September 18 Kiwanis Rose sale.)

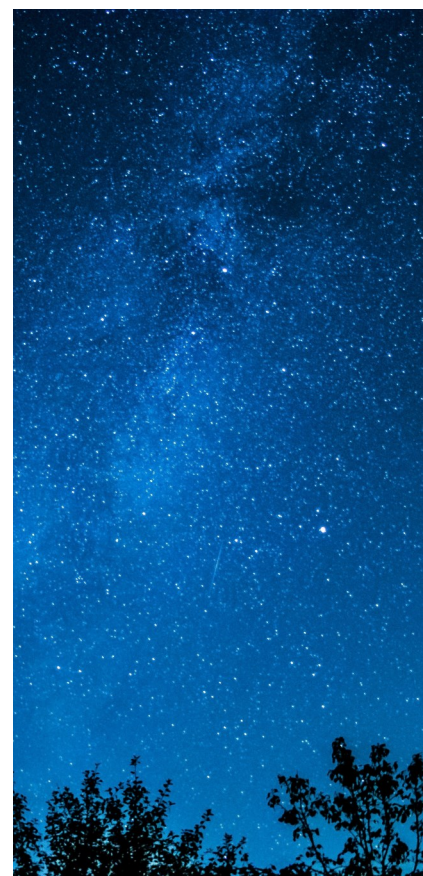
ALSO: We will resume meeting at the Kiwanis Hall on Portage Lakes Drive!

OUR FIRST CLUB MEETING IS SUNDAY, SEPT 11, 2022 - 2 PM AT THE KIWANIS HALL!

Please also mark your FALL calendar for Sunday 2 pm on October 16 and November 20, 2022.

STAY TUNED FOR FURTHER INFORMATION!

For any additional information, please contact me at secretary@acaoh.org



August Astronomical Events

Date	EST (h:m)	Event
03	16:26	Spica 4.6°S of Moon
03	23:58	Mercury 0.6°N of Regulus
05	06:06	FIRST QUARTER MOON
05	15:30	Moon at Descending Node
07	03:29	Antares 2.8°S of Moon
10	12:14	Moon at Perigee: 359830 km
11	20:36	FULL MOON
11	22:55	Saturn 3.9°N of Moon
12	20:00	Perseid Meteor Shower
14	12:00	Saturn at Opposition
15	04:37	Jupiter 1.9°N of Moon
18	05:59	Moon at Ascending Node
18	23:36	LAST QUARTER MOON
19	05:32	Pleiades 3.1°N of Moon
19	07:16	Mars 2.7°S of Moon
22	16:53	Moon at Apogee: 405419 km
23	16:00	Mercury at Aphelion
23	19:17	Pollux 2.1°N of Moon
25	15:58	Venus 4.3°S of Moon
27	03:17	NEW MOON
27	11:00	Mercury at Greatest Elong: 27.3°E
30	21:59	Spica 4.4°S of Moon

September Astronomical Events

Date	EST (h:m)	Event
01	16:12	Moon at Descending Node
03	09:56	Antares 2.5°S of Moon
03	13:08	FIRST QUARTER MOON
04	18:00	Venus at Perihelion
06	16:28	Mars 4.2°N of Aldebaran
07	13:17	Moon at Perigee: 364491 km
08	05:31	Saturn 3.9°N of Moon
10	04:59	FULL MOON
11	10:11	Jupiter 1.8°N of Moon
14	09:49	Moon at Ascending Node
15	13:50	Pleiades 2.9°N of Moon
16	16:00	Neptune at Opposition
16	20:41	Mars 3.6°S of Moon
17	16:52	LAST QUARTER MOON
19	09:44	Moon at Apogee: 404556 km
20	02:40	Pollux 1.9°N of Moon
22	20:04	Autumnal Equinox
23	02:00	Mercury at Inferior Conjunction
25	16:54	NEW MOON
26	13:00	Jupiter at Opposition
27	04:22	Spica 4.3°S of Moon
28	18:43	Moon at Descending Node
30	15:20	Antares 2.4°S of Moon

July 2022 ACA Treasurer's Report
By Dave Hartsook
8/1/2022

Checking Beginning Balance	\$1,475.58
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Income

Membership Dues Received (3 Adult)	\$90.00
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PayPal Net Fee/Charge	\$0.18
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Total Income	<u>\$90.18</u>
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Expenses

None

Total Expenses	<u>\$0.00</u>
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Income Less Expenses	\$90.18
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Checking Ending Balance	<u>\$1,565.76</u>
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Savings Beginning Balance	\$3,768.47
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Interest Income	\$0.03
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Savings Ending Balance	<u>\$3,768.50</u>
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Petty Cash Beginning Balance	\$50.00
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No Activity

Petty Cash Ending Balance	\$50.00
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Grand Total	\$5,384.26
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c/o Glenn R. Cameron, Editor

The Astronomy Club of Akron
c/o Dave Hartsook
4174 Meadow Wood Lane
Uniontown, OH 44685-7717

Yes! I want to become a member of the Astronomy Club of Akron

Check one: ☐ New Membership
☐ Renewal

www.acaoh.org
(PLEASE PRINT)

Name: _____ Phone: _____

Address: _____

City: _____ State: _____ Zip: _____

Email Address: _____

Astronomy Club of Akron annual memberships renew in the month of September.

Initial dues for New Members are prorated. If joining in Sep-Nov, pay full amount below; Dec-Feb pay 75%; Mar-May pay 50%; Jun-Aug pay 25%

Adult (ages 18 and older) ☐ \$30.00

Junior (ages 12 to 17) ☐ \$15.00

Additional Adult Member ☐ \$15.00

Family Membership ☐ \$40.00

Visit us on the Web at www.acaoh.org