

19:05 - meeting started (Randy Hemann)

Meeting Attendees

30 present (4 guests):

Randy Hemann, Rebecca Bomgaars, Julie Gawarecki, Joseph Gawarecki, Gordon Robertson, John Martin, Josef Chlachula, Anna Loney, Delia Bru (?), Patty Galbraith, Luka Bajzer, Jeff Newland, Fiona Ehling, Noah Arrell, Noel Taylor, Bill Davidson, Karl Shidler, Bob Fealey, Jack Wilstie, Jay McLaren, Ron Purdue, Rabert Ayerhart, James Benthall, Mike Carlin, John Attewell, David Meyer, Mike Quirk, Barb Hanning, Michael Currie, and Brandon Wyman.

Treasurer's Report

- 2 new members, 50 members for the year.
- Income: Dues \$40.00, donations \$20.
- Expenses: none.
- Balance: \$6759.85 (\$100 in second account)
- Calendars have not come in yet. Julie called Sky & Telescope, they are behind on processing the mail order. They are 2-3 weeks behind, the calendars should be in on the 2nd Tuesday in December, Julie is willing to meet people at Caribou Coffee if there are at least one or two replies of interest. Definitely hoping to have the calendars before Christmas.
- Julie mentioned a request for a donation to the Gateway Science Fair, typically we donate \$50. No request from the regional science fair, yet, but if we get one, typically we donate \$100 for that. The deadline will be the night before January 1st.
- Luka made a motion to donate the suggested amounts to the science fairs, ??? seconded. All ayes, \$50 to Gateway, \$100 to Regional.

Observing Notes

- Bob Fealey mentioned being out in his pod with [Binocular Highlights](#). See with 7 or 10 power binoculars. John Attewell asked about the ALCOR certificate, Bob said no.
- Randy was out with the Explore Scientific 4-inch refractor. He had it connected to Sky Safari on his iPad, plug in and works, NEVER FOLLOW INSTRUCTIONS. Sky and Telescope book ... same as ??? ... quit working in the last two months. Bluetooth connects, and Sky Safari, but says telescope not communicating. Question posted to the website.

News

- Review meeting minutes. No updates.
- Library telescope update. The second telescope was delivered tonight, but there was bad news, they had to pick up the 1st one as there was a problem with the focuser. The focuser may need to be replaced, possibly have to contact Orion, but Chris will look to see if he can fix it. While that is being done, the old moon map will be removed and replaced with the fixed/updated one. The new telescope may be out in circulation tomorrow, as there are about 100 holds. Julie and Chris have a box with the third telescope (purchased by the library). Jay asked if the patrons know about the date(s) and time for the club meeting(s), Julie indicated that there is a link to the website with the telescope(s). The library thought the

QR code was a good idea, John and/or Mike Carlin are willing to help print one. Julie also mentioned meeting with some Stewartville school teachers, they might want a telescope. We may want to setup a viewing event, others may want to visit with local schools.

- RAC Outreach Meeting Report. Josef mentioned an event this coming Friday at Watson Soccer Field, 6 to 8 p.m. The last 2 hour outreach, the next three months will just be an hour. Josef also mentioned an article he published on our website about a comet, 2018V1, which can be seen with binoculars the next 2 weeks. Josef asked about interest in Zoom.us for outreach webinars, 40 minutes for free.
- Mini-reports/Show-and-tell. Mike Currie had something to show, a telescope a friend wants to donate to the club, called this morning. 3x Barlow. It is a Celestron 127EQ (?). 20mm eyepiece. Gussed value of \$250. The friend was the second owner, never took the dust covers off. Mike will pick it up, has a form to fill out, will drop it off at Randy's.
- John Attewell mentioned a possible recruiting mailing list, meeting after the club meeting to discuss. John also mentioned that the NCRAL has its own list for this sort of thing. John Martin said he had some slides regarding the mailing list(s).
- Josef pointed out people from Lanesboro, Anna and ???, hoping to attend Eagle Bluff event, pulling together some kids from school and library. Julie explained the library telescope to Anna, will email contact information on the library website.
- Two students from Mayo High School, taking astronomy elective. Randy asked about any ideas for events.
- John mentioned a Galileo program coming up in six weeks (NSN). They meet once a week. There are 24 Galileo scopes for educational/outreach/teaching for completing the program. Josef and John signed up and attended. Trying to do more with you astronomers in the future. We have the last of the scopes as they stopped manufacturing them until there is another benefactor/funding. Josef said that it is an excellent teaching tool and great for first observing. Josef enjoyed playing with the pinholes during the classes. John said that they did give us a lot of materials, tips & tricks. Luka said that he also had bought a couple when they first came out. Randy thought we could maybe get a preview of the Galileo scopes at the January meeting.
- Randy had a reminder that there will be no meeting in December. The winter party/meeting is planned for a Friday night in January. Mike has the February presentation slot.
- Comet 46P/Witranen - 5th, 6th, or 6th magnitude. Goes towards northern sky. It will rise quickly. It looks to be by Capela around December 26th. John Attewell said that last months Astronomy Magazine had a nice article with a diagram showing how close it passes.

RAC Meetings/Calendar

- December 11th.....NO RAC MEETING in December.
- December.....Comet 46P/Wirtanen
- December 7th/8th.....Dark Sky weekend
- January 11th.....RAC Winter Party. Friday evening, at Hemann household.
- February 1st/2nd.....Dark Sky Weekend
- February 8th/9th.....Dark Sky Weekend
- February 12th.....Monthly RAC meeting. Presentation: TBA

Other News/Notes/Announcements

- Executive council meeting after the club meeting. Email distribution lists.

Featured Presentation

“Experiments Performed during the Great American Eclipse of August 21, 2017” - Jack Wiltsie

- This was a second part presentation, a follow-up to the first part in March of this year.
- Mostly press releases, very little data.
- 626.3 mph - speed of the shadow.
- 68 instruments.
- Troposphere reaches about 5 to 7 miles.
- Hopkinsville, KY.
- Alliance, NE. 9 degree Fahrenheit drop during totality, expected 6 degrees. 4000 ft. elevation, less water vapor.
- “Eclipse Wind” - 6-7 mph breeze. Bill Davidson mentioned being in the outskirts of St. Louis, 110 degree heat index, he noticed the breeze as totality approached, it was nice.
- Montana State University. Eclipse ballooning project. High school students. Live-streamed launches and feeds from cameras mounted on the balloons.
- Altitude effects on bacteria. Ballooning project results, not analyzed yet.
- Citizen CATE experiment. Continental American Telescopic Eclipse Experimental ????. 68 teams: 27 universities, 22 high schools, one 8th grader, 19 citizen scientists. The goal was a 90 minute movie of totality. 56 of th 68 collected useable data. Clouds blocked only five of the sites. The result was 83 minutes of the possible 93 minutes.
- Sun’s polar plumes.
- Bow waves created by the 2017 eclipse (data pic).

20:30 – meeting adjourned.

Submitted by Brandon Wyman - Rochester Astronomy Club secretary