

19:01 - meeting started (Randy Hemann)

Meeting Attendees

17 present (1 non-member): Randy Hemann, Ron Purdue, Mike Carlin, Luka Bajzer, Jack Wiltsie, John Attewell, Josef Chlachula, Jerome Taubel, Jay McLaren, Noel Taylor, Steve Remick, Jeff Newland, Jim Ruf, Kirk Severson, Jack Mogren, Bob Fealey, and Brandon Wyman.

Treasurer's Report

Income: \$80.

Expenses: \$750. \$500 to Eagle Bluff, \$250 for eyepiece.

October 31st ending balance: \$???

Julie not present, serving as an election volunteer. Jerome Taubel has the calendars, \$15/piece.

News

- November 4th outreach report, Josef Chlachula and Mike Carlin. Last weekend, on a Friday night (November 4th), Josef and Mike were out for their second try for a community outreach event. They were at the Roy Watson Soccer Field. Josef had some pictures to share, the lights were brighter in the pictures than they actually were in person. Randy mentioned KAAL, KTTC, and a message out to school district teachers by Paul Larson. There was also a last minute announcement to/from the Chamber Josef said that about 50 people showed up for the event. Josef indicated that Keller is nice, for us, but out of reach for families with kids. The soccer field is reasonably good, with a good horizon. They went through "the basics": the first quarter moon, and some bright stars. There was also an occultation of Aldebaran. Mike mentioned that a 14 year old surprised him with a gravitationally bound question, and that it was "so cool" to see a 6 year old that was at John Attewells telescope for a long time. They also had a printout to share, which was passed around the room for members to look at. Josef indicated that one challenge is how to inform the public, and then the weather has to cooperate. Friday night is the best, but Saturday and Sunday for backups, with a mention to go to our Facebook page.
- [Yerkes Observatory](#) visit, Josef Chalcula. Josef stopped off at the Yerkes Observatory (5 hour drive) on a trip to Chicago (5.5 hour drive). He gave a summary of what it is (Wikipedia description, built in 1897, 40-inch lens) and shared some pictures. Alvan Clark made the 40-inch lens for the largest telescope, basically the limit, as that is when glass starts to sag. Inside a small building was an 8-inch Cassegrain. Josef missed the tours, which were at 10 a.m., 11 a.m., and 2 p.m. Josef also shared at size comparison chart comparing the Yerkes telescope, Kepler, EELT, and others; with a soccer and football field comparison. Randy mentioned that the Yerkes Observatory was what inspired Hale to not build another observatory in the north.
- Science Fair support -- Rochester Public Schools and Gateway Science fairs. John moved, ??? seconded on donating \$150 collectively to the science fairs (\$100 to one, \$50 to the other). Voice vote, ayes.
- NCRAL 2017 Update -- John Attewell, Kirk Severson, and others. John, Josef, Julie, Jay, and Kirk are on the committee organizing this. There is a good handle on the main speakers. There will be a short talk on Friday. Jay was able to get Armondle Murnduka to talk about Mt. Wilson. Dave Faulkner (Solar System Ambassador) will be speaking. A graduate student from the University of Minnesota will be speaking. Robert Newtell, University of Iowa, will be speaking about robotic telescopes. Steve Kowahler, Iowa State

University, will speak about Kepler since 2008. Russ Durkey, NEO from Minneapolis home, will also be a speaker. Unfortunately, Annette Lee, Native American constellations, had to back out. Kirk was able to arrange Jennifer ??? to speak on a bunch of topics, such as the physics of impact craters. Karl Ling, editor for the NCRAL Northern Lights N??? Is trying to narrow down a talk, something on the 800 objects in an "Astronomical Bucket List". Kirk confirmed with Eagle Bluff. John indicated we can seat a couple hundred people. Kirk said they have a big lecture hall, and a blow up planetarium, it is like a small college campus according to John, a really large facility. Randy mentioned Julie's library project, and Jerome thought about the story on the eyepieces for Wall-E, anecdotal Friday things. Jack Wiltsie was thinking about the pictographs.

Observing Notes

- Randy mentioned that there was some great observing out at Eagle Bluff a couple weekends ago. The observing was good until about 1 or 1:30. There were some new folks there. Some ladies were out there doing some photography, Friday night. They saw the RAC member there Saturday night, so they came out again. Mike helped them with some Milky Way shots. Jerome also talked about how Mike Roland was there with an interesting mount that stayed right here it was pointed. Jerome mentioned that another guy was there with four to five people and an 8-inch telescope, they packed up when the other RAC observers did. Randy commented on how it was a "triple Mike night".
- Steve Remick mentioned that someone had saw him in his RAC cap and asked if we go out in the winter. He told them to check our website.
- ??? was out at Keller Saturday night. It should have been perfect, but all four of the laptops he brought with had problems. His guiding system was off, and he ended up with L-shaped stars. Two others were out there, on the other side, but they were apparently trying not to bother him.

RAC Meetings/Calendar

- November 25th/26th Dark Sky Weekend
- December 2nd/3rd Dark Sky Weekend
- December 13th No RAC meeting!
- December 13th/14th "Super Moon" (also Geminids)
- December 23rd/24th Dark Sky Weekend
- January 10th Winter RAC Party (Hemann house)
- January 27th/28th Dark Sky Weekend
- January 30th/31st Dark Sky Weekend
- February 14th RAC meeting -- presentation T.B.D.

Other News/Notes/Announcements

- After the outreach summary from Josef and Mike, Bob, Randy, Josef, Mike, and Jon discussed some ideas for outreach events. Bob mentioned that the "Super Moon", and eclipse of the moon might be good at West River Drive, where about 40-50 people could be there. Josef indicated that the horizon at the soccer field is better, and less likely to have to contend with fog from the river. Randy mentioned that next year, in August, Jupiter and Saturn will be in the sky. Bob mentioned Venus this winter. Bob and Randy mentioned cameras to use, possibly a 5 megapixel to show a widescreen view, and to not throw away old iPhones, as the camera could be used to display telescope views, Randy has a SmartPhone adapter, which one 4-H

member had used to get a blue ribbon on a photo shown at the fair.

- Randy mentioned that Astronomy had a great article on the December 13th/14th “Super Moon”. The moon will be its closest to Rochester until 2032 on Sunday night at 10:42 p.m.
- Randy had a reminder that there will be no meeting (or party) in December, due to all the fighting against blizzards in the past. There will be a holiday party in January, at Randy’s place.
- Kirk talked some about an outreach event at the planetarium October 28th. It was a bit questionable on getting in some good observing, with a nice little cloud bank in the west. There was a somewhat hilarious encounter with a searchlight that was at the fairgrounds, but some other stuff was shown, including Vega.
- Randy had a reminder that we need to keep track of Paul’s planetarium shows, for some possible outreach events to do.

Feature Presentations

“TITAN (from an armchair, amateur’s perspective)” – Robert Fealey

- Bob first had to give a thanks out to Jay, for seeing him observing in his lot and coming over to talk with him, as that is what lead him to apply to be part of our club.
- UnmannedSpaceflight.com (Bob is a UMSF blog-sphere member, TitanicRivers). Founded in 2004, a forum. Not about manned missions, no talk of aliens, It became affiliated with the Planetary Society in 2010.
- Cassini’s view of Titan: <https://saturn.jpl.nasa.gov/the-journey/the-spacecraft/>
- Huygens lasted about an hour and a half longer than expected.
- Next orbit details: ciclops.org
- <http://pirlwww.lpl.arizona.edu/~perry/RADAR/>
- Titan from Cassini and Huygens, Springer 2009.
- References to be posted in the forum.

20:57 – meeting adjourned

Submitted by Brandon Wyman - Rochester Astronomy Club secretary