

19:05 - meeting started (Randy Hemann)

Meeting Attendees

17 present: Randy Hemann, John Martin, Larry Mascotti, Julie Gawarecki, Jay McLaren, Bob Fealey, Bill Davidson, Mike Carlin, Charles Beckjord, David Meyer, Jeff Newland, Kirk Severson, Luka Bajzer, Nova Kane, Michael Quirk, John Attewell, and Brandon Wyman.

Treasurer's Report

- Income: Total \$x.xx.
- Expenses: \$323.20.
- Balance \$9391.20.
- Liability insurance paid. 6 members joined.
- Calendars: Somebody, not a member, asked for one. Julie tried to get in touch with them, but never got a response. That one is left, all the rest have been sold. Brandon asked to get the last calendar, for \$10.
- Charles Beckjord asked about our insurance. Julie indicated that it covers injuries if someone gets injured at an event. Charles indicated that he is an ex-lawyer, and said that due to 501c3 status, club executives are not liable.

News

- Review meeting minutes. Randy was not at the last meeting, so no meeting minutes.
- John Martin gave an update on the club website. John and others had security concerns going forward with the old forum. A new bbPress forum that integrates with WordPress has been put in place. 104 members from the old forum, along with posts, were migrated to the new forum. Some forum/website members may have ended up with duplicate accounts. Those that had accounts migrated should have received an email to setup a new password. John Attewell asked if it would be the old password, John Martin said it would not be, a new one needs to be set up. Julie said that one should search for WordPress in their email inbox, the message should have come in on Friday. Mike Quirk said that he received his today. The new forum has chat functions and some other things to look into. Bob asked if there was a category for number of views, John Martin was not sure, but he wrote that down to check. Mike Carlin asked about JetPack, John thinks maybe should share at the meetings. Julie thinks it would be interesting if we get requests from Rochester, New York. Apparently two people from Rochester, NY have tried to join, they said to keep the money sent as a donation. Mike Carlin suggested we add a Minnesota logo to the webpage background. Brandon asked if it is easy to find out if one has a duplicate login. Luka indicated that he had a duplicate login, John will look into that as well. John Martin would check if there were duplicate logins and get in touch with us.
- Randy thanked John for his work on the website.

Observing Notes

- During the last club meeting, Mike Carlin had talked about a new toy. He got an Edge, with a CGX mount. Mike took it out to Eagle Bluff, did not recall the date, others there, including Ellen Vega and Jeff Newland.

Mike has some image(s) from that observing night that he indicated he may post to the new forum.

- Bob asked if anyone had seen the supernova in Cassiopeia. John A. asked that he tell us about it. About a month ago, an amateur astronomer picked it up, magnitude 8.0, not visible to the naked eye. Spaceweather had a photo of it. It is still visible. Bob has problems viewing the northwest from his place. It is a binocular object, 8.0 and holding for several weeks. Luka pointed out that we have had a lot of clouds for a while.
- Jay McLaren said that there were two beautiful crystal clear nights in March. Canis major, Leo, 8-9 on double star list, about half done with the list. Epsilon Canis Major ... secondary 6 or 7 mag, not well separated, he was not convinced to say he saw the secondary. John A. asked about a bright one off to the side, too see dim. Jay said that yeah, that is the one. Luka suggested a smaller telescope. Nova Kane, pointed out, in the Zoom chat, that -0.72 is the magnitude. Randy had a suggestion on masking ... Jay will have to try that.

RAC Meetings/Calendar

- May 7/8 dark sky weekend.
- May 11 - RAC meeting.
- May 14/15 - astronomy day. dark sky weekend.
- June 4/5 - dark sky weekend.
- June 8th - RAC meeting. tba.
- June 11/12 - dark sky weekend.

Other News/Notes/Announcements

- Randy said that we had some nice teaser dates ... maybe this weekend ... new moon yesterday.
- Mike C. - battery powered pico projector. Project on the side of a trailer or something? Randy has a pico projector, they are a good outreach tool. Mike C. bought one a week or two ago for about \$100. John A. asked how far it projects? Mike said that it filled up a 100-inch screen just fine, outside, but not good for outreach, wind would probably take it away. Jay asked what kind of batteries were in the battery pack. Mike said that it is built in ... giant battery packs can get ...has not done a full battery test with it yet, so he might have to try popping out a movie some night or something. Luka indicated it would be better to do it then and not at an outreach event.
- Outreach meeting report. John Martin gave a report on outreach plans, as Josef was not on/available. There is an event planned for May 15th at Root River Park, this would be for the spring astronomy day/week. Maybe try to do a Zoom broadcast? More volunteers may need to be lined up, perhaps discuss that at the next club meeting on the 11th. As for doing some kind of Zoom/web event, Luka said that he can get a couple bars out there and would be glad to help with that. Randy said that he has a wifi booster, should get +1 bar or so.
- John Martin. 109 Messier objects.
https://www.nasa.gov/skymap/messier/?fbclid=IwAR3SwVVrOXbRQFL2nKuaWWy_gy5i8Zyt0Jj7jrnO_JRH_oT7Ak-Y0m_hPgTA
- NCRAL 2021 is cancelled. John A. on NCRAL elections. Bill said that members should get an email to vote.
- Randy indicated that we are looking for topics/presentations.
- Luka - quick question. All major star parties cancelled? Randy said that the Texas star party is out. The

Rocky Mountain one is tentative. Okie-Tex is on, people are signing up. Bob said that he got a note that the Nebraska star party is on for August. Bill mentioned getting a letter, all regional star parties, with the AstroLeague, are to be canceled. Randy asked if that was a recommendation or edict. Bill said that it was an edict. Randy asked that Bill forward that email to him.

- Luka - tc-e2 Nikon. Binocular part thing.

Featured Presentation

“UNISTELLAR eVScope” - Randy Hemann.

- Fits in his 20 year old Celestron CT80 bag.
- Comes with its own toolkit.
- 5-lb tripod that telescopes out, with bubble level.
- Numerous reviews, some polarizing. (Love it. Hate it.)
- 20-lbs scope. Carry it on your back, made to be portable.
- 2 set screws to mount it on top of the tripod. 2 extra knobs come with it, in case you lose one.
- Electronic camera, basically, not a telescope.
- Inside, one can see a 4.5-inch reflector.
- 1/3-inch Sony ... chip, like in a security camera...decent, but low resolution.
- Matanoff mask - to adjust focus using the focusing knob on the bottom.
- Built-in lithium battery. Supposed to last 9 hours.
- One push-button to turn it on.
- Original model. Electronic eyepiece, pretend you have a telescope.
- Run the telescope with an app. Glossary of objects to select from. Run it off your SmartPhone.
- Share with 10-people via the network that comes from the scope. Share control with anybody.
- John Martin asked how it does alignment. Plate solving. Randy said that one can see a lot more of that now. From the app, you take a dark frame.
- Recommended, Fading soon list. Appearing soon list. Pick say M35. Gives location, info about it, etc.
- Luka said that version 3 could probably have a laser mounted on it. Randy thought that maybe he could get one of the 3-D printer guys in the club to make a mount for one.
- John M. asked how long it took to get it. Randy said that it took 2 months to get it. He ordered it in the November/December time frame, it arrived in early February.
- More than one dealer/retailer offers it now, but that does not solve production.
- Wifi runs from about 40 feet away.
- John Martin - So, who makes the motion for the club to buy one? Luka - ...it is about 4 grand.
- Randy shared some pics from a camping trip that he used it at. Orion Nebula on a 32-inch TV screen...side of RV... Sometimes 10 seconds to go to object, other times it was 40 seconds (gets a bit lost, look at things to recognize stars)
- Stacks about every 4 seconds.
- The longest he let it run out was 20 to 23 minutes.

- Claim is 16 magnitude, Randy had it down to 14 magnitude.
- Randy never used it with really clear skies.
- Not astrophotographer publishing quality. Noise in TV image, cloudy sky.
- Captures the attention of people walking by, not knowing what to expect.
- Everything does look better in the electronic eyepiece, but need to be careful, or it has to restart the stacking.
- Artificial magnification via a pinch on screen.
- You can do some science, like asteroid occultations. Randy has not tried that yet.
- M84 pic.
- Tried to do the Marcanian Chain.
- Randy said that one down side ... \$3,000. It is a time and convenience thing. No mussin, no fussin. Easy and enjoyable. The two downsides: 1. Price, 2. resolution.
- Bob asked about the resolution, would it be good for the moon and planets? Randy pointed out that the web site says it is not for planets.
- Randy mentioned that during stacking, it will automatically throw out a frame with say an airplane, or starlink satellite.
- Can easily broadcast this like you broadcast anything. Randy had up to 6 users. You have to have a really old Android device to have it not work. One person was on a really old iPhone.
- Cannot run it on the iPad, but can view it.
- One of the first pics, M81. Not focused. See all the spirals though.
- Jay - asked about ... GPS? Randy indicated yes, and it is really quiet, no whirling or noise like that.
- John A. - how did you find out about it? Randy - sky & telescope last summer.
- One other company does something similar, 3-inch, so integration takes longer, and costs an extra \$100.
- Randy said that it slightly exceeded his expectations. He cannot wait to get out at some outreach. A lot of clubs get this for their outreach. It is really made for outreach and social gatherings. Packs up quick, nothing packs up quick for Randy.
- Moves just as fast as Opteron on 8 or 9.
- Luka - does it make noise at max slew speed? Randy - yeah, your normal whirring...
- Small crowds around it were super excited ... something so small ... color ...
- Mike Q. - ... cloudy ... see more than we see with our scopes...? Randy - right, city ... lights ... see it being useful in the Mayo High School parking lot when they cannot turn the lights off.
- John A. - Where is the company that makes it located? Randy - France. Recent look in the forums shows a 4 to 6 month wait. Luka - You have to go to the used market now to get anything sooner.

20:39 – meeting adjourned.

Submitted by Brandon Wyman - Rochester Astronomy Club secretary