

Rappahannock Astronomy Club

Minutes, August 16, 2023, Online Meeting

In attendance:

Scott Busby, Equipment Manager
Bart Billard, Secretary
Glenn Faini, President
Claire Gardiner
Emily Hoell
Declan Hoell
Andy Hulon

Peter Laky
Mark McDonagh
Troy Major
Rolando Pancotti
Matthew Scott, Treasurer
Myron Wasiuta, Vice President

The meeting began at about 8:10 p.m. Twelve members were present. During introductions, Emily Hoell said she and her son, Declan, and daughter, Isabel, were members. They had joined a few months ago. Declan was home schooled and especially interested in astronomy. Isabel was in public school and also had some interest. Pete Laky said he was trying to learn astrophotography. His older children were mainly just interested in looking at things like the planets, but his youngest daughter was a senior in high school interested in studying astrophysics. She taught herself enough about doing astrophotography to make it her senior project.

Old Business

- President's Report—Glenn Faini said he had nothing new to cover in the President's Report.
- Treasurer's Report—Matt Scott said RAC received \$32.50 in payments from one new regular member and one student member who also paid for an Astronomical League (AL) subscription. Matt had talked with the AL people, and they indicated the extra payment was in time for the student to get the full year subscription.
- Secretary's Report—Bart Billard said he was still catching up on the minutes, working on July, which he thought he would finish soon.
- Communications Report—Glenn said that John Maynard had fixed the easymail problem. He said the rejections of anything we sent to gmail accounts had something to do with the way our domain name server was set up. Bart mentioned that Shannon Morgan had fixed MSRO's easymail, too, with the help of John's information.
- Vice President's Report— Myron Wasiuta reported that the Farm Ridge Brewery outreach was an amazing event held on Friday night near the peak of the Perseids. There was a turnout of 10-15 telescopes, mostly from the Charlottesville club members and local amateurs from south of Charlottesville, along with Corey Dallmeyer and Myron. There were usually 20–30 people milling around the telescopes. A Starlink train of satellites passed below the bowl of the Big Dipper. Along with Corey, there was another person with night vision equipment, Dave Sappington, who purchased it through Corey and had a 20-inch Dobsonian. Myron had the 6.5-inch refractor that Jerry had on loan to MSRO and got good views of Saturn. Perseids were also plentiful. Glenn F. asked about news on the York radio telescope. Myron had none and said he had hesitated to contact them because MSRO had not had a telescope capable of photometry recently, but that had changed now, as he would explain in the MSRO report. Glenn said that was next up.
- MSRO Report—Myron said Station 2 (the 10-inch RC telescope) was now fully operational with its computer upgraded and cleaned up so the disk space was adequate for data storage. He also cleaned up the programs on it to help it run faster and added enough RAM for streaming. He said it now had a CAT5 hardwired ethernet connection in addition to WiFi. Also, MSRO purchased and Myron installed a Pegasus Advance mini Gen2 power box. It provided a USB hub with four ports and four 12-volt power outputs. These supplied the PMC-EIGHT controller for the mount, the focuser, the QHY163C USB camera, and the webcam that rode on the telescope so we could see the sky. In addition, it included a mini weather station that controlled the two dew heater outputs based on temperature and dew point and allowed the dew heater ropes to provide enough heat to prevent the dew formation while minimizing distortion of the mirrors. He said it worked as a remote-controlled switching device, letting someone logged into the station's computer turn on and off the camera, TDM, etc. He said Station 2 was now ready for club members interested in

doing some observing. He said Station 1 was still offline, with the 6.5-inch refractor out of the structure, and there was a lot of work to do, and moving it was going to be a big job.

- Club Equipment Inventory—Scott said he still had a lot of equipment that was begging for someone to come check it out and use it.

New Business

- Star Party Sign Transfer to Corey and Myron—Glenn said he had two star party signs that he used to take to Caledon star parties and would arrange to transfer one to Corey and one to Myron to use at their outreach events. He thought the best way to do it was to take them to the club picnic next month. Myron said that would work for him, although, as usual, he would be working that Saturday and would be arriving late. Glenn said he would be able to drive by Myron's house on the way back from the picnic and could deliver the sign in case Myron could not make it to the picnic.
- Annual Membership-Only Picnic—Glenn had Scott update us on the plans for the annual picnic. Scott said he would again be hosting the picnic at Belmont this year (on September 23). Closer to the time of the picnic, he would send out notices asking each member how many would attend and their preferences for hamburgers, hot dogs, or both, along with how many they needed. He said he would purchase and provide the hamburgers, hot dogs, and sodas. He would ask attendees to contribute side dishes, salads, or desserts as in a potluck. Weather permitting, he said we could have telescopes set up for star gazing in the evening, and he could offer a tour of the observatory and if needed, take some club equipment outside for people to try as well. He said members should make sure they were on the club email list and monitor it for messages about the picnic. He warned he could not accommodate special dietary needs, and anyone who could not eat hamburgers or hot dogs would need to bring an appropriate meal for themselves. Similarly for those who want special drinks such as diet soda. Glenn said Scott could submit his expenses to the club and get reimbursed (pending a vote that should go his way).
- Motion to fund MSRO Station 1 Demolition and Reconstruction—Saying we had a generous balance in our treasury we were not doing anything with, Glenn offered a motion that "RAC finance the refurbishment and construction of a new Station 1 at MSRO up to \$2000." Myron indicated that seemed too generous, but Glenn said he intended that as an upper limit, and it would be fine if it ended up costing RAC less. Troy Major seconded the motion, allowing them to continue the discussion. Myron said he respectfully appreciated that motion but would like to use it as a plan B if we needed to. He said his philosophy was to use as little money as possible for MSRO to achieve the goals that we need to. In this case, he believed we could use most of the existing structure. That would involve moving the existing structure to the middle of the yard and building a ground-level deck for it to sit on. He expected he could purchase most of the material for the deck at the 70 percent off scratch and dent section of the Home Depot near where he lived. His wife worked there and could keep an eye out for bargains on material for him. Some of the material could also come from repurposing the existing deck. As a counterproposal, he offered a suggestion that a little later MSRO could use some funding to purchase some little mini computers that would be riding on each station and more Pegasus boxes for stations that needed them. He proposed MSRO could request some funding from time to time for purchasing individual items such as those. Glenn said he still thought some funding would be helpful and expressed concern that reusing existing materials instead of new would shorten the useful life. Myron assured Glenn he would try to use the scratch and ding sale materials as much as possible to avoid that concern. Also, he said the main deterrent right now was having the time to do the work needed for Station 1 to be relocated, and he still had to get the home owners' association approval, which was required any time something that sticks in the ground was to be moved. When Glenn asked, Myron said the only work required for the dome was silicone caulking around the bolts that go through it, and the dome itself was in good condition, along with its electronics, shutter, and drive motor. He said he would have to redesign how the top of the walls mate to the dome skirt that RAC had donated \$1000 to purchase. It is a 7-foot square fiberglass structure with a 6-foot diameter hole that adapts the round dome to the square building. The walls were in very good condition but the brick molding at the top where the skirt fits needed to be replaced. Myron said he would probably rebuild the walls, going along with Glenn's suggested preference for using new materials. He said the more immediate concern was computers and processing power. He wanted to mount small, powerful computers on each telescope the way he saw out in

Washington state where he visited the Battle Point Astronomical Association (BPAA). Having them ride on the telescope made sense for keeping the wires all together (and shorter) to avoid tangling. The compact computers were available in 12V and 18V versions, with the latter supporting more RAM and processing power.

Myron said another reason for his hesitation about the proposed donation was the amount of usage of MSRO telescopes by RAC members. He thought part of the problem was the amount of training going on now with Myron being the only one doing the instruction, and the limited number of telescopes that had been online. These had been issues even before when Jerry was also doing training. Myron thought he needed to develop some group training. He hoped to see increased interest from RAC members as more telescopes got back online. He was also thinking of adding some narrowband capabilities. An increasing number of RAC users interested in remote observing would be Myron's signal to start considering the need for additional support from the club. He encouraged club members to contact him about what remote observing possibilities interested them, and he would tell them whether that was something MSRO could provide. He mentioned astrophotography, and scientific observing: MSRO had low-resolution spectroscopy capabilities and could also do photometry.

Glenn said he thought he should withdraw his motion for now, and he asked Myron to send out a message to club members asking them about their interests in those things he talked about. He suggested Myron ask RAC to revisit a donation to MSRO when they were ready to work on Station 1 or needed to get one of those computers. Myron said maybe he should put together a presentation on the capabilities of the station that was now operational to further gauge the club interests, and he and Glenn planned to talk about that when they got to the topic of a possible Zoom replacement.

- Astrophotography POC—Glenn said Myron was now the Astrophotography POC and that we would change the website and newsletter to reflect that.
- Beginner Coordinator—Glenn said we would change the Beginner Coordinator to Corey.
- School Programs Coordinator—Glenn said the School Programs Coordinator was still vacant because we had not had someone offer to take the position.
- Zoom Replacement for Real-Time Communications—Glenn asked Myron to talk about Discord as a possible replacement for Zoom. Myron said one of the other clubs he belonged to uses Discord as their platform for meeting. He considered it a very versatile platform: you could do video sharing, real-time chatting, and have chat rooms called channels. Myron said he thought the basic version was free, and that we could use it when our Zoom subscription ran out in December. That would give him some time to look into it and talk with some of the clubs that use it about the capabilities and find out how happy they were with it. The BPAA that he mentioned earlier in the meeting used it. One of the things they did was use it when observing. They had a channel called “observing,” and when someone was out observing he could post to the observing channel in real time, posting pictures to it in real time as they come in. An observer could share his screen so others could log in and see what he was doing and watch images coming in. It seemed like a lot of fun to Myron. He said he was proposing that we start thinking about using Discord, and he would like everybody to educate themselves about what it is and maybe be ready to ask questions at the next meeting when he could talk about it some more.
- Upcoming Events—Glenn said we had a star party coming up on August 26 at Bowling Green that would be a first quarter Moon star party.
- Other Items—Glenn said we had reached 63 members this year, not far from the previous high of 65. He asked for anything else from people present.

Emily said she had a question for Myron. She said she was new here, but what he said about the work needed at MSRO gave her an idea. She said she was part of a large home-school co-op in Fredericksburg with a lot of teenage students who were looking for service hours. Myron confirmed MSRO was 501(c)(3), and she said she thought work on rebuilding an observatory would be really cool for them, and it would be a “win, win” if it also checked off the box for volunteer service hours and be good experience to cite on college applications.

Myron said first we could definitely use that kind of help. Second, he said MSRO was a 501(c)(3) with tax-exempt status and could provide community service hours that should be recognized by the local home school associations, and he said he would love having her email him with her contact information so they could talk more about that. Scott

took that opportunity to tell Myron he was also available to help out. Myron thanked him and said that his experience building his observatory would make him a valuable assistant.

Scott also related a recent "astronomy camp" type of event he had held at Belmont Observatory for a group of home-schooled teens visiting a Project Linus acquaintance of his wife's. He indicated Emily could contact him about doing something like that, saying that even in the daytime they could see the Sun imaged in hydrogen alpha light.

Glenn said Peter had posted a comment about being interested in learning remote imaging. Myron had seen it and said he would send out information to the entire club about how to contact him to arrange that. He told Peter he looked forward to talking with him about that.

Glenn also remembered he was wearing a shirt with a RAC logo to illustrate one of the items available at Rocky Top Embroidery, a shop in King George. He said the dedicated web page they had for the available RAC embroidered gear was no longer there because it had probably been a while since anyone ordered something. He said people could still call them to order some T-shirts, polos, hoodies, and (he thought) hats. When we were meeting in person, members could order from Rocky Top, and Glenn would do the deliveries at club meetings.

Next Meeting

The next meeting is on Wednesday, September 20, 2023, at 8:00 p.m. It will be an online meeting.