

# Rappahannock Astronomy Club

Minutes, January 18, 2023, Online Meeting

In attendance:

Wade Allen  
Scott Busby, Equipment Manager  
Bart Billard, Secretary  
Linda Billard, *StarGazer* Editor  
Corey Dallmeyer  
Glenn Faini, President  
Clair Gardener  
Eric Goforth

Glenn Holliday  
Andy Hulon  
Mark McDonagh  
Troy Major  
John Maynard, Web Administrator  
Matt Scott, Treasurer  
Myron Wasiuta, Vice President

The meeting began with a presentation by Corey Dallmeyer about 7:00. Fifteen members attended.

## Program

Corey Dallmeyer gave a presentation on his white phosphor night-vision equipment. He started with a slide with two image samples and a picture of the setup attached to the focuser of his telescope. One picture was part of the California Nebula and the other was part of the Rosette Nebula. The image train on the telescope included a coma corrector on an extension tube, a Televue 55-mm Plossl eyepiece, an eyepiece adapter on the Plossl to attach his PVS14. He called it a \$5,000 foot-long, but said with the 8-inch Dobsonian he was showing, you could get away with just an eyepiece and the PVS14. The extension tube was mainly for the Plossl eyepiece, and the coma corrector was more necessary with a larger telescope.

Corey showed three more pictures, two of which looked more bluish. They were 10-second cell-phone shots of the North America Nebula and M81 and M82, taken at James River State Park. (He mentioned using a phone adapter, which was not in the setup he showed earlier.) The greenish image was the Cygnus Wall.

Corey skipped a couple of slides to talk about the PVS14. His was a generation 3 PVS14, white phosphor, which avoids the green look many people think of when talking about night vision. He said they don't have brands like Televue, and each tube is different. There are ratings like "halo" (what you might see around a bright planet), photocathode sensitivity, EBI, and various measures of how clean the tube is: blemishes or spots in any of the zones, and such. He said he was interested in outreach and the ability to see the objects at the telescope without taking and processing images. Glenn Faini asked Corey how these images compare with what one would see just looking through it. Corey said they were a pretty good representation of what you would see, maybe cleaned up a little by the 10-second exposure time. There would be some fuzz and some noise and some "scintillation" looking in real time. You can turn the gain up to see faint objects better, but would see more noise or "sparkles."

Corey showed another set of images, including the Eagle Nebula someone took using a long exposure with an iPhone. He said you could see the Pillars of Creation. He said you could easily see the Flame Nebula and Horsehead Nebula in another of the images. He mentioned taking a video, and Myron Wasiuta recommended everyone should watch it, saying every 3 or 4 seconds a bright satellite goes through, possibly Starlink satellites.

He showed a picture of the Televue eyepiece adapter and cautioned it could be hard to get off an eyepiece, and some eyepieces do not fit it. He mentioned eyepieces with higher magnification work but at the expense of lower sensitivity. In response to a question by Glenn F., he said it does not rely on eyepieces having threads to mate, but just kind of snugs onto the end. The top of the adapter does screw into the PVS14. Corey also mentioned Myron lent him the 55-mm Plossl, but he had to buy a converter that makes it a 67-mm eyepiece. He said it gives the truest field of view and the brightest image with night vision. Corey also mentioned finding many nebulae he never knew about, regretting that he had left several out as he showed one: the Jelly Fish Nebula.

Corey showed the Swan Nebula with a 7-nm H $\alpha$  filter and said it makes a big difference and should be part of the stack for nebula viewing. For galaxies and globular clusters, he recommended no filter or a

685-nm IR pass filter. He then showed some images from others, some of whom were using refractors and framing much larger areas than his telescope with its 1800-mm focal length. Myron asked him about the lifetime of the tubes. Corey thought it was 10,000 to 30,000 hours. He said it could depend on how you treat them and protect them from excessive light exposure. Myron wondered whether it would be a good idea to watch for weather conditions like temperature in the summer versus winter had any effect on performance. He asked whether Corey noticed effects of the gain setting, but Corey only recalled one time he had trouble with it that turned out to be a weak battery needing replacement.

Myron also mentioned hearing about Corey from some people he knows from the Charlottesville Astronomical Society. They seemed to think he was in Northern Virginia, and Myron had to correct them that he was in RAC. Corey said his wife looked for amateur groups online and wound up getting the Northern Virginia group interested in a demo at one of their star parties, which he went to. Glenn F. asked whether anyone used something other than cell phones, a DSLR for example, for these images. Corey could only think of a professional photographer he knew did not use a telescope, but he did not know what he used to take the images and did not have any included. Myron suggested they try live-streaming a meteor shower without a telescope using one of the cameras he had.

Corey had a few comments about purchasing a PVS14. He said he used an independent supplier who had some tubes in stock, and that Televue and TNVC (The Night Vision Company) currently have a 2-month waiting period, and have had for a long time. Also, they would not provide specs ahead of time. He said he had developed a business relationship with his supplier and was able to get specs before his purchase. Glenn F. was asking about other configurations beside the monocular with eyepiece built in (Corey only knew of some binocular night vision formats), and then suggested trying a zoom eyepiece between the tube and telescope. Troy Major mentioned a couple of zoom eyepieces Corey could try out.

## Old Business

- Treasurer's Report—Matt Scott said there were thirteen renewals last month, two including Astronomical League. The total of incoming funds was 274.68. The total outgoing funds were \$157.40 for the Zoom subscription. Several more so far this month and he would talk about that next month.
- Vice President's Report—Glenn F. had a list of five events between December 22 and February 8 on his agenda. He was uncertain about the December 22 outreach supposedly for Girl Scouts. Myron was able to clarify that it was a request he offered to do at the Community Center in Spotsylvania County off of Brock Road. He said they contacted him via email about a day before to cancel and said they would try to reschedule in the spring. He told them he would try to be available then. Glenn then moved on to an outreach Corey had on January 15 at Bowling Green and one Greg Szlyk was planning for an outreach for Boy Scouts working on astronomy badges on January 23 at his house. He asked whether anyone was planning to help out with Greg's star party. Corey was interested but did not know where it was. Linda also wanted to know for the *StarGazer*. Glenn said it was south of Route 3 on the Rappahannock near Sealston. Greg was looking for the email Greg sent but Troy did not remember seeing an address in it and Bart Billard confirmed it just asked those interested to contact him. Glenn concluded anyone interested should contact Greg and offered to send his direct email address if someone needed to ask him for it. He said the next event was another outreach Corey had going on February 8 at Mott's Run. The last was about the YCAS Radio Telescope, and Linda confirmed she had just got what she needed from Myron for the newsletter.
- Secretary's Report—Bart said he did not have anything to report having not quite finished the December minutes and posted them.
- *StarGazer* Report—Linda said she had worked on it today and got a lot done. One thing she was working on was updating the chart that has all the upcoming events and recently completed ones. She was trying to make the latter more comprehensive, using the lists Glenn made and the club email. She asked people to keep her posted about planned events she could put in the newsletter. When asked about last-minute events, she said that would not be easy to include because the newsletter is quarterly (but completed events could be reported in the next issue). Glenn F. asked when she needed input, and she told him by the end of next week would work. He asked about getting something on Corey's presentation in the *StarGazer*. She said she takes Bart's notes and squeezes them down into a newsletter article. Also, he had written something for her that she used as the lead article in the last issue. She was going to include Wade Allen's

Christmas Pleiades image as the picture of the quarter and was able to get confirmation from him that he had emailed a reply to her request for whatever additional details he could provide her on how he made it. Corey asked whether anyone was planning to attend the star party he was hosting at Bowling Green on January 21. Glenn confirmed star parties were planned for that day at Belmont and Bowling Green, with the go/no go decision up Scott and Corey. They could let Glenn know and he would post the status on the club website.

- MSRO Report—Myron reported resolution of the recent problems with stations 1 and 2. The Internet switch that failed on StationONE was now replaced, making it fully operational without need for Myron to be available to switch on the camera and Telescope Drive Master. To fix the connectivity problem with StationTWO, he and Shannon Morgan had saved all the data on the computer to a 2TB external drive and reinstalled Windows 10 from a CD ROM after completely wiping the hard drive. He still had to get the computer back outside and get everything hooked up, but he hoped to do that on Friday. Myron said they had received a check from RAC for \$275, and he thanked the club for the continuing support of MSRO by RAC. He said StationFOUR is nearly ready to go with fully remote operation. Mike Klosterman, who had been working on the roof automation, was down to getting the ASCOM driver worked out for that. Once that happened, they could get the telescope, an 80-mm refractor back online.
- Communications Report—Glenn F. called on John Maynard, mentioning he had put the topics John gave him in the agenda. John said he had taken a website backup earlier this month and posted all the star parties to the Night Sky Network (NSN) calendar. Glenn asked about the number of activities NSN was looking for, and John said there was a threshold of reports on outreach activities that would lead to us receiving additional NSN outreach resources.  
Glenn said the groups.io list was still running smoothly. He said the only thing he needed to mention was the 3-month grace period for club dues. He would send members a reminder to renew before the end of March. On April 1, members who had not renewed would be dropped from the email list.
- Club Equipment Inventory—Scott Busby said there was nothing new to report. [1:03:30]

## New Business

- Lake Anna Development—Scott Reported the day before the meeting, the Louisa Board of Supervisors held a meeting with the public and let the public raise concerns about impacts of the proposed development. However, after listening to the people who spoke, the supervisors said they had already decided to approve the rezoning from agricultural to commercial. In discussion of the situation among the club members, Scott mentioned some of the problems with the amount of development anticipated that still needed to be addressed, such as sewage treatment capacity, and the inadequacy of the road system to handle the increased traffic density.
- Bylaws Review—Glenn F. said he looked over the Bylaws and found they did not require any revisions for our changes in the star parties, and they otherwise seemed to be in good shape. He did find a use patterns document written by Jerry Hubbell that was in need of updates. He said it had been reviewed a couple of years ago, and when he looked at it this time he discovered it still referred to our Yahoo group, which needed to be changed to Groups.io. He made those changes and sent it out to the Executive Council for comments. Glenn said if he did not get any other comments, he would accept the changes and send it to Linda for posting. He could not remember where it was, but was sure it was on the website.
- Budget and Student Dues Adjustment—Glenn F. said he had looked at last year's budget and concluded our costs were fairly stable and did not need a budget revision. However, he noted the student dues amount was the same as the Astronomical League dues, and said he would like to change them to avoid confusion about some \$7.50 payments that come in from time to time. His opinion was that student membership costs could be lowered to \$5.00 per year without affecting our budget significantly, given the number of student members we get. He offered a motion that Rappahannock Astronomy Club student membership cost should change to either \$5 or \$10 a year, and opened the floor for discussion on the preference. Myron seconded it and said he favored \$5.00. Scott proposed that abolishing the student dues completely could encourage more participation without affecting our budget very much. Discussion suggested some concern about abuse, such as claims of student status by people who were not students. Linda said the website would need to be updated for the PayPal dues payment option to indicate the total cost including PayPal's fees. She said she asked in order to have the right information for the *StarGazer*, and

Matt had told her it would be \$5.69. Glenn F. asked for show of hands for \$0.00, \$5.00, or \$10.00. Scott, John, and Myron favored \$0.00 and the rest favored \$5.00. During the voting, Glenn Holliday joined the meeting and the motion was explained to him. He favored \$5.00, and Glenn F. concluded there were three votes for \$0.00 student membership cost and nine votes for \$5.00, making \$5.00 the choice that carried. Glenn F. concluded John would update the website and Linda would update the newsletter.

- Outreach Contact—Glenn F. said John had asked about changing the Public Outreach contact information on our website now that we had made an Executive Council position with Corey Dallmeyer as Outreach Coordinator. Myron also was handling some outreach duties. Currently the website directs Outreach Coordinator email to Glenn F. He said he could continue to receive inquiries and decide how to forward them, but asked Myron to talk it over with Corey to decide how they wanted it handled. When asked, Glenn H. confirmed he planned to continue coordinating outreach for Scouting. Glenn F. told him Caledon would still be available if one of his groups wants to use it. We would need to contact Caledon when it is needed. Glenn H. said there was a home-schooling group that wanted to go to a star party on Saturday, January 21. He said they had talked about Caledon, so that was where it probably should be. Glenn H. agreed to make the go/no go decision and tell Glenn F. for posting on the website. Glenn F. suggested Corey and Scott should do the same for their events. Scott said he would be willing to have people go to Belmont star parties based on their own assessment of the conditions, so he would not call off a Belmont event.
- Other Items—Glenn F. concluded all the items on the agenda had been covered and asked whether anyone wanted to bring up something not on the agenda. Glenn H. brought up the Scout star party Greg Szlyk was planning for Monday, January 23 at his house. We informed him it had come up before he was able to join the meeting and Corey had said he might be able to help. John said he had meant to mention he was contacted by Terry Barker about reconfiguring Google Analytics for our website. He said Don Clark had given Terry his name, but John did not remember Don giving him any sign-in information for Google Analytics. He reached out to Don but found he was out on vacation until January 20. He said at that time he would seek additional information from him and see about reconfiguring Google Analytics for our website. When Glenn asked what Google Analytics does, he said he thought it was for collecting statistics on visits and such. Glenn H. told John he had seen our version of WordPress was out of date, calling for us to back up our data so it could do the update. Glenn H. was not sure whether he was in a position to do that, but Glenn F. and John told him about the recent backup. John said he would take another backup just to be safe. Glenn H. said he would let John take care of it. He also said WordPress updates were usually automatic unless they were large updates and mentioned reports of attacks on WordPress in the last few weeks that led him to believe this might be a large update in response to that.

## Next Meeting

The next meeting is on Wednesday, February 15, 2023, at 7:00 p.m. It is planned as an online meeting, and Corey will make a presentation on his night vision system.