

Rappahannock Astronomy Club

Minutes, June 17, 2020, Online Meeting

In attendance:

Guest: Jim Browder
Scott Busby
Bart & Linda Billard
Don Clark
Glenn Faini
Joe Fordham

Jerry Hubbell
Troy Major
Guest: Shannon Morgan
Rolando Pancotti
Matt Scott

The meeting began 7:00 p.m. Ten members and two guests were present. Glenn Faini mentioned joining the Richmond Astronomical Society (RAS) meeting via Zoom last week. He said the meeting included a period of socialization and chitchat at the start. Glenn F. said RAS was using the paid version of Zoom to allow longer meetings without interruption and suggested that we consider doing that.

Program

Jerry Hubbell presented "The Future of Amateur Astronomy," about what he thought about the trends for the next 10 years. He said he hoped to make it a discussion with us adding our own thoughts and questions. Introducing his topic, he said more than ever, the amateur astronomy hobby involves people from all walks of life and from all over the world. He noted the commercial sector's entry into the "space race" (companies such as SpaceX and Blue Origin) has started to drive interest in space science, spaceflight, and astronomy. It has brought a new generation of people into the space age and given a "déjà vu" moment to amateurs who remember their childhood in the 1960s and the Apollo program.

Jerry went through a list of areas of change he anticipated over the next 10 years. The first was the definition of "Amateur Astronomer." He said the "state-of-the-art" technology affordable for today's amateurs allows them to view objects and acquire images and data that rival that of professionals 20 years ago. Jerry said some amateurs are doing the cutting-edge astronomical research that is most suitable for small telescope systems (apertures up to 20 inches). They are best suited for follow-up work professionals cannot afford to do. He mentioned he prefers to drop "amateur" and "professional" and just say "astronomer" because the difference is now less a matter of equipment and capabilities and more about "getting paid to observe."

Another change in the definition of amateur astronomer is from amateur telescope making to system integration. Jerry said that the growth of equipment and component manufacturers that cater to the commercial astronomy market means that very few amateur astronomers have to build their own telescopes anymore.

Jerry's second area of change concerned a new wave of tech-savvy beginners. He said although there has been a tendency not to get serious about the pursuit of astronomy until later in life when disposable income is enough to afford getting started, we probably should not worry about the "graying" of the amateur astronomy hobby participants. Jerry said those new to the hobby now are often immersed in the Internet and mobile devices, and while disposable income will still be a driver, they probably will not take nearly as long to progress to high levels of skills and knowledge. Also, "Electronically Assisted Astronomy" equipment available now probably appeals to the interests of today's tech-savvy young people, whom we always want to include in our astronomy outreach efforts.

As Jerry talked about the changing equipment landscape, one of his points was the increasing sophistication of today's optical and electronic equipment which can be a hurdle for newcomers wanting to jump into astrophotography. He said, "Manufacturers have to step up their game in providing more and better documentation and training materials to use the new equipment." On the continuing impact of the Internet, and remote/virtual interaction, he anticipated remote access to equipment and small-telescope observatories would become commonplace, including commercial observatories for those who did not want to purchase their own equipment. Jerry also thought increased use of virtualization and augmentation technologies would lead to virtual star parties and observing sessions.

Jerry said he thought that pro/am collaboration would continue to increase, leading to two classes of equipment and astronomers: professionals using big-buck equipment for new celestial object discovery and amateurs using small-telescope systems for follow-up observations of newly discovered objects. He said the limits of size and sophistication of equipment accessible to amateurs would continue to drive innovation to overcome barriers confronting them. They would sometimes find ways to develop or adapt new technologies and improve capabilities of small-telescope systems. He gave as an example the work he led at MSRO on adapting the use of an engineered diffuser for higher precision photometry on a small telescope.

Shannon Morgan asked whether discovery of minor planets and exoplanets was getting harder. Jerry talked about it as an opportunity for personal discovery. She indicated she was thinking of a Transiting Exoplanet Survey Satellite (TESS) Follow-up Program observation he made with Bart Billard. He said the observation was the first to identify the actual star that had the transit signal in the blend of stars detected by TESS, one that was different from the one initially thought to be the target.

Jerry said he planned to post the presentation slides on the club website. He had had Glenn F. record it in Zoom and suggested getting a club YouTube channel for such recordings.

Old Business

- Treasurer's Report—Matt Scott's report showed \$130 received and no expenditures. Paid 2020 memberships reached 25. There was discussion of changing banks before the Chatham Bridge closure causes too much inconvenience. Matt mentioned getting everyone together in person as required would be a complication and suggested the club could open a new account and maintain two for a while. He also noted that Astronomical League (AL) dues are to be paid in July, so any members who want to be AL members and have not paid the AL dues need to send them to him in the next few days.
- Vice President's Event Report—Glenn F. said the June star party at Caledon was on as a members-only event. He also reported Library meeting rooms would be closed through August.
- Secretary's report—Bart Billard reported completing the May minutes and sending them for comments before posting them on the club website.
- *StarGazer* Report—Linda Billard said she was not yet working on the next newsletter but encouraged members to let her know if they have ideas for articles. She said she could help with writing articles if someone is not sure how to turn his idea into an article.
- MSRO Status—Jerry said Shannon Morgan was doing calibration frames and working on some scripting. He asked Bart to report on two positive occultation observations in May. There appeared to be some GPS problems possibly from a bad antenna, but recent information suggested a peculiarity with camera calibration might be responsible. MSRO now has hardwired Internet between stations to improve communication speeds. Myron was working on having the skycam be able to operate all day so that we could remotely check sky conditions.
- Communications Committee report—Don Clark said he was starting to work with Matt on PayPal dues payments. He could make it active once the account to connect with is chosen. Matt indicated he could be ready to at least open a new account for the club at Atlantic Union Bank. Glenn F. said Groups.io has continued to work well. He said there was now only one member not getting the group emails.
- Club Equipment Inventory—Scott said the situation remained unchanged with the club equipment loans suspended.

New Business

- Zoom Meetings—Glenn F. reiterated that he had liked the way the RAS meeting worked. Jim Browder mentioned one difference was the RAS meetings included a period for announcements but not a business meeting. He said they do use some means to publicize their meetings, deciding they could take their chances with the possibility of intruders disrupting them. The discussion turned to possibly continuing to offer access to meetings via Zoom once in-person meetings become possible, and it appeared both clubs were interested in doing so. We noted that only Glenn F. could run a Zoom meeting now, and Jim indicated RAS also had not addressed letting another club officer host a meeting in place of the president.

- Program Offer from Tom Field—Glenn F. said he received an email from Tom Field of Field Tested Systems, LLC., with an offer to do a Zoom presentation for one of our club meetings. Jerry said he had had Tom do a presentation for a meeting some 5 years ago, and Glenn F. suggested Jerry talk to Tom about the possibilities.
- Upcoming Events—Glenn F. said the June star party was scheduled for the Saturday after the meeting (June 20). He asked Scott about Belmont. Scott said he was OK with holding Belmont Star Parties, maybe even allowing visitors. He suggested he could have a loaner telescope set up for visitors to see what would be available to them if they joined the club. Glenn F. concluded he would show Belmont on the schedule, indicating a members-only event for the near term. He noted a couple of the dates coming up were chosen for showing the Moon early in the evening for visitors.

Next Meeting

The next meeting is on Wednesday, July 15, 2020. It is currently planned as an online Zoom meeting.