Rappahannock Astronomy Club

Minutes, October 21 & 22, 2020, Online Meeting

In attendance:

Michael Aitken (b) Bart & Linda Billard Jim Browder* Christopher* Don Clark* Costa Constantino* Joe Farar* Alexandros Filot* Glenn Faini Glenn Holliday Jerry Hubbell Bruce Jenkins* David and Wendy Levy* Michael Lico* Don Machholz* Sabrina Maxwell* Mike Parker (b) Rolando Pancotti Matt Scott

*Attended only the program Zoom session on October 22. Except possibly Michael Aitken and Mike Parker, the others attended both sessions.

The business meeting began at 7:00 p.m. on October 21. The program meeting began at 7:00 p.m. on October 22. Eight members were present for the business meeting. Glenn Faini said Michael Aitken had just joined the club on the day of the business meeting. The program meeting, which was jointly sponsored with the Richmond Astronomical Society, was attended by 19–21 people.

PROGRAM

Dr. David Levy, internationally known comet hunter presented to the club at the invitation of Jerry Hubbell. Prior the start of the presentation, Glenn discussed the request by Sabrina Maxwell for assistance in starting an astronomy club at Quantico before introducing RAC and inviting Jim Browder to discuss the Richmond Astronomical Society (RAS). Jerry Hubbell then introduced Dr. Levy, with whom he has gotten acquainted through their participation in the Tuesday night Explore Scientific Virtual Star Party series on YouTube.

Dr. Levy mentioned the Tuesday virtual star parties and added that a European star party was planned for the upcoming weekend. He began by saying that his talk would be a retrospective about how he wound up "pursuing his dream." He described how when he was sent to summer camp in Vermont, he was asked to sing a song and he chose "All Through the Night." He sang some of it to illustrate that the song described nighttime and included a passage about the Moon. When he was somewhat older and returned as a junior counselor to the same camp, it was during the time of the Apollo 11 mission. David remembered that on the night of the Moon walk, the senior camp counselor told the campers there would be free play and individual night in cabins after dinner. David suggested that everyone should watch the Moon walk instead. He was chastised for interrupting, but the camp director overheard the interchange and said that watching the Moon walk was a much better choice for the group. He recalled the drama of seeing the ladder on the LEM and waiting to see Neil Armstrong appear, carefully descend the ladder, and step out onto the Moon's surface. He noted that the Apollo 8 television program from lunar orbit probably had an even more profound impact on him.

David's story of deciding to be a comet hunter involved an oral exam in French class he was preparing for. He expected a question on what career he would like to pursue and thought of comets. The teacher's disbelief was great when he answered, "Je veux découvrir une comète." But then the teacher relented a little and gave him a good mark. However, he said he would expect to hear of David's discoveries, and if there were none within 20 years, he would retroactively lower the grade. David discovered Comet Levy-Rudenko—his first—19 years later. Rudenko shared naming honors because he independently discovered the same comet the next day before David's discovery had been officially verified.

David had his 6-inch telescope (named "Minerva") on the desk in front of him while he talked. He told the story of explaining to his grandfather why he was saving up to buy it when he already had an 8-inch telescope. When he explained his desire to hunt comets and the need for a larger field of view to help his chances of seeing one, his grandfather, like the French teacher, was impressed with his seriousness and diligence in his pursuit. His grandfather bought the telescope for him.

David started working with Gene and Carolyn Shoemaker in 1989. He described a night in March 1993 when Gene discovered some rolls they had just used from their large package of film had been exposed to light, possibly deliberately. In hopes of finding some undamaged film they could use to continue imaging that night, Gene developed an unused roll from near the bottom of the package and found the light exposure had not been long enough to badly affect some of the film underneath. They used that film to continue that night's imaging. Although the second night was fairly cloudy, they got some shots near Jupiter. It was on the third night that Carolyn said she saw something like a "squashed comet." When Gene saw it, he said that *this* was the comet they should ask Jim to check. When Scotti didn't call them back, they called him again. David described a funny sound Jim made after looking at the object, which Jim then explained was his jaw dropping to the floor. This was the discovery of Shoemaker-Levy 9 (SL9). SL9 was captured and broken up by Jupiter before crashing piece by piece into the planet in 1994, a widely studied event thanks to the advanced prediction resulting from their discovery. They were very busy around that time and afterward. David described being pulled out of a press conference by Gene because of an invitation to the White House.

He ended his talk by singing his own lyrics about seeing Comet NEOWISE to the tune of Canadian singer Leonard Cohen's song *Hallelujah*, then reading the ending of Ralph Hodgson's *Silent Hill*:

I stood and stared; the sky was lit, The sky was stars all over it, I stood, I knew not why, Without a wish, without a will, I stood upon that silent hill And stared into the sky until My eyes were blind with stars and still I stared into the sky.

After the presentation, Glenn F. asked David whether any of his comets were visible to the naked eye. David mentioned Comet Levy 1990 and said one other was "just barely" visible. He said SL9 was not naked-eye visible but was famous for what it did: showed us how comets could bring the building blocks for life to Earth. SL9 was discovered on March 25, 1993, and was in pictures taken March 23. It took two months to determine that it would hit Jupiter. Glenn F. also asked about the naming convention that led to sharing the naming of his first comet with someone who found it a day later. David did not think it at all likely that after any comet discovery, someone else could somehow get some information within a day to pretend to discover the same comet. He also mentioned an 8th magnitude comet would be visible in Orion during the night after this program. Jim B. asked about David's book, and David said it was available from the Royal Astronomical Society of Canada. Jim B. said he planned to make the recording of this Zoom presentation available on the RAS website.

Old Business

- Treasurer's Report—Matt Scott reported \$20 was received in September, and there were no expenditures. The paid memberships numbered 28 at the end of September, with 3 paid for 2021 as well. Matt said the website now had a PayPal link working for dues payments. He said dues charged through PayPal were adjusted to include the cost of PayPal fees.
- Vice President's Event Report-Glenn Faini said there was no star party this month.
- Secretary's Report—Bart Billard said he had nothing to report.
- StarGazer Report—Linda Billard said she only wanted to let people know she needed their submissions for the next newsletter in a week or less. Glenn F. suggested doing an article on the Mars opposition like the comet article about what observations members were able to do. Jerry mentioned imaging Mars recently from MSRO, saying the focal ratio of the telescope he used was too fast for optimum imaging. He showed the image he was able to get with some decent detail after stacking the best individual frames. Linda said the talk by David Levy the next evening would be the subject of the lead article. She hoped Jim Browder would record it or allow her to.
- MSRO Status—Jerry talked about an acquaintance of Myron's, Cliff Kotnik, who had donated a CGE Pro mount to be used for Station 2. MSRO paid the shipping cost and credited Cliff with a donation value of \$5,000 (for tax purposes). The plan was for Matt to get dimensions and make an adapter to get the mount attached to the Station 2 pedestal. Jerry also said Michael Aitken

was offering MSRO time for exoplanet transit observations on a remote telescope in Abu Dhabi with which he was connected. He mentioned that work to get the Station 3 enclosure's roof remotely operable was continuing.

- Communications Committee Report—Glenn F. suggested Don Clark would have just reported on getting PayPal going if he were at the meeting. He said Groups io was still working well.
- Club Equipment—Glenn F. did not think Scott Busby would have had any change in status to report. (Loans were still suspended.)

New Business

- Officer Nominations—Glenn F. opened officer nominations. Jerry nominated Bart to continue as Secretary. Glenn F. nominated Matt to continue as Treasurer. Linda nominated Glenn F. to continue as President. Jerry said, "Let's nominate Scott Busby for Vice President." He also suggested reopening nominations the next evening during the Zoom meeting for David Levy's presentation. (Glenn F. did not end up doing so, probably because of the large presence of nonmembers.)
- Email Request from Sabrina Maxwell—Glenn F. said Sabrina Maxwell was a Chemistry teacher who had questions about starting an astronomy club.
- Other Discussions—There was a discussion of membership applications and whether new members joining with PayPal needed to separately send an application. The consensus seemed to be to accept the information that comes with the PayPal dues payment as an application. It would only lack the telephone number requested on our form. Glenn Holliday noted that to make our application fillable on the website would require some sort of add-on. Glenn F. announced dates for November's star party and elections club meeting were November 14 and November 18, respectively. Jerry said to Mike Parker and Michael Aitken that he wanted to call their attention to our *StarGazer* club newsletter, saying back issues were available on the club website. Linda recommended that they look at the most recent issue (July 2020) for the story about the club's pursuit of NEOWISE and also the October 2011 issue for the story about the club's activities surrounding the solar eclipse in August of that year.

Next Meeting

The next meeting is on Wednesday, November 18, 2020. It is currently planned as an online Zoom meeting.