Rappahannock Astronomy Club

Minutes, December 21, 2016, Meeting

In attendance:

Bart & Linda Billard Don Clark Jerry Hubbell Scott Lansdale Payal Patel Tim Plunkett Ryan Rapoza Tom Watson

The meeting began a little after 7 p.m. Nine members were present.

Program

Ryan Rapoza presented "Trip Report: The Southern Hemisphere." He said he recently married, and he and his wife made this their honeymoon trip. They went to Australia, New Zealand, and Fiji. Ryan was especially interested in visiting New Zealand, and his wife wanted to see Fiji. Their main stops were Sydney, Cairns, and Melbourne in Australia, Queenstown and Auckland in New Zealand, and the Coral Coast in Fiji. They learned Australians don't really pronounce their "r"s, and Cairns and Melbourne are "Cans" and "Melbon" in Australian.

A highlight of their first stop was the Sydney Observatory. Ryan said it was established for timekeeping, and it has a ball that drops every day at 1:00 p.m. Results of a photo contest were on display, and he passed around a brochure with small reprints of all the winning images. Ryan said Sydney was his favorite city of the three they visited. There was a lot to do, but he would want to live in one of the suburbs. It is only 15 miles to rural areas more suitable for stargazing. He did not get photos or a night tour of the observatory because of light pollution and cloudy weather.

Cairns is located in rainforest near the Great Barrier Reef, and Ryan and his wife again experienced cloudy skies. It was also humid. The city has green areas. The rural areas are not far away, and although he walked the city one night looking unsuccessfully for a dark spot, he thought you might be able to get good viewing when the skies were clear. Melbourne also foiled Ryan's chance of getting photos because of rain and light pollution. However, he found out the local astronomy club gets close to 100 attendees at star parties and runs private tours of the local observatory in the botanical gardens. It was closed to the public while Ryan was there. The Penguin Parade offered some clear dark skies, but cameras were not permitted. The city has free metro light rail transportation, and Ryan mentioned some nearby possibilities for dark sky viewing. One is the Great Ocean Road, but salt deposits on equipment from the nearby ocean could be a problem.

Queenstown, New Zealand, was a highlight of Ryan's trip. It was the first place he saw and photographed the Large and Small Magellanic Clouds, Alpha Centauri, and the Southern Cross. They went on the Skyline Stargazing Tour, which takes visitors above the town to a place shielded from even its low light pollution. Seeing Orion almost upside down (and in the summer) was another eye-opening treat. Ryan said the weather conditions can change quickly, and their tour was shortened by the changing weather. The tour is expensive, but fortunately they got a refund for the half they missed because of the weather. By the time the gondola got back down, the weather had cleared again. Ryan sees Queensland as his future retirement home. He said he walked around with his camera after they got back and was able to get the photos mentioned as well as see some aurora effects with long exposures. It was easy to find spots away from lights. Ryan said 50 percent of the population of New Zealand's two islands (4 million) lives in or around Auckland. He found it like the Australian cities, including the cloudiness.

On the main island of Fiji, Ryan said they chose to stay on the Coral Coast because it faces the southern sky. They enjoyed lots of clear evenings. They were too far north for Alpha Centauri or the Southern Cross to be up at that time of year, but had good views of the LMC, SMC, and the Milky Way. Light pollution amounted to lamps in the resort area. Ryan's final words: "If you like looking at the sky, you have to visit the Southern Hemisphere."

Old Business

- Treasurer's Report—Tim Plunkett's report showed dues received from four current members and two new members, along with a donation. Reimbursements were made for pizza and drinks for the officer election meeting in November, resulting in a net increase of \$72.73. Paid memberships for 2017 now total 10, and 1 paid membership extends to 2018.
- Communications Committee Update— Don Clark reported he had created a page for the Mark Slade Remote Observatory. He also said we may have to change from http:// to https://, and if so it will involve no cost to the club. (Currently the website does not automatically provide a secure login unless the user explicitly goes first to https://raclub.org.) Don said had worked on improving the "responsiveness" of the home page for mobile phones and tablets. Also, he had installed a XAMPP web server on his home computer to allow him to run a version of the website. It will allow him to show potential modifications for testing or comments prior to moving them to the public site. For 2017, Don plans to convert from Weaver Pro 2 theme to Weaver Xtreme 3.0 theme. It should allow significant improvement in responsiveness. He would use one of his licenses. He would then maintain three versions of the website: the public website, one for demonstration of improvements, and one on his computer. Don also wants to improve the hierarchical structure, especially at the lower levels, and to continue improving responsiveness. He said he still talks to Terry Barker, who now has a gig at a nonprofit.
- MSRO Update—Jerry Hubbell said he had use of a G11 mount and a prototype mount from Explore Scientific for testing. He and Myron were doing tests with the prototype, after which they plan to start using the G11 in January. The next MSRO Commission meeting date was January 6, and he hoped the G11 would be working by then. The Commission wanted to get 501(C)3 status as a nonprofit to allow applying for funding of educational or scientific work.
- Events Held—Caledon was cancelled because of forecasted clouds and cold and wind. In an
 email Scott Lansdale displayed, David Abbou reported five outreach presentations to Park Ridge
 Elementary fourth grade students on December 9, 12, and 19. He planned to hold a springtime
 star party at the school and wanted other RAC members to join him.

New Business and Astronomy News

- Schedule for 2017—Scott showed the club schedule for the coming year. The next star party date is January 28. The Marine Corps Museum on March 11 is the next outreach, followed by Stratford Hall on May 6–7, and Park Ridge sometime in the spring. Scott said John Bachman wanted to set up a planning meeting for Stratford Hall. Scott also suggested we reach out to the Richmond Astronomical Society for additional volunteer support. Jerry said he had a contact, and Don suggested also talking to Terry Barker. Scott said we need to have things firmed up by March. Scott also said he got an email from the Stafford Parks people about having events like the Pratt and Curtis Park events we had last year. The Caledon Schedule for 2017 has been posted by Glenn Holliday.
- Stargazer Update—Linda Billard said Tom Watson was planning to do a "prehistoric sky" article about trying to get the description of the sky right in a book he was working on. Tom said he did not want to catch flak from Neil DeGrasse Tyson for getting the stars wrong. Ryan has provided a written version of his presentation for the newsletter. Jerry will do an article with advice on choosing a first telescope. Linda also asked members to try to write a half-page review to give her when they read an astronomy book they like. Similarly, equipment reviews would be welcome. She described the old "News You Can Use" article written for U.S. News and World Report written some time ago by Bart's father and said she could use such contributions for a similar astronomy news article. Such contributions would not be time sensitive.
- Program Ideas for 2017—Tom said he had one he failed to do because of his knee injury. He said he could also do one on x-ray astronomy. Scott still had his Pluto program to do. Rather than doing it in January, he proposed we could have a session to talk about telescopes for possible gift recipients or other interested people. Linda agreed to post a notice to "Come learn about telescopes" at our January meeting. Tom proposed he could try to generate some astronomy interest using Twitter by retweeting some content from places like NASA.

Next Meeting The next meeting is on Wednesday, January 18, 2017, at the Central Rappahannock Heritage Center.