

Rappahannock Astronomy Club

Minutes, October 16, 2019, Meeting

In attendance:

Jean Benson	Jerry Hubbell
Bart and Linda Billard	Andrew Kovak
Scott Busby	Rolando Pancotti
Don Clark	Tim Plunkett
John Duran	Matt Scott
Glenn Faini	Mike Wallmark*

*Visitor who joined at the meeting

The meeting began at about 7 p.m. with introductions. Eleven members as well as two visitors were present. One of the visitors applied for membership at the meeting.

Program

Tom Watson presented a program about prehistoric astronomy. He noted that evidence of early astronomical observations indicates Neolithic farmers studied the sky as early as 7,500 years ago. They needed to find signs indicating the approach of favorable times of year for planting, harvesting, or other activities affected by the weather and seasons. Tom said he would show examples from all the inhabited continents. He started with a photograph of the Kalokol Pillar site near Lake Turkana in Kenya. He noted that weather variation in that region was not so noticeable compared with more temperate zones, so relying on astronomical signs of changing seasons would be more important.

For Asia, Tom chose a Yellow River area in northern China that had an observatory from about 2,300 to 1,900 BC (4,300 years ago). The observatory consists of a circular ditch in the ground and a hole at the center of the circle where an observer could look through slits between stones set in the ditch. (The stones are gone now.) This region was another area where seasons were not so variable.

Tom showed an outline of an emu drawn representing a constellation near the Southern Cross used by ancient people in Australia. He related a story of three brothers who went fishing. One caught a forbidden sawfish and Sun Woman saw this. She made a canoe that took the brothers to the sky, and it was represented by the Milky Way.

Tom said Europe was his preferred area of study of Neolithic culture and illustrated it with an image of the scientific reproduction of a stockade in two concentric circles. It had pairs of openings aligned so that the Sun would shine straight through both circles to the stockade center at certain times of the year (including the equinox). The original was built about 5,900 years ago by a late linear pottery culture.

For North America, Tom showed the ancestral pueblos in Chaco Canyon in Arizona. As with other sites, these were built around astronomy. They dated from the 10th to 11th centuries AD. He also showed a butte that a woman anthropologist decided to climb one day. She found some petroglyphs and happened to be there at the right time to see a Sun dagger fall on one. Tom's picture showed a spiral pattern with a narrow wedge of sunlight across it. It is believed the petroglyphs indicated the solstice or equinox when the Sun dagger fell across the center.

The Mayans of Central America were the closest Tom could get for South America. He mentioned their written language and lamented the many codices burned by Catholic priests traveling with the early European explorers. Tom showed one of the surviving codices, which included astronomical tables.

Deleted: |

Old Business

- Treasurer's Report—For the month ending September 30, Tim Plunkett reported a prorated dues payment of \$5 and no expenditures. The total count of paid memberships for the year reached 39.
- Vice President's Event Report—Glenn Holliday was not at the meeting. Glenn Faini reported a good star party in September. He discussed the draft star party schedule for next year. It had 11 dates selected because on the two preferred Saturdays in December, the park would be closed

for hunting. Linda Billard asked for the January and February dates to include them in the next *Stargazer*. They were January 18 and February 20. Jerry Hubbell commented that he thought first quarter Moon weekends could be good star party dates for showing the Moon to new visitors, and the Moon would set early enough for deep sky observing later in the evening. Tom suggested the warmer months would also be good for first quarter Moon star parties because skies would not be as favorable for deep sky viewing. Glenn F. noted that the December 2020 first quarter Moon Saturday was a possible date to use for a star party to avoid the closures for hunting at Caledon. Tom also suggested the Moon could actually be helpful for showing someone how to use a new telescope. Glenn F. said he would try adjusting a few dates and send the schedule out for comments.

- Secretary's Report—Bart Billard said he had posted the August and September minutes on the club website.
- *StarGazer* Report—Linda Billard said she wanted submissions from people contributing articles by October 25. She worked out with Glenn F. when he should do the President's Corner. Jerry suggested to Scott Busby that he was about due to write an update on his observatory. Scott thought that was a good idea but he was also working on two other articles for later issues of the newsletter.
- Mark Slade Remote Observatory (MSRO) update—Jerry said the change to nonprofit status would have an effect on the \$5.00 added to RAC dues for MSRO support. The club would need to choose whether to treat the amount as a tax-deductible donation or as a payment for services. In the latter case, the club would receive credit for a fixed amount of time for use of the observatory. The club could allocate time to the members or let it be first-come-first served.
- Communications Committee Report—Don Clark said he checked into the calendar offered by the Night Sky Network (NSN) as an alternative to the Google calendar he had set up. The NSN calendar did not have the one-user-one-password drawback of the Google calendar, and he recommended switching starting next year. No one thought it would be a problem. Don said he did not know whether the NSN calendar could do notifications but said he would find out.
- Yahoo Group Issue—Glenn F. said that a lot of the Yahoo Group features were going away soon, leaving only the email server. Members should download files, etc. on the group site soon. Jerry said Groups.io could pull an entire Yahoo group over and duplicate it, but the free storage limit was 1 gigabyte. Scott B. said Glenn F. should send a message to everyone about getting stuff off the Yahoo group site before access goes away.
- Club Equipment Inventory—Scott B. said the 8-inch Skyview Pro telescope was now checked out. It was an upgrade from the 6-inch telescope for Curtis Martin. Curtis had not yet called Scott B. with any questions on using it. Glenn F. had borrowed a 2-inch eyepiece. Scott B. said Don was donating a 10-inch Dobsonian telescope. Jerry asked whether the loan policy and list of loaner equipment were available on the club website.

New Business

- Bank Account—Tim said he made a deposit to fix the account balance discrepancy so the next statement should match with the club records.
- Membership Survey—Glenn F. said he sent the survey out on October 10, requesting responses by October 30. We discussed sending reminders about the survey. Glenn F. agreed to Jerry's recommendation to send reminders 7 days and 3 days before the survey due date.
- Officer Nominations—Glenn F. opened the meeting for nominations for club officers. Linda nominated Glenn F. to continue as President. Scott B. nominated Bart to continue as Secretary. Scott B. said Glenn Holliday had declined nomination as Vice President. Jean Benson nominated Matthew Scott as Treasurer.
- Upcoming Events—Glenn F. said our next Caledon star party date was Friday, October 25, and the Stratford Hall star party date was November 16. We also had a star party scheduled for Caledon on December 28.
- Coming Meetings—November 20 was the date of the officer elections meeting, with pizza provided. The December meeting would include a vote for members to approve appointments of the Executive Council members for next year.
- Next Meeting—The next meeting is on Wednesday, November 20, 2019, at the Headquarters Library on Caroline Street, downtown Fredericksburg. We will be in room L2, downstairs near the elevator.