

Rappahannock Astronomy Club

Minutes, September 20, 2017, Meeting

In attendance:

Jean Benson
Bart & Linda Billard
Hal Dryden
Glenn Faini
Jerry Hubbell
Venita Johnson
Scott Lansdale

Tom Mukunnamkeril
Payal Patel
April Peterson
Tim Plunkett
Matt Scott
Adam, Noah, and Joshua Zwierko

The meeting began about 7:00 p.m. Nine members and 7 visitors were present.

Program

The program for the evening was reports of experiences observing the August 21 solar eclipse. Ron Henke started it off via Skype from Denver, with Jerry Hubbell displaying slides he sent. Ron said he was in Jefferson, OR, for the eclipse, where the duration of totality was 1:58 compared with the maximum for Oregon of 2:05. He used the same IOptron mount that Tom Watson reviewed in the newsletter and agreed with Tom's review. Ron said the breeze stopped during totality, and that the local TV station reported a 4-degree temperature drop. Jerry Hubbell and Linda Billard, who were at higher altitudes reported greater drops. Ron said he had no problem taking his telescope from Arizona as a carry-on item. Ron's prominence picture, which was the current image of the month on the club website, was the final slide. Scott Lansdale asked about the granularity in the picture with the sunspots visible. Myron Wasiuta confirmed that it can be seen with white light, but said that with a hydrogen alpha filter it is much more detailed and is at a higher level in the solar atmosphere.

Bart Billard described his trip with Linda to Asheville to visit their high school classmate and his lady friend. Together they went with a neighbor who did the driving to Oak Knob, near Huckleberry Knob in western North Carolina to view the eclipse. They had to park on the highway nearly a mile from the trailhead parking lot and walk nearly a mile and a half to Oak Knob. It took another trip back to the car to get the club NexStar telescope and video recording equipment Bart had brought. Many people were already camping at the site, and the word was more were at Huckleberry Knob not far to the west. A few were leaving to try to find a better location farther west because of cloud forecasts. However, the clouds began breaking up early in the partial phase, and none were nearby during totality. Bart and Linda said they saw light from the clouds in the distance during the totality phase. Bart showed the video he made with brief views of smaller and smaller crescents of the Sun showing progress of the partial phase, then the beginning of totality from about a minute before to 30 seconds into totality, and finally the ending of totality and more clips of progress of the ending partial phase. The clouds were visible in the clips beginning and ending the video. His equipment for timing occultations provided Universal Time annotation along the bottom of the video.

Myron described his experience next, beginning with his first eclipse on May 30, 1984. He said it was cloudy for that event, but he saw it get dark and resolved to see the next one. He went to the South Carolina coast to be among the last in the United States to see the eclipse. He stayed in a beautiful state park and had to drive 40 miles south for the totality to McClellanville, SC, where they had a great festival with a shrimp theme. He showed a video he combining video from his iPhone and his camera on his telescope by synchronizing their soundtracks. He noticed strange lighting seconds before totality but could not get it in focus.

Glenn Faini said he was able to stay with his brother located about an hour north of totality. They made an 8 a.m. start and found no traffic on the interstate. They went to Laurens, SC, a small town near Greenville.

Jerry Hubbell went with his company to Casper, WY for a convention and the eclipse. He said Explore Scientific sold 4.5 million eclipse glasses, mostly bulk sales. They were overwhelmed with orders in the

last week or two before the eclipse. Explore Scientific was involved with the NASA TV effort to broadcast the eclipse. He showed an Explore Scientific video covering the preparations for the event. It included an interview with Vivian White of the Night Sky Network and Astronomical Society of the Pacific.

After Jerry's video, Glenn was able to get some of his Facebook image posts and a video to show us. One image had Regulus visible near the eclipse.

Payal Patel described the partial eclipse experience at Caledon. She said Tom Watson was also there. She showed an eclipse model they made at an art table Caledon had set up.

Scott showed his VLF recording at 40 KHz of the signal from a Puerto Rico station that he made on the day of the eclipse. He had added marks at the beginning, maximum, and end of the partial eclipse. He found some activity but could not really tell if it was related.

Old Business

- MSRO—Myron said a dedication of MSRO was planned for October 21 from 4 to 8 p.m. with food and drinks provided. Club members were invited. He said you could bring a dessert or side dish. There would be training for those interested and maybe a star party. He and Jerry were planning a YouTube channel with more training videos. Jerry said he had a second video that would be ready once it was edited.
- Recent Events—Payal had already talked about Caledon during the program. David Abbou had an eclipse outreach event at Porter Library. The club picnic was held on August 12.
- Treasurer's Reports for July 31 and August 31, 2017—Tim Plunkett had a \$20 dues payment in July from Matt Scott and Jean Benson as the only change in either month. He counted 28 paid club members for 2017 (counting each family as one membership). Scott noted the total number of names on the list was 34.

New Business

- Meeting Location—We discussed the new meeting location. Jerry said it was a little small with the table and the way the chairs were set up.
- Upcoming Events—Scott reminded members that the club officer nominations were scheduled for the October club meeting on October 11. He said he would be unable to attend the meeting. The program for October was Bart's interferometer project report. The MSRO dedication ceremony and picnic was scheduled for October 21. The November meeting on the 15th would include club officer elections. The program topic for December was Jerry and Bart's presentation on observing exoplanets.
- 2018 Caledon Star Party Schedule—Scott asked the question, "Should we continue to do pre-observing presentations [at the star parties]?" Payal said the one on "How to blow up a star" had two people attending in spite of rain. She thought we should find out how many come on a good day before deciding.
- Stargazer Update—Linda said she did not have much to say this month. The issue would be mainly about eclipse experiences. Scott said he read a new Neil de Grasse Tyson book. Linda solicited submissions on things people were doing, saw, or read. Glenn said he got the book *Deep Sky Companions* on Caldwell objects. It was on sale for \$8.99.
- Other News—Payal showed a prototype handout she had made for passing out at events. Glenn showed an issue of *Sky & Telescope* for the month of his birth. He had found it on EBay.

Next Meeting

The next meeting is a week early on Wednesday, October 11, 2017, at the Headquarters Library on Caroline Street, downtown Fredericksburg. We will be in room 2.