

# Rappahannock Astronomy Club

## Minutes, January 15, 2014, Meeting

In attendance:

Ben Ashley  
Terry Barker  
Bart & Linda Billard  
Scott Busby  
Don Clark  
Joe Fordham

John Gray  
Jerry Hubbell  
Tim Plunkett  
Andrey Ruhkin\*  
Myron Wasiuta  
Keith Wimmer

President Jerry Hubbell called the meeting to order shortly after 7 p.m. Nine members were present, along with four guests, one of whom joined during the meeting.

## Program

The presentation period of the meeting was devoted to a show-and-tell of new equipment or activities. In the introductions, visitor Keith Wimmer told us he was a retired teacher who now has more time for astronomy activities. He has owned an 8-inch reflector, an 8-inch Schmidt Cassegrain, and a 12-inch Dob. The Dob has given him great views of the Dumbbell Nebula.

Jerry passed around his new QHY 5-II camera, which looked almost the same size as a 25-mm Ploessl eyepiece. It is a guide camera that he bought for its 75-percent quantum efficiency Sony chip. He said its efficiency made faint stars suitable for guiding, but he also planned to try it for planetary imaging. Also, it would fit in the focuser like an eyepiece and provide video via USB to a computer with a fast enough frame rate for convenience in focusing.

Myron Wasiuta brought in the newly donated Brandon telescope that he recently evaluated for the club. It is a 94-mm f/7 apochromatic refractor built in 1987, 1988, or possibly 1989. Earlier ones lacked blackening of the inside of the focuser that this one had. This model was a first attempt at an affordable apochromat for amateurs, and the objective was made by Roland Christen, who later started Astro-Physics. Myron showed us several features that he thought would be helpful for using the telescope. It appeared to have been intended for terrestrial use because it was equipped with an Amici prism for right-side-up images. He said that should not be used for astronomical viewing with 2-inch eyepieces because it restricted the field of view. He showed us how to adjust the draw tube for proper focus without the prism. The tripod is difficult to handle for one person, and Myron recommended setting it up first without the optical tube assembly (OTA). When removing (or installing) the OTA he said the altitude should first be set horizontal to prevent the OTA slipping while the rings are loose. He noted the need for a good storage case for the OTA, replacement foot covers for the tripod legs, and quality eyepieces to match the quality of the telescope optics. Scott Busby said he thought suitable foot covers made for surveying tripods would be found at Home Depot. Myron also observed that the tripod was a little unstable and should not be set up on a smooth surface. He set it up on a towel for his demonstration to avoid the tripod legs spreading out and collapsing the tripod. The problem was getting the chain that prevented spreading of the legs to attach properly. Someone would probably have to find or rig some fittings for the ends of the chains so that they would hook up properly with the tripod legs. The telescope would not go to the zenith because the slow-motion controls, positioned for convenient access, are in the way.

Myron described the tests he performed on the optics and said he had submitted a formal report we could read. He concluded that it is a fine instrument with significant historical value.

Ben Ashley showed us several recent images he had made. Of particular interest was one of the minor planets, Eris. He said he recently read Mike Brown's book, *How I Killed Pluto and Why It Had It Coming*. Mike Brown was the astronomer who discovered Eris and may have set in motion the reclassification of Pluto by proposing, with justification, that Eris and similar objects likely to be out there should be a planet if Pluto is. Reading the book inspired Ben to see if he could find Eris and image it. He showed us the picture he was able to obtain recently

with his equipment. Eris was 18.7 magnitude and 14.5 billion kilometers away at the time. The final picture was the result of combining a 2-hour stack, and it showed no streaking of Eris, while an asteroid in the image did show streaking. Ben noted the 500-year orbit period of Eris made that possible. He also showed us an image where he succeeded in capturing Sedna at 22nd magnitude. That took 3 nights and about 7-1/2 hours of total exposure. Myron observed that in the 1950s, that was about the magnitude limit of the 200-inch telescope using film.

## Old Business

**Treasurer's Report**—Tim presented the November and December reports, apologizing for having let the December meeting date slip by without realizing it was time to go give his report. In November, he recorded the \$100 donation from Northumberland Preservation, Inc. and the reimbursement of \$47 to Terry Barker for software for the new club website. He also reimbursed Linda Billard and Jerry Hubbell for the pizza and drink purchases for the officer election meeting. Linda and Jerry returned these amounts in part to pay 2014 dues, with the rest going as donations. In November, the paid memberships for 2014 reached five. In December, one new membership was recorded, increasing the number to six. Jerry suggested crediting the couple who joined with membership in December as well so that we could count 26 memberships for 2013.

**Star Parties, Events, and Meetings**—The December 28 star party at Caledon was cancelled. The January 4 event at Belmont was successful for the early part of the night. Scott was joined by Jerry and Ben and two visitors, Mike and Kristian Curry. Scott and Jerry worked with Scott's Mewlon and Jerry's new camera, and they got several thousand frames of the Moon. Jerry left about 9:30, a little after the visitors. Scott and Ben kept observing, and also had wide-ranging discussions. The sky went overcast a while, cleared again, and then went overcast for good, ending the night's observing. It was also the night a skunk that Scott concluded was probably rabid attacked his ducks. He and Ben had heard a commotion and checked on them, but the skunk escaped detection until the morning, when Scott went out and found the damage. He had to dispatch the skunk when it then came out and came right up to him.

**Club Loaner Equipment**—Ben said he had transferred the Dob built by Myron back to him and his Culpepper astronomy club. Myron and the Culpepper club will work this year on refurbishing it. He mentioned some of their current activities, including learning the constellations with the help of the Stellarium free planetarium program. Jerry suggested considering a joint meeting with their club. The club meets at the Culpepper Library and observes afterward, usually getting a number of library patrons stopping by to take a look. Myron also continues to interpret astronomy at Motts Run, holding an event on the fourth Saturday of the month this year.

Announcements appear on the Parks and Recreation website, and RAClub members are welcome to come and help. We were again asked to think about what loaner equipment might be about due for us to donate or give away at an outreach event. Equipment status has become a little difficult to track. We weren't sure whether Dave Benz or Rob Friedel had the Personal Solar Telescope. Bart and Linda confirmed transferring it to Dave a few months ago. Tim also was not sure he had the 6-inch reflector that Melvin McDaniel had borrowed last year [he confirmed he had it after the meeting].

**Star Party Dates**—The next regular Caledon date is January 25, the date that was chosen for the special outreach event to assist new telescope owners. The Richmond club was scheduled to go to Caroline Middle School April 2. It was noted that location was closer for many of us, and some might be able to help out.

**Communications Committee Report**—The new website was ready to go live the day after this meeting. The design was by Jerry's daughter Rachel, and it was built by Glenn Holliday, Terry Barker, and Don Clark. Scott and Terry discussed the Twitter feature at the bottom. Terry said it showed Tweets from RACLUBVA (but Scott might be able to get it to show his if he includes "@RACLUBVA" in them). Maintenance was much improved. As Jerry displayed pages of the website, we noticed the officer listing had Secretary and Treasurer reversed. Also, Jerry suggested the Clear Sky Chart links should use the dynamic HTML available at the Clear Sky Chart website so that the links on our website would update instead of being static thumbnails. Don made a motion to purchase the \$29.95 upgrade that the Communications Committee tried out to get the theme to work on mobile devices. This upgrade was from the free Weaver II WordPress Theme to Weaver II Pro. The motion passed.

There was discussion of the small calendar to the lower right of the home page. Terry indicated it was not clear they could add star parties to it because the dates did not follow a simple algorithm like the third Wednesday for the meetings. The conclusion was that he should change the title to say RAC meetings instead of events. The Yahoo calendar would be kept as the main calendar, although a link to it would need to include an explanation that those interested would need to join the group to see it.

Don noted he has maintained event information and recorded completed events on the Night Sky Network website. He said continuing to do so would be most effective if we could use some of the free toolkits offered in our outreach events, because that would qualify us to get additional toolkits that are not normally free.

Scott said that some of the glitches in the club's Yahoo group that have come with Yahoo's new look were being worked out. He also demonstrated how to view the Yahoo group mail.

Linda said the next Stargazer issue was just about ready. A couple of articles remained to be completed, including a report on this meeting's program and one on the January 25 star party if it occurred.

## **News/New Business/Announcements**

Star Parties, Outreach Events, and Meetings—Ben listed one enquiry from a group in Stafford, the enquiry reported earlier from a large group of Girl Scouts in Northumberland, and the planned return visit to the Shiloh Schools site in November. Jerry said he could give a couple of programs based on talks he will be preparing for upcoming conferences. He asked Myron, who said he could give a presentation in June on star-testing your telescope. Terry agreed to come up with a topic for the May meeting, and Scott agreed to July. Ben thought he could do a presentation for April. We still need presenters for September, October, and December.

Other New Business—Myron asked what aperture club members were considering for the possible purchase of a second solar telescope. He told us that 60 mm aperture size is significantly better than 40 mm.

## **Next Meeting**

The next meeting is on Wednesday, February 19, 2014, at the Heritage Center in Fredericksburg.