# Rappahannock Astronomy Club

Minutes, October 16, 2013, Meeting

In attendance:

- Benjamin Ashley
- Terry Barker
- Bart & Linda Billard
- Don Clark
- George Clark

- Glenn Holliday
- Jerry Hubbell
- Scott Lansdale
- Dan Lien
- Tim Plunkett

President Jerry Hubbell began the meeting a few minutes after 7:00 p.m. Eleven members were present.

## **Program**

Brenda Conway was unable to attend and present her program. Instead, we watched the PBS video, Seeing in the Dark, written, produced, and narrated by Timothy Ferris, with music by Mark Knopfler and Guy Fletcher. The video illustrates the range of interest and activities of amateur astronomers, and how some can participate in scientific investigations, by weaving together stories of various amateurs and some of Ferris's own activities and experiences starting out in the hobby. It includes Robert Smith, a former running back for the Minnesota Vikings, who now coaches and introduces his players to observing, showing them how science teaches about careful examination of things and issues. Artist Steven O'Meara prefers sketching celestial objects to catch details of planets in rare glimpses of fine seeing. He remembered a beautiful red lunar eclipse he saw with his mother at a young age as the inspiration for learning the night sky. He learned so well he was given keys to the observatory at Harvard when he was 14. His passion for observing and sketching like 19th century astronomers led him to make a discovery that was not confirmed until Voyager reached Saturn: dark radial spokes in Saturn's' rings. Robert Gendler is a radiologist who does astrophotography in his driveway and with a robotic telescope at New Mexico Skies. The video shows what is involved in setting up a remote telescope with the help of the four brothers known as Team Bisque, who set one up at New Mexico Skies for Ferris to try out from his observatory computer room during a local rainstorm.

We also see a stop at an annual meeting at Stellafane and look at some of the homemade telescopes brought there by amateur astronomers. John Vogt and his daughters assembled their 32-inch Dobsonian made in his garage. Another amateur showed a refractor made with irrigation pipe. Ferris later visits with Barbara Wilson to look through her large Dobsonian at the star cluster NGC 1907. She once showed him the jet coming out of the core of an active galaxy, and they once tried unsuccessfully to observe gravitational lensing visually.

Another amateur astronomer featured in the video, Michael Koppleman, is a musician who contributes to science by following up on gamma ray bursts (GRB). He is on a NASA email list so that he can try to capture light from a GRB within minutes of the detection of the gamma rays by a satellite. The video illustrates how far an amateur can see with a GRB Koppleman captured in 2006 that turned out to be 11 billion light years away. Ron Bissinger joined a team of amateurs organized by a group called <a href="Transitsearch">Transitsearch</a> to contribute to the science of extrasolar planets. He works with astrophysicist Barbra Fischer to make follow-up observations on extrasolar planets discovered by professionals to identify ones that transit their stars. Transit observations provide additional information about extrasolar planets, such as their size relative to that of their star.

#### **Old Business**

- Treasurer's Report—Tim presented the Treasurer's report for September. He said the only incoming
  item was an Astronomical League dues check that he omitted and will add in a revision to send out
  later. There were expenditures to reimburse Scott Busby for picnic costs and Linda Billard for
  newsletter costs. Also, the donation to the Heritage Center approved last meeting appears in the
  expenditures for the month. He received a letter, which he had Linda read to us, from Barbara Seager
  expressing the appreciation of the Heritage Center for the donation.
- Star Parties, Events, and Meetings—Scott Busby reported on the Belmont star party date (October 12). No other members showed up because of the clouds, but Scott was able to get in a little observing and make some images. Glenn Holliday reported on the Caledon event the week before. He and Ben Ashley were joined by a group of Scouts and one hiker who stopped by before leaving the park. Although cloudiness did not decrease as much as forecasted, they were able to use holes in the clouds to observe some objects. Glenn showed Venus and Ben showed various objects. Glenn was asked about ways to satisfy the merit badge requirement calling for the Scout to help set up or run a star party. One suggestion was that we might use one of the loaner telescopes and coach the Scout on how to show some objects with it. The Wilderness Elementary School Observe the Moon Night event took place the evening before the club meeting. Bart Billard and Ben Ashley set up telescopes, joined by four teachers and a former club member, Jim Burtle, with telescopes. Linda Billard showed students Sky Safari on her iPad and helped manage traffic around Ben's telescope. The clouds were pretty bad at first. Linda said she went inside the school, where a lot of activities were going on and spread the word that the telescopes were ready outside. She wound up leading a big crowd out to see the views of the Moon through the clouds. Linda White, the school's librarian, had obtained a grant for purchase of a pair of 25x100 binoculars with a Celestron mount to use at the event. The children enjoyed the view through the binoculars, but they generally thought the telescopes we brought were better.
- Status of Club Loaner Equipment—Ben brought in a new telescope donation that was in need of a custodian. He said it was an Orion Sky-View Pro 8-inch reflector on a German Equatorial mount suitable for visual observing and short-exposure imaging. It was donated by Terry Clayton, who purchased it about 5 years ago and practically never used it. It included a focuser upgrade and a 2-inch laser collimator. The donation also included a Celestron Sky Scout planetarium device. Scott Lansdale agreed to try being the telescope custodian, and Linda asked for the planetarium. Other loaner equipment status was unchanged. Ben suggested we should consider discarding or donating some of the loaner equipment that is not being used. He said that the 8-inch Dobsonian is showing signs of wear. He indicated the tube should be replaced and recommended upgrading the focuser with the extra focuser from the donated telescope. The primary mirror could possibly need refinishing.
- Scheduled Star Parties and Club Meeting—The next Caledon star party date is October 26. The return to Northumberland is planned for November 9. Linda reported looking for ideas for a Comet ISON event. The only example she could find is one to be held by the Berkeley Lawrence Hall of Science in California (not by an astronomy club).
- Communications Committee Report—Glenn told us we could now reach all of our web content via the new site under development, but that much was by links to the old site contents. He asked about whether quality assurance could be started and whether it was ready to go live. Jerry thought that quality assurance would be worth starting but was not ready to suggest going live. Glenn said the todo list would take up to a year to complete if only he and Terry Barker worked on it. Others interested in helping could be added to the project. The problem with the display on the iPad was still unresolved. Glenn said he was getting the same problem with Firefox, and that although there was a question about it on the Jarita forum, the link provided in answer to the question was broken.
- Club Newsletter Status—Linda said three items were left to complete the next newsletter. Along with the write-up of the program for this evening, she was waiting for Jerry's "President's Corner" and a good version of the picture of the quarter.

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

 Officer Nominations—Jerry asked for nominations for next year's club officers. Terry nominated Jerry Hubbell for President. Linda nominated Ben Ashley for Vice President. Jerry nominated Ben Ashley for President and Bart Billard for Secretary. Linda nominated Tim for Treasurer. When no more

- nominations were offered, Jerry closed the nominations and noted that additional nominations could be made at the election meeting next month.
- Other New Business Items—More suggestions for the use of club funds were discussed. Jerry told us
  the 60-mm version of the solar telescope from Coronado is definitely a step up in what could be seen
  compared with the version the club has. He said the price of the 60-mm version was \$2000. George
  Clarke said the Lundt 60-mm solar telescope was about \$1200. Scott Lansdale agreed to look into
  what the club would have to do to get a radio astronomy kit (he thought we would need to have a
  proposed use for it at outreach events).

Ben brought up his proposed Caledon schedule for 2014. He noted that an early April date was desirable because of the Mars opposition and that made March 1 preferable for the Messier Marathon date. That resulted in the calendar not fitting a date for February. He did not have a Caledon date for August because he wanted to give Scott Busby flexibility as host in choosing the date for the picnic. Terry suggested another possibility for unneeded club loaner equipment discussed earlier was to make a donation to a school.

Terry and Don Clark had both seen the movie "Gravity" and recommended it.

Tim showed us a Year in Space calendar and said that interested members could order one through him or directly, if they preferred.

Don showed toolkits he had obtained from the Night Sky Network for use in outreach events. He said that David Abbou would use some of the toolkit materials for his outreach activities. Glenn would use some for outreach for Scouts. Additional materials could be used by other members for outreach events. Don said that members should provide him with information on any outreach events that use some of the toolkit materials (even just one card), because the club would earn credits from the Night Sky Network toward receiving additional toolkits.

George Clarke told us he was researching solar telescopes for his own use and could report on what he sees when he gets a chance to go to a place with demonstration telescopes available.

We discussed plans for next month's club election meeting. Linda said she would plan to get the pizza from Wegman's or Primavera. Jerry said he would bring the drinks.

## **Next Meeting**

The next meeting is on Wednesday, November 20, 2013, at the Heritage Center in Fredericksburg. On the agenda are elections for club officers for the coming year. Pizza will be served.