Rappahannock Astronomy Club

Minutes, February 8, 2012, Meeting

In attendance:

- Benjamin Ashley
- Dave Bentz
- Barton & Linda Billard
- John Caplins
- Dan Casciaro
- Don Clark
- George Clarke
- Joe Fordham
- Rob Friedel
- Leigh Gettier
- · Ranny Heflin

- Glenn Holliday
- Jerry Hubbell
- Dan Lien
- Mike Masters
- Wavne Shields
- David Simpson
- Gaston Smith
- Josh Smith
- Genette Smith
- Sara Smith
- Robert Younger
- Myron Wasiuta

President Jerry Hubbell began the meeting at 7 p.m. after introductions. Twenty-two members and 2 visitors were present.

Program

Myron Wasiuta presented "Observing the Moon—1," which he described as a set of "case presentations of lunar features off the beaten track." He hoped to demonstrate that it is wrong to think the Moon is "always there," "always looks the same," "nothing ever changes," or that we could have seen all there is to see. Myron began by pointing out that the full Moon has a terminator visible at its North or South Pole, and it provides a Sun angle one cannot otherwise get. He presented many other examples using images of the Moon and drawings. Myron made many of the images himself using his C14, C8, antique 4.5-inch refractor, or 12-inch Dobsonian telescopes. Among his examples is the limb (edge) of the Moon. To see the Eastern limb at the waning crescent phase requires early morning observing. Myron said the reward is seeing profiles of craters and mountains, contrasts of the dark crater floors in shadow, and from time to time parts of the Moon that are only visible because of libration. Another striking view was Mare Orientale when libration favors the western hemisphere. This impact basin stood out in a full Moon image, breaking up the expected round shape.

Myron offered some book recommendations. For finding your way among the features of the Moon, he recommended the *Atlas of the Moon* published by *Astronomy Magazine*. A good book for learning about the Moon is one by Charles Wood: *The Modern Moon—A Personal View*. Myron also suggested looking at the interactive high-resolution Moon images that can be found by Googling "Bad Astronomy high-resolution Moon images."

Old Business

- Star Parties, Events, and Meetings—The backup date for January was a successful star party
 opportunity at Scott's Belmont Observatory. Scott was joined by Jerry Hubbell, Ranny Heflin, Bart
 and Linda Billard, Rob Friedel, Leigh Gettier, and Bill Krainski. Ranny gave a report: broken clouds
 moved in near sunset, and it was windy, but conditions improved later in the evening, apart from the
 temperature. Ranny set up a tent for his imaging equipment and was up until early morning making
 images.
- Status of Club Loaner Equipment—The loaner status was unchanged. The latest loan was the Orion Dobsonian checked out by Shannon McCurdy at the January meeting.

- June 2012 Transit of Venus—The date of the transit is June 5. Mike reported on Pratt Park and Duff Green Park as possible outreach locations. Both allow views down to about 5 degrees above the horizon. Duff Green Park may allow more access for setting up equipment. Bart reported on Patriot Park in Spotsylvania County next to the YMCA. There are possibilities for getting far enough from the trees to provide a reasonably good view close to the horizon, especially if we could set up in front of the YMCA. Myron recalled Curtis Park was reasonably open. Spotsylvania Mall was suggested as a good outreach location, but the heat of the Sun on the asphalt is likely to be detrimental to seeing conditions.
- Star Party Request for St. Margaret's School—Mike received no new communications about the request.
- Outreach Presentation—Jerry said that David Abbou is doing astronomy presentations for Stafford Elementary School on March 13.
- RAClub.org Website Status—Mike reminded members that they could submit their images to him for
 posting on the Club website. Only images submitted to him for RAClub.org are eligible for selection
 as image of the month (images submitted only to the Yahoo rac_group site are not considered for
 image of the month).

News/New Business

- St. Mary's College Request—Glenn discussed a request for a star party relating to the importance of astronomy for Native Americans. The time requested was some time during the current term of a Native American studies class. He said the Pleiades have an important role in Native American culture, which would favor March, probably March 17 or 24, the Club primary and backup dates for that month and during a favorable phase of the Moon. The problem is the distance for members to go there or for the class to come to Caledon. The college is near the site of the original Maryland settlement.
- Star Party Request for April 28—Jerry reported that David Abbou had a request for a star party at Stafford Elementary School. David's email indicates Club members who wish to participate should give him their names to provide to the school in advance.
- Sky & Telescope Subscription Renewal—Glenn Holliday noted that time for renewal is coming up for
 the subscriptions that received a club discount last year. He said he asked Tim Plunkett whether he
 had heard anything about renewing at the discount rate but has not received a reply. Mike suggested
 the difficulty we had last year coordinating several subscriptions through the magazine's club discount
 was probably enough to make it preferable to simply renew and forget about the discount.
- Astronomy News—Bart Billard summarize a news item from the Kepler mission describing the confirmation of 26 more planets in 11 systems. These confirmations bring the total confirmed planet count to 61. There are more than 2,300 candidate planets, with most likely to be confirmed. The presence of more than one planet per star in these systems helped make the early confirmations possible. For example, variations in the timing of transits could be measured by Kepler, providing evidence of gravitational attraction between planets that would not be seen in transit-like light curves caused by background eclipsing binaries. Jerry and Myron talked about imaging with C8 telescopes. They agreed C8s made in the 1970s (as opposed to the early 1980s) are a good buy for imaging and might be something the Club could invest in. Good used C8s with mount and only needing a dew shield appear from time to time for about the cost of a 10-inch Dobsonian.

Next Meeting

The next meeting is Wednesday, March 14, 2012, at the Central Rappahannock Regional Library Headquarters, 1201 Caroline St., in Fredericksburg. Introductions will begin at 6:45 p.m.

Submitted by Bart Billard, Secretary