

Rappahannock Astronomy Club

Minutes, May 9, 2012, Meeting

In attendance:

- Dave Bentz
- Barton Billard
- David Buckwater
- Dan Casciaro
- Don Clark
- George Clarke
- Brenda Conway
- Ranny & Jenny Heflin
- Jerry Hubbell
- Dave Marlow
- Mike Masters
- Matt Roles
- Wayne Shields

President Jerry Hubbell began the meeting at 7:10 p.m. after introductions. Twelve members and 1 visitor were present.

Program

Ranny Heflin presented “Digital Single-Lens Reflex (DSLR) Astrophotography Basics.” He mentioned a number of features of DSLR cameras that are helpful for taking pictures of the night sky. Compared with film cameras, being able to zoom in on a live image of a star and boost the sensitivity with a high ISO setting makes focusing much easier. When the camera is pointed up at the sky, it is a lot more comfortable to have an LCD screen that folds out and turns instead of having to look up through a finder. Some camera models now available have full (35 mm) size imagers, and there are models made for astrophotography by using a different filter in front of the imager. These models respond better to the H α light of emission nebulas. Ranny can even program his camera to take a sequence of images and include dark frames after each. Apart from his experience pointing antennas at objects in the sky as an Army signal officer, he only has 2 years of astronomy experience and 1-1/2 years in astrophotography, so he encouraged his audience to find out how easy it is to capture images like those in his presentation.

Ranny showed one can get started with as little as a camera with a wide-angle lens and a tripod. Wide views and exposures under 40 seconds produce images without streaking from Earth’s rotation. He finds it easier to get crisp images with fixed-focus lenses than with zoom lenses. Ranny also covered piggy-back photography with the camera riding a telescope and taking and stacking video of the Moon and bright planets. Video crop mode increases the frame rate by providing the center 640 by 480 pixels, while HD video mode shows more of the full image and is helpful in finding the target. His presentation package is available on the Club website documents page: [Digital Single-Lens Reflex \(DSLR\) Astrophotography Basics](#). One question at the end of the talk concerned whether the DSLR models modified for astrophotography could take good daytime shots. Ranny said he used the white balance and white shift settings to compensate for the difference in response with the astrophotography filter. Look for more images from Ranny on the web. He has a trip to Albuquerque late this month that is going to give him a chance to see the annular solar eclipse.

Old Business

- Treasurer’s Report—The report for April showed no expenditures and receipt of dues from three members. Paid membership for 2012 has reached 26, and 3 members have paid dues for next year or beyond.
- Star Parties, Events, and Meetings—The primary and backup star party dates were both cancelled because of bad weather.
- Status of Club Loaner Equipment—Dan Casciaro checked out the PST and Matt Roles checked in the 8-inch Dobsonian and checked out the GEM reflector. Orion no longer makes the slow-motion control knob type that fits this scope, so the Club needs to get the standard knob and have it drilled out to fit. Xavier Valverde was able to do this before with another part the Club needed. Glenn said

he contacted Celestron about availability of a replacement tray for one of our tripods, and Celestron went ahead and sent the replacement without charge.

- June 5, 2012, Transit of Venus—Glenn provided an update on plans for the event at Pratt Park. Participants need to fill out and send in volunteer forms to be covered by the Stafford Parks' liability insurance. The forms (there are two) are available under "Files" on the Yahoo rac_group site in a directory made for the transit of Venus event. Participants need to at least take the completed forms with them to provide to a Parks representative at the start of the event. We can arrive and start setting up at 5:00 p.m. and will be allowed to use the gravel road to get to the site with cars for setting up and breaking down afterward. The official start time is 6:15 p.m., giving participants a chance to see first contact beforehand. It is ok for us to pack up in twilight and take until 9:00 p.m. to leave. Glenn received the solar goggles ordered from Woodland Hills Telescopes and was able to try them out at a Girl Scout event where they were well received. Jerry will try to have video of the transit on his monitor using his scope and the Club webcam. When asked about easels for Glenn to set up transit poster material, Jerry and Brenda said they could provide some.
- Star Party and Outreach Requests—Myron's Stafford Library system event dates are during the weeks at the end of July and the beginning of August. Mike requested that Jerry provide the dates for posting on the Club website or send an email. Myron would appreciate volunteers who can make it to any of the weeknight dates to help. David Abbou's April 28 event at Stafford Elementary School was cancelled because of weather, but his talk the day before at the middle school was well received. The event for St. Margaret's School in Tappahannock was also cancelled. The event for Northumberland is planned for November 10.
- RAClub.org Website and Rac_group Status—Mike showed links he has added or updated with images on the Club website. The site now has a Night Sky Network link. Don Clark said he is adding our events to the Night Sky Network site as he gets the information. Providing the event information can make the Club eligible to receive kits helpful for outreach events that are given out each quarter.
- Next month's meeting program—Dan Lien is on the calendar to give his rescheduled talk on radio astronomy. Mike offered to send Dan's email address to Jerry so he could send Dan a reminder.

News/New Business

- There were no new requests for presentations or star parties to report. Jerry announced that Scott Busby finished the first phase of his observatory construction project. Jerry showed a sampling of photos of the construction that are available on the rac_group Yahoo site.

Next Meeting

The next meeting is Wednesday, June 13, 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