

BBAA Astronomy Club, January 7, 2016 (Plaza Middle School Planetarium)

Chuck Jagow (President):

Called meeting to order at 7:30 PM.

Sad news about the death of Nick, former Webmaster. He did do all of his observing with a 6" Dob.

Introduced Officers, Mark G. Treasurer, Jeff G (Secretary).

I've been a member of the club since 2003. Wife gave me a 70mm telescope. Shortly after, I moved up to a 10". Went to Sky Watch with 127 mm scope. Then at another Sky Watch, I went and met Chuck Ripple who had a 14" SCT. I helped him lift it out of his truck. Then I had big telescope envy. I have had many Dobs, countless ETX 125's. Grew to 10", two or three 12" scopes. Currently, I bring the 14" Dobs to Outreach events. I have a 60 mm Solar Scope, Incidentally, 12 years ago was my first BBAA meeting.

Vice President (Leigh Ann) Events Report:

Friday, Jan 8th, first Cornland Park (Cornwatch) after a new moon. Requires special permit and your BBAA ID card. Every Friday before and after the New moon. (Cornwatch this month is also on the 15th).

Saturday 9th Night Watch at Chippokes Plantation State Park.

Also, on 9th, in Hampton the Virginia Living Museum is also having a Star Party.

January 14th Garden Stars at Norfolk Botanical Gardens. Starts at 7:30 or 8:00 PM

Saturday, January 16th a new event called Saturday "Sun Day" at Bells Mill Park, Chesapeake from 10-2 PM on one Saturday each month.

January 30th Skywatch at Northwest River Park.

February 3rd (Wednesday) a Science Expo at 6:30 – 8:00 PM Elementary School.

February 4th TCC BBAA Club Meeting.

May 9th Transit of Mercury, Monday morning. Transit takes 7 hours. Chuck Dibbs and Dale Carey are trying to negotiate this for us.

May 14th National Astronomy Day. No details yet.

August 10th – 13th is ALCON Convention in Washington, DC. Details forthcoming on cost, etc.

Treasurer's Report (Mark Gerlach)

General Fund: \$ 3,022.67

Scholarship Fund: \$ 2,178.02

Total: \$ 5,200.69

General Membership: 102

Associate Members: 6 + 7 (members of Astronomical League)

Honorary Members: 4

Total: 121 (with 117 paid in full) **** numbers don't add up ****

RRRT Report (Bird was not present to give this).

Observing Reports:

Comet C/2013 US10 (Catalina) makes a close approach to Alkaid (Ursa Major) on the 15th. Chuck Jagow, Jeff G., Leigh Anne, and several others have seen it. Chuck mentioned it's a nice green in photographs. Best seen in early morning around 3:00 AM to before dawn. At 5:00 it was about 30 degrees above the Eastern horizon. Dale mentioned you will be able to see it when the Big Dipper turns around, and then around Midnight.

George Reynolds mentioned Skywatch. We had 19 scopes and we had a great time. It was very cold but we had a great time. Many visitors received a tour of the night sky.

Old Business:

Constructive changes in the Constitution are being made (reported by Chuck J). The finished version should be ready for club membership vote by March.

New Business:

April 16th, Mt. Trashmore Star Party. The date is not yet firm without confirmation from the city of VB. Boardwalk Astronomy Dates being refined for 2016. Still pending approval from the Beach.

Cornland (Cornwatch) Observing site 17 min from Chesapeake. Not an outreach program. This is for club members and their guests if they're invited. A much better and closer location than Chippokes. Parking may not necessarily be in the parking lot, as previously done. This is not stated in the current special use permit. Available for D/Loading from NSN. Porta-potty on sight. Please don't share this document with the public. The permission took several months to get from the city. Each guest must have a BBAA ID card emailed by Chuck. It will be a Microsoft Word attachment. If a club member does not have access to Microsoft Word, we'll make arrangements and probably print it out as a .PDF file. Address is 3908 Cornland Road. The corner of Benefit Rd. and Douglass (next to the Fire Station). Directions: Route 17 & pass Dominion Blvd construction. Stay on 17, turn left on Cornland Rd. 1½ miles...dead-ends on West Rd. Turn right then immediate left on Benefit. Go about another mile, and Cornland Park will be on your left. Raccoons sometimes come in... when soccer season ends, maybe the grass will start to grow.

"Has anybody thought about Nick's Site, for us to make comments?" Chuck replied, I know that somebody can make a request to Nick Anderson's brother. His Facebook page is still active. Neat resource and thought it would be great if we could keep it active.

George Reynolds (Presentation):

Door Prizes... no tickets today, but we have 4H Water Bottles and T-Shirts that were given to us. Brand new people will be eligible. George distributed to these folks.

Nick committed suicide. He went to grad school, would be an assistant. If anybody is in any kind of trouble, there is no trouble bad enough to take one's life. A moment of silence for Nick (1 minute).

Scholarship committee report? At the end of the month. \$1,000 and \$500 is planned.

Astronomy 101 (Lesson 5): Distributed learning materials. George also has copies of previous lessons one (basics), lesson two (best telescope), lesson 3 (using your telescope), lesson 4 (presentation on the moon). Tonight's lesson 5 is "Finding Your Way Among the Stars".

Lesson 5: glossary terms were read by George. Books recommended for you to get information about Amateur Astronomy. Longitude, Latitude (example Plaza Middle School: +36 deg. 49' North, -76 deg. 4' West). Example Mt Trashmore (North 36 deg. 49' 45"; West 76 deg. 7' 15"). Celestial sphere terms: Declination positive above Celestial Equator (similar to latitude) & Right Ascension (RA) goes 0h to 24 h (15 degrees every hour). 0 line of RA is Vernal Equinox point (First Point of Aries).

Excerpts: "Objects in the Heavens" looking at the page for Orion. Across bottom: 05, 06, ... RA. Notice the 0 line is the Celestial Equator (half below, half above). Betelgeuse (Alpha Orionis) coordinates RA 5h 52min, 7 deg 36 min. George is demonstrating this in the excerpt and planetarium. Next find M42: RA 5h 35.4 min, -5.27 degrees. Find Open Cluster CR65 at RA 5h 26 min, 16 deg. 6 min. Sky Atlas 2000 (Turian & Stinot) each page is a double fold out shows page number, chart number. Also corresponds to Sky and Telescope's Pocket Atlas. Highly recommended. Also, NGC 2112 (RA 5h 53.8m, Dec 0 deg. 25 min) was demonstrated. Star Charts attached from website called SFA (30 degrees declination to North Pole) and -30 degrees to South Pole. Zenith and Meridian terms discussed.

Other resources: Uranometria chart even deeper than Sky Atlas 2000 and much deeper than naked eye. Norton Star Chart is excellent. Year-Round Messier Marathon Field Guide (Harvard Pennington & Perry Vermaculus) excellent with descriptions, telescope views, sketches (useful because your eye is not as sensitive as the pictures). "Star Hopping", by Robert Garth Nagle: gives hints and hops to find these night sky objects. Pegasus, up one, two stars and right to Andromeda Galaxy. Binoculars are excellent to find these objects. "Star Watch" and "Star Ware" by Phill Harrington. "Illustrated Guide to Astronomical Wonders" by Robert B. Thompson and Barbara R. Thompson is alphabetical by constellation, pictures, and sketches. www.telescope.com is a good reference on getting started and has Orion products.

Astronomy takes patience. Looking through atmosphere sometimes gets better and worse. Your eyes will get trained on how and what to observe.

Examples in planetarium (Chuck Dibbs helped with the demonstration): Milky Way, Big Dipper, Ursa Minor, North Star at the tail. Comet C/2013 US10 (Catalina), Arcturus, Bootees, (Arc to Arcturus). On 9th Chuck moves stars to a fine conjunction of Saturn and Venus about 5 AM. Jupiter and Mars were pointed out.

Chuck moved planetarium to Saturn zoomed in, the red dot on Earth so this is night. Showed how to find Venus and Saturn so they were in perspective.

Conjunction (near the sun) and Opposition (Opposite us from the sun). With Venus and Mercury there is Superior Conjunction (on the other side from us) and Inferior Conjunction (between us and sun). Transit of Mercury on May 9th was demonstrated starts at 7:20 AM local time. Around Columbia, SC next summer a Total Eclipse of the Sun. Chuck showed the eclipse from space. Hotels are getting reservations already. Dale will take the camper.

Constellation (stick figures). Pegasus, Pisces, Cetus, Triangulum, Perseus, Auriga, Camelopardalis, Cassiopeia, Cepheus, Big Dipper and Little Dipper are asterisms. These are really asterisms... part of Ursa Major and Ursa Minor. Hyades, Great Squares of Pegasus, Circlet, Summer Triangle (part of 3 constellations uses Vega, Deneb, and Altair), Sagittarius (Teapot). Steam coming out of the teapot (center of the galaxy, but black hole not visible nor center due to dust and other debris).

Supermassive Black Hole that gravitationally holds (Milky Way) in place. We can visually see the Andromeda Galaxy and of course cannot see a Black Hole (absence of light).

What does the sky look like at Cornland (Friday, 8th of January). Demonstrated Milky Way and sky at that location.

Chuck took us to 26 degrees South to see the Southern Cross, Alpha Centauri, and the Great Magellan Cloud.

“What is the farthest Southern Hemisphere thing that we can see?” Many layers of atmosphere, so it’s very tough to see these, anyway.

North Star is a good indicator of your Latitude. The number of degrees above your horizon to Polaris closely approximates your Latitude on earth.

Another good resource is The Hawaiian Astronomical Society. They have charts of every constellation. Tri Atlas has very good representations, too.

George received a rousing applause from the group.

Meeting adjourned at 8:57 PM.