



BACK BAY observer

The Official Newsletter of the Back Bay Amateur Astronomers
P.O. Box 9877, Virginia Beach, VA 23450-9877

EPHEMERALS may 2013

05/02, 7:30 pm
BBAA Monthly Meeting
TCC Campus, VA Beach
Building J, Rm JC-12

05/03
Skywatch
Northwest River Park

05/11
Nightwatch
Chippokes State Park
Surry, VA

05/17
Night Hike
Northwest River Park

05/17, 8:30 pm
Garden Stars
Norfolk Botanical Gardens

05/19, 10:00 am - 3:00 pm
Solar Observing
Virginia Air & Space Center
Hampton, VA

5/21, Dusk - 11:00 pm
Boardwalk Astronomy
VA Beach Boardwalk at 24 St.



Looking Up!

Editor's Note: This month's Looking Up column was written by Observer Editor, Paul Tartabini. President Courtney Flonta will return as the regular author.

Greetings, Back Bay Amateur Astronomers!

Hard to believe it is May already. It seems like just yesterday Jim Tallman suggested his idea to have more club workshops and classes. Actually it was at the January meeting. His idea was for BBAA to provide a means for club members with experience in different areas to pass their knowledge to others, either folks new to the hobby or long-time members interested in finding out about a different aspect of amateur astronomy.

It was exciting to see Jim's idea come to life a couple weeks ago at the first BBAA workshop: "Make your own solar filter".

There were nine of us who signed up for the workshop, which was led by Jim and Chuck Jagow. All we participants had to do was show up at Jim's house with our scopes. All of the materials and tools we needed were waiting for us when we arrived. Jim and Chuck also provided the instruction, help and encouragement.

What a great opportunity for club members, especially newer ones like myself! For the low, low price of \$19 all nine of us can now safely partake in daytime viewing of our nearest star, doubling the time we can spend on our favorite hobby.

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Plus, it was a heck of a lot of fun. We all had a great time talking astronomy, checking out gear, and helping each other along the way. As Bob Beuerlein remarked, it was nice to see everyone in broad daylight for a change. Oh, and as a bonus, Mr. ALCOR, Bill McLean, stopped by, and yes, he even brought cookies.

Special thanks to Jim for hosting the event at his home. We all enjoyed his hospitality and were surprised with a great cookout around lunchtime! Jim and Chuck both did a fantastic job teaching us how to make the filter and providing us with one more skill to put into our astronomy toolbox.

To our many experienced members: please consider passing on some of your knowledge to the club by teaching a workshop. Your efforts will be much appreciated and you will help spread the joy of astronomy. [Contact an officer](#) if you're interested. Until then, where there's stars there's hope....

Paul Tartabini



Top: Chuck Jagow explains the basics of making a solar filter to workshop attendees. Below: Jim Tallman helps smooth out a rough edge on the frame of someone's solar filter.

April 4, 2013 BBAA Meeting Minutes

The Meeting was held at TCC.

Those in attendance were:

Courtney Flonta, Bill Holmes, Kevin Swann, Jim Tallman, Mark Gerlach, Thomas Jarvis, Chris Jarvis, Bill Mclean, Kenny Broun, George Reynolds, Eva Burgstaller, Josef Burgstaller, Amy Gardner, Joey Quinn, Les Wilson, Jason Tackett, Robert Beuerlein, Matt McLaughlin, Bird Taylor, Neill Alford, Paul Tartabini, Andrew Reisenweber, Chuck Jagow.

Calendar:

- May 2 Thursday, monthly meeting at TCC-VA Beach Campus, 7:30 PM
- May 3 Friday, Skywatch @ Northwest River State Park, Equestrian area, 7PM
- May 11 Saturday, Nightwatch @ Chippokes, 7:30PM
- May 17 Friday, Garden Stars @ Norfolk Botanical Gardens, 8:30PM
- May 17 Friday, Night Hike @ NWRP, 7PM
- May 31 Friday, Skywatch @ Northwest River State Park, Equestrian area, 7PM

- June 6 Thursday, monthly meeting, location TBD, 7:30PM

Meeting Summary:

- Treasurer's Report was read
- Secretary read 3/7/2013 meeting minutes
- Visitors: Les Wilson learned of BBAA from the last Star Party & needs help with his Celestron SC. Amy Gardner (who now lives in North Carolina) was visiting family.
- New Members: Thomas Jarvis & Chris Jarvis
- ALCOR representative Bill McLean awarded Jim Tallman the [Sunspotters](#) & [Lunar](#) program pins.
- Nick Anderson is working on the [flat galaxy](#) program.
- Paul Tartabini recommends the new [Stellar Evolution program](#).
- ALCON 2013 convention is in Atlanta, GA July 24-27. (alcon2013.astroleague.org)

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The Back Bay Amateur Astronomer's
Observer

The BBAA Observer is published monthly; the monochrome version is mailed to members who do not have internet access. Members who do have Internet access can acquire the full color version on the Internet at <http://www.backbayastro.org/observer/newsletter.shtml>

Please submit articles and items of interest no later than the date of the monthly meeting in order to be in the next month's edition.

Please submit all items to:
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BBAA Meetings

The BBAA meet the first Thursday of every month except for July. While school is in session, we meet at the VA Beach TCC Campus. The May 2 meeting will be held at TCC in Virginia Beach, Building J, Room JC-12 at 7:30 pm. Directions available at www.backbayastro.org.

BBAA Internet Links

BBAA Website
www.backbayastro.org

Yahoo! Groups
tech.groups.yahoo.com/group/backbayastro

BBAA Observer Newsletter
www.backbayastro.org/observer/newsletter.shtml

April Meeting Minutes, continued from page 2

- The deadlines for the four Horkheimer awards (for those 18 and under) have just passed for this year, but keep them in mind for early spring next year. Three of them offer a \$1000 prize with one including a Celestron telescope. See the [Astronomical League site](#) for more details.
- A workshop for constructing solar filters & sun finders was on April 13 to precede Astronomy Day April 20.
- The Scholarship committee will meet in June.
- A Northwest River Park coordinator is needed. See Chuck Jagow.
- This evening's raffle winner was Andrew

Reisenweber who won a variable intensity red flashlight.

- The meeting presentation was by Kenny Broun in the newly renovated TCC Planetarium. The program was called, "Star Signs." One thing mentioned was the constellation Libra was originally considered the "claws" of Scorpio the Scorpion until the Romans separated it out as its own constellation. Another highlight was how in 600BC the sun was positioned in the beginning of the constellation Aries, but now it has moved into Pisces due to the [precession of Earth's axis](#).

Minutes taken by Kevin Swann

Your Daily Dose of Astonishment

By Diane K. Fisher

As a person vitally interested in astronomy, you probably have the Astronomy Picture of the Day website at apod.nasa.gov set as favorite link. APOD has been around since practically the beginning of the web. The first APOD appeared unannounced on [June 16, 1995](#). It got 15 hits. The next picture appeared [June 20, 1995](#), and the site has not taken a day off since. Now daily traffic is more like one million hits.

Obviously, someone is responsible for picking, posting, and writing the detailed descriptions for these images. Is it a whole team of people? No. Surprisingly, it is only two men, the same ones who started it and have been doing it ever since.

Robert Nemiroff and Jerry Bonnell shared an office at NASA's Goddard Space Flight Center in the early-90s, when the term "World Wide Web" was unknown, but a software program called Mosaic could connect to and display specially coded content on other computers. The office mates thought "we should do something with this."

Thus was conceived the Astronomy Picture of the Day. Now, in addition to the wildly popular English version, over 25 mirror websites in other languages are maintained independently by volunteers. (See tinyurl.com/about-apod for links). An archive of every APOD ever published is at tinyurl.com/archivepix. Dr. Nemiroff also maintains a discussion website at asteriskapod.com.

Dr. Nemiroff has since moved to Michigan Technological University in Houghton, Michigan, where he is professor of astrophysics, both teaching and doing research. Dr. Bonnell is still with NASA, an astrophysicist with the Compton Gamma Ray Observatory Science Support Center at Goddard. APOD is only a very small part of their responsibilities. They do not collaborate, but rather divide up the calendar, and each picks the image, writes the description, and includes the links for the days on his own list. The files are queued up for posting by a "robot" each day.

They use the same tools they used at the beginning: Raw HTML code written using the vi text editor in Linux. This simple format has now become such a part of the brand that

they would upset all the people and websites and mobile apps that link to their feed if they changed anything at this point.



The [January 20, 2013](#) Astronomy Picture of the Day is one that might fall into the "quirky" category. The object was found at the bottom of the sea aboard a Greek ship that sank in 80 BCE. It is an Antikythera mechanism, a mechanical computer of an accuracy thought impossible for that era. Its wheels and gears create a portable orrery of the sky that predicts star and planet locations and lunar and solar eclipses.

Where do they find the images? Candidates are volunteered from large and small observatories, space telescopes (like the Hubble and Spitzer), and the independent astronomers and astro-photographers. The good doctors receive ten images for every one they publish on APOD. But, as Dr. Nemiroff emphasizes, being picked or not picked is no reflection on the value of the image. Some of the selections are picked for their quirkiness. Some are videos instead of images. Some have nothing to do with astronomy at all, like the astonishing [August 21, 2012](#), video of a replicating DNA molecule.

Among the many mobile apps taking advantage of the APOD feed is [Space Place Prime](#), a NASA magazine that updates daily with the best of NASA. It's available free (in iOS only at this time) at the Apple Store

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with NASA.

A Night of Observing at Pettigrew State Park

By Kent Blackwell



Comet PanSTARRS was at its brightest on March 9, 2013. Unfortunately, it was also quite close to the setting sun so it could only be seen from a location with a good western horizon. I was considering various sites and at the last minute Robert Hitt and I decided to take our homemade [teardrop trailer](#) (nicknamed Gypsy Wagon) to [Pettigrew State Park](#) in North Carolina. The campground is located on Lake Phelps, about 95 miles south of Virginia Beach, VA. The campground's boat ramp provides an excellent western horizon.

Before setting up the telescope we walked over to [Somerset Place](#), an antebellum plantation. It was an active plantation from 1786-1865 and encompasses 100,000 acres. In 1829 it became the home to two generations of a planter family, Josiah Collins III, his wife Mary and their six sons. When the Civil War ended in 1865, so did slavery. Left without unpaid labor, planters such as the Collins family could no longer maintain the plantation system that had characterized much of the antebellum south!

After a nice, hot spaghetti dinner (thanks Dee!) I drove about 500 yards to the boat ramp area to set up my telescope. To my surprise four other amateur astronomers were already setting up telescope in the rather small area. All of them hauled their telescopes in trailers from Pennsylvania. Telescopes ranged in sizes from 10" to a 25" Obsession. Robert Werkman from Hershey, PA possessed one of the most beautiful telescopes I have ever seen, a custom-made 22" f/3.5 Dobsonian finished in a highly polished mahogany from Australia

All eyes faced west as the sun sank below the horizon. I scanned the skies with 10x50 binoculars as well as with my 80mm f/8 TMB refractor but no luck. None of us were able to see **Comet PanSTARRS**.

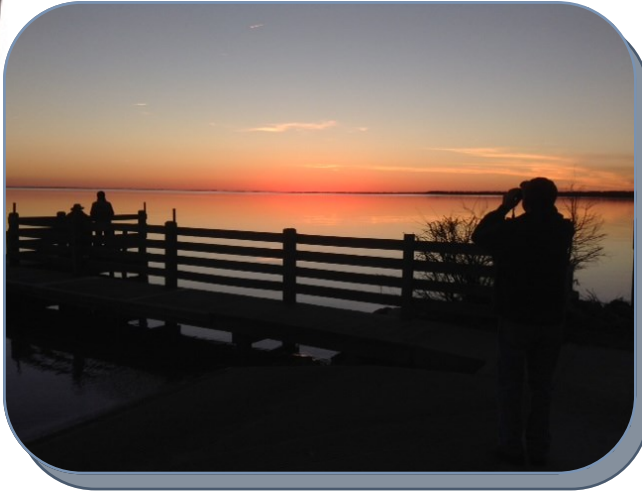


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Pettigrew State Park, continued from page 5

We had been promised a very bright comet some weeks before but comets are often compared to cats. They both have tails and both do exactly what they want. Astronomer Fred Whipple put it aptly, "If you want to bet on something stick to betting on horses". Instead of reaching naked eye visibility the comet barely reached 1st magnitude, difficult to see so close to the setting sun.

As darkness fell we all knew it was going to be a special night. The sky was beautiful soon after astronomical twilight. The view of mighty Orion reflecting in Lake Phelps was wonderful. The bright star Canopus was on the meridian and only 7-degrees above the southern horizon. Canopus is not usually seen from our northern latitude.



My Sky Quality Meter read 21.3, not bad for early in the evening. By 10:00 pm the reading was 21.5, indicating a very dark sky indeed. At midnight it read 21.82, the darkest sky I have seen in a long time. That means we were seeing naked eye stars fainter than 7th magnitude.

Since the view of the southern horizon was so exceptional I decided to concentrate on southern deep sky objects. First was the large globular cluster **NGC 3201** in Vela, another object rarely seen from our latitude. The exact date of its discovery is uncertain, perhaps by James Dunlop in 1826 and cataloged at the time as Dunlop 445. **NGC 3201** is relatively nearby at 16,300 light years from the sun. It was easily resolved in my telescope, despite only being a few degrees above the horizon.

I observed several open clusters in southern Puppis before turning my telescope high in the northern sky to explore some Ursa Major



To get to Somerset Place just walk down Carriage Nature Trail from the campground. You'll be able to tour the Collins Family Home as well as reconstructed dwelling places where many of the slaves lived.

NGC galaxies hitherto unseen by me. I managed to view about two-dozen, concentrating on the faintest that could be seen in my 14" telescope. Josh Wright was also exploring faint galaxies with his 25" Obsession while Jim Werth was concentrating on planetary nebulae with his 22" telescope.

The more I meet fellow amateur astronomers the more I realize how small our hobby is. One gentleman I met is Lou Behrman. Lou is from Philadelphia but his mother lives in Sierra Vista, AZ. Everyone in the BBAA club surely knows that our own Ted Forte recently moved to Sierra Vista. Lou has been to the house and used the 30" telescope that Ted now owns. Small world, huh?

I quit about midnight but the others who had driven all the way from Pennsylvania wanted to make the best of the glorious Pettigrew sky. The sky is darker than Coinjock, but, at least for me, not as convenient. If you go to Pettigrew to camp I suggest you take every provision you might need because there are few, if any convenience stores nearby.

The rangers at Pettigrew State Park are very accommodating to amateur astronomers. They turned out the streetlight at the boat ramp as well as the light on the outside of the public restroom for me. The downside is the campsites themselves are located in areas of tall trees. The only place one can get a decent horizon is the boat ramp, and space is limited. Another problem is the wind. Being so unsheltered, observing from the ramp on a windy night would be nearly impossible.

Although we didn't see **Comet PanSTARRS** it was a terrific Saturday night complete with new friends and mesmerizing dark skies.

Antares Launch Watch | compiled by Bill McLean

That was fantastic; I wish all of you could have been with me at Wallops to see it. It started out as a low rumble, then building, until it started to drown out the noise from the crowd. At that point I could feel the rumble all around me. Very intense. As it climbed higher and faster the rumble started to fade. And fade and fade. It was over too quick. :(

- **Mat Snellings**



Bob, Annette, Bird, Paul, Larry, Mao, George, Mary and yours truly had an absolute ball watching the Antares rocket go up followed by "pie" at Pizza Heaven. Good call Bird.

We met at Buckroe Beach in Hampton just minutes before the 1700 launch. All I saw was a small but fairly thick, squiggly condensation trail for 2, maybe 3 degrees. It was pretty breezy and cool on the beach.

Pizza Heaven is a smallish hole on the wall, just minutes from the beach, with very yummy pizza and the words "Tap House" printed on the sign. We all had very good food and some tested the hops. Lots of good conversation debriefing the launch, fun and laughter all around. I had a great time! Thanks guys for making me feel a part of something wonderful.

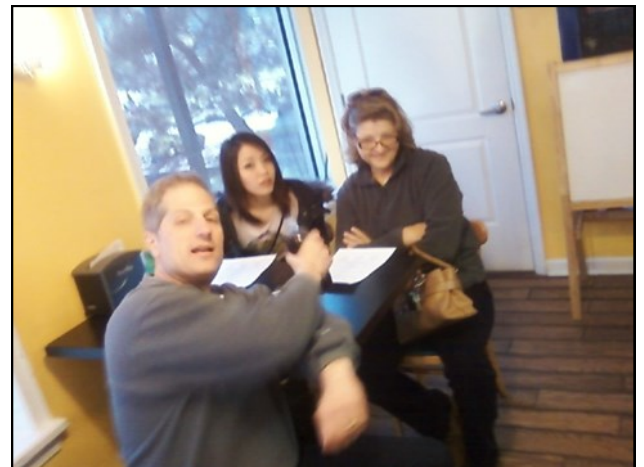
- **Bill McLean**

I was in nerd nirvana at Buckroe Beach: Streaming NASA TV out of Wallops in both ears with the countdown and Antares status, compass and stopwatch hanging around my neck for planning the expected trajectory, and Fujinon Techno-stabi binoculars prefocused on the Moon, awaiting launch. Expectations were for a bright rocket burning with a kerosene sky trail.

Promptly at 5pm Antares lifted off the pad. AstroBuddy Steve and I caught a vertical plume within the first minute or so. We couldn't find it for several seconds and then we shouted out a Tally Ho as we traced along a trajectory that was higher than expected for several more seconds. I couldn't believe how clear it was and how large the plume was. Only it was actually a small biz jet and the plume was really the wings. What a hoot. We laughed our butts off when we realized what we'd been following.

None of us was able to find it during the flight other than the condensation trail soon after launch.

- **Bird Taylor**



Top Left and Above: *After Antares' successful launch, Buckroe Beach observers celebrate at Pizza Heaven.*



May 2013

BBAA Events	Special Outreach	Astronomical Events
5/2 BBAA Monthly Meeting		5/2 Last Quarter
5/3 SkyWatch @ Northwest River Park	5/9-12 East Coast Star Party, Coinjock, NC	5/9 New Moon
5/11 Nightwatch @ Chippokes State Park	5/19 Solar Observing Virginia Air & Space Museum	5/18 First Quarter
5/17 Garden Stars @ NBG		
5/21 Boardwalk Astronomy		5/25 Full Moon



Sneak Peek into June

Thu 6/06/2013 BBAA Monthly Meeting, TCC Campus, 7:30 pm

Sat 6/08/2013 Nightwatch at Chippokes State Park, Surry VA.

Fri 6/14/2013 Garden Stars at Norfolk Botanical Gardens, 9:00pm

Tue 6/18/2013 Boardwalk Astronomy at 24th St VA Beach Boardwalk, Dusk - 11:00 pm

Fri 6/28/2013 Skywatch at Northwest River Park