



EPHEMERALS october 2012

10/11-14
East Coast Star Party
Hampton Lodge
Coinjock, NC

10/13
Nightwatch
Chippokes State Park
Surry, VA

10/19, 7:30 pm
Garden Stars
Norfolk Botanical Gardens

11/01, 7:30 pm
BBAA Monthly Meeting
TCC VA Beach
Building J, Room JC-12

11/09
Skywatch
Northwest River Park

BACK BAY observer

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

Looking Up!

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

Sometimes it seems that everywhere you go, you see BBAA. A case in point was the recent open house held at NASA Langley Research Center in Hampton, VA on September 22, 2012.

Since 9/11, getting access to the local NASA center is pretty tough, so it was a rare treat for Langley's doors to be opened to the general public. As a NASA employee, I looked at the open house as a chance to take my family to work to see what I and the rest of NASA Langley do. We had a big crew that sunny Saturday that even included my two little nieces who were visiting all the way from Danville, VA.

As we arrived outside the huge NASA hangar, we were handed brochures detailing the numerous tours and activities that were available. I was excited to read that Tour Stop #12 was being run by "local amateur astronomers" and included a solar observing station where you could view the sun through a telescope.

"I'll bet I know some of those astronomers," I remarked to my group. "Do you think I'll finally get to meet Mr. Bird," asked my daughter, Sarah. She was dying to meet my 'astro-buddy', fellow BBAA'er Lawrence "Bird" Taylor, someone she'd heard so many interesting stories about when I returned from various stargazing adventures. "Oh, I'm sure he'll be there," I responded, and there was no doubt in my mind.

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BBAA Meeting Minutes & Summary

October 4, 2012

- The Meeting was held at TCC was called to order by President Courtney Flonta

- Those in attendance were: Mark Gerlach, Kenny Broun, Mat Snellings, Bill Mclean, Curt Lambert, Ben Loyola, Joey Quinn, Katelyn Neese, Les Wilson (visitor), Dino Giangregorio, Mary Giangregorio, Courtney Flonta, Michael R. Salas, Jeff Goldstein, Kevin Swann.

Outreach:

- The October 19th Garden Stars has many signed up for it. People are needed to help out.

Observing reports:

- Mark Gerlach attended the VAAS conference @ Maidens, VA scout campground (West of Richmond) where Caroline's Rose (NGC 7789 in Cassiopeia) was observed & dark matter was the subject.

Other Notes:

- Need to complete the Astronomical League Venus transit pin by the end of the year.
- The evening presentation was by BBAA's Jeff Goldstein who presented two of his school's projects:
 - Distance to the sun – using proportions
 - The noon project – the sun's angle at equinox
- Mark Gerlach also showed pictures of an 8" Meade 8800 scope donated to the club
- The East Coast Star Party is coming up. It will be held Oct. 11-14 at Hampton Lodge in Coinjock, NC. For more info see <http://tinyurl.com/oct2012ecsp>
- Anniversary dinner will be held at Noon on Dec. 15 at Fire & Vine

The October BBAA meeting was a hoot!

Kenny Broun was up and about even after having his innerds aerated. I personally was impressed with his level of astronomical knowledge helping as he did with the pre-meeting crossword puzzle I brought courtesy of Sky at Night magazine. I guess he really is a college professor. Thanks Kenny- still can't get 1 across.

Jeff Goldstein presented a few fun techniques for figuring the earth's circumference like Eratosthenes of Samos did and how to calculate the distance to the sun using a pin hole camera like method. Fun Jeff! And that's coming from a math-is-like-Chinese person.

Dino Giangregorio shared how he got the Astronomical League's Venus Transit Pin and proudly showed it off. You go Dino! I think fulfilling the requirements for that AL pin is easy. It's figuring what the coordinator wants is the challenge. (see caption below for more information).

Good getting together with like minded nerds. Good raisin oatmeal cookies. Good time.

Summary by Bill McLean

Dino Giangregorio shows off his coveted AL Venus Transit Award. The AL web site has all of the rules and guidelines (as well as a nice graphic of the Award Pin): <http://www.astroleague.org/PlanetaryTransitVenus2012>. The site also has links to the NASA 2012 Transit of Venus page which offers two different certificates for the Transit and provides instructions on how to earn each certificate.

The process is a bit confusing, but fortunately for BBAA, Dino has navigated the waters for us. He wrote an extensive set of instructions on how to earn the Pin and posted it to the club's Yahoo Group. You can read his detailed explanation at

<http://tinyurl.com/GetTransitPin>

As Dino points out, you can still earn the pin, even if you weren't able to observe the transit yourself.



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 November meeting will be held at TCC in Virginia Beach, Building J, Rm 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

Observing at the 2012 VAAS Convention

By Kent Blackwell

The annual meeting of the Virginia Association of Astronomical Societies (VAAS) was held this year at a 600-acre Boy Scout camp in Goochland County near Richmond.

Robert Hitt and I arrived mid-day Friday. Although no talks were scheduled until Saturday anyone who wished could camp on the site and observe both Friday and Saturday nights.

The weather was mostly clear all weekend, with a few high cirrus clouds both evenings. I had hoped to search for several challenging objects but ended up looking at more familiar "show objects" instead.

On Saturday several lecturers offered their services and gave many interesting talks during the day. In addition to the talks all the attendees were treated to both lunch and dinner.

Although the weather forecast didn't look promising Saturday night it ended up being the better of the two evenings. I started off showing several people the gorgeous globular cluster **M 22** in Sagittarius, followed by the far smaller globular **NGC 6638**. Next up was **M 17, The Swan Nebula** followed by the lovely, tight open cluster **M 11, The Wild Duck**.

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A Brand New Age: Queue Observing at Mt. Paranal

By Dr. Marc J. Kuchner

First a caravan of white observatory cars arrives, winding up the narrow road to the 2600-m (~8500-foot-) high summit. Then the shutters around the domes open, and rays from the setting sun alight on colossal mirrors and metal struts. It's the beginning of another busy night at Mt. Paranal, Chile, where I am learning about new, more efficient ways of managing a modern observatory.

I stepped into the observatory's control room to soak up some of the new, unfamiliar culture. Here, under florescent lights and drop ceilings are banks of computer screens, one bank to control each of the four big telescopes on the mountaintop and a few others too. At each bank sits two people, a telescope operator and an astronomer.

The layout of this workspace was not unfamiliar to me. But the way these Mt. Paranal astronomers work certainly was. When I was cutting my teeth at Mt. Palomar observatory in California, I would only go to the telescope to take my own data. In stark contrast, everyone observing at Mt. Paranal tonight is taking data for someone else.

The Mt. Paranal astronomers each spend 105 nights a year here on the mountain performing various duties, including taking data for other astronomers. The latter, they call "executing the queue." Headquarters in Germany decides what parts of the sky will have priority on any given night (the queue). Then the Mt. Paranal astronomers march up the mountain and carry out this program, choosing calibrators, filling the log books, and adapting to changing conditions. They send the data back to headquarters, and from there it makes its way out to the wider astronomical community for study.

This new way of working allows the Mt. Paranal astronomers to specialize in just one or two telescope instruments each. Surely this plan is more efficient than the old-fashioned way, where each of us had to learn every instrument we used from scratch—sifting through manuals at 3:00 AM when the filter wheel got stuck or the cryogen ran out, watching precious observing time tick away. Here at Mt. Paranal, much of the work is done in a big room full of people, not off by yourself, reducing some dangers of the process. Also, queue observing cuts down on plane travel, an important step for cutting carbon emissions.



European Southern Observatory at Mt. Paranal, Chile.

It's a brand new age, I thought as I watched the giant domes spin in the silent, cold Chilean night. And maybe with queue observing, some of the romance is gone. Still, my colleagues and I couldn't help saying as we stared out across the moonlit mountains: I can't believe how lucky we are to be here.

Dr. Marc J. Kuchner is an astrophysicist at the Exoplanets and Stellar Astrophysics Laboratory at NASA's Goddard Space Flight Center. NASA's Astrophysics Division works on big questions about the origin and evolution of the universe, galaxies, and planetary systems. Explore more at <http://www.science.nasa.gov/astrophysics/>.

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Wherever there's an opportunity to share astronomy with the public, you'll be sure to find Bird. And find him we did, along with other BBAA outreach masters Jim Tallman, Chuck Jagow, Larry Wade and Bruce "Doc" Bodner. The amount of time these folks give



Even better than getting your face painted was a view of sun spots through Bird Taylor's solar-filtered telescope at NASA Langley Research Center's Open house on Sept. 22.

up to share their love of astronomy with the world is truly amazing!

I enjoyed watching family members look through the diverse set of solar scopes that were set up near the Variable Density Tunnel, a 1922 wind tunnel (now a historic national landmark) that revolutionized wind tunnel testing and was the source of much of the famous NACA airfoil data you may have heard about. It was fun watching the kids learn about sunspots, prominences and solar flares while being treated to outstanding views through some awesome scopes, all in the shadow of one of NASA's aeronautical treasures.

As I watched our members expertly answer questions and practice tremendous patience while they shared views through their PSTs, white light filters and even Chuck's solar funnel, I felt proud to be part of BBAA.

Until next time, Clear skies...

Paul Tartabini

Observing at VAAS, continued from page 3

The line behind my 16" f/6.2 Dobsonian thinned a bit so I observed for the faint planetary nebula, **Minkowski 1-56** in Sagittarius. Soon, a group came by and wanted to see something so I upped the power to 500x and showed them **NGC 7009, The Saturn Nebula**. The ansae were easily seen, as well as amazing detail in the center.

A man and his son named Benjamin set up next to us and asked if they could look through my telescope. The boy was 10 years old and after about 30 minutes of using my 16" scope I decided he was definitely on his way to becoming a budding amateur astronomer. I showed him how to use the Telrad to find objects. Within minutes, he centered **M 31, The Andromeda Galaxy**. He slewed the telescope to **M 32** on one side and then to **M 110** on the other side. Glendon Howell showed Benjamin the same objects in his large binoculars, so the boy got a good concept of seeing the relative size of the galaxies in both instruments.

The next object was the globular cluster **M 15** in Pegasus, but wait! Benjamin couldn't reach the eyepiece since I didn't have a full size ladder. Ray Moody came to the rescue with his 6' ladder. The globular blazed with a myriad of stars. Benjamin and everyone else were amazed at its beauty.

The real test of the night was trying to see the central star in **M 57, The Ring Nebula**. At 500x



Robert Hitt (L) & Kent Blackwell (R) camping in their homemade Gypsy Wagon trailer at VAAS.

everyone who tried was successful. Although difficult, the central star would occasionally pop into view with averted vision.

Around 1:00 am thin clouds rolled in and that was all I needed to decide to call it a night and go to bed. I had a terrific time at the convention and want to thank all those who helped organize it. I know a great deal of work goes into such events and I want them to know we all appreciate it.

Kent Blackwell

BBAA (Bad Back Amateur Astronomer)

By Bill McLean

I've been having a lot of difficulty observing for the last year and a half; hard time bending, sitting, and carrying. I stopped observing for a while but that would never do. Here's my tale of getting back into observing...



G-JEM

(Georgie JunE Method)

Using other people's scopes is good and I will continue practicing this method, but sometimes I want to do my own thing, like do some "work" on an AL program. And what if there is no one else around to bum photons off of? These concerns have led me to some other innovations...



BOS (Bird Observation System)



Using other people's scopes is good and I got the Canon 10X30 image stabilized binoculars and a Walmart folding lounge chair. This is the warm weather configuration. When cold weather hits I add a sleeping bag. Have spent many nights napping immediately after observing, or maybe even during. Annette and I used the BOS New Year's Eve at the GAP. Great way to ring in the New Year. Excellent for wide field observing. And napping. Proven through years of successful testing by a NASA engineer.

K-BOS4 (Kent Blackwell Observing System+4 inches)



I have found this dob riser to be extremely easy on my back. It cost \$25 to build and I made it so I can stand comfortably and observe. As an added bonus, using the Telrad is now very easy- even in the dob hole (zenith). Thanks to Kent Blackwell for the idea- he's used his riser for many years. It's simple and stable. I only have to carry the stuff 2x, and if there's anyone else observing they gladly offer to do the heavy lifting.- thanks guys

M-MAB (Matt McLaughlin stArBlast)

My ETX was filling the grab-n-go slot till my back worsened. With the tripod extended it was too low for me to stand without bending, and sitting at the scope with the tripod most of the way down was getting too uncomfortable.

I found the Orion 4.5"eq mount. <http://www.scopereviews.com/page1ab.html#2> It weighs 20 lbs. and I can easily grab n go it and requires nearly no set up. Just point it north. The eyepiece is at my standing eye level. Granted, it's only 4.5" but it's a sweet little scope- bottom line I use it a lot. I'd rather observe with a little scope than no scope at all. It's even easier to set up than dragging out a lounge chair for binocular use.



I hope that anyone out there that has been running into issues with their back while observing will be inspired to try one of these solutions and not give up observing. I use all four.

Carpe Noctum

Bill McLean



October 2012

BBAA Events	Special Outreach	Astronomical Events
10/13 Nightwatch @ Chippokes State Park		10/14 New Moon
10/11-14 East Coast Star Party		
	10/18 Science Night at Greenbrier Intermediate School	10/21 First Quarter
10/19 Garden Stars @ NBG		10/22 Orionids peak after midnight
		10/29 Full Moon



Sneak Peek into November

Thu 11/01/2012 BBAA Monthly Meeting, TCC Campus, 7:30 pm
 Fri 11/09/2012 Skywatch at Northwest River Park
 Sat 11/17/2012 Nightwatch at Chippokes State Park, Surry VA.
 Fri 11/30/2012 Garden Stars at Norfolk Botanical Gardens, 7:30 pm