

# BACK BAY Observer

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

# EPHEMERALS December 2013

12/14, Noon
Fire & Vine Restaurant
VA Beach
(Directions & Sign-up Info Here)

12/27 Skywatch Northwest River Park

1/02, 7:30 pm BBAA Monthly Meeting Plaza Middle School, VA Beach KIVA Room

1/04 Nightwatch Chippokes State Park Surry, VA





# Looking Up!

Editor's Note: This month's Looking Up column was written by President-Elect Jim Tallman. Jim's official term as BBAA President begins January 1.

Well another year has passed for the BBAA family and friends, one that was full of excitement about our hobby and the sharing of information that goes along with it. One way a few of us began sharing this year was by dabbling in the realm of Astrophotography or as many in the BBAA call it "The Dark Side".

Last week Kent Blackwell, who professes to be a loyal Jedi who never falls prey to the "Dark Side", posted an excellent image of The North America Nebula (NGC 7000 or Caldwell 20) to the BBAA Yahoo Group. He didn't need any complicated equipment and said he was surprised at how easy it was, with new technologies making it possible. The picture was impressive, to say the least, even more so after I read the post about how he took the picture: he set up a tripod, got it polar aligned, and then attached the camera/lens combo to take the shot using a 242 second exposure. He did so well that the stars are just about pin-point. Nice job Kent!

I know my experiences this year with learning the quirks of the astrophotography hobby have, at some times, left me wondering why I even wanted to start down this path; but then I realize that I want to succeed in this because it is fun to share what you have seen with others.

I've learned from others that excellent pictures of the night sky can be taken with just a camera, tripod, and bulb switch. Star trails, can be obtained in this manner.

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# **November 7, 2013 Meeting Minutes**

The Meeting at TCC was called to order at 7:32 PM by Vice President Chuck Jagow acting for President Courtney Flonta.

Participants: Robert Beuerlein, Kenny Braun, Scott Cadwell, Tom Flatley, Mark Gerlach, Jeff Goldstein, Bill Holmes, Chuck Jagow, Thomas Jarvis, Chris Jarvis, Robyn Korn, Leigh Anne Lagoe, Ben Loyola, Bill Mclean, George Reynolds, Kevin Swann, Jim Tallman, Paul Tartabini, Bird Taylor, and Mike Webster.

### Calendar

- Dec. 14 (Sat) Anniversary Luncheon @ Fire & Vine Restaurant in VA Beach, 12 PM
- Dec 27 (Fri) Skywatch @ Northwest River Park (Equestrian Area), 4:00 PM
- Jan 2 (Thu) Monthly Meeting, KIVA Room at Plaza Middle School in VA Beach, 7:30 PM
- Feb 21 (Fri) Greenbrier Middle School Science Night
- VA Beach SPCA requested an "Animals in the Night Sky" presentation again. George Reynolds presented it 2 years ago. We will schedule it.

### Treasurer's Report

- General Fund \$1526.74
  Scholarship Fund \$1349.67
  Total \$2876.41
- The General Fund includes \$300 worth of 2014 dues & donations.
- The Treasurer's report was put on the overhead for discussion. Expected dues (83 members) are \$1494. With 2013 leftover amount, the total is \$2766.52.
- The club will ask Chuck Dibbs to query if Mt. Trashmore would be less expensive to rent for next year's picnic. Every workshop charges almost exactly any expenses incurred. Insurance increases a small amount every year. There is a charge to attend Garden Stars, but attendance is usually low. Increasing the amount for dues requires a change in the By-Laws, meaning all members must be mailed a ballot. We have had income from the website (thanks to PayPal) for dues and the scholarship fund. Any money collected from outreach events goes into the general fund.

### **New Business**

- Elections were held for 2014 Officers. After nominations and voting the results are:
  - Jim Tallman as President
  - George Reynolds as Vice President
  - Chuck Jagow as Treasurer
  - Leigh Anne Lagoe as Secretary
- A question was asked if the BBAA web site should post sponsorships as other web sites do. No motions were made.
- ALCOR representative Bill McLean awarded Mark Gerlach the Outreach Pin.
- If interested in asteroid occultations, NASA has an asteroid initiative for amateurs where you time the dark period with a video camera. There are apps available where time marks are inserted into the video for accurate measurement and videos can be used to make graphs of luminosity that you can send to NASA. The International Occultation Timing Association also has aids for further research.
- Some have viewed Comet ISON. Also, Comet Lovejoy is currently in Cancer [as of November 7]. Sky & Telescope has articles on both.
- SkyTools has an observing planning tool for PC only. You can download various listst. It has a free "starter kit" for small scopes and more advanced versions for larger scopes.
- GAP Pod Update—Bird Taylor reports that the 8'
   Sky Shed project is being completed by Boy
   Scouts. Plans are to clean the mold off of the
   dome on Nov. 23 and Assembe the POD onto a
   deck at Grundland Astronomy Park on Nov. 24.
   A BBAA Plaque will be mounted on the dome.
   Future enhancements are planned as additional
   Scout Projects.
- BBAA is now going to be using two-sided business cards instead of the pamphlet that has been used in the past. Cost for 250 is \$20 and decreases with more copies. A suggestion was made to put a QR tag on it that links to the website. Another suggestion was made to have a design contest. An example card was passed around and a motion was made and passed to accept it as is.
- The evening raffle winner was Mike Webster who won the book Astronomy Hacks. An additional winner was Tom Flatley who won a Universe Sampler book for beginners.
- The meeting was adjourned at 8:45 PM to the TCC Planetarium for a Presentations by Kenny Braun: "Evolution of the Moon" and a Venus Terrain Program.

### 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: bbaa.newsletter@gmail.com or BBAA Observer, P.O. Box 9877, Virginia Beach, VA

### **President**

Courtney Flonta 757-580-0644 president@backbayastro.org

ALCOR

Bill McLean

Librarian Bill Newman billn59@verizon.net

### Vice President

Chuck Jagow vp@backbayastro.org

### **Scholarship Coordinator**

alcor@backbayastro.org

Ben Loyola benito@loyola.com

### Treasurer

**Secretary** 

Kevin Swann

757-424-6242

Jim Tallman treasurer@backbayastro.org

Lawrence "Bird" Taylor Lawrence. W. Taylor@nasa.gov

### Webmaster

Nick Anderson nranderson.deepskyobserver@ gmail.com

kjswann@yahoo.com

### **RRRT Coordinator**

### **Newsletter Editor**

Paul Tartabini bbaa.newsletter@gmail.com

# **BBAA Meetings**

The BBAA meet the first Thursday of every month except for July. The next meeting will be held on Jan. 2, 2014 in the KIVA Room at Plaza Middle School located at 3080 South Lynnhaven Rd in Virginia Beach at 7:30 pm.

Also, be sure to attend the Anniversary Luncheon at Noon on Dec. 14, 2013 at Fire & Vine Restaurant in VA Beach.

### **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

## Looking Up, continued from page 1



The North America Nebula (NGC 7000) in the constellation Cygnus. Image by Kent Blackwell. Canon 20Da, 66mm f/6 William Optics lens, 242sec exposure at ISO 1600.

There are also other devices that make using a smart phone a viable option. Both Celestron and Orion make afocal camera adapters that attach to the telescope eyepiece, so one can line up the camera and shoot. It doesn't get any easier than that.

Maybe this year will see more of us sharing our pictures of the night sky even if they are not quite "Hubble-quality." Just because it is fun to see what others have Jim Tallman seen.



# **Eclipse and Star Party all in one Weekend!**

By Bruce Powers

I'm a relatively new member to this club but I wanted to give my impression of the two East Coast Star Parties I have attended since joining.

I attended the Fall East Coast Star Party in 2012 and was really impressed with the help I received in getting my two scopes up to speed. I got to see a space station over-flight and an Iridium flare at that event.

Since I had such a good time at this large event hosted by Kent Blackwell in Coinjock, NC, I decided to give it a try again in 2013.

Coinjock used to be a place I would pass through in North Carolina on the way to the Outer Banks to windsurf. This little town in the Tar Heel state now means a twice-a-year opportunity to hang out with cool people and watch the stars in a community setting.

I arrived on Saturday with my "Aliner" pop-up camper. Member Dr. Michelle Shinn also has an Aliner camper, so we were able to swap some great camper design modification suggestions between the two of us. Yes, other engineers/astronomers like to tinker with things as much as I do, so I felt like I was in good company.

Once again Mr. Jim Tallman helped me immensely in tweaking my Celestron 8-inch and Meade 5-inch scopes, and Paul Tartabini impressed me with his star hopping abilities using his 8-inch Dobsonian scope to find two comets in the dawn sky including comet ISON.

I really need to rethink the simplicity of Dobsonians given the immense amount of cords, batteries, and other equipment needed to run my two scopes. This, I think, is the true value of events that this club organizes: you are able to field test your gear to see what works in the dark and what does not. If your scope is just a living room decoration, you'll likely never figure out how to make full use of it.

I really enjoyed the Halloween costume competition. I honestly thought I was going to be the only person dressing up, but fortunately four others brought costumes as well. There really was no competing with our Marilyn Monroe look-alike, who shut down the competition by showing a little leg!

One of the most unique parts of the 2013 event was the partial solar eclipse visible at dawn. Many of the astronomy campers availed themselves of the all-night coffee first, then assembled their telescopes, binoculars, and Mylar glasses-protected eyes in a small clearing on the shores of the Currituck sound at the Hampton Lodge campsite.



Bruce Powers and Michelle Shinn sport their Eclipse Glasses as the partially eclipsed sun rises over Currituck Sound on Nov. 1, 2013.

There really was a wide variety of observing gear present, but the most interesting thing to me was that this group had assembled to watch this celestial event together. Most people I had talked to about the partial eclipse were only going to "watch it on the Internet", "read about it later on Facebook", or engage in some other form of relatively passive participation. This crowd, in contrast, was actively participating in person on the frosty cold morning. Just like getting out and actually using your scope in the dark to figure out how it really works, it pays to show up when the universe shows off!

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# James' GAP POD Eagle Scout Project | Lawrence "Bird" Taylor



Life Scout James Bittner checking out Grundland Astronomy Park (GAP) in the summer of 2013.

Back Bay Amateur Astronomers (BBAA) has made a big difference in our region's astronomy outreach facilities with their donation of Cecil Nichols's family SkyShed Personal Observatory Dome (POD) out at Grundland Astronomy Park (GAP) in Hampton. The GAP is located on an old Nike Missile Site that is now a Hampton City Park and has been used for Observing Sessions since the beginning of the Virginia Peninsula Astronomy/Stargazers (VPAS) club in January 2002.

Cecil was a lifelong astronomer and long time BBAA member. He passed away in January 2011. Members of BBAA helped his family find new homes for most of his equipment, with the main exception being the POD that had yet to find a home other than to lie in wait in George Reynolds's backyard.

That is until members started talking about the POD around the Fall of 2012. VPAS was asking about its status and availability. George inspected the POD with fellow member, Mat Snellings, who contacted Wayne Parker of SkyShed about the cost and availability of the hardware needed to assemble it (which had been lost prior to transfer from Cecil's house). The total including shipping was \$500.

Several advocates within BBAA and VPAS proposed assembling and erecting the POD out at the

GAP. The ideal situation would be for a Boy Scout to hold a fundraiser to purchase the missing parts and then assemble the POD out at the GAP for his Eagle Scout Project. At the December 2012 BBAA meeting members unanimously voted to donate the POD for astronomy outreach at the GAP. Ben Becouvarakis and I transferred the POD from George's backyard in Virginia Beach to Hampton a week later.

Around the same time, Mark Croom and I were teaching an Astronomy Merit Badge class for the Boy Scout's Merit Badge University, an annual event held on the Peninsula. Several of the requirements require participation in Observation Sessions in order to learn the night sky. At one such session out at the GAP, one of the Scouts, James Bittner, expressed an interest in the GAP POD idea for his Eagle Scout Project.

James earned the Astronomy Merit Badge and continued to stay engaged with VPAS. With his family's support he formulated plans that would be rolled up into his Eagle Scout Project proposal. A key partner in his quest was Beth Haines of Hampton Parks & Recreation. She not only is responsible for landscaping in Hampton, but is also the point of contact for the GAP. James had several planning sessions with Ms. Haines and Troop 94's leadership in order to have his plan approved.

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# **GAP POD,** continued from page 5

A couple months ago James finally had his carwash fundraiser, where Troop 94 earned the money to purchase the assembly hardware. Hampton Parks & Recreation prepared the grounds for the project. On the 22nd of November, James and his folks scrubbed the dirt, mold, and algae off of the POD parts and then loaded the walls and storage bays into their two Honda minivans, transporting them out to the GAP in a couple of trips. Ben saved the day with his large truck once again, and came over on the 23rd to take over the last four dome pieces that couldn't fit in the vehicles we had available. That made all of the pre-assembly complete with the arrival of the hardware and purchase of sealants and tools.



Ben Becouvarakis and his dad's truck, stuffed to the brim with the Personal Observatory Dome in Virginia Beach.

A little before 9am on the morning of the Nov. 24th, James, his parents, and two older brothers, Eagle Scouts David and Michael, arrived at the GAP for the big day. It was severely cold. Whereas a couple of days before, during the cleaning session, there was no wind

and the temps were in the upper 70s, it was now in the teens with 40+ mph gusts and windchill.

James had a plan and led his Troop and other volunteers in assembling the POD. It was heartwarming to watch the Scouts working together along with a few AstroBuddies that couldn't keep from getting involved with the boys' project. Scouts and their families floated in and out throughout the whole day helping to make the GAP POD a reality. A few BBAA members also offered their help. Other than Bob Beuerlein, who had his hands busy the whole day, Jim Tallman made a huge impact with his piping hot sausage biscuits for the work crew, and Bill McLean shared his cookies. What a godsend they were. The Scouts wolfed them down. The Sun was bright and not sharing the sky with nary a cloud. If only there wasn't any wind.

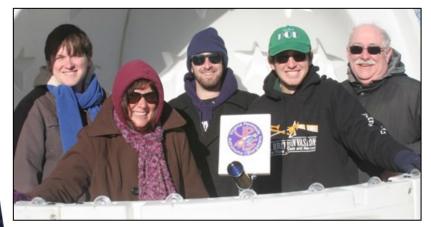
By a smidgeon after 2:30 in the afternoon, the dome was being hoisted onto the walls with the final hardware being driven home. The joy of the Scouts at each major step along the assembly was very spirited with lots of high fives, hoots, and thumbs-ups. After the final seals were secured and the GAP POD was actually completed, we set up a Personal Solar Telescope (PST) inside so that James and his Troop could share First Light. James was one happy Scout. Although, his parents might have been even happier at the completion of their third family Eagle Scout Project.

In celebration of a job well done, James and his family cracked open the food spread and shared subs, drinks, and a ton of other yummies

With all of the assembly crew. The hot chocolate was a big hit with everyone. Wow! What a great job by everyone involved.

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The Bittner family: from left to right, Michael, Maureen, David, James and Bob. Also pictured in the center is the Personal Solar Scope, which provided the entire group with the First Light for the newly assembled GAP POD.



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### **GAP POD,** continued from page 6



James Bittner and Troop 94 celebrating a job well done on the GAP POD (Nov. 24, 2013).

To bring this story full circle, Mark and I are once again teaching the Astronomy Merit Badge, and this past Friday out at the GAP was our first night Observation Session with a Scout and his family learning the night sky inside the GAP POD. Seven of us were inside protected from the strong, cold winds checking out the Crescent shaped Venus, Pleiades, and many constellations, asterisms, and other celestial wonders. What a joy!

Very special thanks to those that made this wonderful event come into being. The gift from Cecil's family will inspire many new AstroBuddies in the years to come. Be sure to check out the Scout signatures inside the GAP POD when you come to share a night with us.

In the not too distant future we have Kyle who is interested in building a 20-ft. x 20-ft. wood deck that the GAP POD will be moved onto for his Eagle Scout Project. We're also still looking for another Scout to build four concrete piers that will be the third phase of our Grundland Astronomy Park POD.

Thank you, Hampton Parks & Recreation, for continued access to such a beautiful urban night sky site. Thank you, BBAA, for facilitating and having such a generous vision on expanding local astronomy outreach. And finally, thank you, Cecil and James for making this project a reality. Awesome!

### Eclipse and Star Party, continued from page 4



A telescopic view of the partial eclipse and sun spots. Image by Jim Tallman.

At first contact, when the moon began to take a bite out of the sun, there were all kinds of iPhone and other computer applications running to predict how the eclipse would progress. People were taking photographs through their scopes and even making sketches

to record the several sunspot groups that were visible on the surface of the sun. We have come a long way compared to ancient peoples in the past who thought that a dragon in the sky was swallowing the sun when an eclipse occurred. At last contact, when the Moon cleared the sun, everyone remarked how great it was to have an eclipse the same weekend as the star party.

learned something about photography beyond my last eclipse that I observed in Hawaii in 1991, and I figured out how to make my scopes work even better. They are more at home now out under the stars than they were as decorations in my living room, thanks to BBAA! But the neatest thing I saw at the 2013 ECSP was very clear evidence through the partial solar eclipse that the universe is majestically moving around us every day and hour of our lives. You just can't get that feeling by watching something on a glowing screen after the fact. See you at the East Coast Star Parties in 2014!



December 2013 / January 2014

BBAA Events	Special Outreach	Astronomical Events
12/14 <u>Anniversary Luncheon</u> , Fire & Vine, VA Beach		12/13 Geminids Peak
		12/17 Full Moon
12/27 Skywatch @ Northwest River Park		
1/02 BBAA Monthly Meeting		12/25 Last Quarter
		1/01 New Moon
1/04 Nightwatch @ Chippokes State Park		1/05 Jupiter at Opposition