



## EPHEMERALS - February 2007

DATE	WHEN	WHAT & WHERE
1	7:30p	February Meeting @ TCC
7	4:30p	Free Lecture at NSU Planetarium (Cosmic Elements)
9	Dusk	Skywatch @ Northwest River Park
10	Dusk	Cloverwatch @ Franklin Fairgrounds
15	6:00p	Azalea Garden Middle School Parent's Night
17	Dusk	Nightwatch @ Chippokes Plantation
24	Dusk	Garden Stars @ Norfolk Botanical Gardens

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## LOOKING UP

Fellow BBAA members,

First, I would like to extend our heart felt condolences to Kent Blackwell, who lost a dear friend, and to Kevin and Barb Weiner for the loss of Kevin's brother.

A tragedy affects us all and our prayers are with you.

Let me thank Chuck and Beth Rippel for hosting January's meeting. It was fun and had that "cozy" feel. This month we are back to TCC, so come on out.

Could you believe the weather for January? 75\*, dang, of course, as soon as the new moon approaches, it turns cold.

Have been hearing a lot of talk out there about the new equipment that some BBAA members have purchased lately. Let's get those reports and analysis written and sent to Chuck for publication in the newsletter.

I will be bringing my new Hercules mount with setting circles to the February meeting for "show and tell". If you have something new, bring it in so we can all see and check it out.

Much is happening this month, check that calendar and see what you would like to join in on. On a more personal note, I will be heading south to the "Orange Blossom Special" outside Tampa the middle of February. This goes on the same time as the Winter Star Party in the Keys, but since I have never been to this one, I thought it was time to check it out. Of course, a short video will be shown at the March meeting.

Now, to all you BBAA members who are out there just listening, we want to hear from you. We have 100+ members but only the same 20 are seen at meetings, outings, and parties. If you joined BBAA just to get the newsletter, or a few observing sessions, that is ok. But we would really like to hear from some of you. Please feel free to write a small newsletter article, introduce yourself, tell us a little about yourself and why you joined BBAA, where you work, vacations you may have or are going to take. I see so many names on our members list I don't know, or haven't met. Try to come to a meeting, or a Sky/Night watch, come on out and look through our collection of scopes. Remember, you do not have to own a scope; we will gladly let you look through ours.

See ya

*Dale Carey*

# THE BACK BAY AMATEUR ASTRONOMER'S OBSERVER

## JANUARY'S MEETING MINUTES

The January meeting of the Back Bay Amateur Astronomers was called to order by President Dale Carey on Thursday January 4th, 2007 at 7:30 PM at member Chuck Rippel's house in Chesapeake.

**Members in Attendance:** There were nineteen people in attendance which included: Neill Alford, Dr. Bruce Bodner, Dale Carey, Larry Channel, Ted Forte, Jay Garrard, Steve Hamilton, Chuck Jagow, Georgie June, Ben Loyola, Tom Pearson, Mike Pereira, Bill Powers, Mike Przytula, George Reynolds, Chuck Rippel, Kevin Swann, Barbara Weiner and Kevin Weiner.

**Treasurer's Report:** \$4,601.93 in treasury, \$1,465.30 in Scholarship, which leaves \$3,136.63 remaining in the treasury. Barb reported that there were some significant expenses coming up including observer's handbooks, PST, PO Box rental, insurance and flyer reproduction costs.

**Secretary's Report:** Membership at 105 members and 49 are delinquent in paying their dues, December is the month the majority of dues are due. Some renewals are trickling in and Chuck will start sending friendly email reminders real soon now.

**Astronomical League Correspondent's Report:** Amazingly Ted Forte earned the comet observer's award! Congratulations Ted!

**Old Business:** There was some discussion to increase the scholarship fund, however it was tabled. Ben Loyola spoke on the effort that has been expended to increase the exposure of the BBAA scholarship for this year.

**New Business:** Dale Carey proposed setting up a committee to help "steer" BBAA along. After significant discussion the committee was voted on and the committee will consist of three members; Bruce Bodner, Steve Hamilton and chaired by Chuck Rippel. They promised to not just smoke cigars and

stare into the night sky...

Dale also suggested a roving reporter for the newsletter to help ease the burden of acquiring content for the newsletter. He suggested that at each meeting the newsletter editor pick a lucky soul and have them write an article for the newsletter.

However, the editor failed miserably in this new responsibility, perhaps at the next meeting in February.

### **Rapid Response Robotic Telescope Project Report:**

Ted Forte reported that the observatory building is coming along and they expect to have the telescope operational in the late spring. Ted also detailed that since a shift in the funding had occurred that the telescopes role had shifted slightly toward finding something newsworthy and "flashy" to appease the folks who ultimately had to fork over the big bucks to have the thing built. The BBAA's role in bringing the RRRT's capabilities to local schools via outreach was also discussed. Ted is actively recruiting folks from the BBAA membership for this outreach.

**Observer's Corner:** Nobody saw nothing - or I forgot to write it down - your choice.

**Miscellany :** Chuck provided an extensive tour of his shop which included his many telescopes and his extensive amateur radio equipment. Nearly everyone agreed that they needed to get their spouses in to see Chuck's setup so their spouses could see how miniscule their setup was in comparison.

**Presentation:** Dale Carey provided a video of his last trip to the Chiefland Star Party which was followed by a video that Chuck Rippel made of the recent night time shuttle launch that was visible from the Tidewater area.

**In Conclusion:** The meeting was adjourned at 9:00 PM.

*Chuck Jagow*



## A Great Big Wreck

By Dr. Tony Phillips

People worry about asteroids. Being hit by a space rock can really ruin your day. But that's nothing. How would you like to be hit by a whole galaxy?

It could happen. Astronomers have long known that the Andromeda Galaxy is on a collision course with the Milky Way. In about 3 billion years, the two great star systems will crash together. Earth will be in the middle of the biggest wreck in our part of the Universe.

Astronomer John Hibbard isn't worried. "Galaxy collisions aren't so bad," he says. A typical spiral galaxy contains a hundred billion stars, yet when two such behemoths run into each other "very few stars collide. The stars are like pinpricks with lots of space between them. The chance of a direct hit, star vs. star, is very low."

Hibbard knows because he studies colliding galaxies, particularly a nearby pair called the Antennae. "The two galaxies of the Antennae system are about the same size and type as Andromeda and the Milky Way." He believes that the Antennae are giving us a preview of what's going to happen to our own galaxy.

The Antennae get their name from two vast streamers of stars that resemble the feelers on top of an insect's head. These streamers, called "tidal tails," are created by gravitational forces—one galaxy pulling stars from the other. The tails appear to be scenes of incredible violence.

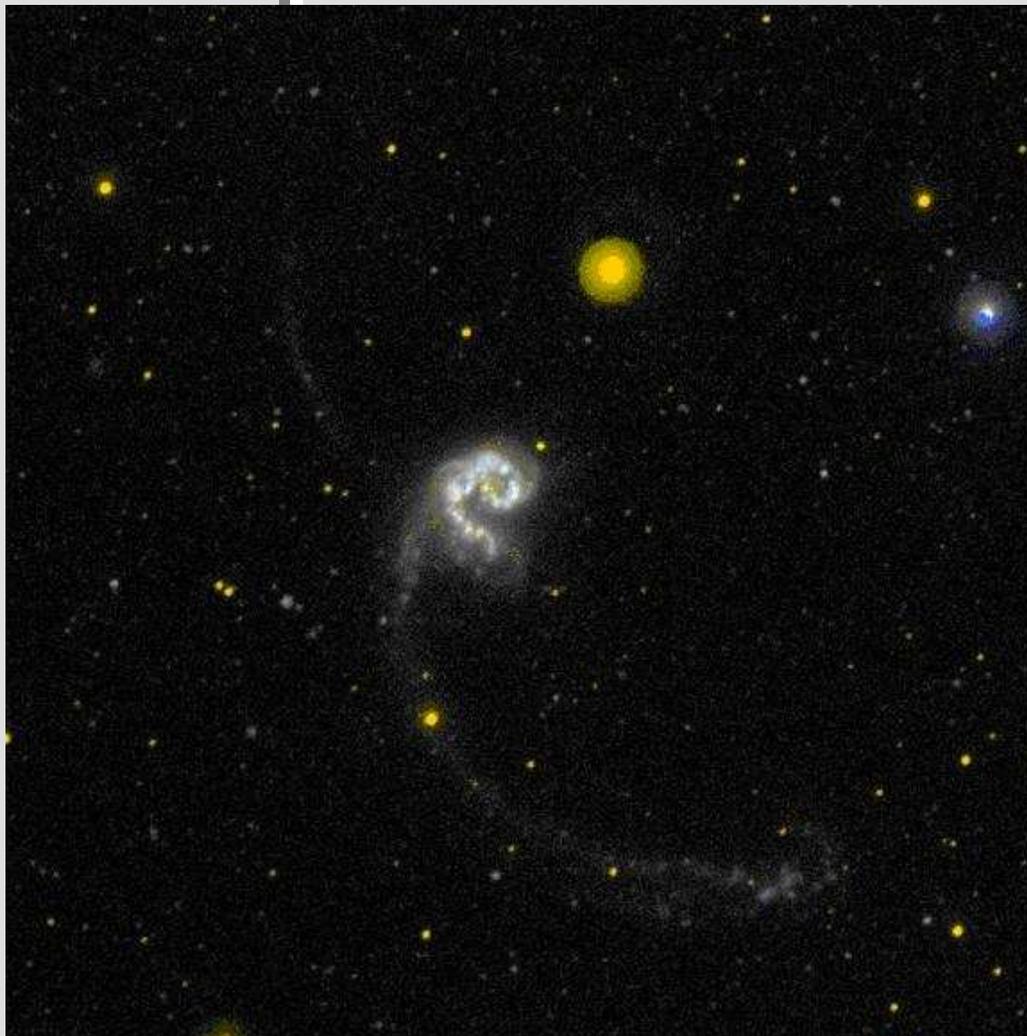
But looks can be deceiving: "Actually, the tails are quiet places," says Hibbard. "They're the peaceful suburbs of the Antennae." He came to this conclusion using data from GALEX, an ultraviolet space telescope launched by NASA in 2003.

The true violence of colliding galaxies is star formation. While individual stars rarely collide, vast interstellar clouds of gas do smash together. These clouds collapse. Gravity pulls the infal-

ling gas into denser knots until, finally, new stars are born. Young stars are difficult to be around. They emit intensely unpleasant radiation and tend to "go supernova."

GALEX can pinpoint hot young stars by the UV radiation they emit and, in combination with other data, measure the rate of star birth. "Surprisingly," Hibbard says, "star formation rates are low in the tidal tails, several times lower than what we experience here in the Milky Way." The merging cores of the Antennae, on the other hand, are sizzling with new stars, ready to explode.

So what should you do when your galaxy collides? A tip from



GALEX: head for the tails.

*This GALEX UV image of the colliding Antennae Galaxies shows areas of active star formation, which is not in the tidal tails as one might expect.*

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.

# THE BACK BAY AMATEUR ASTRONOMER'S OBSERVER

## BBAA INFO

The BBAA meet the first Thursday of every month. While school is in session we meet at the VA Beach TCC campus in the Pungo building. Summer meetings are usually held at the Chesapeake COX campus. The February meeting will be on Thursday February 1st at 7:30 PM at the TCC campus in Virginia Beach.

## BBAA INTERNET LINKS

### BBAA WEB SITE

<http://groups.hamptonroads.com/bbaa/>

### YAHOO GROUP

<http://groups.yahoo.com/group/backbayastro>

### BBAA OBSERVER NEWSLETTER

<http://www.backbayastro.org/newsletters/newsletter.shtml>

## WHERE IS THE MEETING?

### TIDEWATER COMMUNITY COLLEGE CAMPUS

The TCC Campus is located in Virginia Beach off of Princess Anne road. The following should help you locate the campus.

#### FROM Interstate I-64:

Proceed to the I64 / I264 junction and take I264 East .  
Take the S. Independence Exit, 17A, right hand lane  
(.000000048134 AU).

Turn LEFT onto Princess Anne road  
(.000000010322 AU).

Turn LEFT onto Community College Place  
(.000000002131 AU).

At the Stop Sign turn right and follow the road around to the left and park in one of the parking lots.

The meeting is held in the Pungo Building which is on the right hand side of the pathway that splits the two major parking lots. The Astronomy classroom is in the far back right hand corner of the building.

### COX COMMUNICATIONS CAMPUS

The COX Communications Campus is located in Chesapeake's Greenbrier section. The following should help you locate the facility.

#### FROM Interstate I-64:

Take exit 289B (between the Indian River & Battlefield exits).  
South on Greenbrier Parkway (.7382 miles).  
Turn RIGHT onto Eden Way West (.9231 miles).  
Turn RIGHT on Crossways Blvd (.88901 miles).  
Turn Right into the Cox Campus

The meeting is usually held in the Silver room located on the North side of the facility. Enter and tell the guard that you are with the BBAA and they will issue a badge and direct you to the room.

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**What do you want to do?**

## OBSERVER INFO

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/newsletters/newsletter.shtml>

Please submit articles and items of interest no later than the 18th of February for the March issue. Please submit all items to:

[ObserverBBAA@cox.net](mailto:ObserverBBAA@cox.net) / [chuck@jagowds.com](mailto:chuck@jagowds.com)

OR

BBAA Observer  
P.O. Box 9877  
Virginia Beach, VA 23450-9877

## RRRT Outreach Volunteers Sought

A major focus (pun intended) of Norfolk State University's Rapid Response Robotic Telescope observatory will be public outreach and education. NSU will make telescope time available for use by the public schools of Hampton Roads.

We are seeking volunteers willing to be salesman and consultants for the observatory's outreach efforts. You will be called upon to arrange visits to schools to promote and explain the possible uses of the observatory. You will also be asked to make yourself available to students and classes as a guide in the effective use of the scope, helping students create and submit their observing programs. You will be responsible for helping the students make use of the collected data/images. You will broker the expertise within the club and the greater community to assist students in processing images or reducing data.

You don't need to be an expert, but you do need to be committed. Only serious volunteers need respond. You will have to become familiar with the control software and the telescope's capabilities. The RRRT committee members can help you with that and we expect there will be some training sessions at NSU. You will need to know, or learn, at least the rudiments of CCD imaging. Most of all you will have to be willing to devote your time.

We need to have a cadre of volunteers for next school year. We hope to create a standard presentation for use in the classroom by then. There will also be promotional materials such as brochures, handouts and posters provided.

Contact Ted Forte email: [twforte@cox.net](mailto:twforte@cox.net) home (757) 427 3894 cell 636-1662 to learn more.

*Ted Forte*



RRRT Observatory Progress as of 01/22/07

## BBAA Reaches Out Garden Stars and "Sky Search"

On Saturday night 11/25/06 a small BBAA contingent, composed of Kevin and Barb Weiner, Larry Channel, and me, gave a Garden Stars presentation to a group of young kids, Cub Scouts, and their parents at the Norfolk Botanical Garden. After a brief slide show we took them outside to look through our telescopes and showed them some double stars, open and globular star clusters, and the 5-day-old Moon. Many of the parents commented on how much they enjoyed it, and would come back again.

Then on Monday night 11/27 several of us from the BBAA helped a troop of Girl Scouts earn their "Sky Search" merit badge. Inside we covered the discussion topics they had to know, and outside we gave them and their parents a "tour" around the night sky. The church the troop meets in was gracious in turning off the parking lot lights for us so the girls could see some stars.

When we first went outside, about 7pm, it was partly cloudy, but the first quarter Moon was easily visible through the haze. By 7:30 the sky had cleared nicely and we were able to show off some of our favorite celestial wonders, like the Pleiades, the Andromeda galaxy, the Double Double and Albireo. I first showed them the Moon under low power in my ShortTube 80 refractor, and then under higher power in my Dob. Tom Pearson then showed them a real closeup of Luna in his SCT. After all the girls, leaders, and parents had seen the Moon, we turned our scopes on other objects.

Kevin had his laptop there running Starry Night Pro, and showed them the constellations and their mythological portrayals on the screen. He also demonstrated how stars are actually moving, and how their proper motion will in time change the appearance of the constellations.

I know that Tom, Kevin and I had a good time, and so did the Girl Scouts. I think the parents enjoyed it more than the girls did!

*George Reynolds*

## Jupiter - What Filter To Use?

At the Green Bank Star Party in WV I won a set of 12 color filters, donated by Burgess Optical. Wow, I said, I don't even use filters, maybe a sign from above? Anyway, since I had all of these, I wanted to see what they can do. Jupiter is easy and I can do it from my driveway. Here are my notes and conclusions.

Scope - W.O. Megrez 80II ED triplet, a W.O. dielectric 1.25" diagonal, a TeleVue 5mm Nagler ( giving me 112X) all on a LX75 mount.

Time 9 P.M. July 1<sup>st</sup>, clear sky but seeing was bad, a 6 out of 10.

I will use a scale up or down as compared to no filter.

**No filter** - 2 bands with some detail between. One moon in middle of planet with a its shadow to the far edge. Neat !

**82A - Light Blue** - made white lines under bands, less detail, rating - 1.

**80A - Med. Blue** - no help, less detail, rating - 2.

**38A - Dark Blue** - Looked like the "Blue Snowball", rating - 2

**47 - Violet** - Like looking at the Sun in calcium, barely could make out, rating - 4

**23A - Light Red** - Can just make out band - all red planet, rating - 2

**21 - Orange** - see bands but darker image, rating - 1

**25A - Red** - Barely visible bands, too dark, rating - 2

**58D - Dark Green** - better contrast on both bands but overall pic no improvement, rating - 0

**56 - Green** - Finally, better contrast around bands, pleasing to eyes, rating + 1

**11 - Yellow** - No increase in detail but more pleasing (not as bright), rating + 1

**8 - Light Yellow** - Good view, less bright with more detail - best so far, rating + 2

**12 - Yellow** - Nice view, less detail than with #8, rating + 1.

The outcome? The Light Yellow was the best of all the filters, but by switching from no filter to the # 8, I noticed that even though the Light Yellow showed a little more contrast and knocked down the brightness by 1 or 2 notches, still the best overall viewing of Jupiter was - NO FILTER AT ALL in my opinion. Next report - using filters on the Moon.

*Dale Carey*

## Sleeper McNaught

We may all heard of comet McNaught several months ago or even a year ago. It sounded to me like another fuzzy magnitude 4 or 6 object that Kent would snag nearly naked eye in Mark's backyard. No one expected the display this little ball of ice would put on for the inhabitants of Earth, especially the lucky ones in the Southern Hemisphere. Steve Hamilton was able to capture an image at Cornland before it disappeared down south. The remaining images were from down under.

*Chuck Jagow*



Image Credit: STEVE HAMILTON



Image Credits: Gordon Garradd  
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# THE BACK BAY AMATEUR ASTRONOMER'S OBSERVER

## JUPITER JAM

The Virginia Beach Plaza Middle School recently hosted the Jupiter Jam session. This musical event featured the Virginia Beach Symphony playing space themed music including popular favorites such as the Star Wars theme, Star Trek theme and more conserva-



tive selections such as Mozart's Jupiter Symphony. In light of the space theme the school invited BBAA to set up a table and telescopes.

BBAA members Ted Forte and his Wife Hali, Georgie



June, Kent Blackwell, Dale Carey and Chuck Jagow supported the event. Inside Ted and his wife set up a very extensive table extolling the BBAA club's virtues right alongside the NASA table. Chuck Jagow set up

his LXD-75 rig with his 6" scope with a Thousand Oaks solar filter attached. Piggybacked on the SN6 was a Coronado Solarmax 60 HA scope. The two scope combo rig provided a view of sunspots in the 6" scope and hydrogen alpha views in the Solarmax. The sun was not real cooperative and only yielded a small group of sunspots and one small flare at the lower limb. While Dale and Chuck hawked views outside, Ted and company stayed inside generating interest in the club at large. Georgie split her time between both camps. All in all it was a fairly productive day, quite a few people enjoyed views through both scopes and were amazed at what they saw.

*Chuck Jagow*

## Orion Nebula and a Geosynchronous Satellite

By Rick Scott

Geosynchronous satellites are in an orbit that make them appear to be in the same location in the sky relative to the ground. If you were to attach a telescope to a fixed mount so that it never moves while it's aimed at one of these satellites, it would always be close to the center of the field. This is the way satellite television works, the antenna only has to be aimed during the initial installation.



This doesn't work for the stars and other objects far out in the sky and they appear to move as the Earth spins on its axis. For this photograph of the Orion nebula, the telescope was guided so that the stars were in a fixed location relative to the telescope's view. This way they don't make star trails in the photograph.

*Submitted by George Reynolds*

# FEBRUARY 2007

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				<b>1</b> BBAA MEETING @ TCC	<b>2</b>	<b>3</b> Full Moon 
<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b> SKYWATCH @ NWRP	<b>10</b> CLOVERWATCH @ FRANKLIN Last Qtr 
<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b> AZALEA GAR- DENS MS PAR- ENT NIGHT	<b>16</b>	<b>17</b> NIGHTWATCH @ CHIPPOKE New Moon 
<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b> GARDEN STARS @ NBG First Qtr 
<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>			