



EPHEMERALS - JUNE 2007

DATE	WHEN	WHAT & WHERE
8	9:00a	Space Station @ Hermitage Elementary School
8	Dusk	Skywatch @ NWRP Equestrian Area
9	6:00p	June Meeting @ Richard Dickson's Hacienda
15	7:00p	Nighthike @ NWRP Ranger's Station
19	12:00p	Nightwatch @ Chippokes Plantation
23	8:00p	Garden Stars @ Norfolk Botanical Gardens
Get Ready For For The Summer Picnic Next Month!		

LOOKING UP

Hello All,

What a great month and there was plenty going on. Weather wasn't the greatest at the ECSP, but everyone had a good time, as usual. Kent brings something to the club that is the highlight of the year for a lot of folks, including me. Thanks Kent!!!

The weather sure got good after that, the rest of the month was perfect. I left on the 16th and spent 9 perfect days and nights in W.Va. I went up to the mountains to participate in the Skyline Drive Poker Run, my other love, riding my motorcycle in the mountains and back roads. Had a blast, and of course had to bring a scope. Glad I did, anyone who has been to W.Va. knows how good it can get, and I had a few nights that I would rate as 10's. Next month's meeting will be at Richard Dickson's home, for what has become a yearly event. Thanks again Rich, but once again I will miss it. I will be in Kansas visiting my granddaughter Emma, and of course her mom and dad. On the way back I will attend the Heart of America Star Party put on by the

CONTENTS

Ephemerals	1
Looking Up	1
June Meeting Minutes	2
Observer's Corner	2
NASA Space Place	3
BBAA INFO	4
East Coast Star Party	5
Proposed BBAA Constitution Change	6
June Calendar	8

That's All Folks!

Astronomical Society of KS. Never been, only 60 miles off I-70, what the heck. I'll have my usual video for all to see, also remember that the July meeting is at the annual Picnic at NWRP. Hope everyone gets out and under the skies as much as you can, because you know, hot, muggy weather is on the way. Good luck to us all.

Dale Carey

IMPORTANT NOTICE!

A proposition for amending the club constitution to allow a free associate membership to be offered to youngsters was discussed at the May meeting. Attending members discussed the language of the amendment which appears later in the newsletter to be read by the general membership for approval or rejection by popular vote in either July or August. Important details inside on page 6.

MAY'S MEETING MINUTES

The May meeting of the Back Bay Amateur Astronomers was called to order by President Dale Carey on Thursday May 3rd, 2007 at 7:30 PM at TCC in Virginia Beach.

Members in Attendance: There were twenty two people in attendance at the meeting including one new member, James Kresky, who joined during the meeting which earns him a big welcome aboard! Members in attendance included: Neill Alford, Bruce Bodner, Kenny Broun, Dale Carey, Larry Channel, Jeff Dunn, Ted Forte, Steve Hamilton, Stan Hubbard, Chuck Jagow, Karen Jagow, Georgie June, Ben Loyola, Matt McLaughin, Al Palacio, Mike Pereira, Lee Perkins, Mike Przytula, Kevin Swann, George Reynolds and Kevin Weiner.

Treasurer's Report: Treasurer Barbara Weiner was absent, however Kevin reported that the club has just about the same amount as reported last time in the treasury.

Secretary's Report: Chuck Jagow reported membership is currently at 92 members with 4 members needing to pay their dues.

Astronomical League Correspondent's Report: Georgie presented Ted Forte the Advanced Lunar Certificate.

Old Business: The club has received several qualified entries for the BBAA Scholarship. The Scholarship Committee must now convene and select a winner.

The Night Sky Pocket Guides were discussed and it was determined that we the group would not sell them. They would be provided upon receiving a suggested donation of \$4.00 each for the club. This would not require the club to reorganize its book keeping practices.

New Business: There was none.

Rapid Response Robotic Telescope Project Report: Ted Forte reports that the building is done and the observatory should be coming on line sometime later this summer.

Presentation: The meeting's presentation consisted of the proposed amendment to the BBAA constitution that will allow for two new forms of memberships. The ensuing brainstorming helped to chisel out the final wording which will be published for review here in the newsletter.

In Conclusion: The meeting was adjourned at 8:48 PM.

Chuck Jagow

Observer's Corner

April—2007

Rick Bish

BBAA-ers: I met Chuck Wood Tuesday night in Hampton. By way of introduction, Chuck writes the article, "Exploring the Moon," for Sky and Telescope magazine, is the editor of the "Lunar Picture of the Day" web site, is the author of The Modern Moon, A Personal Perspective, and created The Lunar 100. Chuck Wood is a professor in Wheeling West Virginia at Wheeling Jesuit University.

Bird and I met at a little pizza place called, Mona Lisa's on Buckroe avenue around 6:00. We sat down and had pizza and about the same time the pizza came out, Chuck walked in the door. He was late because he got caught in that 8-mile traffic jam on 64-welcome to Hampton Roads!

A mother and her son joined us as well and Chuck asked us about our interest in astronomy and about the proliferation of astronomy clubs in the area. When Bird and I told him about the size of the BBAA (about 120 or so), he seemed quite impressed and wondered if the presence of NASA or the military had anything to do with the large number of people in the club. I believe we answered yes to both and added that the area here is also just quite populated-all cities considered.

We ate pizza and then all met at the Jones Planetarium, about a mile away. The Jones planetarium was quite impressive-a fully working planetarium now thanks to the hard work of the VPAS people. The planetarium went to seed in the mid-seventies and was restored by VPAS a few years ago. The planetarium is about the same age and size of the Chesapeake planetarium. The neat thing about Jones is that the seats are fully cloth upholstered and are all in a semi reclining position, so the star shows are easier on the neck.

Chuck's presentation was on the geographical perspective of the satellite, Titan and how images have changed over the years. It was amazing how much data is available on this tiny dot within our eyepieces, every time we look at Saturn. He spoke about the content of the atmosphere and how to interpret many composite scientific photographs as to land formations. He even had one photograph taken on Titan's surface that showed rock formations.

At the end of Mr. Wood's presentation, he sat in the audience (there were less than 10 of us there) we turned off the lights, and the stars on, and Bird directed us in a tour of the night sky complete with Milky Way. All of us spontaneously (Chuck too) shared experiences about observing the night sky and what it meant to us.

Many of us left about 9:00 PM. It was a great, simple, and memorable night. Thanks Chuck and thanks Bird, for all your

(Continued on page 7)



The Ions of Dawn

By Patrick L. Barry

This summer, NASA will launch a probe bound for two unexplored worlds in our solar system's asteroid belt-giant asteroids Ceres and Vesta. The probe, called Dawn, will orbit first one body and then the other in a never-before-attempted maneuver.

It has never been attempted, in part, because this mission would be virtually impossible with conventional propulsion. "Even if we were just going to go to Vesta, we would need one of the largest rockets that the U.S. has to carry all that propellant," says Marc Rayman, Project System Engineer for Dawn at JPL. Traveling to both worlds in one mission would require an even bigger rocket.

This is a trip that calls for the unconventional. "We're using ion propulsion," says Rayman.

The ion engines for the Dawn spacecraft proved themselves aboard an earlier, experimental mission known as Deep Space 1 (DS1). Because ion propulsion is a relatively new technology that's very different from conventional rockets, it was a perfect candidate for DS1, a part of NASA's New Millennium Program, which flight-tests new technologies so that missions such as

Dawn can use those technologies reliably.

"The fact that those same engines are now making the Dawn mission possible shows that New Millennium accomplished what it set out to," Rayman says.

Ion engines work on a principle different from conventional rockets. A normal rocket engine burns a chemical fuel to produce thrust. An ion engine doesn't burn anything; a strong electric field in the engine propels charged atoms such as xenon to very high speed. The thrust produced is tiny-roughly equivalent to the weight of a piece of paper-but over time, it can generate as much speed as a conventional rocket while using only about 1/10 as much propellant.

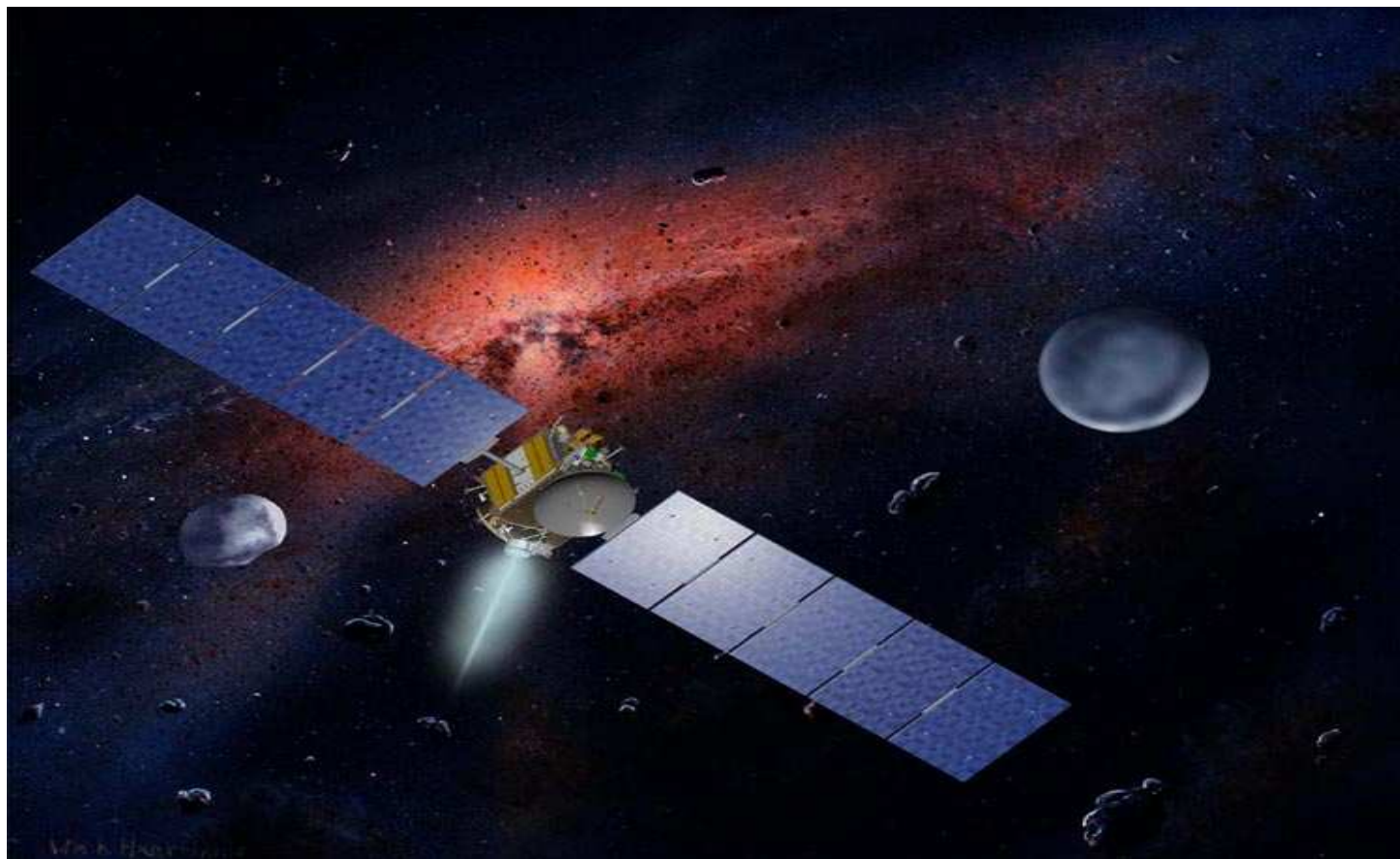
And Dawn will need lots of propulsion. It must first climb into Vesta's orbit, which is tilted about 7 degrees from the plane of the solar system. After studying Vesta, it will have to escape its gravity and maneuver to insert itself in an orbit around Ceres-the first spacecraft to orbit two distant bodies. Dawn's up-close views of these worlds will help scientists understand the early solar system.

"They're remnants from the time the planets were being formed,"

(Continued on page 7)

Image Caption:

Artist's rendering of Dawn spacecraft, with asteroids. Largest are Vesta and Ceres. Credits: Dawn spacecraft-Orbital Sciences Corporation; background art-William K. Hartmann, courtesy UCLA.



THE BACK BAY AMATEUR ASTRONOMER'S OBSERVER

B B A A I N F O

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 June meeting will be on Saturday June 9th sometime during Richard Dickson's summer picnic in Yorktown.

Richard says: "EVERYONE IS WELCOME!"

WHERE IS THE MEETING?

RICHARD & KAREN DICKSON'S 6th SUMMER PICNIC

**821 Dandy Loop Rd
Yorktown, VA
(757) 874-5214**

- Coming from the Southside you can either come all the way up on I64 W or come up from I664 and merge with I64W by the Coliseum. Your choice depending upon the traffic.
- From points North of Yorktown, hop on I64E and come on down.
- Take exit 258-B off of I-64. This is Route 17 North (also called J. Clyde Morris Blvd). Go 6 miles.
- Turn right onto Rt 173 East just past the Midas Muffler shop, follow this for 4 miles.
- Rt 173 will end (just past Richard's biggest light pollution source - the oil refinery) and you enter the village of Dandy. Rt 173 then turns into Dandy Loop Rd (a 2.5 mile loop).
- Stay to your right around the loop. My house is 1.0 miles from the "Welcome to Dandy" sign when you enter Dandy.
- Our house is a one story red brick ranch style house set back 120 feet or so from the road.

For time planning, Richard notes that It takes about 25 minutes to get to his house from I-64 if the traffic is not bad. You can plan how long it takes to get to his house by adding this to the time it takes to get to mile marker 258 on I-64. Marker 258 is about a dozen miles from the HRBT.

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>

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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 20th of June for the July issue. Please submit all items to:

ObserverBBAA@cox.net / chuck@jagowds.com

OR

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

THE BACK BAY AMATEUR ASTRONOMER'S OBSERVER

East Coast Star Party

The spring East Coast Star Party was a success even though the weather was a big disappointment. Some attendees arrived early on Thursday, May 10th. A team of people from Hampton Lodge Camping Resort was busy cutting down a cedar tree when I pulled into the observing area, the tree that had obscured the southern horizon for many years. Once the debris is removed it'll give lots more room for people to set up telescopes at future East Coast Star parties. I think we all owe a bit of gratitude to the staff at Hampton Lodge. They always make certain the grass is cut, and have the grounds in tip-top shape for the star party.



The transparency and seeing were excellent that night, with a naked-eye limit of about 6.1 magnitude. Most of us observed until moonrise at 2:30 am.

We awakened to clear skies on Friday but as the afternoon progressed the sky clouded considerably. Since the weather was threatening we decided to gather in the recreation hall where Dee Diffrient fed dinner to about twenty hungry stargazers. Afterwards we socialized for a while and returned to the observing area. Although the skies looked like rain it never did so everyone gathered around their telescopes and chatted. Even though the skies did not provide any excitement something else did. Suddenly an explosion was heard followed by a bright white flash. We joked that it sounded as if Norfolk had exploded. Then, the sky turned orange-red. An electrical short in one of the campground trailers caused a propane tank to explode, sending a fireball into the sky and the trailer parked next to it. Both trailers burned to the ground in 15 minutes, and damaged another nearby. Every rescue and fire vehicle in Currituck County, NC responded. Fortunately



the trailers were unoccupied. The heat from the fire was so intense it could be felt more than 600 feet away.

Saturday wasn't looking too promising but actually the skies were clear most of the day. About twenty of us took the usual jaunt to Mel's Diner in Grandy, NC for brunch. When we returned we prepared our telescopes, hoping to have an opportunity of seeing stars that evening.

Attendance was down from October 2006, but about 60 people still showed up for the cookout. One couple came to ECSP from Cincinnati, OH. Lou and Mary Freeze said although they didn't get to see any stars they thoroughly enjoyed themselves. I met them on an eclipse cruise in the South Pacific two years ago and was pleased they decided to visit.

I made the decision to proceed with the cookout outdoors in the observing field. As is traditional Dr. Robert Hitt cooked hamburgers and hot dogs. Just as the first burgers sizzled on the grill the rain and wind came. We all survived by huddling around in mini-groups under canopies. Actually, it was kind of fun and cozy. It resembled three small cocktail parties in the rain.



The rain stopped in time for the door prize drawing. Kenny Broun walked away with SkyTools 2 as well as a set of Orion vibration pads. John Raymond won Software Bisque's The Sky 6 while Larry Channel and Kelly Proffitt each won Software Bisque's Seeker Solar System Simulators. Joyce White won a Tele Vue 8mm eyepiece and Steve Hamilton won a 20mm Arcturus eyepiece donated by Richard Dickson. Dale Carey and Mike Przytula each won a pair of Barska7x35 binoculars. Daryl Douglas took home the top prize of a Celestron 114GT GoTo telescope. A Meade ETX-60 telescope was donated by Chuck Jagow. Dale Carey had the winning ticket but gave the ticket to one of our young attendees, Jenna Elliot.



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(Continued on page 7)

THE BACK BAY AMATEUR ASTRONOMER'S OBSERVER

PROPOSED AMENDMENT TO THE BBAA CONSTITUTION

During the April BBAA meeting it was discussed to setup some form of a youth membership for the club. Initially it was envisioned as a free membership for kids to encourage young people's interest in astronomy. Ted Forte took up the challenge of initially looking at the BBAA Constitution and making a recommendations for an appropriate change.

At the May meeting the recommended changes were presented and hashed over until all were pretty much in agreement that it was sound.

In order for the changes to be made to the BBAA Constitution, the changes must be presented to the membership and then the changes must be voted on by the membership.

Since the meetings draw only about a third of the membership at any time, the changes will be presented here for the membership to review. Then next month a special email campaign will commence to solicit the member's vote upon the subject. The club Secretary shall conduct the email voting campaign.

The following text has been taken from the current Article III of the BBAA Constitution for reference:

ARTICLE III - MEMBERSHIP

Section 1. Types of Membership. Membership shall be of one type: Regular.

Section 2. Eligibility. Subject to the limitations contained in this and other Articles of the Constitution and By-laws, a person with an interest in astronomy or a related science is eligible for membership. The BBAA shall not discriminate with regard to age, sex, race, creed or national origin.

Section 3. Regular Membership. A regular member shall be entitled to hold office in the Organization, vote on Organization matters and receive the Organization publications. Directly related family members of the regular member shall be permitted to participate in meetings and other activities, but shall not be entitled to hold office in the Organization or vote.

Section 4. Guests. Meetings are open to the public. Guests are invited to attend Organization meetings, but shall not be entitled to hold office in the Organization, vote on Organi-

zation matters or receive the Organization publications.

Section 5. Expelling of Members. The elected officers of the Organization shall have the power to expel any member by majority vote of the officers for conduct damaging to the property or reputation of the BBAA or its members. Failure to pay financial obligations due the Organization shall result in termination of membership.

Section 6. Disposition of Dues and Fees. Any member who resigns or is expelled from the Organization shall also forfeit dues, fees or money paid to the Organization, subject to waiver by a majority vote of the Organization Officers.

The following text represents the proposed changes to the BBAA Constitution with the changes in red:

ARTICLE III - MEMBERSHIP

Section 1. Types of Membership. Membership shall be of **three types.**

- a. **Regular Membership**
- b. **Associate Membership**
- c. **Honorary Membership**

Section 2. Eligibility. Subject to the limitations contained in this and other Articles of the Constitution and By-laws, a person with an interest in astronomy or a related science is eligible for membership. The BBAA shall not discriminate with regard to age, sex, race, creed or national origin.

Section 3. Regular Membership. **Upon payment of annual dues a member becomes a Regular Member for a period of twelve months.** A regular member shall be entitled to hold office in the Organization, vote on Organization matters and receive the Organization publications. Directly related family members of the regular member shall be permitted to participate in meetings and other activities, but shall not be entitled to hold office in the Organization or vote **without payment of annual dues.**

Section 4. Associate Membership. **Any person under the age of 18 shall, upon application, be an Associate Member of the organization without payment of annual dues. Associate membership shall remain in force until the person attains their 18th birthday or upon graduation from high school. Associate members shall be entitled to participate in meetings and other activities, but shall not be entitled to hold office in the Organization or vote. Associate members shall not be**

(Continued on page 7)

THE BACK BAY AMATEUR ASTRONOMER'S OBSERVER

(Proposed Amendment Change, Continued from page 6)

counted for purposes of determining a quorum or for determining the number of members required to achieve an approval percentage of members. Organization publications may not be mailed to Associate Members at club expense. Upon payment of partial dues equal to the current Astronomical League dues, an Associate Member shall be reported to the League as a Regular Member, but shall have no other privileges of Regular Membership without payment of full annual dues.

Section 5. Honorary Membership. Any individual nominated and approved by majority vote at a regular meeting in which a quorum as defined by Article II Section 2 of the Organization By-Laws is present, shall be considered an Honorary Member for life. Honorary Members shall have all the rights and privileges of Regular Members without payment of dues.

Section 6. Guests. Meetings are open to the public. Guests are invited to attend Organization meetings, but shall not be entitled to hold office in the Organization, vote on Organization matters or receive the Organization publications.

Section 7. Expelling of Members. The elected officers of the Organization shall have the power to expel any member by majority vote of the officers for conduct damaging to the property or reputation of the BBAA or its members. Failure to pay financial obligations due the Organization shall result in termination of membership.

Section 8. Disposition of Dues and Fees. Any member who resigns or is expelled from the Organization shall also forfeit dues, fees or money paid to the Organization, subject to waiver by a majority vote of the Organization Officers.

(Observer's Corner, Continued from page 2)

hard work and making it all happen.

May—2007

George Reynolds

I didn't go to Chippokes last night, as I wasn't feeling well, but I'll bet it was a great night. It was nice and clear in my backyard in light-polluted Virginia Beach!

I got a call from my son Daniel about 8:30 pm. He and his new bride Jessica were at Lynnhaven Mall and they asked, "What is that bright thing in the sky next to the Moon?" I told them it's Venus, whereupon they said they'll come over to see it through the telescope.

When they arrived about a half-hour later, I set up my 10-inch Dob in the back yard and gave them a close-up view of bright Venus (almost at half-phase) and the lovely crescent Moon.

When I doubled the power with a Barlow lens, they gasped in delight at the detail on the Moon's surface.

I pointed out a few constellations, like Leo, Virgo, and Gemini, and showed them how the Big Dipper points to Arcturus and then to Spica. When I showed them Saturn at 114x they were impressed. They clearly saw the rings and some of Saturn's moons. I also showed them (and split) the double star Castor.

It was a brief but pleasant and satisfying observing session.

(ECSP, Continued from page 5)

For me the highlight of the entire weekend was being presented with a wonderful plaque. It consist of a rosewood base with a circular Plexiglas disk engraved, "The Best We Have Ever Seen" and continued, "Presented to Kent Blackwell from The Back Bay Amateur Astronomers in appreciation for hosting the many East Coast Star Parties." I was very touched, and it came as a total surprise. Thank you all so much.

I want to thank everyone who made the effort to attend. All we can do is hope for better weather next time. "Well, Kent, I must say at least you don't throw a dull party" was the comment from many, as all seemed to have a genuine good time.

The next star party will be in the late fall of 2007. I'll announce the date months ahead of time.

Kent Blackwell



(NASA Space Place Continued from page 3)

Rayman says. "They have preserved a record of the conditions at the dawn of the solar system."

Find out about other New Millennium Program validated technologies and how they are being used in science missions at <http://nmp/TECHNOLOGY/infusion.html>. While you're there, you can also download "Professor Starr's Dream Trip," a storybook for grown-ups about how ion propulsion enabled a scientist's dream of visiting the asteroids come true. A simpler children's version is available at <http://spaceplace.nasa.gov/en/kids/nmp/starr>.

JUNE 2007

BBAA EVENTS	SPECIAL OUTREACH	ASTRONOMICAL EVENTS
08 = SKYWATCH @ NWRP, Dusk	08 = Space Station @ Hermitage Elementary School , 1701 Pleasure House Road, Virginia Beach, 7:30 AM - 3:00 PM, Steve Hamilton POC	08 = LAST QUARTER
09 = BBAA Meeting @ Richard Dickson's house, 7:30 PM		
09 = CLOVERWATCH @ Franklin Fairgrounds, Dusk CANCELLED		
15 = NIGHT HIKE @ NWRP Ranger Station, 7:00, Ted Forte POC		14 = NEW MOON
19 = NIGHTWATCH @ Chippokes State Park, Dusk		
		22 = FIRST QUARTER
23 = GARDENSTARS @ The Norfolk Botanical Gardens, 7:00 PM		
		30 = FULL MOON