

CONSTELLATION

An Official Publication of the Bucks-Mont Astronomical Association, Inc.

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BMAA News

Well, it has been a long cloudy January, February and March here in southeastern Pennsylvania. When we have had clear nights it has been very cold. A lot of rain and flooding in Bucks County. Our March StarWatch dates got the big cloud rain scenario. In other words, it has really stunk big time and we are ready for some warm weather and clear nights! There was a semi-clear night for the Lunar Eclipse on February 22nd. A few BMAAers had more sense than most of us and went to the Winter Star Party in the Florida Keys. Bruce Collier and Bob Post sent us some pictures. Lou Vittorio was doing some serious observing in his home using SLOOH.com. Let's keep our fingers crossed for a good April, May and June!

Venus and Jupiter-Montgomeryville, PA-31 January 2008

Courtesy of Chris Sommers



BMAA Gophers

Position	Name
President	Dwight Dulsky
Vice President	Bernie Kosher
Treasurer	Ed Radomski
Secretary	Herb Borteck
Star Watch Coordinator	George Reagan
Constellation Editors	Chris Sommers and Scott Petersen
Webmaster	Jim Moyer

For More Information about BMAA Go to www.bma2.org.

Online Remote Telescope Control and Observing with www.Slooh.com

➤ by Lou Vittorio

Has this ever happened to you?

- You wanted to observe the latest comet, but the temperature is close to absolute zero outside.
- You wish to view the crescent moon and study a crater, but it is cloudy.
- After a business trip return on the red eye, you pull into your driveway at 1 am and notice the sky is the clearest it has been in awhile.

In each of these all too frequent times, it is just not feasible to pull out your gadget bedecked telescope and get some observing time in. What to do? Dial your browser to www.slooh.com and for a modest fee control and observe LIVE through an online telescope. Slooh sells observing time for \$19.95 (300 min) or unlimited time for a year for \$99.00. But really, what is Slooh?

Slooh was started in 2003 as an online telescope control and viewing program. It is currently listed as the only online "Live" telescope service. The Slooh team constructed a remote observatory in the Canary Islands (off the northeastern coast of Africa) that employs two observing domes equipped with the following scopes:

Dome 1 - Optimized for Deep Sky observation

- 14-inch Schmidt Cassegrain telescope, with a 2100mm focal length
- 34mm diameter refractor, with a 135mm focal length

Dome 2 - Optimized for Planetary observation

- 14-inch diameter Schmidt Cassegrain telescope, with a 3910mm focal length
- 85mm diameter APO refractor telescope, with a 480mm focal length

The domes also include an all-sky camera with a fisheye field of view of 175 degrees. The main scopes are equipped with CCD cameras with up to 3 megapixels of resolution.

Two additional Slooh sites are currently under construction in Chile and Australia, and when complete will enable full time sky viewing from anywhere you can access the internet. The author first became aware of Slooh after winning a raffle held at the BMAA holiday meeting in January. The winning ticket (pulled out of a hat by my son) provided me with 500 minutes of Slooh observing time and has further led to the writing of this article with no regrets (except maybe to the reader). Getting setup with Slooh is simple if you are comfortable with online transactions. Just navigate your Flash enabled browser to www.slooh.com and follow the prompts. If you are not ready to sign up, check out what they have to offer at <http://www.slooh.com/help.php>?

Once your account is setup with a username and password (just like an e-mail account), you enter the Slooh Launch Pad, select your observing (mission) interface and begin observing. The mission interface also has an online chat room, a user forum, radio astronomy programs and a camera tool to take and store pictures.

Object viewing is supplied in two ways: 1) by the telescope editor or 2) through coordinate missions. For the former, a schedule is available online which provides the time, date and object planned for viewing. Each object is "served" for 5 or 10 minutes. An example schedule is provided below.

Time (UTC)	Mission Name	Scientific Name
Mar-20 20:02	Saturn	
Mar-20 20:07	Moon	
Mar-20 20:12	Pinwheel Galaxy	M33
Mar-20 20:17	Blue Spiral	NGC 1232
Mar-20 20:22	Reflection Nebula	NGC 1999
Mar-20 20:27	Flame Nebula	NGC 2024
Mar-20 20:32	Camel's Eye Nebula	NGC 1501
Mar-20 20:37	Reflection Nebula	M78

(cont.)

<u>Time (UTC)</u>	<u>Mission Name</u>	<u>Scientific Name</u>
Mar-20 20:42	Orion Nebula	M42
Mar-20 20:47	Flaming Star Nebula	IC 405
Mar-20 20:52	Open Cluster	NGC 2232
Mar-20 20:57	Denning's Galaxy	IC 342

To plan your viewing, you will need to convert UTC to your local time. For the eastern coast of the US, this currently entails subtracting 4 hours from the provided UTC time (when not in daylight savings time, subtract 5 hours). So yes, you can take in your favorite object at 5 pm local time while catching some rays on the back porch!

Coordinate missions are the second viewing method provided by Slooh. As a member you can reserve personal time slots that will enable you to navigate the scope to the celestial coordinate and object of your choosing. Something temporal maybe? Or a Messier object of lifelong interest? You choose. The reservation tab on the Launch Pad is quite straightforward and easy to use, but you will need to make your reservations several days in advance.

Picture 1 and Caption
Nebulas M42 and M43 (top) in Orion
20 Jan 08 21:34:15 UTC | Dome 2 Wide Field



Upon viewing objects, the user has options to zoom in, pan, change visual properties (e.g. brightness, contrast), and go to high resolution and magnification. Sky ratings are provided by users and give an indication of whether high magnification will be useful. The objects are slowly imaged from a faint fuzzies to clear color pictures. This is completed in real time using their patented LightMachine instant imaging technology. This technology is transparent to the user and seems to work well enough for good results on most objects.

The author's experiences with Slooh have been good. The site literature states that weather in the Canary Islands is favorable for viewing approximately 80% of the time and this percentage seems about right. The interface has been fairly flawless and the chat rooms can be quite helpful and informative. Two pictures taken by the author during observing sessions are included with this article. One picture is of M42 and M43 and the second is a coordinate mission object. Based upon the time and coordinates of the latter object, do you have any guesses as to the object's name? The answer will be revealed at the next BMAA member meeting on April 2, 2008. See you there. - lfv

In the great idea department, how's this? ...an exquisite mountaintop observatory with all the bells and whistles you could ever want: the best CCD cameras, filters, the works. Commanding this observatory with your computer from thousands of miles away, high-quality deep-space images appear on your monitor in glorious color, and you get to decide between keeping these magnificent celestial images for yourself or sharing them with friends." - Astronomy Magazine

Picture 2 and Caption

Coordinate Mission

02h 30m 18s -30° 24' 00"

20 Jan 08 21:32:29 UTC | Dome 1 High Mag



For further Info:

<http://www.myslooh.com/>

<http://www.slooh.com/help.php>

<http://en.wikipedia.org/wiki/Slooh>

BMAA 2008 Monthly Meeting Topics

April	The Messier Marathon
May	Tripod Astrophotography
June	DSLR Astrophotography
July	CCD Astrophotography
August	Show-n-Tell Night
September	Image Manipulation (Astrophotography)
October	Stella Della Valley Prep
November	How to Buy a Telescope Night
December	BMAA Holiday Party

Comet Holmes from the Florida Keys Courtesy of Bob Post



Announcements, etc.

Thursday May 1st 3:15 – 6 PM. BCSTA (Bucks County Science Teachers Assoc.) IU unit in Doylestown (near 611 bypass) *Volunteers needed for Info table, Solar viewing, Presentation by BMAA**

Saturday May 10th Astronomy Day MC3 *Volunteers needed for Info table, observing**

Telescope kit for SDV teenagers *Volunteers needed to coordinate this project**

Astronomy Trivia Game at SDV 2008 *Volunteers needed to create questions and answers ppt.**

Messier Marathon Event Friday April 4th OR 5th at Tohickon Boat Access Lake Nockamixon.

Summer Picnic – StarParty *Volunteers needed to coordinate this event**

** Please contact Dwight Dulsky if you can help with any of these activities – we need your help and support to make these things happen.*

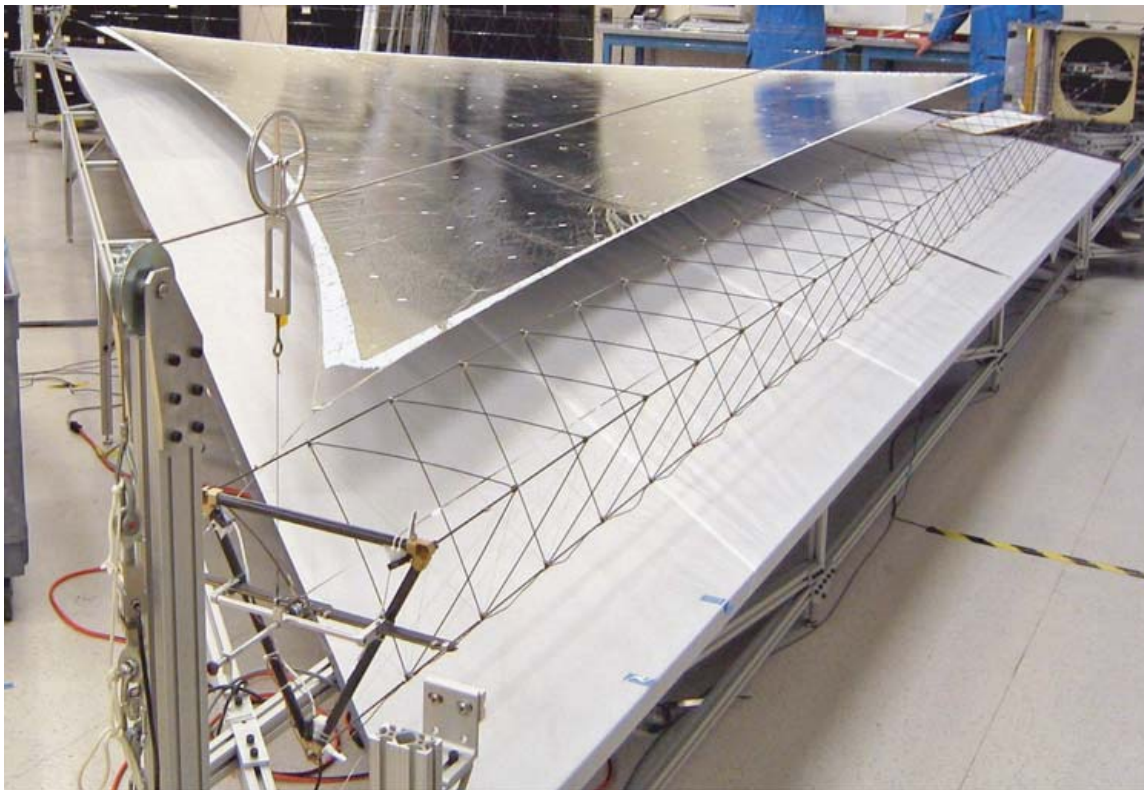
The NASA Space Place Even Solar Sails Need a Mast

➤ by Patrick L. Barry

Like the explorers of centuries past who set sail for new lands, humans may someday sail across deep space to visit other stars. Only it won't be wind pushing their sails, but the slight pressure of sunlight.

Solar sails, as they're called, hold great promise for providing propulsion in space without the need for heavy propellant. But building a solar sail will be hard; to make the most of sunlight's tiny push, the sail must be as large as several football fields, yet weigh next to nothing. Creating a super-lightweight material for the sail itself is tricky enough, but how do you build a "mast" for that sail that's equally light and strong?

Enter SAILMAST, a program to build and test-fly a mast light enough for future solar sails. With support from NASA's In-Space Propulsion Program to mature the technology and perform ground demonstrator tests, SAILMAST's engineers were ready to produce a truss suitable for validation in space that's 40 meters (about 130 feet) long, yet weighs only 1.4 kilograms (about 3 pounds)!



Caption: SAILMAST is the thin triangular truss in front of the picture. It is attached to a section of a silver foil solar sail section shown here in a laboratory test. The mast in the picture is 2m (6 ft) long. The Space Technology 8 mission will test the SAILMAST, which is 20 times longer.

In spite of its light weight, this truss is surprisingly rigid. "It's a revelation when people come in and actually play with one of the demo versions—it's like, whoa, this is really strong!" says Michael McEachen, principal investigator for SAILMAST at ATK Space Systems in Goleta, California.

SAILMAST will fly aboard NASA's Space Technology 8 (ST8) mission, scheduled to launch in February 2009. The mission is part of NASA's New Millennium Program, which flight tests cutting-edge technologies so that they can be used reliably for future space exploration. While actually flying to nearby stars is probably decades away, solar sails may come in handy close to home. Engineers are eyeing this technology for "solar sentinels," spacecraft that orbit the Sun to provide early warning of solar flares.

Once in space, ST8 will slowly deploy SAILMAST by uncoiling it. The truss consists of three very thin, 40-meter-long rods connected by short cross-members. The engineers used high-strength graphite for these structural members so that they could make them very thin and light.

The key question is how straight SAILMAST will be after it deploys in space. The smaller the curve of the mast the more load it can support. "That's really why we need to fly it in space, to see how straight it is when it's floating weightlessly," McEachen says.

It's an important step toward building a sail for the space-mariners of the future.

Find out more about SAILMAST at nmp.nasa.gov/st8. Kids can visit spaceplace.nasa.gov/en/kids/st8/sailmast to see how SAILMAST is like a Slinky® toy in space.

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

2008 Regional Star Party Calendar

South Jersey Star Party April 5th & 6th

April 26-27th NEAF (Astro Imaging Conf. 24th & 25th)

Cherry Spring Star Party May 29th -June 1st, 2008

Mason Dixon Star Party July 30th-Aug. 3rd

Stellafane July 31st -Aug. 3rd

Black Forest Star Party Sept. 5th -7th, 2008

Stella Della Valley 2008 Oct. 24th - 26th, 2008

Burgers in Paradise-The Winter Star Party Courtesy of Bruce Collier



Summer Community Events

We would love to have a Summer Picnic/StarParty for BMAA members only. This does not have to be anything fancy, we can keep it simple with Hot Dogs and Hamburgers and a covered dish type of an affair. For this to happen, we need one or two members to help coordinate this event. Please call or email Dwight Dulsky if you can help with this event.

Night Sky Network Update

BMAA continues to participate in presenting outreach activities with the kits from The Night Sky Network and NASA. These are very well thought out, high quality materials for demonstrating many concepts in Astronomy. If you are doing any presentations for schools, scouts or other groups please take a look at these kits. Subjects include the Solar System, Galaxies, Black Holes, Telescopes, Lunar Phases, etc. I would love to see more BMAA members get involved as presenters. Perhaps you don't want to bring your scope to a StarWatch. We could still use you as a StarWatch helper or NSN presenter. Each kit includes a great training DVD that you can watch at your own pace. Please contact Dwight to borrow a kit.

Dark-er Skies in Bucks?

➤ By Dwight Dulsky, BMAA

In recent months I have noticed three separate "victories" for darker skies in Pennsylvania, and two are right here in Bucks County. West Rockhill Township in upper bucks is working to pass legislation to ban those large bright LED billboards in the township (Rt. 309 runs right through the heart of this rural township just south of Quakertown). These super bright billboards scatter light in all directions – including up and change their message about every 10 seconds. A public hearing for comments was held on February 20th. Last Year, in 2007, Doylestown and Bensalem both banned these digital billboards.

In Buckingham township (where we hold several StarWatches), recently enacted a "Dark Sky Ordinance". One of the first tests of this ordinance involved the building of a new church building in the township. Through the efforts of neighbors concerned about the lighting and the new legislation, the exterior lighting was modified to be more dark sky friendly. Low wattage lighting replaced high wattage. The number of light poles was reduced from 69 to 48. Exterior lights shining up upon the steeple and cross were also reduced. There were also steps taken to insure that lighting stayed on the church grounds and did not stray across property lines.

My family has owned a cottage within Promised Land State Park in the Pocono's for over 45 years. I recently received notice from the State Park system that any exterior lighting on our buildings must be with dark sky friendly fixtures that only allow downward facing lighting. No dawn to dusk lights, these need to be replaced with motion sensor lights. Although Promised Land is not quite as dark as Cherry Springs, these changes will certainly help within the park itself.

As a member of BMAA, I would urge you to take the time to write to the officials in these communities and your own to support efforts in passing dark sky ordinances.

Quarterly Meeting Minutes

Bucks-Mont Astronomical Association, Inc.
General Meeting, Peace Valley Nature Center.
January Meetings.
General Meeting was Holiday Party.

Bucks-Mont Astronomical Association, Inc.
Executive Meeting Minutes
Churchville Nature Center
January 16, 2008

Present at the meeting: Dwight Dulsky, President; Bernie Kosher, Vice President; Ed Radomski, Treasurer; Herb Borteck, Secretary; George Reagan, Star watch; Chris Sommers, Constellation; Frank Schubert, and Bob Jackson
The meeting started at 7:30pm.

Ed Radomski brought up an issue concerning the Bucks County Park Commission's request that they be put on our insurance as a member. It was decided, instead, that we would get an alternative spot in Peace Valley. George Reagan will investigate a different site at Peace Valley and give us a report. Ed Radomski gave the treasurer's report. We have a total of 39 paid up members.

The balance of the meeting concerned the various meetings and the topics that would be discussed at each meeting.

Dwight Dulsky will be sending Herb a contingent list which will be sent out to the members to consider.

It was an interesting meeting. All members are welcome to attend any Executive meetings where their input would always be welcome.

The meeting ended at 8:33 pm.

Respectfully submitted,
Herb Borteck, Secretary

Bucks-Mont Astronomical Association, Inc.
General Meeting Minutes
Peace Valley Nature Center, Doylestown PA
February 6, 2008

Officers Present: Dwight Dulsky, President; Bernie Kosher, Vice President; Herb Borteck, Secretary; George Reagan, Star watch Chairman; Chris Sommers, Constellation. Attendance: 13 members. Dwight Dulsky started the meeting at 8:13 pm.. Ed Ramdonski was absent and so there was no treasurer's report

George Reagan reported and gave us a copy of the 2008 Star Watches. They can be found on our site. However, I will add the list to the bottom of this report for the benefit of all. George said that he will be adding some school sites to the list and a suggestion was discussed about signs to be made and placed at the various watch sites.

There was one new member at the meeting: Bob Dudley and also, our member, Harry Goodman found out how to get to our meeting. He travels from Phila. and it is a long trip. We hope to see them both often at future meetings.

Chris Sommers brought in copies of the CONSTELLATION and informed us that articles for the next issue must be in before the end of March. So stop waiting and send them.

Dwight showed us a list of monthly topics that will be discussed. The topic for this meeting was on Comets. Future

topics, will be:

March: The Messier Marathon
April: Tripod Astrophotography
May: DSLR Astrophotography
June: CCD Astrophotography
July: Show And Tell
August: Image Management (Astrophotography)
September: Stella Della Valley Preparation
October: How To Buy a Telescope
November: BMAA Holiday
December: Choosing Eyepieces [Write down your questions for the meeting and if you have "ancient and interesting eyepieces for show, by all means bring them.]

The Stella Della is set for Oct. 24-26, 2008. It is possible that we will celebrate Astronomy Day at The Montgomery Community College on May 10th.

Bernie Kosher showed some pictures and gave us a run down on what was occurring this month. There will be a complete lunar eclipse on Sat at 8:43 pm. Herb showed a NASA picture of the Spider Crater on Mercury. Then Dwight proceeded with a very interesting talk on comets. He covered the whole topic and was rewarded by a round of applause.

Jay Sarajian showed us an excellent buy. It was a kit with a strong green laser, a red flashlight and an excellent 10 by 50 pair of binoculars; all for the special price of \$90.00. Plus he brought a Sky Scout and talked about it.

It grieves me to say that those who missed this meeting missed a great meeting which we all thoroughly enjoyed.

Respectfully submitted,
Herb Borteck, Secretary.

**Bucks-Mont Astronomical Association, Inc.
General Meeting and Executive Minutes
Peace Valley Nature Center, Doylestown PA
March 6th, 2008.**

Officers present: Dwight Dulsky, president, Bernie Kosher, vice-president, Ed Radomski, Treasurer. Meeting called to order at 8:05 PM

The meeting began with the showing of a video produced by our English friends "The Monty SkyWatchers". This was a little production showing some highlights of one of their meetings. In a nice personal touch, some of the members sent personal greetings on camera saying hello to us here in the states. We took a few pictures and will combine them with some Stella-Della shots and send our greeting to them next month.

Ed Radomski reported on club accounts, new members and calendars and books still available for purchase. Ed also reported that another local group is forming to discuss cosmology topics. If members are interested – see Ed for the contact person's phone number. George Reagan highlighted upcoming StarWatches and special events happening for BMAA. Please come out and help us with StarWatches. Even if you do not bring you scope there are often "newbies" who can use your help.

Constellation Newsletter– Chris Sommers and Scott Petersen. Chris reported that the next issue will be published in early April. He has received a few articles already and would appreciate more donations. Lou Vittorio will be contributing an article about the Slooh remote telescope website.

Bernie Kosher inquired about donations to various organizations we have supported in the past. This will be discussed again at our Business meeting on Wed. March 19th at Churchville. Dwight Dulsky presented various announcements and reminders to the membership present....Reviewed the calendar of monthly topics for the year. Reviewed calendar of local and regional StarParties

Looking for volunteers for various club events and projects:

- April 18th evening StarWatch at Joseph Neidig elem. School in Quakertown, PA
- May 1st volunteers for the Bucks County Science Teachers Association presentation in Doylestown 3:15 – 6 PM (info table, club presentation and solar viewing).
- May 10th Astronomy Day at Montgomery County Community College Time: TBA (volunteers for info table and observing)
- SDV – Volunteers to look into acquiring a telescope kit for teenagers to assemble at SDV 2008 and then raffle off amongst themselves.
- SDV – Volunteer team to create a list of Astronomy Trivia questions for an activites at SDV, especially for use if bad weather besets us.
- Volunteers to coordinate a BMAA Summer Picnic. BMAA would provide Hot Dogs and Hamburgers, members bring a covered dish salad or dessert to share.

Monthly Sky Highlights - Handouts were given to the membership for the month of March. The *free* Star Maps were from www.skymaps.com

Norm Remer brought in some interesting S&T magazines from the 70's.

Slooh.com presentation – Lou Littorio gave us an online tour of a robotic controlled telescope facility in the Canary Islands called www.slooh.com “Slooh” sells telescope time to individuals (\$19.95 for 300 min and \$99.00 for unlimited use for a year). Images are sent live to your Internet browser for you to view or save and print. The facility utilizes two 14” Meade telescopes which are up and running all night (Canary Island Time). Slooh is also working on facilities in Chili and Australia, which when up and running will provide 24 hours coverage, northern and southern hemispheres. Lou cleverly provided us a live view by utilizing a laptop complete with a mobile Internet card. The connection was very fast and flawless.

Eyepieces – Bernie Kosher brought in a number of interesting eyepieces and led a discussion about various eyepiece designs. Bernie talked about many old and new design features. Due to the time, he cut the presentation short. But, we hope Bernie will continue this interesting and useful discussion at some point in the future.

**Bucks-Mont Astronomical Association, Inc.
General Meeting and Executive Minutes
Churchville Nature Center, Doylestown PA
March 20th, 2008.**

Vice President; Ed Radomski, Treasurer; Herb Borteck, Secretary; George Reagan, Star watch; Chris Sommers, Constellation; Art Baldwin. The meeting started at 7:39pm. Ed stated that Bob Black was notified that he was an honorary member.

Ed Radomski gave the treasurer's report. Observatory Accounts \$X,XXXX. Club Only X,XXX. Total Assets \$XX,XXX. Our paid up membership is now 49.

The balance of the meeting concerned the various topics that had been presented to us before the meeting. We are paid up members of The Astronomy League, and The United Astronomy Club of N.J. We will give a donation to the International Dark Sky Association, to The Churchville Nature Center and to the Peace Valley Nature Center.

There was a discussion about what kind of signs were needed for StarWatches and Dwight Dulsky was designated to pick out and order which kind and the quantity. There was a discussion of whether we should order membership badges or hats. It was left undecided.

There will be a presentation on astronomy for the Bucks County Science Teachers Association on May 1st. More discussion on this will be held at our next public meeting in April.

It is proposed that we have a Messier Marathon attempt at Nockamixon on April 4th or 5th. No prizes to be awarded. Just a fun thing to do!

George Reagan will see to it that we have meeting and Star Watch calendars printed for distribution to the public.

Dwight brought up the topic of a Radio Jove kit for those who are interested. It allows a person to listen to radio noise generated from Jupiter and the sun. For more information go to: <http://radiojove.gsfc.nasa.gov/>

It was an interesting meeting. All members are welcome to attend any Executive meetings where their input would always be welcome.

The meeting ended at 8:40 PM

Respectfully submitted,
Herb Borteck, Secretary

BMAA 2008 StarWatch Schedule (see www.bma2.org for updates and maps)

April	2 Wed	8pm	BMAA General Meeting, Peace Valley Nature Center, Doylestown
	8 Tue	8pm	StarWatch, Gwynedd Wildlife Preserve, Upper Gwynedd
	11 Fri	8pm	StarWatch, Pennypack Ecological Restoration Trust, Huntingdon Valley
	25 Fri	8:30pm	StarWatch, Cedar Hill Park, Horsham (Cedar Hill Rd. near Horsham Rd.)
May	1 Thu	8:30pm	StarWatch, Willard Markey Centennial Park, Perkasio
	5 Mon	8:30pm	StarWatch, Peace Valley Nature Center, Doylestown
	7 Wed	8pm	BMAA General Meeting, Peace Valley Nature Center, Doylestown
	10 Sat		Astronomy Day - To Be Announced
	13 Tue	9pm	StarWatch, Tamanend Park, Upper Southampton
	30 Fri	9pm	StarWatch, Nockamixon State Park, Quakertown (Tohickon Boat Access)
June	4 Wed	9pm	BMAA General Meeting, Peace Valley Nature Center, Doylestown
	6 Fri	9pm	StarWatch, Tyler State Park, Doylestown (Hickory Nut Picnic Grove)
	10 Tue	9:30pm	StarWatch, Covered Bridge Park, New Britain (Adjacent to the Covered Bridge)
July	2 Wed	8pm	BMAA General Meeting, Peace Valley Nature Center, Doylestown
	3 Tue	9:30pm	StarWatch, Lower Nike Park, Warrington
	11 Fri	9:30pm	StarWatch, Peace Valley Nature Center, Doylestown
	29 Tue	9pm	StarWatch, Willard Markey Centennial Park, Perkasio
August	1 Fri	9pm	StarWatch, Nockamixon State Park, Quakertown (Tohickon Boat Access)
	6 Wed	8pm	BMAA General Meeting, Peace Valley Nature Center, Doylestown
	7 Thu	9pm	StarWatch, Hansell Park, Buckingham [Map]
	12 Tue	9pm	StarWatch, Silver Lake Park, Bristol
September	3 Wed	8pm	BMAA General Meeting, Peace Valley Nature Center, Doylestown
	5 Fri	8pm	StarWatch, Peace Valley Nature Center, Doylestown
	9 Tue	8pm	StarWatch, Tamanend Park, Upper Southampton
	24 Wed	7:30pm	StarWatch, Pennypack Ecological Restoration Trust, Huntingdon Valley
October	1 Wed	8pm	BMAA General Meeting, Peace Valley Nature Center, Doylestown
	2 Thu	7:30pm	StarWatch, Honey Hollow Environmental Education Center, Solebury
	7 Tue	7:30pm	StarWatch, Covered Bridge Park, New Britain (Adjacent to the Covered Bridge)
	21 Tue	7:30pm	StarWatch, Lower Nike Park, Warrington
November	24-26 Fri-Sun		STELLA-DELLA-VALLEY XXII, Camp Onas, Ottsville
	3 Mon	7:30pm	StarWatch, Cedar Hill Park, Horsham (Cedar Hill Rd. near Horsham Rd.)
	5 Wed	8pm	BMAA General Meeting, Peace Valley Nature Center, Doylestown
	7 Fri	7:30pm	StarWatch, Silver Lake Park, Bristol
	25 Tue	7:30pm	StarWatch, Gwynedd Wildlife Preserve, Upper Gwynedd
December	3 Wed	8pm	BMAA Holiday Meeting, Peace Valley Nature Center, Doylestown

All StarWatches are free and open to the public. StarParties are open to members and guests only.

Call the BMAA Message Line 215-579-9973 for activity updates. (Cancellations due to weather will be announced 1 hour before the event.)

Constellation-Instructions to Authors

You need to be a BMAA member to submit an article. Articles are typically ½ to 2 pages in length. They can vary in topic from reviews of books, star parties, observing, equipment, issues of general astronomical interest, etc. Go to the BMAA website and take a look at *CONSTELLATION* back issues and you will get the idea. Another good example for articles is on the Cloudy Nights web site (<http://www.cloudynights.com>).

As to the format for articles, please adhere to the following:

Word Processor: MS Word.

Font: Times New Roman

Margins: 1 inch all sides.

Title Font Size: 14 pt

Text Font Size: 10 pt

Spacing: Single Space

Original Figures: Gray scale or color, jpeg format, and please save the file as the size as it would appear in the article (about 2" x 3"). The figures should be original due to copyright issues.

The Editors will modify the article as needed to fit the format.

Email articles to: constellation@bma2.org

The *CONSTELLATION* is the official publication of the Bucks-Mont Astronomical Association, Inc., a 501c3 non-profit organization incorporated in the Commonwealth of Pennsylvania and exists for the exchange of ideas, information, and publicity among the BMAA membership, as well as the amateur astronomy community at large. The views expressed are not necessarily those of BMAA, and those of contributors may be edited to fit within the format and confines of the publication. The contents this publication, and its format (published hard copy or electronic) are copyright of ©2006 BMAA, Inc., and may not be reproduced or distributed without express written consent of BMAA, Inc.

Bucks-Mont Astronomical Association Membership Application

Name and address _____

Renewal() New Member()

Renewal Dues are \$25.00/year and are due starting in November

Dues for new members are:

Telephone _____

January	\$25.00
February	\$23.00
March	\$21.00
April	\$19.00
May	\$17.00
June	\$15.00
July	\$13.00
August	\$11.00
September	\$9.00
October	\$25.00
November	\$25.00
December	\$25.00

Home _____

Cell _____

E-mail _____

Additional members from the same household are 1/2 price.

Your name, city of residence, telephone number and e-mail will be posted in the member's area of the website that can be viewed by using a club issued name and code word. The code is changed periodically and issued to club members only.

() Do not list my name or any personal information on the website.

The Association saves considerable money each year through electronic delivery of the Constellation. Printed copies will always be available at the meetings. You will receive the Constellation by being notified by E-mail when it is available on the website.

() Check here to receive the Constellation by Traditional mail.

Your e-mail address will be added to the e-group list and you will receive one e-mail a day containing all the mail that is sent to the group address by other members that day. This will allow you to be aware of current activities and discussions, and you may respond to any message by addressing your response to the e-group address. You must be a member to send to or receive messages from the e-group. You may cancel or change this option by contacting Jim Moyer, info@bma2.org.

BMAA Web site - <http://www.bma2.org>

Please return this form, with a check payable to BMAA, to:

Ed Radomski
36 Far View Rd.
Chalfont, PA 18914