

CONSTELLATION

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Summer 2010 President's Message

As I exit the presidency position for BMAA, I want to take this opportunity to thank the membership and officers for all their help in making our club run smoothly and be a friendly place for people to enjoy learning about astronomy. Our club has always been an eclectic mix of new and old (OK, maybe seasoned is a better word!) astronomers.

For me, and I'm sure many beginning astronomers, the study of space is one interesting question after another. Although I certainly enjoy looking at all the neat objects out there beyond the threshold of vision, I'm always fascinated in the "why". How did those objects get there? When did they form? How did they form? How do these objects relate to the greater scheme of it all? If anything, hopefully my step back from the presidency will give me some more time to read about these things and continue my own personal journey in amateur astronomy.

The past decade has seen many discoveries in both cosmology and technology. Much of that has been due to improvements in digital imaging and the results of many NASA missions yielding amazing new insights to the Universe near and far. As a club it has been fun to dive into this new digital era. We have so many great resources at our finger-tips on the Internet. Information flies around the globe as the speed of light, instead of the speed of pigeons. We hold our cell phones up in the air and ID the night sky before us – then get a phone call from spaceweather.com that an aurora may be on the way.

Astrophotography has been a staple of astronomers since the 1800s. Some of our "seasoned" members cut their teeth on film astrophotography through the decades. Many of the same techniques are still used today in digital astrophotography. Each year several of our members have been re-investing again in astrophotography with the new relatively inexpensive digital cameras. Taking great astrophotos is still a challenge with a fascinating learning curve. Luckily for those willing to invest some time with their equipment and under the night sky, you can get some pretty amazing images right from your backyard.

Don't be discouraged by your failing efforts – learn from them. When you have paid your dues and mastered focusing in the dark, the stunning sights will come. Start out with easy projects and there are some great books on the subject to get you started. I strongly suggest you spend some time reading and researching about this subject before buying a new camera.

Finally, a warm welcome to our new president Chris Sommers. Chris brings a wealth of knowledge to the club with his extensive scientific background. He also has great enthusiasm as you have probably noticed from his observation posts over the years. Please offer him the kind support you have given me to keep BMAA moving forward. Although I bid you farewell from the front of the room, I certainly plan on staying active in the club with outreach and special activities as they arise.

Enjoy,
Dwight Dulsky

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BMAA membership dues are due!

BMAA annual membership dues are due by the November General Meeting. A membership form can be downloaded at the club website: www.bma2.org

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Stella Della Valley 24

Oct. 8-10th 2010

- by *Dwight Dulsky*

Stella Della Valley is on our doorstep once again. This is our 24th annual StarParty for amateur astronomy in our area. After two disappointing washouts in 2008 and 2009, we're hoping to be blessed with clear skies this time around.

Besides the fellowship of astronomers near and far who come to SDV, I always look forward to the wonderful lineup of activities on Saturday that take place rain or shine. I always come home with some great unexpected surprises from our Saturday morning Astronomical Flea Market. If you are coming to SDV, now is the time to gather up some unused equipment, books and gadgets to sell and trade at the flea market. Bring some extra cash as you are bound to want some of this new and used optical gear.

We're also running our "Make a Solar Filter" workshop using Baader Solar Film. This is the most inexpensive way to safely look at the Sun with your telescope. With these "white light" filters you'll be able to see dark sunspots with clarity and ease. We have a limited amount of solar film and we'll sell it for .11 per sq. in. on a first come first serve basis. This is a workshop primarily for adults or adults who bring children to SDV. Solar observing is definitely an adult led activity.

In the afternoon we have 3 very interesting speaker presentations in the Dellview meeting room that you won't want to miss.

Dr. Julia Plummer, Asst. Professor and Coordinator of Science Education at Arcadia University. "*Habitability in the solar system: Where should we look for life and why?*" For the last few decades, the science of Astrobiology has explored the question of where and when life may have arose beyond the Earth. Building on what we know about the biology, chemistry, and physics of life on earth, this talk will examine the best candidates for habitable locations throughout the solar system and how this helps us understand where life may exist in other solar systems.

Preston Smith, "*Collecting Vintage Astronomical Telescopes*" Preston is a BMAA member who has traveled far and wide in his military career and as an ambassador of amateur astronomy. Preston has presented several times at NEAF and other Star Parties in the region. This year Preston is talking about "Collecting Vintage Astronomy Equipment". He has some fascinating collectables and rare finds from the dawn of amateur astronomy. Long time astronomers are bound to enjoy seeing some of the scopes they may have started with - back in the day!

Dr. Ken Kremer, "*The Space Shuttle, The Space Station and What's Beyond for NASA*" will join us again talking about NASA at the crossroads. So much is happening between our Shuttle Program winding down, completing the ISS and the ever changing future objectives for of our space program. Ken always has a great presentation of first hand accounts and an insider's view of the space missions. Dr. Kremer is an active member of the Planetary Society, The Rittenhouse Astronomical Society and a NASA Solar System Ambassador.

Wrapping up Saturday afternoon we'll be giving away a bunch of doorprizes* that have been donated to SDV. Then our ever popular pizza party (\$12 pp) at 5 PM will fill our bellies for a long night of observing under the stars.

Remember, if you can't make it for the whole weekend, we do have a 1 day pass available for \$15 pp. You'll be able to enjoy all of the Saturday activities from 7 AM until midnight Saturday (no overnight camping with the day pass). You can even set up on the observing field to enjoy an evening of observing at your own scope or just walk around visiting other astronomers. If you wish to partake in the pizza party you must let us know before 2 PM on Saturday.

* Thank you again to the following vendors who have donated door prizes for this event:

**Tele Vue * Questar Lumicon International * ScopeCity
Marge's Monograms * Jim's Mobile, Inc. (JMI) * Bob's Knobs
Scientifics * Sylvan Dell Publishing * Gene Chimahusky
Orion Telescopes * Astrozap * Astrolaugh * BMAA**

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August "Show-and-Tell" Meeting

August 4, 2010

- by *Dwight Dulsky*

One of the most fun meetings of the year is our annual August "Show-and-Tell" meeting. Our members bring in astronomical gadgets and gizmos to share with the group. Often this meeting shows novel solutions to make your observing sessions more productive and enjoyable. The 2010 presentations did not disappoint.



Preston Smith brought in several things, new and old, to share with the group. He demonstrated how you can easily monitor your power supply using a simple 12 volt car voltmeter that can be purchased for as little as \$15 on Amazon.com. Preston also shared how he was restoring and evaluating a vintage 6" refractor objective that was made by an amateur astronomer in Allentown back in the early 1960s. The objective was made using the rather unusual Littrow design.

Lee Zager showed BMMA members a high quality Hershel Wedge for white light solar observing. Unlike white light filtering systems to safely observe the Sun, a Hershel Wedge simply reduces the light and expels heat to produce super high quality views of the solar surface.

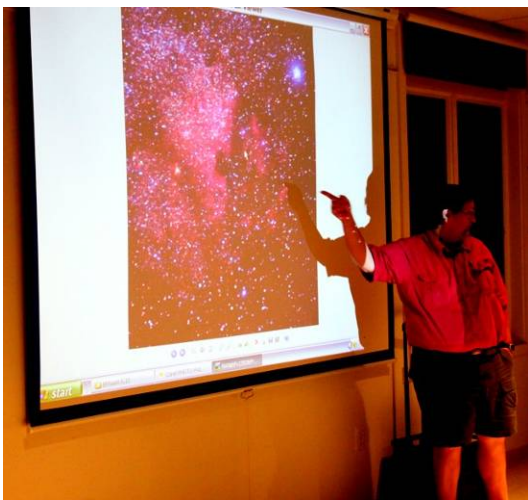


All photos by Dwight Dulsky



Ed Radomski brought in a “back saver” observing chair – a gift from his wife, Joan. The heavy duty adjustable chair is really used for musicians, but perfect for astronomers as it is very comfortable and has wide stable legs that don’t dig into the ground.

Although I wasn’t able to get a picture, Ed also modeled that latest fashion of the Amish astronomers on a recent trip to Chester County with Bernie. What happens in Lancaster – should stay in Lancaster! (see straw hat in foreground of the picture)



Bob Post brought in some astrophotographs he took with his Pentax camera. This camera has some great features for astrophotographers including very high ISO capabilities for imaging in low light. Another great feature is a built in image stacking routine. On the screen is the North American nebula, further demonstrating the camera’s ability to capture the red hydrogen gas of this deep sky object.



Brad Miller demonstrates his AstroTrac camera mounting system for astro imaging. This robust device allows for long exposure astrophotography in a small compact system.

Vice-president Bernie Kosher shares an antique portable sundial. With a few quick adjustments, the very analog device allowed the user to tell local solar time almost anywhere on the planet. No batteries to charge!

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Lunar Sketching

- by *Dwight Dulsky*



At our September meeting we did a workshop using the “Take Away” method. This activity was sent to us by the newly elected vice-president and former secretary John Goss, presented earlier at the Green Bank Star Party. The technique involves starting with a med gray background. From this the artist/astronomer used eraser and pencil to add and take away details. Erasers bring out the highlights and pencils enhance the shading and shadows of the lunar features.

6th BMAA public Lunar Sketching

One of the best aspects of this technique is that it forces the observer at the eyepiece to really study the lunar features in detail as you render them. It’s also nice to have a anecdotal sketch of your observing session done lo-tech style. Think about how nice it would be to share such a logbook with a young grandchild someday!



Jack Horkheimer

Foley Arthur Horkheimer
June 11, 1938 – August 20, 2010

[Note: The following articles were submitted by BMAA member Alan Pasicznyk and originally published in the CONSTELLATION in 1989 and 1991. This is his intro:

Back in '89 Jack was off the air for a while and so I called his secretary at Miami Space Transit Planetarium and arranged for an interview with him by phone. Later, (coincidence?) Sky and Telescope did an article on him, and in a little while he was back on the air again.

A few years later I sent him another article that I wrote about researching the Pleiades to the Biblical flood. A few weeks later his secretary called me to ask about the pronunciation of my last name; Jack was going to mention my name on the air!!! - *Editor]*

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Who Was That Guy?

- by Alan Pasicznyk

"Greetings, greetings, fellow stargazers and have I got news for you..." (the monologue continues with graphic descriptions of the celestial events of the night)... "and all ya hafta do is go outside on any clear night and look due south...". If these words sound familiar, and if you remember hearing "keep looking up" at the end of each and every discourse, then you most certainly have been listening to one of Jack Horkheimer's presentations of Star Hustler on your local PBS station.

Of course there's a chance that you may not have stayed up late enough to see one of Jack's presentations air, (on PBS channel 12 in Philadelphia, at about 1:00 AM) and missed some or all of his transmissions, but in any case, Mr. Horkheimer certainly comes across as having a truly interesting personality and perspective. After phoning and talking to Jack, I realized that there were more facets to his on-the-screen character than I had anticipated. "That person you see up there on the screen isn't me, but just part of me", he said. I found out that his whimsical style was a result of his background in the theater.

Mr. Horkheimer initially studied at the University of Hawaii, then for 6 1/2 years he studied Theatre Arts at Purdue. During his last year at Purdue, doctors told Jack that he had a congenital lung defect (a hereditary illness) and that he should move to an area which was humid and had warm nights. The doctors also said that he had about one year to live. This was back in the early 1960's and as Jack puts it, "Well I'm still here, I guess, due to luck and advances in the medical field". So Jack moved to Miami and later graduated from the University of Miami in 1964 with a Bachelor of Science degree in the Life Sciences.

Jack was born in 1938 in the town of Randolph, Wisconsin, population 1,100. When he was a boy scout in Wisconsin he was "one of two" scouts in the entire troop that was seriously interested in Astronomy. When I asked him how he got interested in Astronomy, Jack said, "I've always been interested in Astronomy." Now for myself, I can trace back my first interest in "outer space" as it was called back then, to when I was about 6 years old. At that time I was captivated by a TV show called "My Favorite Martian". So just to be sure, I questioned him again, "Wasn't there just one thing that got you interested in Astronomy that you can remember?" Jack replied, "I've always been interested in Astronomy, as far back as I can remember". Obviously he wasn't going to budge an inch on that one.

Then I asked him how he became involved in the Theatre Arts and subsequently the PBS series of "Star Hustler". He told me that his family is in the publishing business and that he used to write and direct plays. After receiving his Life Sciences degree, he became the "Director of Winter Plays" for the University of Miami. In 1967 he began doing shows for the Miami Space Transit Planetarium. This later led to the PBS broadcast of "Star Hustler" for 3 1/2 years. The show was taken off the air after losing its sponsor (Zeiss Optics). "I was sort of relieved", Jack recalls.

Undoubtedly, the show took quite an amount of time to prepare, in addition to Jack's work at the planetarium. But was this the end? Was this the last we would see of "Star Hustler" save the imagined TV receivers at Alpha Centauri and light years beyond? I asked Jack. He replied: "Well, there's talk that we might go back on the air after this summer, but we'll just have to wait and see".

I asked him if he had any other hobbies besides Astronomy. "Eating and cruising", he said, "I like to go on cruises". Jack lectures on cruises (presumably out of Miami), and at night during the cruise, the ship turns out all its lights, and Jack uses a high powered searchlight to point out the stars and constellations.

As for his personal Astronomical tastes, Jack likes naked-eye Astronomy; in Wisconsin he used to be able to see fainter than 6th magnitude stars. His favorite scope is either a Richfield or a pair of 7 X 50 binoculars. I always had the impression that Jack was single. His attitude seemed to be so free spirited. He told me that he's never been married; "I don't feel bad about it or anything, but I really am quite happy just being unmarried".

I talked with Jack for about a half-hour, or rather he talked with me. He talked at warp speed, my handwriting could only make sub-light. I just hope that I got all this stuff right. In parting he said, "Maybe I'll catch up with you sometime". It struck me curiously because I was just about to say that exact same phrase to him. Well Jack, if not in the near future, then maybe in the distant future we will all catch up with each other.

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[The following script was researched and written by the staff of the Miami Space Transit Planetarium in 1991, and provided by Alan Pasicznyk. – Editor]

STAR HUSTLER # 117-I
724th Show VTR 03:58

MONDAY 10/21/91 THRU SUNDAY 10/27/91

ANNOUNCER:

SOME PEOPLE HUSTLE POOL...SOME PEOPLE HUSTLE CARS. BUT HAVE YOU EVER HEARD ABOUT THE MAN WHO HUSTLES STARS? JACK HORKHEIMER, "STAR HUSTLER", DIRECTOR OF THE MIAMI SPACE TRANSIT PLANETARIUM.

OUR EPISODE FOR THIS WEEK: OCTOBER 21st, THROUGH OCTOBER 27th IS:

THE SINISTER SIDE OF THE SEVEN SISTERS

AND NOW, HERE TO TELL YOU ALL ABOUT TONIGHT'S SKY AND THE BIGGEST SHOW OF ALL, THE UNIVERSE: YOUR "STAR HUSTLER" JACK HORKHEIMER.

HORKHEIMER:

GREETINGS, GREETINGS FELLOW STAR GAZERS AND YOU KNOW, THE TINY GROUP OF STARS CALLED THE SEVEN SISTERS, THE PLEIADES, IS PERHAPS ONE OF THE LOVELIEST AND MOST BELOVED STAR CLUSTERS OF THEM ALL, AND PRACTICALLY EVERY ANCIENT CULTURE HAD SOMETHING DELIGHTFUL TO SAY ABOUT THEM. IN FACT THE PLEIADES SEEM TO BE AMONG THE FIRST STARS EVER MENTIONED IN ASTRONOMICAL LITERATURE, APPEARING IN CHINESE RECORDS AROUND 2400 B.C. NOW IN OUR TIME WE CAN SEE THEM RISING IN THE EAST IN EARLY EVENING IN OCTOBER AND NOVEMBER, A SURE SIGN OF LATE AUTUMN. AND ALTHOUGH THERE ARE HUNDREDS OF BEAUTIFUL STORIES AND NAMES FOR THE SEVEN SISTERS, IT IS VERY SELDOM THAT THEIR OTHER SIDE, THEIR DARK SIDE, THEIR SINISTER SIDE, IS EVER MENTIONED. SO AT THE URGING OF AMATEUR ASTRONOMER ALAN PASICZNYK OF DOYLESTOWN PENNSYLVANIA, HERE GOES.

ALTHOUGH THE POET MILTON WROTE "THE PLEIADIES BEFORE HIM DANCED, SHEDDING SWEET INFLUENCE", ANCIENT HIPPOCRATES WROTE: "IN AUTUMN UNDER THE PLEIADES THERE DIED GREAT NUMBERS." AND ALTHOUGH GEORGE BIEGEL IN THE 18TH CENTURY COMPARED THE PLEIADES TO A ROSETTE OF SPARKLING DIAMONDS, SOME ANCIENT HINDUS DESCRIBED THEM AS A SHORT HANDLED RAZOR THAT CUT ACROSS THE HEAVENS. AND ALTHOUGH MORE THAN ONE CULTURE REFERRED TO THE PLEIADES AS THE DAZZLING EYES OF CELESTIAL BEAUTIES, ANCIENT SOOTHSAYERS CLAIMED THAT THE PLEIADES BROUGHT BLINDNESS AND OTHER MALADIES OF VISION.

AND STRANGELY THE PLEIADES HAVE LONG BEEN ASSOCIATED WITH ANNUAL FESTIVALS OF THE DEAD. IN FACT, THE GRUESOME SACRIFICIAL RITES OF THE DRUIDS AROUND THE FIRST OF NOVEMBER WERE DETERMINED BY THE RISING OF THE PLEIADES, AND IN THE MIDDLE AGES ON OCTOBER 31ST WHEN THE PLEIADES WERE ALMOST OVERHEAD AT MIDNIGHT, SO-CALLED WITCHES CELEBRATED THEIR MIDNIGHT BLACK SABBATH. INDEED, HISTORICALLY THE PLEIADES HAVE LONG BEEN ASSOCIATED WITH THE DEAD: ALL SAINTS DAY, ALL SOULS DAY, AND ALL HALLOWS EVE, YOU KNOW, HALLOWEEN.

BUT MOST INTERESTINGLY, THE PLEIADES WERE LINKED IN THE DISTANT PAST AMONG WIDELY SEPARATED NATIONS WITH THE GREAT BIBLICAL FLOOD AND OTHER DELUGE MYTHS OF ANTIQUITY. INDEED, WHEN CORTEZ CONQUERED MEXICO IN 1519 HE FOUND MANY TEMPLES AND PYRAMIDS ORIENTED TO THE SETTING OF THE PLEIADES AND WAS TOLD OF THE VERY ANCIENT BELIEF OF THE DESTRUCTION OF THE WORLD IN A PAST AGE ON A NIGHT WHEN THE PLEIADES REACHED THEIR GREATEST HEIGHT AT MIDNIGHT.

AND IF YOU REALLY WANT TO GET SPOOKY, IN ANCIENT AZTEC AND MAYAN TRADITION IT WAS ALSO SAID THAT THE EARTH HAD BEEN DESTROYED AND RECREATED NOT ONCE, BUT FOUR TIMES AND THAT EACH TIME THE PLEIADES WERE HIGH OVERHEAD AT MIDNIGHT AND COINCIDED WITH THE RARE MEETING OF BOTH THEIR SACRED AND SECULAR CALENDARS, AND THAT THE NEXT TIME THIS WILL HAPPEN WILL BE AT THE END OF THIS CENTURY.

(HUM BARS OF "TWILIGHT ZONE")

PERSONALLY HOWEVER I STILL SEE THE PLEIADES AS SEVEN EXQUISITE SISTERS AND I HOPE YOU DO TOO AS YOU KEEP LOOKING UP!

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