



Website: 3ap.org

Member: Night Sky Network

The Guide Star

Journal of the Amateur Astronomers Association of Pittsburgh, Inc.

AAAP founded June 9, 1929 by Chester B. Rowe and Leo J. Scanlon

June, 2013

Volume 47, No. 5.0



Nicholas E. Wagman Observatory



Mingo Creek Park Observatory



“Dancing With the Stars” at the AAAP’s June Star Parties: NEWO and MCPO, June 14, 15

This time of the year brings the fewest hours of darkness, but we still enjoy the warm nights, especially those that are a bit hazy and provide steady seeing. All the more reason to attend the [June 14 and 15 public star parties at Wagman and Mingo](#) observatories. As always both events kick into high gear around [Sunset](#) and go until the last guest departs, which may be in the wee hours. For our new members, the star parties are ideal for meeting your fellow members, plus learning more about scopes and the sky. Also as always, if you don’t have a scope for the star parties, no problem. Just answering the public’s questions, helping with crowd flow and parking is always appreciated (and will be duly recognized). We hope to see you dancing with the stars.



Mingo Picnic on June 29: Anything You Want It to Be

If there was ever an informal club gathering, it’s the annual picnics at the observatories. Your time to do whatever you want, even if it’s just reading a book or chatting with your fellow members. This year’s first picnic at Mingo Observatory takes place [June 29 at the Shelter 10 grove](#) near the observatory. Festivities start at [4:00 pm](#) and conclude with members-only observing. The club will provide ice, cups plates, napkins, tableware, hot dogs, buns, condiments, and a cake, plus a charcoal lighter and fluid. Members may bring food, snacks, deserts, etc.. If it rains, we will huddle under the shelter roof. Go to page 6 for the park map and directions to Shelter 10. Note: Also leave room in your schedule for the club’s second picnic in Deer Lakes Park, July 27, Veteran’s Grove (more in the next Guide Star).



Planetarium Talk At Mingo’s June Star Parties: Sherlock and Satellites

As part of this year’s public lecture series at Mingo Observatory, Eric Fischer will deliver a talk on satellite observing in the newly-named “Richard Y. Haddad Planetarium Theater”. His talk, “*If Sherlock Holmes Observed Artificial Satellites*” will be given at [8:00 pm](#) on the star party evenings of [June 14 and 15](#).

Eric will describe how you can learn a lot about the type of satellite passing overhead simply by noting it’s speed, direction and light curve. Note: Seating in the planetarium is limited. Eric requests that members give up their seats for our guests if no other seats are available. Thanks!

Congratulations to AAAP’s 2013-2014 Officers, Thanks to Departing Officers



John Holtz



Terry Trees



Joanne Trees



Diane Yorkshire



Eric Fischer



Don Hoecker



Nate Brandt

The polls are closed, the ballots are counted and the results are in from the May meeting:

- President: John Holtz
- Vice President: Terry Trees
- Corresponding Secretary: Joanne Trees (newly elected)
- Recording Secretary: Diane Yorkshire
- Guide Star Editor: Eric Fischer (newly elected)
- Membership Secretary: Don Hoecker
- Treasurer: Nate Brandt (serving second year of 5-year term)

Congratulations to all and thanks for your service to our esteemed organization. If you need any help from any officer, contact them at the e-mail addresses shown on page 6. Our thanks to [Kelly Fletcher](#) and [John Cheng](#) for serving so ably in their jobs as Corresponding Secretary and Guide Star Editor, respectively.

May Meeting: Tim Spuck's Chilling Tale of Life and Work In The Antarctic



Tim Spuck

The AAAP thanks our friend [Tim Spuck](#) for his fascinating account of living and working at the South Pole (lecture at the May 10 business meeting). Tim served as the "Embedded Educator" for a group of researchers studying the effects of space weather, among others (see May Guide Star for lecture overview). In case you forgot how different the Antarctic environment is compared to the rest of the world, consider these facts:

Living near the South Pole is like living on a planet of a double-star. That is, during the Southern Hemisphere's Summer Solstice, daylight never ends, just like the sky of a double-star planet.

In many respects, the Antarctic is a nice test bed for living on Mars: Thin air, temps barely above 20 deg. F, lots of UV flux, perpetual haze of ice crystals, drier than the Sahara Desert, etc. Thus the South Polar environment is good for conducting millimeter and sub-millimeter astronomy, studying the Cosmic Background Radiation, monitoring material flowing into the Milky Way's supermassive black hole. Our congratulations to Tim for his many recent achievements and assignments. May meeting note: Thanks to Amanda of CSC for helping set up our meeting in the "Works Theater". We were bumped from our normal meeting room in the Bayer theater.

May Meeting "Show & Telescope" Segment Featured Rich McLaughlin



The club thanks long-time AAAP member [Rich McLaughlin](#) for an interesting retrospective on some of the telescopes and other equipment he has tangled with over his astronomical career. During the May business meeting ("Show & Telescope" segment), he displayed photos and drawings of everything from a 2-inch/f-30 refractor, to a 12.5-inch Cassegrain (converted from a Newtonian, no less), to an elevated roll-off roof observatory to a WWII bomb damage assessment camera converted for astronomical use. In his early days tooling around with his twin brother, there were very few scopes available for purchase, so he shelled out \$400 for a 2-inch J.W. Fecker refractor lens, not much less than the purchase price of a car. Rich belonged to a small club known as the Allegheny Valley Astronomers (AVA) which had as a member, among others, the famed planetary astronomer William K. Hartman.

Speaking of Spuck: Expedition to Chile

Tim Spuck is inviting AAAP members to join him in a 10-day astronomy expedition to Chile in the late October/early November time frame. The fee is \$2000 and openings are limited.

For information on availability, accommodations, travel destinations, etc. please contact Tim at tspuck@hotmail.com

Brashear Award Presented for the Late John Close



Donna Close Receives Brashear Award from Bill Yorkshire

At the May meeting we had the great honor and satisfaction of presenting a John Alfred Brashear Award (lifetime achievement) to [Donna Close](#) on behalf of her late husband [John Close](#), who passed away in May of 2012. Donna spoke highly of John's interests in astronomy and AAAP activities. We remember him well for his consistent help at star parties (including his Star Wars light-saber for parking duty), handing out free astro magazines at CSC Astronomy Weekend and, shall we say, his unique sense of humor. Note: Thank you Bill Yorkshire for obtaining the Brashear award plaque. Photo credit (L): Diane Yorkshire.

Messier Cert. for Terry Trees

It's been quite awhile since we awarded a Messier Certificate to an AAAP member, but [Terry Trees](#) ended that drought when he received his long-sought certificate at the May meeting. Terry has been chasing after the M objects since 1996 and informed us that we logged "117 of the 110" objects ☺. We let that slip of the tongue (mind?) go and presented the award anyway. If you are interested in earning a Messier Certificate, go to the "Awards and Certificates" section of the club's web site (Members Info.): 3ap.org

Farewell and Clear Skies to John Mozer

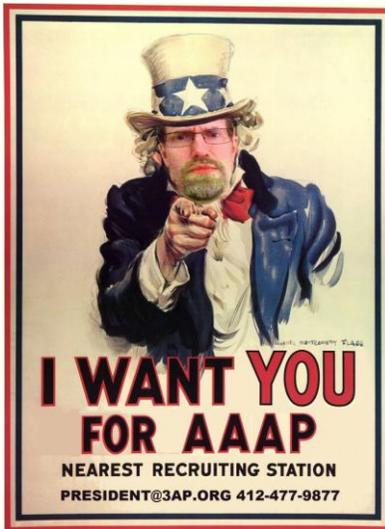


We are sad and a bit envious to report that AAAP member [John Mozer](#) and his wife [Sheila](#) will be relocating to (appropriately enough) Aurora, Colorado. Sad that we won't have John present at our meetings and special events. A bit envious that he will be able to enjoy vast, dark skies from his new home town in Colorado. John has been an active AAAP member for several years, most recently serving as Corresponding Secretary and helping with several special events involving the PSO and Butler Symphonies, among others. We wish him and Sheila the very best and hope they will keep in touch.

Winning Logo: The Same, But Different



At the May meeting, President John Holtz revealed that the winning entry in the AAAP logo contest was the most familiar one: Saturn tilted inside the circle with our full name and 1929 founding date. This logo has a new high-resolution image of the planet and omits the background moon (star?) of the previous logo. The basic design dates back at least several decades. Many thanks to the members who submitted very creative alternate designs. Contact John Holtz if you would like an electronic copy of the logo.



Executive Committee Positions Offered

President John Holtz is looking for a few good men, or women, to serve with him and the other AAAP officers on the Executive Committee (EC).

The EC is the group of 15 to 20 members that keep the Association running: approving funds, planning the general meetings, and so on. Please contact him (president@3ap.org) if you would like to be considered for the position. The EC typically meets the first Monday of the month as necessary, at the Carnegie Science Center. Note: The Executive Committee appointees listed on page 6 are current for 2012-2013.

By-Laws Changes Approved for Admission of New Members

At the May business meeting, President John Holtz called for a final vote on AAAP membership provisions in the club's By-Laws. The measure passed unanimously. Our thanks to all the members who offered suggestions during the preceding months. Effective as of the May 10 meeting, the relevant clauses are as follows:

Article V: Memberships

Section 1, Membership: Any person with an interest in astronomy or a related science may become a member of the AAAP upon payment of the prescribed dues to the Treasurer and upon approval. Former members who are re-joining shall be approved by a majority of the Executive Committee. New members shall be approved by a majority of the membership present at a regular meeting. If an applicant is not approved, his or her payment will be returned within two (2) weeks.

Section 2, Membership Categories: The Executive Committee shall determine the membership categories available to new applicants and renewing members. The categories shall be described where appropriate.



“Much Obligated” to Helpers At May 17/18 Star Parties (Mingo and Wagman)

How many different ways can we say “thank-you” to the AAAP members who helped out at the May 17 and 18 public star parties at Mingo and Wagman Observatories? We’ll always think of something. Let the Guide Star Editor know if we missed any names and if there are any misspellings.

Mingo: May 17 (131 guests)

- Bill Roemer
- Mike Meteney
- John Diller
- Dick Haddad
- Ed Moss
- John Holtz
- Kathy DeSantis
- Nick and Colleen Martch
- Melody Bishop
- Mike & Michael Christeson
- Don Hoecker
- Gene Kulakowski

Mingo: May 18 (81 guests)

- Bill Roemer
- Michael Skowvron
- Fred Klein
- John Diller
- Jeff Marsh
- Ed Moss
- John Holtz
- Nick and Colleen Martch
- Greg Shephard
- Mike & Michael Christeson
- Sean O’Brien
- Kathy Desantis
- Mike Meteney
- Gene Kulakowski

Wagman: May 17 (100 guests)

- Bill and Diane Yorkshire
- Bill Hayeslip
- Bill Moutz
- Rowen Poole
- Flacc Stifel
- Tom Reiland
- Mary DeVaughn
- Matthew Jones
- Ann Campbell
- Becky Valentine
- Kevin Spencer
- Fred Klein
- Patrick and Vaughn Rieger
- Tim Manka

Wagman: May 18 (80 guests)

- Kelly Fletcher and Rowen Poole
- Ron Pollack
- Cindy Pollack
- Tom Reiland
- Tim Colbert
- Matthew Jones
- Bill Hayeslip
- Eric Fischer
- Joyce Osborne-Fischer
- Linda and Jill Bailey
- Kevin Spencer
- Michelle Gauger
- Bill Moutz
- Tim Kelly

Four Planets Highlight Kunkle Park Star Partyby Terry Trees (from AAAP Listserver)

May 17 Bill Moutz, JoAnne and I, along with our friend John Doyle, the Washington Twp. Treasurer, hosted a small star party in Kunkle Park near Apollo. We arrived about 7:15 PM and left about 10:45 PM. It was surprising how late the sky remained bright and also surprising how late the almost full moon rose. It was also surprising that Bill and John knew each other...from their childhood. It was meteorologically clear, but the many cirrus/jet contrails prevented it from being astronomically clear. We had four scopes, ranging from 8” to 12.5” and Bill also brought his binoculars/tripod. Shortly after 10 PM or so, we began to disassemble scopes as the clouds dramatically increased.

Early in the evening I spotted Venus above some trees and between some clouds. It was almost a perfect but blurry sphere, color-tinged by being low in the sky. JoAnne used SkyWalk on her cell phone to show that

Jupiter was to Venus’ upper left and Mercury was to its upper right. I soon spotted Jupiter and it was also blurry, showing two brown belts but no moons in the bright sky and haze. Bill found Mercury with his binoculars and that enabled me to see it naked eye. It was about ½ the distance from Venus as Jupiter was. Shortly thereafter, JoAnne spied Saturn and we all turned scopes to it. Titan and the rings were immediately evident. We also looked at Polaris, Mizar and M-3. After a quick look at the moon around 10 PM, the last of the public left. We totaled about 35 visitors.

We had at least two repeat visitors from last week’s star party. Kunkle attendance is building as the word begins to spread. Our next Kunkle star party will be in late July. We passed out green Wagman brochures/schedules. Finally, we need to convince John Doyle to join the AAAP.



My Encounter With An Astronomy Prodigy At The CSC.....by Eric Fischer

For the Carnegie Science Center's Astronomy Weekend (a.k.a. "Spaced Out Weekend"), I decided to try something different for a tabletop display: Basic questions about the solar system on a flip-up overlay sheet, and the answer on a fixed sheet underneath. Typical questions included "Which planet's day is longer than its year?" and "Which planet has the largest moon relative to its size?" There were 24 questions in all. The display attracted a lot of interest and most of my guests got about one third to one half of the questions correct. (Even I made several mistakes with the answers, it turns out!)

Then along comes a little boy barely able to see over the top of the table. He stated each question, considered his answer for a moment and, with a soft voice, answered 18 of the 24 questions correctly, with no coaching from his

parents! I watched in utter amazement. [Joey Ripper, age 4](#) (from the South Hills) was the astronomy prodigy who blew away the competition.

According to his Jessica, his mom, "His interest in Space began when he had just turned two and he loved the moon and the stars. He learned the phases of the moon and slowly developed an unbelievable interest and appetite for knowledge about the solar system. He knows an immense number of facts about the planets, their moons, and other major stars in the galaxy."

We can only hope that this gifted person will someday consider membership in the AAAP, assuming that he doesn't take an assignment with NASA, a major university or professional observatory. In the meantime, we hope to see him again at next year's Astronomy Weekend.

Interaction With Our Star Party Guests: Rules of Conduct.....by Tom Reiland, Director of Wagman Observatory



(Photo from StarGeezer Astronomy.com)

Here are guidelines for Star Parties at Wagman and Mingo Observatories and all other star parties and outreach activities. These rules of conduct were suggested by legal counsel during the past year:

- 1.) No vulgar language.
- 2.) No sexist or racist remarks or jokes.
- 3.) No physical contact with children unless their parents give permission to lift them to view through a scope or to prevent them from falling off of a ladder. These are duties that the parents or guardians should take care of and not our members. Catching a falling child is okay to prevent injury and law suits.
- 4.) No inappropriate behavior or suggestive language by male volunteers towards female visitors.
- 5.) Try to avoid arguments concerning religion versus science issues, but if this is not possible, do not

verbally attack someone's beliefs even though they may be flaky. Just say that you disagree with them and that everyone is welcome to their own opinions.

- 6.) Handling drunks, unruly or other problem guests:
 - a) Tell them to either settle down or leave, depending on their situation. The Directors should be told about any problem caused by such an individual and handle the problem.
 - b) If they don't listen and continue causing a disturbance, the police should be called.

We need to put our best foot forward when we interact with the public. It will prevent law suits against the club and members because we will need to follow these rules. Thank you for all of your contributions throughout the years and we hope you continue to be the best volunteers any astronomy club could desire.

Citizen Science Opportunity - Identify Gravitational Lenses.....NSN Report from Kathy Destantis

[Space Warps project](#) asks you to help discover incredibly elusive objects, rare and distant gravitational lenses. Gravitational lensing is a lens-like effect when light rays are bent passing through intense gravitational fields exerted by massive galaxies and black holes. Gravitational lens breakthroughs can help answer fundamental questions about the structure of the universe, including how many very low mass stars, too dim to see directly are present in distant galaxies. Space warps is the newest offering from Zooniverse (www.zooniverse.org). To take part visit www.spacewarps.org. More information is also available from Twitter ([@SpaceWarps](#)), and [on Facebook](#) and you can discuss any interesting objects you find on [Space Warps Talk](#).



Count Meteors for LADEE.....NSN Report from Kathy Destantis

The [LADEE mission to the Moon](#) is scheduled for launch this September, but we want to get on the radar of NSN clubs for outreach opportunities related to both the launch and mission science now.

The thin lunar atmosphere may be generated in part by meteoroid impacts. The majority of these impacts are too small to be observable from Earth, but there is a correlation between the meteors seen in our own atmosphere and meteoroid impacts on the Moon. Comparing variations in the rates of meteors counted by observers on Earth with changes LADEE's instruments see in the structure and composition of the lunar atmosphere can help us better understand the role of impacts as a source for the lunar atmosphere.

There's a free app to help you count meteors and automatically submit the data to NASA. It's called Meteor Counter and is available for both Android and iPhone/Pad platforms. [Download the Meteor Counter app now](#) and practice so you'll be ready to contribute to the science of our next mission to the moon in the Fall. To find out more about the LADEE mission, go here: http://www.nasa.gov/mission_pages/LADEE/main/get-involved.html

Heads Up for CSC Skywatch Sessions



Excerpt from CSC Web Site: *“Learn about globular clusters, nebulae and planets when you see them with your own eyes. Come to SkyWatch at the Henry Buhl, Jr. Observatory and get up-close and personal with amazing celestial objects. Our 16-inch Meade LX200 Schmidt-Cassegrain telescope shows you great detail of Jupiter’s clouds, Saturn’s rings and the lunar surface. Best of all, our expert stargazers can explain exactly what you’re seeing. You can’t do this at home!”* For more information, go to:

<http://www.carnegiesciencecenter.org/planetarium/buhl-planetarium-skywatch/>

Buhl Planetarium Sky Shows Update

As of June 1, 2013 the following astronomy-related programs were running at the Buhl Planetarium:

Astronaut	Beginner’s Guide to the Universe
The Little Star That Could	Circus In The Stars
Navigating With Lewis and Clark	Two Small Pieces of Glass
Revealing the Universe	A Traveler’s Guide To Mars
Digital Universe	Far Out Space Places
IBEX: Search for the Edge....	Stars Over Pittsburgh
Zeke’s Dazzling Sky	

For availability, show times and listings of other Buhl shows, go to:

<http://www.carnegiesciencecenter.org/planetarium/>

Image of the Month: NGC-2146.....by Bill Snyder



For high-res view and technical details, go to:

http://billsnyderastrophotography.com/?page_id=3743

Bits and Pisces of News....

- **Astronomical League Membership Reminder:** There is still time for you to submit your AL membership application for the ridiculously low price of \$7.50 (send check to Treasurer Nate Brandt). AL membership connects you to all sorts of resources (observing programs, literature, national star parties) that are not available elsewhere. See Terry Trees article in the April, 2013 Guide Star. An AL membership form is provided at the end of this G.S. issue. The on-line version is available at: <http://tech.groups.yahoo.com/group/AAAPgh/files/Astronomical%20League/>
- **Sally (Wagman) Hoge** (the daughter of Nicholas E. Wagman) and her family recently visited the observatory and graciously donated \$1000 to the general operating fund. The AAAP expresses its deep appreciation for this donation. More about the Wagman family visit in the July Guide Star.
- **Telescope Raffle Reminder:** **Win a brand new 6” inch Dobsonian** telescope. At both Wagman and Mingo Observatories, a new telescope raffle will be conducted throughout the star party season. Tickets are \$5 each, and the winners will be selected at the last star party in October, the 19th at Wagman and the 26th at Mingo. The telescopes are on display at the observatories.
- **Astro-imager extraordinaire Bill Snyder** will be selling prints of his remarkable deep-sky images at this year’s Three Rivers Arts Festival, which runs from June 7 to 16. (Note: Put in a plea to the Weather Gods that this year’s festival is not hammered with thunderstorms.) See lower left for one of Bill’s recent fine images.
- For those of you keeping an **“Astronomer’s Bucket List”**, the early Summer months afford a chance to see the ISS three or four times in a single night (go to Heavens Above.com for predictions). Also, if you happened to see Mercury, Venus and Jupiter in the same telescopic field of view back on May 24-26, you can check that off your list. Three planets in the same FOV are rare. Note: Observations and images of the conjunction will be presented in the July Guide Star.
- **Listserver Post (excerpt) from Bill Moutz:** On May 24 four AAAP members attended the **Butler Outdoor Clubs Star Party** at Breakneck campground near Portersville. In attendance was John Holtz, Chris Mullen, Fred Klein and I. Although we were clouded out Fred gave a super PP Presentation on “What YOU Can See of the Solar System” His main focus was on naked eye viewing but he also touched on using binoculars and scopes. His presentation ended with a short video of a star party at Wagman. Fred also has his collection of astro photos for the folks to enjoy. I handed out flyers and displayed Terrance Dickerson’s “Night Watch”.
- **Listserver Post from Dan Peden:** I just finished the book **“The Day We Found the Universe”** by Marcia Bartusiak. It was excellent. I had gotten it at the library but will now buy my own copy to re-read when traveling. The Amazon.com book page has several reviews that do the book better justice than I ever could, as well as the text of an interview with the author. I highly recommend this book to anyone interested in the history of early 20th century astronomy, cosmology or the big U.S. observatories.

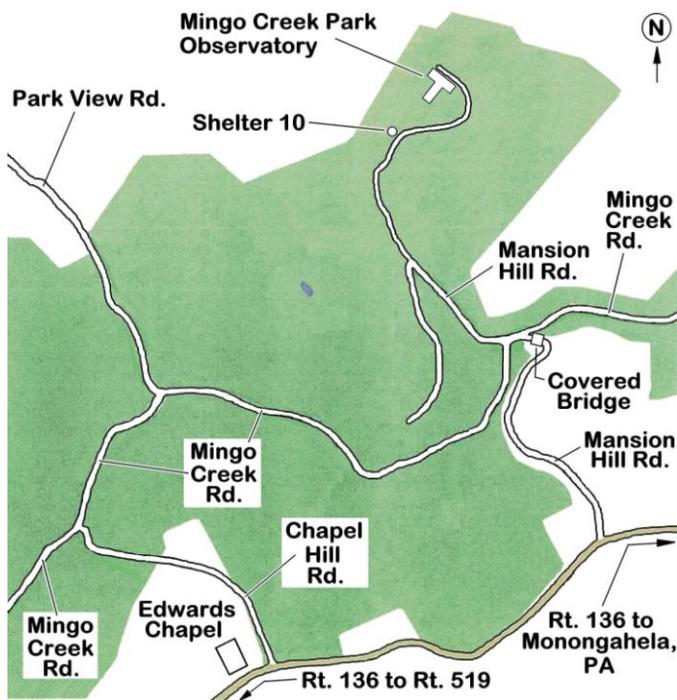
Welcome Extended to New Club Members

The AAAP is pleased to welcome the following new members into our cosmic fold:

Michael Lincoln, Jack Landman, Lewis U. Davis Jr., Lisa Lakkis

Map to Mingo Picnic

Note: Take Mansion Hill Road (not Chapel Hill Road) to get to the picnic shelter.



AAAP 2013-2014 Elected Officers

President:	John Holtz, president@3ap.org
Vice-President:	Terry Trees, vicepresident@3ap.org
Treasurer:	Nate Brandt, treasurer@3ap.org
Corresponding Sec:	Joanne Trees, correspondingsecretary@3ap.org
Recording Sec:	Diane Yorkshire, recordingsecretary@3ap.org
Membership Sec:	Don Hoecker, membershipsecretary@3ap.org
Guide Star Editor:	Eric Fischer, gseditor@3ap.org

AAAP Executive Committee Appointees (Current 2012-2013 Assignments; see p. 3)

Mike Meteney	Bill Moutz	Mike Skowvron
Chris Mullen	Joyce Osborne-Fischer	

Facility Directors

Mingo Creek Park Observatory

Director:	Bill Roemer
Assistant Director:	Gene Kulakowski
Assistant Director:	Mike Meteney

Nicholas E. Wagman Observatory

Director:	Tom Reiland
Assistant Director:	Rowen Poole
Assistant Director:	Bill Yorkshire

Membership Information

AAAP Member Dues:	\$ 30.00
Family Membership:	\$ 45.00
Student Membership*:	\$ 20.00

* K thru 12 and full time college student

Paying Your Dues

1. Make check payable to "AAAP Inc."
2. Send check to:

Nate Brandt, Treasurer
2520 Campmeeting Rd.
Sewickley, PA 15143-9104

Membership Forms

Membership **Renewal** Form available at:

http://www.3ap.org/AAAP_Mem_RenForm_2013.pdf

New Member Form available at:

http://www.3ap.org/AAAP_New_MemForm_2013.pdf

Classifieds

FOR SALE: Orion Atlas EQ-G GoTo German Equatorial mount. USED. Some dings, scratches, etc. Polar scope reticle glass cracked (see pic at lower right); polar scope should be readjusted if used it as your only polar alignment method. Made many trips to dark sites. Was my first mount and a long time reliable astrophotography companion. Most of my astrophotos came from this mount. Since building the observatory and putting in an AP900 mount, Atlas just doesn't get much use, especially since I have two of them.

Prefer to sell the mount head with hand controller, 2-11lb weights, ADM Losmandy Style dovetail adapter, and AC power supply without tripod for \$500 to a club member. Only have 1 tripod for both mounts, prefer to keep it but we can discuss for an additional fee. Contact **Nate Brandt** at icreateworlds@hotmail.com

FOR SALE: Celestron C6 SCT with 1.25" visual back, 1.25" diagonal, finder scope, and Astrozap flexible dew shield for \$300 in original box. Scope is pretty clean except for unavoidable marks on the Vixen dovetail; see pic at right. Contact **Nate Brandt** at icreateworlds@hotmail.com

FOR SALE: Orion StarMax 102 EQ Mak-Cassegrain. Optical Design: Maksutov-Cassegrain. Aperture: 102mm (4"). Effective Focal Length: 1300mm (51.2"). Focal Ratio: f/12.7. Eyepiece: 25mm Sirius Plössel, 1.25" format. Diagonal: 90 deg. Mirror Star Diagonal, 1.25" format. Finder: Orion EZ Finder II Telescope Reflex. Mount: Orion EQ-2, German-Type Equatorial. Slow Motion Controls: On RA and Dec. Axes. Motor Drive: Orion EQ-2M Single Axis DC. Motor drive on the R.A. axis. Battery powered (4 D-cells). Hand controls. Guiding rate: 100% sidereal. Centering rate: 400% sidereal. Northern or Southern Hemisphere operation. Externally clutched. Tripod: Adjustable-Height Aluminum Legs with Accessory Tray. Deluxe Carrying Case: For Optical Tube and Some Accessories. Asking Price: \$250. Contact **John Mozer**, 412-874-2688 or jdmozer@aol.com



Orion Atlas EQ
(Nate Brandt)



Celestron C6 SCT
(Nate Brandt)



Orion StarMax: Pic
from Orion Web Site
(John Mozer)

June, 2013						
SP = Star Party MM = Monthly Meeting	NEWO = Wagman Observatory CSC = Carnegie Science Center	MCPO = Mingo Observatory AO = Allegheny Observatory	SR = Sunrise (AM) SS = Sunset (PM)			
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
 27	28	29	30	31	 1	
2 SR: 5:51, SS: 8:45	3 	4	5	6	7	8 
9 AAAP founded (1929) SR: 5:50, SS: 8:49	10	11	12  Mercury @ max. East elongation	13 NEWO Phase 1 Dedication (1987)	14 SPs: NEWO and MCPO	15 SPs: NEWO and MCPO
 16 SR: 5:49, SS: 8:52	17	18	19	20 	21 Summer Solstice (1:04 AM)	22
 23 2013 largest full Moon SR: 5:50, SS: 8:54	24	25	26 Charles Messier Birthday (1730)	27	28 	29 Mingo Picnic
 30 SR: 5:53, SS: 8:54	1	2	3	4	5	

July Look-Aheads

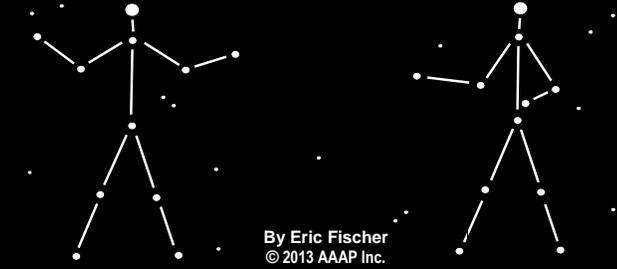
July 6 – Keystone State Park star party (contact Bill Moutz)
July 12/13 – Wagman and Mingo star parties

July 27 – Wagman Picnic, Deer Lakes Park (Veteran's Grove)

Astronomy and Astrophysics Humor with **"The Zubens"**

"Ellie, did you know they built a fancy apartment building for astronomers?"

"Yes, it's called the *Spiral Arms.*"



By Eric Fischer
© 2013 AAAP Inc.

Introducing "The Zubens" (Ellie and Essie)

This month we introduce new cartoon characters to the Guide Star: Essie and Ellie Zuben. "The Zubens" was inspired by "Ursa and Major" a wonderful series of cartoons that ran in 1990's issues of our newsletter. "Ursa and Major" was created by AAAP member Steve Piskor and gained fans both inside and outside the club (including the Smithsonian). From time to time we will re-run "Ursa and Major" plus cartoons from other AAAP members such as George Lindbloom and Bob Schmidt.



Steve Piskor, Creator of "Ursa and Major"

Quoting Galileo: "The Sun, with all those planets revolving around it and dependent on it, can still ripen a bunch of grapes as if it had nothing else in the universe to do."





Amateur Astronomers
Association of
Pittsburgh

**ASTRONOMICAL
LEAGUE**
Membership
Application Form



Astronomical League "Member-at-Large" dues are currently \$30/year for US residents.

If you join the A.L. through the AAAP, you receive a **75%** discount.

(Annual membership runs July 1 – June 30)

(Dues prices are subject to change.)

Please complete and mail this form with a \$7.50 check made out to "AAAP", with "Astro League" in its Memo Field to:

Nathan Brandt – Treasurer, AAAP
2520 Campmeeting Road
Sewickley, PA 15143-9104

PLEASE PRINT

Last Name: _____

First Name(s): _____

(A.L. membership is \$7.50/year/household. If you have an AAAP Family Membership, please list all those family members you wish to include in the Astronomical League membership.)

Address 1: _____

Address 2: _____

City: _____ State: _____ ZIP+4: _____

Telephone: _____ (_____) _____ E-Mail: _____

ADVERTISE/SHARE MY ABOVE PERSONAL INFORMATION (Circle one): YES NO

E-Mail addresses, phone numbers and mailing addresses are normally shared within the League including other League clubs/societies for the purposes of promoting astronomy related events...yours will be shared ONLY if you circle "YES".