

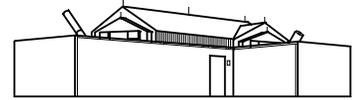
The Guide Star

Newsletter of the Amateur Astronomers Association of Pittsburgh Inc.

A Section of the Academy of Science & Art of Pittsburgh

September, 2003

Vol. 37, No. 6



Nicholas E. Wagman Observatory

It's 60,000 Years to the Next One!

Don't Neglect Mars Now: Be There for Sept. 5, 6 and 20 Star Parties



Maybe it's just human psychology, but anticipating an event seems more interesting than the event itself or looking back at it. So it goes with Mars. After the August 27 close pass, you will see few if any TV reports, headlines or articles about the Red Planet. How frustrating! Mars will still be a fantastic sight for several months to come and may even show details not seen during the approach phase (especially if another dust storm kicks up before then). Thus, make sure to tell all your friends, workmates, relatives, etc. to attend the club's **Sept. 5 and 6** star parties at both the Wagman and Mingo sites (and **Sept. 20** for Wagman "Moonrise Special") for a long, good look at this marvelous planet. What to bring to the star parties? Yourself, your scope or binoculars, extra literature and your desire to help park cars/answer questions/speak to kids/help with crowd control, etc. etc. Mars awaits you, and so do we.

New Members Reception at Sept. 12 Meeting

by Bill Roemer

- What: A reception for new members
For whom: Any AAAP member who has joined in the past year or any member who considers herself/himself new.
Where: During the regular AAAP meeting, CSC
When: Friday, September 12, 2003
Time: 7:30 PM

(continued on page 2, column 2)

First Meeting of 2003/2004 Season

September's Guest Speaker Sheds Light On Photometry



In this age of digital photography, CCDs, image stacking, etc. one might wonder what ever happened to the science (and art) of photometry – the technique of precisely measuring and quantifying star light. We're pleased to report that the subject is alive and well, still of great value to professional researchers, and the topic of our guest speaker, **Bruce Howard**, at the AAAP's **Sept. 12** meeting at the **Carnegie Science Center** (meeting starts at **7:30 pm** in the main lecture hall). Here are some comments from Bruce about his interest and lecture "Photoelectric Photometry - The Precision Measurement of Starlight":

"I am an amateur astronomer recently relocated to this area from South Carolina. I have been involved in astronomy since the late 60's in one fashion or another - mostly involved in telescope and instrument construction. In the mid 90's I became interested in Photoelectric Photometry. This was, and to a certain extent still is, an area of research that amateurs can make a contribution to science that is useful to the professional astronomer. I constructed the necessary equipment over a period of several years and then made observations and data reductions for several more years. These concluded in 2000 as I began to work extensively away from home and ultimately was compelled to relocate to this area."

(continued on page 2, column 1)

Humble, Respected AAAP Member **Bob Florida Dies In Home Accident**



Robert G. Florida, a 25-year member of the AAAP who was much admired for his soft-spoken personality and exceptional astronomical skills, died July 26 as the result of a fall down his cellar steps. Bob made many close friends in the AAAP, consistently helped at star parties and other club events, and rarely missed a business meeting. Many will remember Bob for always wearing a bow tie at the meetings, his quiet manner, persistent smile, disdain for useless controversy, sense of humor and abilities as an astrophotographer and astronomer in general. Here are some remembrances of Bob from several AAAP members:

Erik Bauer: *"I'd known Bob for nearly 30 years since I first joined the South Hills Backyard Astronomers (SHBA.) He was a great guy, an excellent amateur astronomer, and a fabulous astrophotographer. He worked with negatives/prints, which probably explains why I don't recall him winning any of the Kevin Burnell Photo Contests. I remember visiting his amazing fold-open A-frame observatory in Peters Twp., and helping out with his Discovery Program star parties in Murrysville. He even did what he could to help me find a new job during this past year. I will really miss him."*

Dave Smith: *"I always considered Bob the best black and white film astro-photographer in the club. He would work with "hypered" film that he prepared himself in a vacuum chamber and gas."*

(continued on page 2, column 1)



Bob Florida in his unique "A"-frame backyard observatory.
(Photo by David L. Smith)

Bob Florida Leaves Many Fond Memories

(continued from front page)

He did make the transition to digital. I met Bob before joining AAAP. I photographed Bob at his McMurray "A" frame observatory with other SHBA members for article for a magazine Mt. Lebanon Federal did on community activities in the late 70's. It is still hard to believe Bob is gone. I will miss Him at Wagman and talking about photography with him at Max's."

Bob and Maryanne Mickey: "This is really devastating news for us. Bob got us started (along with Erik Bauer) in astronomy at one of the family star parties he held. Since then we have been blessed to help each year and he has helped us at the Penn Trafford version. There is so much I could say about this kind and gentle man."

John Holtz: "Bob Florida's 25th anniversary in the AAAP was coming up in September. I will always remember his trademark bow tie and eagerness to talk astronomy. He will be missed."

Tom Reiland: "Bob Florida will be missed by many of us, not just because he was one of the most active in the AAAP, he was one of our nicest members, also. I don't know of anyone who didn't get along with Bob. I'll miss seeing him at the Star Parties at Wagman Observatory and talking to him about our hobby. It's not going to be same on the hilltop from now on."

Taking A Fresh Look At Celestial Photometry

(continued from front page)

"My observatory is still in my back yard in South Carolina waiting for me to dismantle it. It consists of a homemade 16 inch Cassegrain reflector with a long 14.4:1 focal ratio which is ideal for photometry, but lesser so for other observations. I also have several generations of photometers - each model incorporates some lessons learned from the model before. Some of the equipment I used for this work is now somewhat obsolete as more and more of this work is being done using CCD based photometers where mine used photomultipliers. However the techniques are very similar and the majority of what I would be discussing is still reasonably current."

Subscription Increase Reminder

"Sky" Is Up (In More Ways Than One)

by John Holtz (from AAAP Listserver)

Between the August Guide Star and the List Server, I think that everyone is aware that Sky & Telescope is increasing their subscription rate. So, I will not repeat the information here. What I would like to point out is that any old membership applications need to be CHANGED or DESTROYED. The old applications have an "Effective" date of 7/1/2002 (bottom left corner) and a Sky & Telescope cost of \$30.

The new applications have an "Effective" date of 8/21/2003 and a Sky & Telescope cost of \$33. There is a new supply (200) of applications at Wagman Observatory. If you would like me to mail some to you, please indicate how many. If you would like an original copy so that you can make your own copies (reimbursible, of course), please let me know. Thanks for your help in spreading the word.

Simply Put: "We Need You!"

- Keeping a decades-old tradition going, we have been invited once again to assist **Allegheny Observatory** with their annual **Open House**, which is set for **October 3**. AAAP members set up scopes on the observatory front lawn, or help direct visitors through the bowels of the mighty observatory. If you haven't been to AO in awhile (or ever!), this is an excellent chance to see the entire facility inside-out. Contact **Lou Coban** at coban+@pitt.edu or call 412-321-2400 to sign up.



AO photo by
Rich Bailey

- Although the Kevin Brunelle photo contest is not until November, we need someone to coordinate the submission of entries (our thanks to the Conte family for handling this in the past). If you would like run the contest, please contact President George Guzik.
- On June 9, 2004, the AAAP will be 75 years old; we plan to hold a celebratory banquet for the occasion near that date. We need a Coordinator to look into a banquet location, catering arrangements, the program, guest speakers, etc. Again, speak with George Guzik if you would like to help in this capacity, or with any other banquet assignment.

Greetings, Greetings to New Members

(continued from front page)

Why should new members attend this reception? It will give you an opportunity to meet others in the light. It will show you just how much we appreciate your being a part of AAAP. Join us at 7:30 PM at The Carnegie Science Center on September 12!

The New Members Committee:

Brett Day	Brent Hudock	Pete Zapadka
Mary DeVaughn	Bill Roemer	

Wagman Observatory A Busy Place In Spite of Soggy Weather

Security System Armed, But Not Dangerous

Vandals Strike, But No Major Damage

The new security system at Wagman Observatory is fully activated now. As a result, if you don't know how to properly disengage/re-engage the system, all sorts of trouble will be caused. **Please contact Flacc Stifel (412-486-8067), Tom Reiland (412-487-8326) or Wade Barbin (724-443-3404) to learn the proper operation of this system, before you head up to the observatory.**

Barely a month after the club's trailer (parked at Wagman) was destroyed by fire, vandals struck around August 12-13. Gutters and downspouts were either bent or pulled off, the power company electric meter was broken off, and even the rain gauge (never touched before) was damaged. We suspect kids (with nothing to do by late summer) were responsible; no connection has yet been made with the trailer fire. Fortunately, Dave Houggy's construction equipment was left untouched. Just before Guide Star press time, the electric meter had been replaced and County police were investigating. We're thinking of installing some kind of protective cover/guard for the meter.

Follow the Limestone Road

The driveway that starts at the Wagman gate now reaches all the way to the front door of the observatory, thanks to the efforts and contributions of members **Dave Houggy, Flacc Stifel, Wade Barbin, Bill Yorkshire** and **Bob Kalan** who toiled at the site on August 7. The fresh layer of limestone was put down with help from contractor's equipment supplied by Dave Houggy; our special thanks to Dave for his expert services. Incidentally, the square paving stones along the south wall of the Brashear Telescope room have been removed. One or two more applications of the limestone will be needed to build a firm roadbed. In addition to the driveway, the barren soil areas around the building have also been seeded and new grass growth has appeared. Small orange marker flags have been placed to denote the seeded areas. In addition to improving the general appearance of the Wagman grounds, the extended driveway and new grass will make the Wagman site less prone to mud problems in the Spring (e.g. at Wagman Winterfest.).

Help! Do You Understand Insurance Lingo?

From John Holtz: *"It's time for the club to renew the insurance for Wagman Observatory. With the recent vandalism, an in-depth review of our coverage seems like a good idea. Unfortunately, I do not have the head for understanding the pages and pages of coverage and exclusions. If you have the interest and ability to read and understand the insurance-babble, please contact me. The club would benefit greatly from your input."*

Church Group Visits, Enjoys Despite Clouds

From Tom Reiland: *"Thanks go out to Flacc Stifel, Bill Roemer, Pete Zapadka, George Guzik, John Diller and Frank Pastin who helped out with the church group visit to Wagman Observatory on August 8. That's a good number to handle twenty or more visitors."*



Dave Houggy (in dump truck) spreads first layer of limestone in newly extended driveway.



Old paving stones (they're not light weight!) are yanked with the help of Dave Houggy's "Bob Cat" type tractor.



Bill Yorkshire (left) gives the orders while George Guzik and Wade Barbin do the real work. ☺



Tired Wade Barbin surveys new groundskeeping results.

Mingo Observatory Planning Continues Along Smoothly

by Shawn van Mastrigt (from AAAP Listserver)

The Mingo Observatory Project has taken two important steps forward for the construction of the observatory. At a public hearing on August 11, the Nottingham Twp. Planning Committee approved the building blueprints, and the plot plan with minor alterations to be made to the building, and a few variances which will need to be approved. On August 18, the Nottingham Twp. Board of Supervisors gave the project the go ahead at a public hearing. The supervisors have approved the "Conditional Use Land Development" application for the observatory. The next step is a zoning hearing for the two variances necessary for the project:

- Variance for hours of operation of observatory.
- Variance for pavement requirement for roads and parking.

The supervisors seem very much in favor of the project, and they made sure to mention that they would like to see an article in their local paper as the project progresses.

(Editor's note: Make sure to check out all the updates to the Mingo Observatory Web site, which includes lots of photos from recent star parties. Shawn is our superb Web Master for this site.)

Another Good Showing At Mingo

by Dave Smith (from AAAP Listserver)

In spite of the weather we had around 17 visitors show August 2 at Mingo after the rain, and we may have five new members. The picnic shelter has been working nicely as a place to set up displays and meet and talk with the public. The only telescope we used was one of the new members 4.25" to look at he moon. August 1 we had a few telescopes on the hill. we were able to see a few objects. The people I have talked to are well aware of our observatory project and are excited about. Some know about Wagman but just don't want to drive that far. We also had a good turn out of members, several from the North, to check out the site.

Surprise! Keystone Event Goes Well Despite Weather

by GeorgeGuzik

Our event at Keystone State Park on last month certainly looked like it was going to be a "non-event." Sky conditions kept getting worse toward evening, with clouds moving in. In fact, I was wondering if ANY members of the public would show up for it. Surprise! We actually had a decent turnout with several families, and lots of kids, arriving. Although we didn't have much to show them in the sky, we did show them some earthly objects like telephone poles (down the street quite a distance) and camp lanterns (across the lake). We had a good assortment of telescopes set up so that the visitors could learn more about equipment. Pam Primas, Environmental Education Specialist at Keystone, also had a number of activities for the families. As the evening came to a close, a few stars managed to shine dimly through the clouds and haze which made the event "official." I thank **Bill and Maureen Moutz, Frank Pastin, John Diller, and Mark Orsatti** for participating in this event and for making it enjoyable in spite of the clouds.

Furthermore and In Conclusion

- ☛ Once our new observatory in Mingo Park is fully up and running, we expect a considerable boost in membership. All the more reason for you to switch from the printed Guide Star to on Guide Star On Line (GSOL). How so? The observatory's activities will generate more news stories, a larger newsletter, more new members, etc. Help us hold the line on resulting costs by becoming an on-line subscriber (you'll also help save some trees in the process). To become a GSOL subscriber, contact Charlotte Tunney at tunneyc@carnegielibrary.org
- ☛ Generally regarded as the best field reference for upcoming astronomical events – "The Observer's Handbook" – will be ordered this Fall. It's not to soon to place your order with our **Mari-Jo Meyers**, our Merchandise Coordinator. She can be contacted at any upcoming meeting, star party, by phone at 724-339-3447 or by e-mail at wmeyers1@comcast.net
- ☛ We've gotten several nice comments on Jerry Zhu's photo gallery in the August Guide Star Web features. New digital images or old film, your astrophotography is certainly worthy of a spread in a future newsletter. Contact Eric Fischer to submit your entries.
- ☛ Congratulations to AAAP'er **Gene Henderson**...whose Bino Platform is featured in S&T's New Product Showcase for September. Best of luck, Gene.



Amateur Astronomers Association of Pittsburgh, Inc.

A section of the Academy of Science and Art of Pittsburgh
Founded June 9, 1929 by Chester B. Roe and Leo J. Scanlon

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AAAP Member Dues***:

AAAP Dues:	\$18.00
Junior Member (under 18):	\$13.00
<u>Sky & Telescope Magazine:</u>	Add \$33.00
<u>Astronomy Magazine:</u>	Add \$29.00

***Basic Procedure for Paying Dues:

1. Make check payable to "AAAP Inc."
2. Send check to John Holtz, Treasurer, 176 Hidden Hill Rd, Sarver, PA 16055-8907

The Nebraska Star Party

by Trevor Lewis

I just returned from a week at the tenth Nebraska Star Party (NSP). This was my third year at the event. As usual, my principal goal was to get away to a quiet place for a week; any stars that show up are a bonus. Also as usual, I was the only AAAP member there, at least to my knowledge. I posted a few photos at <http://photos.yahoo.com/tjlewis6> in the "Nebraska Star Party 2003" folder.



Just plain fun. Photo by Trevor Lewis

The NSP is a rather diffuse event compared to the Laurel Highlands Star Cruise (LHSC) or the Black Forest Star Party, my two other regular events. The observing field is huge and open, and no one has to have a neighbor unless they want one. Many attendees sleep in town or at another campground, rather than at the observing field. I stay at a motel in town (Valentine, NE, 26 miles away, pop. 2862), leaving only the tripod set up during the day. One benefit is the restaurant across the street

from the motel--Nebraska steaks, all on their own, make the trip worthwhile. Prospective attendees who contemplate camping on the observing field should be aware that conditions on the plains could seem harsh to Easterners. Temperatures, winds, and precipitation can be noteworthy, and every year I see one or more tents, and an occasional telescope, rather drastically rearranged by a daytime storm. The most successful campers seem to use either good solid four-season tents or hard-sided campers with air conditioning.

I was there for five observing nights: Sunday through Thursday. Early Sunday night was overcast. Although it cleared later, I did not stay because I had been driving most of the day. The next three nights were good observing nights, with Wednesday definitely the best. There were only about six hours of dark sky between twilights, but observing conditions were good (by southwestern PA standards) less than an hour after sunset. Skies are very steady and transparent, and light pollution is negligible. It was easy to confirm the NSP claim that the Milky Way is bright enough to cast shadows. I could see what I was doing without artificial light.

I spent most of my observing time in recreational mode, just reviewing old favorites. I did reserve some time to look for some objects with low surface brightness, since they are much easier in those skies. I also experimented a bit with photography for the first time. Mars was spectacular, as scheduled.

Thursday night clouded over by midnight. Before dark, Todd Andrews, the news anchor from a North Platte TV station (on his day off) taped a story on the NSP. For some reason, perhaps my ubiquitous laptop, he spent much of his time taping me and my setup. After dark I gave him a quick sky tour including M17, Neptune, and 12 Victoria. My "15 seconds" or so were on the Friday evening news -- a pretty good piece, actually. He introduced me as having traveled "over a thousand miles with thousands of dollars of equipment" to observe in Nebraska skies. Not surprisingly, my plugs for the AAAP and LHSC didn't make the cut, though I did plug Star Cruise to NSP attendees looking for a great event!

Star Party at Spruce Knob

by Jeff Marsh

Friday night was good. Spruce Knob is a very dark site, although on this particular night seeing and transparency were down a bit. But who's complaining? By my standards this was an amazing sky. A few

of the sights I observed through my 11" Dob: a nice view of the Veil, the Crescent Nebula, old favorites like M13, M11, M8, M22, and my first view of Pluto. (At least I think I saw it!)

The non-Pittsburgh observers had 20" and a 24" Dobs, which gave great views. The spirals in M51 were easy to see, even for me.

We had visitors from The Mountain Institute. It is their land we were on, and so we had a bit of an impromptu star party for them, showing them the best sights. Being a bit outgunned by the big Dobs, I just let people sweep through the Milky Way with a wide field eyepiece. I'm fairly new at this, but I've learned that in dark skies this is a great thing to show. We have all seen the



Panorama of Spruce Knob. Photo by Gary W. Lake of West Virginia Wallpapers (<http://www.motownflash.com>) Used by permission.

Milky Way in scopes and binoculars, but for a new person the number of stars is very impressive. And I think it adds to the experience if the viewer can move the scope around a bit on their own and sweep through the huge numbers of stars. It's the kind of wondrous experience many visitors are looking for at a star party.

Around 2 a.m. and later Mars was high enough to look pretty good to me. In my limited experience, it was my best Mars view ever. I started this hobby two years ago just in time for the great

(continued on page 6, column 1)

First Light

by Dave Mueller

Take me off the non-observers list! Thanks to an unexpected quarterly bonus from the "salt mine," I'm now a proud owner of my first scope -- an 8" f/7 Dobsonian. I picked it up in the rain from Helix on Thursday night and was prepared to spend the next 40 days and nights of rain reviewing my vast collection of astronomy book.

Imagine my delight when the weather cleared Friday afternoon! Luckily, it was day 2 of my hobby so I don't have any non-essential junk yet. I put the scope, flashlight, and all three eyepieces in the car and headed to Mingo. I arrived around 9:30 after a few guiding errors in the light fog, and spent a few minutes talking to the members in the pavilion. They were watching a nice DVD called "The Universe" that someone had brought back from Star Cruise. It had a high "oohh" and "aaah" factor due to lots of Hubble images). Shortly after, I headed up the hill to begin collecting some photons.

The scope set up fast, and it took about 20 minutes to install and sight the Telrad on the Moon. First light was Mizar and Alcor about 10:30. I was easily able to split Mizar and it's companion, and moved up to higher power while zeroing in the Telrad. Soon after, I spied a small spot on

the southeast horizon that should have been Mars. It was odd that it wasn't red, and didn't move much. About 10 minutes later, someone turned off their streetlight and Mars disappeared.

It was pretty hazy, but started to clear a little. After about 20 minutes of straining my neck, I was able to find M13 in Hercules around 11 p.m. I want to know what drunken caveman came up with that constellation!

I was the last one on the hilltop and wasn't quite sure what the protocol was for leaving, so I started to pack up about 11:15. I was starting to have visions of the gate at the bottom of the hill being locked and having to disassemble the hinges with my McGyver tool. Luckily, the gate was still open, so I closed it behind me.

When I arrived home, the real Mars was about 10 degrees over the neighbor's roof, so I set up the scope on the back steps. A few quick shots of my favorite lubricant (Tri-flow) made the Dobsonian mount a lot smoother, and I was able to get about 15 seconds of viewing as Mars drifted through the eyepiece at 140x. Jiggle, jiggle, watch; jiggle, jiggle, watch. And then it was almost two hours later. I was able to see the South Polar Cap (a lot



smaller than it was at Star Cruise), and a dark feature that looked like a bikini bottom. I made a sketch. [above] After Mars went behind a tree, I took a break for a cheese stuffed soft pretzel, fresh from the oven. Afterwards, I moved to the patio and was able to find the Coathanger. It just barely fit inside my widest eyepiece. It was nice seeing it right side up for a change. I dragged myself and the scope inside about 2 a.m.

Thanks to the AAAP for all of the information that I've absorbed at meetings and the Star Cruises, and to Tim Hagan at Helix for showing me which end of the scope to point at the sky.

Star Party At Spruce Knob

(continued from page 5)

Mars dust storm. So I am happy to see anything on Mars and Saturday morning provided that and well beyond.

Saturday night the clouds allowed only limited viewing for an hour or so—I still saw plenty in that time. Again no complaints. If I get one good night like Friday, that's enough to make the whole trip worthwhile. I had a great time. Thanks again to Dave Smith for finding this site, making the arrangements, and encouraging us to go.



But seriously folks! "Bikini bottom" imaged by Jerry Zhu

CLASSIFIEDS - FOR SALE:

12" LX200 with UHT coating, 1.5 years old, \$2600. Call Bernie Kriger at 412-787-1171 or e-mail bkriger@aol.com.

2x Tele Converter. Tamron MC. Fully multi-coated optics. Call Simon Sloan at 412-331-2567 or e-mail simon128d@hotmail.com.

6" reflector telescope in 8" tube on Meade Starfinder mount Two lenses with full aperture solar filter. \$500.00 412-521-1192

8" Meade LX90 Schmidt Cassegrain telescope, computer controlled with equatorial wedge, full aperture solar filter, and AC/DC power cord. \$1500.00 412-521-1192

Discovery 10" PDHQ Dob. Mint condition (less than 2 years old) with standard accessories and JMI Crayford focuser. Looking for \$800 or best offer. Can be picked up in Wheeling, WV or we can make delivery arrangements. Optics absolutely superb. Contact Patrick Plunkett at plunkett@wju.edu

September 2003

Fridge Calendar by Cathy Rivi

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3 	4 J Holtz Astronomy Class	5 Star Party (Wagman and Mingo Park)	6 Star Party (Wagman and Mingo Park)
7 	8 Star Trek premiers 1966	9	10 	11	12 AAAP Business Meeting 7:30 PM Carnegie Science Center	13
14 John Dobson's Birthday, 1915	15	16 	17	18 	19 Allegheny Observatory Lecture 7:30 P.M. RSVP required; call: (412) 321-2400	20 Star Party (Wagman) Dark Sky/Moonrise
21 How easily the ripe grain leaves the husk At the simple turning of the planet.	22	23 The Jetsons premiers 1962 Autumnal Equinox 6:47 a.m. ET	24	25 	26	27 
28	29 	30	"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." Galileo			

Looking ahead:	Star Party Oct. 3 (Mingo Park)	<u>AAAP Long-Range Meeting Schedule</u>	
	Oct.4 (Wagman and Mingo Park)	Oct. 10	Feb. 6, 2004
	Oct. 18 (Wagman)	Nov. 7	Mar. 5, 2004
		Dec. 5	Apr. 2, 2004
		Jan. 9, 2004	May 7, 2004



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