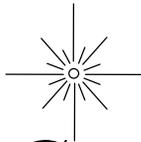




**AAAP 75th Anniversary
1929 to 2004**



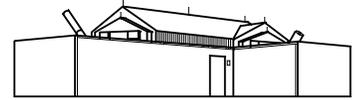
The Guide Star

Newsletter of the Amateur Astronomers Association of Pittsburgh Inc.

A Section of the Academy of Science & Art of Pittsburgh

July, 2004

Vol. 38, No. 4



Nicholas E. Wagman Observatory

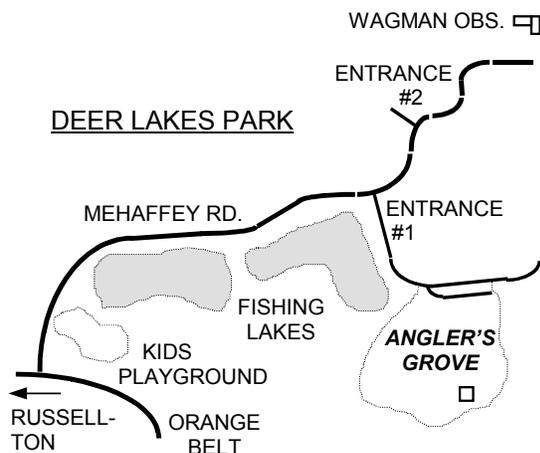
\$0 Admission at NEWO and MCPO Sites **Seven Star Parties for the Price of None**

How many times has a member of the public asked you if there is a charge for attending an AAAP star party? Perhaps the ideal answer is "There is no charge, but we'll give you quite a charge!". The question is reasonable since it seems you almost have to pay someone just to go out your front door in the morning. This month we conduct seven, free-of-charge public star parties at the Wagman and Mingo sites: **July 9** at Mingo, **July 10** "Dark Sky Specials" at both sites, **July 23 and 24** for standard quarter-Moon events at both sites. As always, we make a friendly plea for free help from you at these events. Being friendly and helpful to our guests will no doubt increase the stash in our donation cans. Reminder: Because of the ongoing construction at Mingo, scopes will be set up near the Pavillion. Contact **Larry McHenry** or **Ed Moss** if you have any questions about use of the Mingo site. See also article on p. 2.

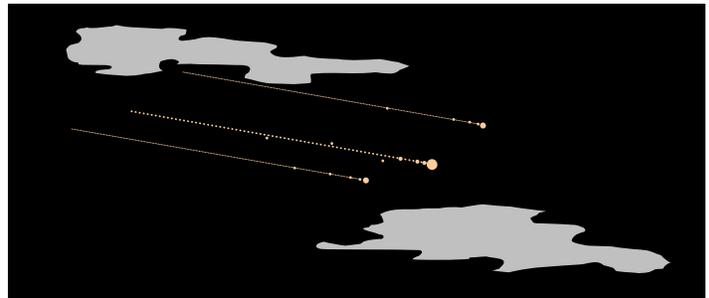


"Basket Cases" Welcome at AAAP Summer Picnic

It's time once again (**July 17, 3:00 start**) to run, wander, sit, walk, hop, swing, twirl, read, munch or whatever it is you like to do at the annual AAAP Picnic at **Angler's Grove** in **Deer Lakes Park** (see map below). Just like letting a car enter traffic in front of you, you don't have to bring goodies to the picnic, but most people observe the unwritten rule of bringing something to help spice up the feast. When it gets dark, other people in the park must sadly go home, while we retreat to our fabulous observatory for an evening of members-only star gazing.



Holy Atmospheric Friction! Members Observe Ultra-Rare Rocket Reentry



AAAP members were minding their own astronomical business at the June 26 Wagman and Mingo public star parties when an event happened that makes even a Venus transit look commonplace: A sky-crossing reentry of a Russian rocket stage, moving from MW to E in and out of a scattering of low clouds at about 10:51 pm. It appeared as three distinct (but clearly disintegrating!) orange streaks moving much slower than a meteor, but faster than the fastest low-orbit satellites. Members lucky enough to have binoculars in hand noted many small fragments breaking away from the main bodies. (If you have not seen a reentry before, recall the TV images of the Mir or Shuttle Columbia break-up.) As members cheered and applauded, some attempted to give each other "High Fives", but often missed each other in the darkness. ☺ John Holtz soon determined that we saw a so-called "BOZ" rocket motor of an Russian SL-12 upper stage launched in 1992. Days after this fantastic sight, some member's hearts were still racing.

Morning Glory: Venus Transit Dazzles



The low horizon elevation of the June 8 transit of Venus (as well as the fickle weather we have this time of year) had everyone biting their nails in advance of the event. But the clouds stayed away that morning and most members who tried to see the transit were thus rewarded. In addition to backyard observations, more than 50 members watched the event from the Wagman site (see above photo by Phil Hughes). Jerryu Zhu gained local fame with his Venus+airliner transit photo, which was displayed on the Post-Gazette front page. For detailed reports on the transit, refer to the features section of this Guide Star.

Mingo Observatory Construction Hustling Along



The basic "T" shape of the Mingo Observatory is evident in this early construction photo by Larry McHenry. Since this image was taken, the walls have climbed and much other work completed.

Just as planning and funding for the club's new Mingo Creek Park Observatory moved along at warp speed, so to is the actual construction work. As of Guide Star press time, here are some of the milestones passed (in roughly sequential order):

- ✓ N-S site alignment done by Mike Meteney, Ed Moss, and Dan Reed.
- ✓ Electric supply line from pavilion cleared of trees and trenched.
- ✓ Building foundation footers dug and concrete poured, holes for piers dug out.
- ✓ Roll-off roof track and hand crank fabrication started (by Flacc Stifel).
- ✓ Walls for refractor room complete, three quarters of planetarium room walls up

Member's Help with Construction Tasks Also Needed

Not all of the Mingo work is being handled by the contractors. We are performing various general tasks to help keep costs under control and keep the project on schedule (e.g. some hand digging of ditches for underground conduit, painting, interior electrical work.). If you can provide time and skills in any construction-related area, please contact **Mike Meteney** at 724-348-9087 or mmeteney@comcast.net

Reminders About Mingo Site Use During Construction

Adapted from AAAP Listserver Posting by Larry McHenry

If you're planning to visit the MCPO site in the near future, please exercise caution when walking near the construction area. The contractor is working on building the concrete block walls around the planetarium room, the reception area, and the reflector telescope room. There is a large supply of block stacked on the floor areas of the observatory, making the place look a bit like a concrete block version of Stonehenge. The contractor has a lot of scaffolding in the construction area. Also, the excavated area around the building has not yet been finish graded so it is rough and can be difficult to traverse, especially in the area at the top of the electrical service trench. As a guideline, I ask that you stay on the untouched ground surrounding the construction site and view the project from a distance.

Usual Superb Help from Members

After Rainy Start, Clear Sat. Night Salvation for Star Cruise

Like the Three Rivers Arts (i.e. "Thunderstorm") Festival and some recent Laurel Highland Star Cruises, the 2004 edition of LHSC got off to a stormy/muddy start, but was saved by a spectacular Saturday night (June 19). Also like previous LHSC's, this year's event succeeded because of the tremendous work done by members such as **Terry Trees**, **Charlotte Tunney**, **Larry McHenry**, **Flacc Stifel**, **John Holtz**, **Bob Kalan** and a host of others. See the features section of this GS for Prez Guzik's report.



Photo by Phil Huges

Impromptu 75th "Banquet" At Wagman

At one time we were planning to hold a big banquet this year to celebrate the club's 75th Anniversary, but withdrew the idea because we were already stretched too thin with work on Mingo, LHSC, the Manka scope upgrade, etc. But President George Guzik saved the day (June 9) by holding an impromptu celebration at Wagman Observatory. George read Leo Scanlon's account of the club's first meeting, and a cake was shared by about 40 members in attendance. George also noted "*Congratulations to the members of the AAAP, both past and present, for building upon the work of Leo Scanlon and Chester Roe to make the AAAP the great organization it is today.*"



Youngest club member, Jim Moody cuts the 75th cake (photo by Colleen Nelson)

July News Wrap-Up

- ✓ The new optics for the Manka telescope are now installed, however some additional alignment work is still in process. **Please do not attempt to collimate or make any other adjustments on the telescope!!!!** This work is restricted to **Wade Barbin** and **Flacc Stifel**. If you would like to learn more about the operation of either Wagman scope, please contact Flacc.
- ✓ Schedule Reminders: **July 10**, Keystone State Park star party, with the theme "*Mythology and Constellations*". The **Aug. 14** Keystone event covers "*Meteors: Fact & Fiction*". Contact George Guzik to volunteer for either event. "*Astroblast*", hosted by our friends at the Oil Region Astronomical Society (ORAS), will be staged from **Aug. 17 to 22**. For more info go to astroblast@oras.org or call John O'Hara at (814) 677-3972.
- ✓ Our deepest condolences to Terry Trees and his family upon the recent death of Terry's stepfather. Of course, Terry is one of the club's most active and respected members, handling a host of programs and events such as LHSC.
- ✓ Our thanks to the scores of members who helped out at the June 25/26 star parties at Wagman and Mingo. Good show!

Venus Transit De-lights!

(Compiled by Ann Norman from the AAAP Listserver)

Astro photos by Jerry Zhu

Phil Breidenbach: GOOD MORNING!! I went to work today figuring I was going to miss the Venus Sun pass. The weather was great coming in. The moon was nice and clear with only a little bit of clouds hiding the horizon. I had brought a couple welding filters "just in case" I got a chance to go out and take a quick look. As the Sun came over the horizon, I just HAD to get a look.

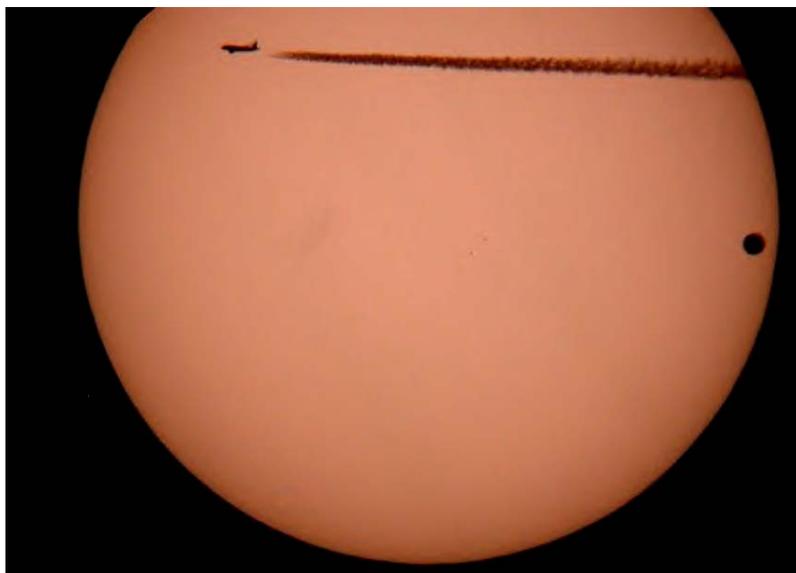
I got an old Fecker finder scope that was lying around in the assembly area and taped one of my welding filters over the end of it. I then went up the stairs in the front lobby and set it on the windowsill and, wonder of wonders, there it was—Venus was approximately half a planet diameter away from the edge of the Sun. I brought almost all of my fellow workers up to see it. After the planet hit the Sun's edge, I took it down. I do have to do a little bit of work today, I guess! Ha ha!

Everyone I showed it to was impressed and many thanked me. I hope everyone that went out this morning on expeditions had as good luck as I did!

Tom Reiland: I just got back from my 1.6 mile Venus Transit Expedition to 1210 Middle Road in Shaler Township. Here's the one word that expresses my feelings about this event: WOW!!!! What a great time to observe the Sun, Venus, Moon, and Earth simultaneously! I hope things went well at Wagman Observatory.

Ann Norman: I set up my telescope on the sidewalk near my house in Swisshelm Park and projected the sun's image onto a piece of paper. Easy! No long-term damage to my eyes--the bright purple spot I was seeing everywhere has already dimmed to yellow.

Pete Zapadka: Tom Reiland and I had a phenomenal view from right up the road from my place. The sun rose at 5:50 a.m. and we had to wait for it to clear some trees and some morning clouds. By 6:09 a.m., we were watching the transit! We first observed the transit with Tom's refractor -- he projected the image onto a movie screen. Venus was evident right away. Later, we noticed a bright area circling Venus as we looked at the image on the screen. As the sun got higher, I pulled out my binoculars and No. 14 welder's filter. I kept one lens of the binoculars capped and placed the welder's filter over the other end. What a view!! Venus was larger than I thought it would be and so easy to see. So I put the binoculars down and held the welder's filter to my eyes. With difficulty, I was able to see Venus naked-eye! It was nearly at the limit of my visual abilities, but it was evident [Tom also saw it nude-eye.]



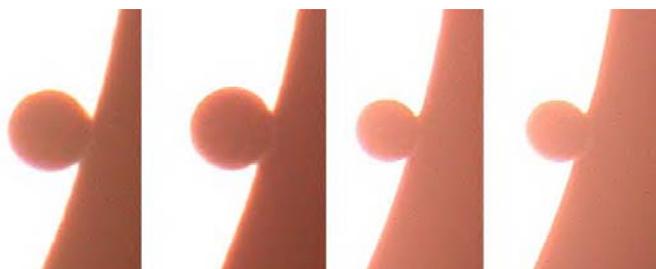
Afterwards, I rushed off to work--which is where I am now so I'd better go earn my pay. Way cool!!

Tim Manka: I went to the football field in front of North Hills High School at the request of someone at the Carnegie Science Center. We had four telescopes set up. Over a hundred people witnessed the Venus transit, including students, teachers, and the general public. We were amazed that it was clear in Pittsburgh. I gave talks while people waited in line for a telescope. Afterwards I went in the school and taught two classes on the history of astronomy.

Bill Roemer: In South Fayette Township Jean and I set up our 8" Dob with solar filter. About 6:08 we could see Venus. We watched until it was past the sun at about 7:27. We could also easily see it nude eye until about 7:00 though a welder's glass.

John Cheng: As Venus exited the globe, a circle of light, outlined the planet's limb, which had already slid off the solar disk. This has been noted during previous transits. It was easily seen by many at Wagman. Perhaps due to the moisture in the air, the seeing was quite good and the expected "black drop" effect was not pronounced, but it would have been impossible to make a definite visual call on third contact.

Jerry Zhu: Hope everybody saw the transit! Conditions were quite good. I'm quite happy I was able to capture the "ring of light."



Don Shepherd: Completely awesome!!! The jet photo belongs in *Sky & Telescope*, and the ring-of-light photos belong in a textbook!

Terry Trees: [Because of local weather reports] John Holtz, my wife JoAnne, my younger son Geoffrey, and I drove to Wellsboro, PA, to see the Venus transit.

We scouted out a tentative observing location as soon as we were done checking-in Sunday night. Around the corner from the airport we spotted a farmer's front yard that seemed ideal, with a great eastern horizon. We spoke to the farmer's wife and she was happy to allow us to come back in the morning.

Jerry Zhu's photos illustrate the features we saw. John saw the ring of light. We all saw the disk of Venus outside the disk of the sun using the H-alpha filter and we certainly saw the dark features shown in his center set of pictures where a "square" dark area extended from the planet to the solar limb.

Was the round-trip drive of 9 hours or so worth an extra 5 to 10 minutes of observing time compared to our home base in Pittsburgh? Yes, of course. We played the odds and won. We were also amused by the number of people driving by at 50 mph who did great Linda Blair imitations as they tried to figure out what we were doing with our strange devices.

Bill Hayeslip: What a terrific transit and what a terrific crowd at Wagman. Must have been 30 telescopes there and a number of others hoping to catch a view of the transit. [I can't believe] that we got to see it in Pittsburgh! Where were the rain and hail and weeklong clouds? Makes you want to go right out and buy a lottery ticket.

Fred Klein: I had the great pleasure to share Mother Nature's wonders this morning at Wagman with a very happy crowd.

Kenn Lippert: Thanks to all those with scopes [at Wagman] that let me have a look. And great thanks to Larry McHenry who had beautiful views on the TV screens, where more than one person could watch at a time. Very impressive views through that little Corando Solar Max (or whatever it was called) with the H-alpha filter. The prominences really stood out!

Vern Cox: I took three photos of the transit with the aid of my 13- and 11-year-old boys. They will be all grown up for the next one but today we are going to Kennywood. ☺

Brett Day: Just now finally got in from this morning's adventures (distracted drive home, and a pause for a lazy breakfast), and I just wanted to thank all the members for the excitement, and grand views of this amazing event, it was truly worth losing the sleep for. I am confident that this opinion, and gratitude is shared by the entire mob I was lucky enough to ride up with. Thanks Guys (gals included of course), we had a blast !!!

John Cheng: Some of the observing reports on the web mention that the "black drop" effect was much less dramatic than expected although one British imager did indeed catch an horrendous interaction between the limbs of the two objects at third contact. I keep wondering was today's seeing "that good" and/or contemporary optics that much improved, that the effect was little noticed?

Terry Trees: Did anyone notice, while Venus and the Sun were still very low in the sky, that Venus appeared more like a stop sign than a circle? An interesting atmospheric distortion, I guess.

Kenn Lippert: I definitely noticed. At first I thought it was a spider artifact, but I also noticed it in a refracting telescope, so it couldn't have been that. Also one of my photos shows a VERY pronounced "black dot" well. Venus looks like a capital letter U (sans-serif) cutout on the edge of the solar disk. Here is my crowd picture: [at bottom of page]

Larry McHenry: Hi Kenn, Nice panorama! You can really see the curvature of the Earth! ☺

John Cheng: Thanks Kenn Lippert...for assembling the panorama. I'll keep it as a remembrance of a flat-out enjoyable session. Everyone was revved because of what was happening in the sky. The atmosphere was excellent in every manner of speaking. When George Guzik and I observed the planet's limb light up as it left the solar disk, we both just stepped back from the eyepiece, smiling, laughing, and finally shaking hands.



Star Cruise Efforts Rewarded

By George Guzik, AAAP President

(Photos by Ann Norman)

The weather certainly threw us a few challenges (rain, rain, rain, clouds, rain...) at the Laurel Highlands Star Cruise! However, our patience was rewarded on Saturday evening when the rain left town and we had very good night of observing.

Star Cruise is a huge event. Imagine hosting a party for several



hundred people. - a party that lasts over 4 days. Your guests will need to be entertained, they'll need to be fed, and they'll need a place to stay. Sounds a bit intimidating, doesn't it? This example gives you some idea of the task that the organizers of Star Cruise accomplish.

I'll begin by thanking Terry Trees and Larry McHenry for the monumental effort



Flacc Stifel, Bob Kalan, Larry Sneider, Ed Moss, and Dan Reed took charge of getting the field marked, setting the locations for the tents, making signs, and installing the generators and power distribution system of "Pinehill Power & Light."

Flacc, Bob, and Larry also helped in dozens of ways keeping the facilities running smoothly through the event, including showing some real ingenuity in getting one of the biggest RVs I've ever seen unstuck from a soft part of the field.

John Holtz handled the months-long task of accepting and processing registrations and payments. He also contributed to the technical program by conducting observing classes for the guests. Plus a few rocket launches, too.

Charlotte Tunney led our volunteers program and kept the many functions of LHSC staffed with volunteers. I organized this function at previous editions of LHSC so I speak from experience when I say, "Well done, Charlotte!" I thank the volunteers who generously gave their time to help us with Registration, with Souvenir Sales, and with lots of other tasks.

JoAnne Trees accomplished miracles preparing and running the AstroKids activities. I heard no child at LHSC utter the words, "I'm bored!" Joe McCafferty and I had a great time helping JoAnne with these activities that included making small telescopes, bottle rockets, Estes rockets, and a wide variety of craft items. We noticed that a few other adults also slipped into the auxiliary tent and joined in the fun.

of organizing the event. Their job included putting together a first class technical program with speakers from the AAAP, from amateur astronomy, and from the professional ranks, too. That job also included overseeing the MANY tasks that had to be performed to ensure the success of the event.



I thank all of the AAAP members who shared their knowledge and made presentations during the event. The presentations included Dave Smith's popular guided tours of Cooper's Rock.

Thanks also to Charlie Pritt, Paul Smith, and Lee Wadsworth for helping with field setup, and to Geoff Trees, Sean Trees, and Jim Tunney for their support.

Special thanks go to Dave Houggy and to Mary Hall for their support of "Pinehill Power & Light."

LHSC provides a great opportunity to get in touch with amateur astronomers from many places and to show them the professionalism with which the AAAP conducts its events. I'm very proud of the work that the AAAP accomplished at this year's LHSC!



Star Cruise Plus an Extra Night

By Phil Hughes



Milky Way at Star Cruise 2004. Image by Larry McHenry

I just got back from Star Cruise today. The skies were absolutely fantastic at Pinehill Campground. Saturday night I tried out my new red-dot finder, carefully installed with duct tape, courtesy of Bill Hayeslip. It, along with my 50mm finder and dark skies, made finding objects like shooting fish in a barrel. I logged over 65 objects in between taking pictures with my barn door tracker and simply scanning the sky with my binoculars. The skies there would have made the Messier Marathon easy. Objects that elude us often at Wagman jumped out at Pinehill. The only downside was the dew. I only had to turn from my scope to look at a chart to find the eyepiece had already dewed over, but I kept it clear with a blower. Later I draped a small hand warmer that Bill had given me over the eyepiece and it never fogged again. Thanks for the help Bill.

I had arrived at Star Cruise Thursday night and got set up just before dark. I set up next to Bill Hayeslip and it turned out to be a good choice. He along with his wife and daughter made Star Cruise very enjoyable. They had a hummingbird feeder that I inherited when I decided to stay an extra day along with Jeff Kearns. I placed the feeder atop my camera tripod.

Jeff moved over to my campsite after everyone vacated the area on Sunday and we spent a surreal day sitting in the sun in the middle of a field. It was strange to see the field so empty after everyone left. Star Cruise was wet but Sunday the field was drying and the Sun was out in full force. Jeff and I both sport the burns to prove it. We started our day in the field by making coffee. Jeff said make it strong but he obviously wasn't ready for what I had prepared. After spending all night observing in spectacular skies we both desperately needed sleep. We tried, but after the coffee sleep did not come.

We spent the day discussing astronomy and watching hummingbirds. We studied the hummingbirds and speculated on just how many calories they require. We also discovered they tend to relieve themselves on their way from the feeder, thereby spraying anything in their path. This caused me to remove the feeder from the tripod, wipe down the tripod, and place the feeder on the ground. We proceeded to watch unhappy hummingbirds, upon discovering their treasure trove to be missing, continuously fly around its last location. Jeff remarked that they must have a built in GPS. They finally found the feeder but really didn't like eating off the ground.

The sky Sunday was every as bit as good as it was Saturday, if not better. Transparency seemed better for most of the night, but we were plagued by thin clouds later. We didn't have to contend with the dew Sunday night. We were getting detail in galaxies I had never before seen. M108 was very distinct and M110 showed actual shape that night and we were able to see dust lanes in the Andromeda Galaxy. The Scorpius Jewel Box was beautiful in the 11x 70s. Jeff was looking for Caldwell objects using "Planetarium" on his Palm Pilot. Since I had it installed on mine, I got into the game as well, using it to find objects near some of the M objects I was looking at. It is a great program. Jeff called me over to his scope to verify seeing the eyes in the Owl Nebula just one of our many "confirmed kills." Observing with Jeff was very enjoyable; his excitement is contagious.

Jeff left for home around 4:40 AM and I crawled cold and tired into the tent. I awoke at 10:00 and figured I may as well get up since I was told they were going to come and get the porta-johns in the morning and figured they would wake me up. I crawled out of the tent to find all the porta-johns were gone. I had slept through it. Earplugs are great.

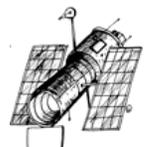
All in all, it was a great week with many good lectures and great people. I commented that I have never been part of a group like that where everyone was so pleasant. Considering the fact we were camped in mud, that is really saying something! Thanks go out to all who worked so hard to make it all possible. I can't wait until next year.

Thanks for the Memories!

By Lee Wadsworth

I would like to thank all of you who made the 2004 Star Cruise an event that was so well executed that even Mother Nature couldn't dampen our spirits. This was my second Star Cruise and once again I left Pine Hill Campground with wonderful memories that I will cherish for many years to come. I really don't want to mention names for fear that I would miss somebody but, that being said, I would like to offer special THANKS to Terry's lovely assistant "Vanna" for pulling my ticket at precisely the right time and making me the very proud owner of a pair of Oberwerk 20x90 binoculars. They are awesome and are getting much use!

July 2004

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Age does not diminish the extreme disappointment of having a scoop of ice cream fall from the cone. Jim Fiebig				1	2  Hay or Thunder Moon	3
4 	5	6	7 	8	9  Star Party MCPO	10 Dark Sky Special! Star Parties: NEWO and MCPO
11	12 	13	14	15	16 AO Lecture Series See details below	17 AAAP Picnic  Angler's Grove Deer Lakes Park
18 "I yelp astronomy like a sun-dog,..."	19 ...and paw the constellations like Ursa Major."- Letter from...	20 Mark Twain, San Francisco Alta California, Aug. 1, 1869	21	22	23 Star Parties: NEWO and MCPO	24  Star Parties NEWO and MCPO
25	26 	27	28	29	30	31  BLUE MOON!

<p>Also this month: July 16 Lecture: Everything You Wanted to Know About Galaxies and Mars. Allegheny Observatory. Free but RSVP required. 7:30 p.m. Sponsored by University of Pittsburgh (412)-321-2400.</p> <p>Looking ahead: Star Parties: August 6, Mingo Creek Park Observatory (MCPO) August 7, MCPO and Nicholas E. Wagman Observatory (NEWO); August 20 & 21, NEWO and MCPO.</p>	<p><u>AAAP Long-Range Meeting Schedule</u></p> <table> <tr> <td>Sep. 24, 2004</td> <td>Jan. 28, 2005</td> </tr> <tr> <td>Oct. 29, 2004</td> <td>Feb. 25, 2005</td> </tr> <tr> <td>Nov. 19, 2004</td> <td>Mar. 25, 2005</td> </tr> <tr> <td>Dec. 17, 2004</td> <td>Apr. 22, 2005</td> </tr> </table>	Sep. 24, 2004	Jan. 28, 2005	Oct. 29, 2004	Feb. 25, 2005	Nov. 19, 2004	Mar. 25, 2005	Dec. 17, 2004	Apr. 22, 2005
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Fridge Calendar by Cathy Rivi

LAUREL HIGHLANDS STAR CRUISE:2004

Photos by Phil Hughes



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