

# The Guide Star

Newsletter of the Amateur Astronomers Association of Pittsburgh Inc.

A Section of the Academy of Science & Art of Pittsburgh

December, 2002

Vol. 36, No. 9



Nicholas E. Wagman Observatory

## Help the "Princess", Hop Stars

### Party With Your Peers: AAAP Holiday Gathering

Perhaps you have been "encouraged", so to speak, to attend your company's Christmas party, to show you are part of the team, to make a good impression on the management, etc. At the party, perhaps something like this happens: "Yes Mrs. Puckerbolt (CEO's wife), these are ('choke') wonderful cookies ('hack') you have baked." At the **December 13, 2002 AAAP Holiday Party**, no such pretensions. You don't have to impress anybody, you don't have to laugh at the President's dumb jokes ☺. Heck, you don't even have to show up. But we hope you will attend the club's last big event of the year, to enjoy the company of your fellow astronomers, to recount the year's interesting events, and to rediscover people who were just dim silhouettes during star parties.

The AAAP's Holiday Party is staged once again at the **Middle Road Fire Hall** in the North Hills (see map on page 2), and starts at **7:30 pm**. President Larry McHenry has promised a minimum of business items and a maximum of time for food, refreshments and dispensing of door prizes. As result, we won't be scrambling at the last moment to gather up leftovers and misc. party debris while the fire hall staff awaits.

*(continued on page 2, column 1)*



### Wagman Vital Info: Combo Locks/Security System Changes

The last thing you want to do in the dead of winter is drive up to the Wagman site, trudge through the snow, then discover that you can't even open the gate, let alone the door. New Years is our usual time to change the Wagman site and building combination lock codes, so please save yourself a bundle of trouble by contacting **Tom Reiland** or **Flacc Stifel** for the new combinations. When these locks are changed, we will also activate the new building security system, which has keypad access (same combination as door). Again, contact Tom or Flacc to learn the new procedures (in part, to prevent false alarms right at the get-go).

*(continued on page 2, column 2)*



### Many Fine Entries for '02 Astrophoto Contest Shows Off Imaging Skills

*by Dave Conte*

The 2002 AAAP **Kevin Brunelle Astrophotography Contest**, conducted at the November AAAP meeting, was a feast for the eyes, with a wide variety of astronomical and atmospheric images from our skilled and artistic members.

Digital imaging is growing in popularity, but there were many slides as well. Thanks to everyone who entered, voted and helped count the ballots. Special

*(continued on page 2, column 2)*



1<sup>st</sup> Place Leonid Photo by John Pane

### \$50K Donation From Dick Haddad South Hills Observatory Takes Giant Leap

We're most pleased to report that the new AAAP South Hills Mingo Observatory Project received a major boost in October when club member Dick Haddad, working closely with an associated charitable foundation, made a major financial donation of \$50,000 towards construction of the Mingo Park Observatory. Best of all, this is only the first of two such installments. Dick has been instrumental in supporting and promoting the club and new observatory, and has worked closely with the county and local firmsto resolve the many first-phase details of the project.

Dick and AAAP officers have met with Mingo Park personnel to discuss site surveying, among other things, and a large area of probably more than 10 acres has been worked out for our use. We have contacted a surveyor and should have the actual surveying done and in both our hands and the County's. A number of groups are being formed to work on the various aspects of design of the building and grounds.



AAAP Holiday Party – Middle Road Fire Hall

## Club's Holiday Party Your Best Venue

(continued from front page)

### A Feast of Refreshments

Even more so than the AAAP picnic, the holiday party is your chance to show off your baking and related culinary skills. Feel free to prepare and bring any holiday party delight you can cook up. If you're not a kitchen person, donations of pop, chips, store-bought cookies, etc. are most welcome. Whatever your plan, please contact our "Holiday Party Princess", **Emily Bell (412-931-1530)**, if you would like to help with food or refreshments in any way (especially with acquisition of prepared party trays). Of course, we also need help with final clean up; club members have been very helpful in this regard over the years.

### All About the Fine Art of Star Hopping

While there has been some friendly debate in recent years about the merits of star-hopping vs. digital setting circles, star hopping will remain an important tool in every amateur astronomer's kit. One of the most amazing star-hoppers around, **Tom Reiland**, will continue his traditional series of holiday party lectures at this month's event with a review of the star-hopping technique for finding celestial objects. Tom has an astonishing ability to start with a bright asterism and quickly jump from star to star to find a faint NGC deep sky object such as distant galaxies in the Coma-Virgo region. He will pass on some of the secrets of this rare trade at the December meeting (see related Messier topic on page 4, top of first column).

### It's Snow Time to Get Stuck

Now that we're in the "air-crystallized di-hydrogen oxide" time of the year, we pass along the usual warning to check with any AAAP officer if it looks like a snow storm will interfere with the party. Listserv members are likewise reminded to check your e-mail in-boxes for postponement/cancellation announcements.

### **Tip of the Month**

**Members who get *Sky & Telescope* or *Astronomy* Magazines: When renewing your AAAP membership, please send the magazine subscription notice you received in the mail to the Treasurer along with your dues. Do not send anything directly to the magazines themselves.**

## Everything From Iridium Flares to Intense Aurora In Photo Contest

(continued from front page)

thanks to Larry McHenry for processing the digital presentation, to Alison Conte who ran the contest presentation on my behalf, and to our friends at Sukolsky-Brunelle photographic lab for donating the prizes.

Prizes – and more applause – will be awarded at the Christmas meeting, so if you are a first place winner, don't miss it.

### A. Astronomical - Optics of 150 mm or Less

- 1st Fred Klein - 2 Iridium flares (see photo below)  
 2nd Fred Klein - N. American nebula  
 3rd (tie) Fred Klein - Milky Way in Cygnus  
 Ed Honkus - Time exposure - moon/planets

### B. Astronomical - Optics Longer than 150 mm

- 1st Mark Arelt - M8  
 2nd Jerry Zhu - Shuttle docked with ISS  
 3rd Fred Klein - M31

### C. Atmospheric Phenomena

- 1st John Pane - Leonid with trail (see photo)  
 2nd Fred Klein - Black Forest aurora  
 3rd Ed Honkus - November, 2001 aurora

(Editor's note: The AAAP extends thanks to **Dave and Alison Conte** for orchestrating a fine contest this year. The image presentation, balloting, etc. were all first-rate. A super-sick Dave Conte could not help run the contest at the Nov. meeting, thus Alison had to run the whole show. As always, good work Alison! The 2003 installment of the Brunelle contest starts NOW. Any images you capture from here on out are eligible for next year's contest. Let's keep the show going.)



1st place Iridium Satellites photo by Fred Klein.

## Heed Wagman Security Changes Before You Go Up

(continued from front page)

Other Wagman-related updates include:

- ☛ Before we go out for bids to restore Leo Scanlon's Valley-View Observatory dome, Flacc Stifel will approach Allegheny County government about the project and its implications for the recently concluded lease renewal.
- ☛ All are reminded not to leave any food or beverages in the observatory over the winter, especially anything that could explode in the bitter cold weather (e.g. bottle of soda-pop).
- ☛ The next Wagman Winterfest is scheduled for March 8, 2003. Given the problems we had earlier this year with wind-whipped tents and damaged fenders, we plan to scale back the event to just the confines of the building.

## First Release of Pluto "Map" A November Meeting Highlight

Kudos (as usual) to Mark Kochte for another lively presentation at the Nov. meeting on recent Hubble Space Telescope discoveries. As already noted, Mark has been getting great "Neilson" ratings at the most recent "Star Cruises". Among the many highlights of his talk were a new Mercator-projected image of Pluto's surface (300 km resolution) compiled from multiple HST images and gravity-lensing of stars inside globular cluster M22. As for "yoi" data, Mark pointed out that the famed "Hubble Deep Field" images covered an area of the sky equal to the eyeball in President Roosevelt's engraving on a dime held at arm's length (yoi!).



Pluto Global Map from HST

Our thanks also to the big crowd (110+) that attended the November meeting to show appreciation for Mark's long drive to Pittsburgh. Mark returned the favor by distributing a large collection of HST glossy color prints.

And one last thanks to the folks at the CSC, who provided cookies and drinks in the auditorium...a nice treat and inducement for all to attend the December 13 Holiday party.

## Foul Weather Puts Damper on Allegheny Observatory Open House

by Lou Coban

We had a rather low turnout at the open house this year no doubt due to the crummy weather. Out of approximately 315 tickets only 178 showed. I would like to thank everyone (listed below) for sacrificing their Friday night to help make the open house an excellent time for everyone!

- |                     |                   |                  |
|---------------------|-------------------|------------------|
| Wade Barbin*        | Jack Greenberg *  | Nicolas Pereya   |
| Morgan Bell         | Janet Greenburg * | Kavan Ratnatunga |
| Dan Vanden Berk     | George Guzik*     | Nancy Robinson   |
| Mariangela Bernardi | Leslie Johnson *  | Jill Schaefer*   |
| Dave Burkhard*      | Brenda Keeley     | Ravi Sheth       |
| Pat Clevenger       | Doc Keeley*       | Dave Smith*      |
| Lou Coban*          | Kevin Kepes *     | Bob Snyder       |
| Andy Connolly       | Ed Klein          | John Stein       |
| Gulab Dewangan      | Fred Klein*       | Flacc Stifel*    |
| Bill Donohoe        | Ken Kobus*        | Rose Sullivan    |
| Terry Finnegan*     | Bob Kramer        | Gary Sutton*     |
| George Gatewood     | William Love      | Dave Turnshek    |
| Chris Gazzo         | Tim Manka*        | Diane Turnshek*  |
| Dave Gazzo          | Dave McDermott    | Ted Worek        |
| Art Glaser*         | Stephen Pelles    |                  |

\*Denotes AAAP member.

## Wagman 2002 Volunteers Noted and Applauded

by Tom Reiland (from AAAP Listserver)

I have finished counting the number of members who helped at the Wagman Observatory Star Parties this year and the number of times that they assisted. 97 members came to Wagman a total just over 400 times. 24 members qualified for patches and 10 members can choose either a patch or a hat. This number is down from previous years. We usually have over 110 members help out each year a total over 600 times. The weather and detours due to road construction (or destruction) probably had something to do with the lower numbers, even though we have almost 550 members. That's only 18% of the club volunteering to help at the Wagman Star Parties. Hopefully, we'll do better next year. Here is the final 2002 tally of those who qualified for hats or patches:

### Name - No. of Nights

- Bill Hayeslip ..... 15
- Tom Reiland ..... 15
- Tim Manka ..... 13
- Ed Moss ..... 13
- Flacc Stifel ..... 13
- John Holtz ..... 12
- Eric Fischer ..... 11
- Don Hoecker ..... 11
- Bill Yorkshire .... 11
- Pete Zapadka ..... 11
- George Guzik ..... 10
- Joyce O-Fischer.. 10
- Eric Heckathorn. 10
- Frank Pastin ..... 10
- Terry Trees ..... 7
- Char. Tunney ..... 5
- Jim Tunney ..... 5



Nice effort! Thanks go out to all who helped. Patches and hats will be given out at the January meeting.

## Still More Upcoming Occultations

by John Holtz

As if December is not busy enough, there are a number of good occultations to keep you busy. An occultation occurs when one object, such as the Moon or asteroid, passes in front of a smaller apparent object, such as a star. The occulted object winks out instantly. Total lunar occultations, where the star passes directly behind the Moon, are common. A grazing occultation, where the star passes in and out of the Moon's mountains along the limb, are less common but more exciting.

Around 7:08 pm on Tuesday, **December 10**, the Moon will graze a 6.1 magnitude as seen from a narrow 2-mile wide path crossing near Aliquippa, Cranberry Twp, Mars, and Butler. The conditions will be nearly ideal: Moon not too bright (43% illuminated), southern cusp (rougher terrain), fairly high altitude (34 deg.), reasonable hour of the night. Why don't you join me for an expedition to view the graze? If you would like to go along, whether to see what a "graze" is all about, or to make scientifically useful timings, please let me know.

(continued on page 5, column 1)

## Our Sympathies

The AAAP offers its heartfelt condolences to member **Tim Hagen** upon the recent passing of his father. Tim is one of our most active members at Wagman star party's and LHSCs.

## The News, The Whole News and Nothing But the...

☛ Congratulations to **Tom Reiland** regarding the publication of a new book on the "Messier Marathon" by famed comet-hunter Don Machholz. In appreciation for Tom's original idea of a Messier Marathon (observe almost all the M objects in a single night), Don gave Tom a free copy of the book. If you acquire this book, look for Tom's picture and related information on page 33.)

☛ The club is now the proud owner of a portable plug-'n-play 15" flat-screen LCD monitor which is suitable for small group presentations (such as a 'Borders' style talk). Light weight, easy to use, all you have to do is plug the vga adapter into the back of your laptop, and the power cord into a AC outlet. If any member would like to borrow it, please contact Larry McHenry

☛ **Art Glaser** reminds us that we have a substantial AAAP historical materials collection at U-Pitt's Archives of Industrial Society, and that among the membership there is certainly more that can be contributed. Newspaper clippings, old meeting minutes, photographs, etc. are all eligible for inclusion. Art notes that the stuff you would like to donate does not need to be organized; he will do that for indexing purposes. Contact Art at [aglasers+pitt.edu](mailto:aglasers+pitt.edu) or 412-341-5862 to learn more about the club's archives and your potential contribution.



*This recently discovered 1931 photo of Leo Scanlon at his 10" telescope is among hundreds of photos, clippings, etc. destined for the AAAP archives.*

☛ Congrats to **Larry McHenry** for his prominent appearance on his company's (HighMark) intranet web site, describing his interests as an avid amateur astronomer. As a member of one of his company's project teams, Larry was given his turn in the company spotlight in an article that described his interests and displayed some of his best known astro images, as well as the equipment used to acquire them. (*Editor's note: If you are likewise noted at your company, please let me know for use in future Guide Stars.*)

☛ "Five Neat Slides" – Among the club's 550 members are thousands of old 35 mm slides, many of which are great shots of celestial and atmospheric phenomena. Certainly most of the current membership hasn't seen these or only vaguely remembers them from meetings years ago. All members are invited to bring in a few of these slides to upcoming meetings to keep the 35 mm film tradition going (Eric Fischer and Ed Honkus showed some at the November meeting). If we run out of time at the end of a particular meeting to show your slides, bring 'em again the next month.

☛ "How about that" to two AAAP members for their appearances in the January issue of *Sky & Telescope* magazine. Look on page 138 for **Jerry Zhu's** rainbow photo from Cooper's Landing, and a Letter-to-the-Editor from **Bill Fusfield** on choice of binoculars.

Allegheny Observatory Public Lecture Series  
by  
Some of Pittsburgh's Professional Astronomers  
[Free Admission, Reservations Needed: 412-321-2400]  
Check Events on [www.phyast.pitt.edu](http://www.phyast.pitt.edu) for up-to-date details.

**3rd Friday of the Month**  
Refreshments ..... 7:00 PM  
Lecture ..... 7:30 PM  
Observatory Tour .... 8:30 PM

2002:  
10/18 Finding the Universe with Quasars  
Prof. David Turnstone, University of Pittsburgh

2003:  
11/14 Finding Planets Outside the Solar System  
Prof. George Bakstunov, University of Pittsburgh  
11/15 Finding the Universe: The Next Steps  
Prof. Andrew Lawrence, University of Pittsburgh  
11/16 Jovian Atmosphere: Building Blocks of the Universe  
Prof. Regina Sushko-Ludback, Univ. of Pittsburgh  
12/14 Astronomy and Commerce in the Cosmos  
Dr. Andrew Hopkins, University of Pittsburgh  
12/15 The Solar Universe  
Prof. Robert Griffith, Georgia Institute of Technology  
12/16 High-Pack Astronomy for Beginners  
Prof. John Stroh, Geneva College  
12/17 Life in the Universe  
Prof. Joseph Scoville, Wheeling Jesuit University  
11/18 Finding the Universe with Galaxies  
Prof. Benjamin Rao, University of Pittsburgh  
11/19 Finding the Universe with Galaxies: The Next Steps  
Dr. Robert Griffith, Georgia Institute of Technology  
11/20 The Galaxy of Quasars  
Prof. Lynn Hinkle, University of Pittsburgh  
11/21 The Stars of Stars  
Prof. John Miller, University of Pittsburgh

☛ Allegheny Observatory has started an extended public lecture series on astronomy, featuring local professors and lecturers on a wide variety of topics (see ad above). Seating is limited at AO, so call 412-321-2400 to make reservations.

☛ Keeping a recent AAAP tradition going, **Phil Breidenbach** used Halloween night to set up his telescope to entertain Trick-or-Treaters and their parents. Says Phil "I took my telescope out and showed some stars to the kids as they did their trick'r'treating. In all, I imagine I let about 25 people look through it. It is a good feeling when some of them run up to you saying that they hoped I'd have it out again this year! I told them about the club and passed on a little information about the sky. I think everyone enjoyed it! Some even forgot to take any candy!"

☛ **Go West John Brashear:** This interesting report from **Mike and Jill Yeager**, who recently toured an observatory on Vancouver Island, British Columbia: "We were told that the observatory's original mirror (which they had on display) was finished by a gentleman from Pittsburgh. We immediately told the tour guide that it must have been John Brashear. She wasn't sure but said she had documents from the original plans for the observatory and would show us them after the tour. Sure enough it was our "beloved" John Brashear who had finished the mirror. The tour guide said she would research this further and e-mail us any photos and info on John Brashear's involvement with the observatory which is now referred to as *The Center of the Universe.*"

☛ All the best to member **Jenny Pon**, who now lives in the Detroit area and is the Planetarium Producer at The New Detroit Science Center's "Digital Dome Planetarium". Congratulations on your new assignment.

## Merchandise Memo From Mari-Jo

by Mari-Jo Meyers (from AAAP Listserver)

It's that time of year again - the 2003 calendars are in, both the Astronomy and RASC version. The 2003 Observer Handbooks are on their way. Time to remember your love ones with that special AAAP Holiday gift :-). Each calendar is \$10.00 each and the Handbooks are \$15.00 each. If anyone wants me to set any of the items aside for them just drop me an e-mail at mwm@bellatlantic.net or call and leave a message at 724-339-3447. Please make sure to let me know how I can get it to you will you be at the AAAP Holiday meeting? Do you live close to Wagman so we could meet up? Will you be willing to pay postage? Whatever it takes we can do it. Remember quantities are limited and it's first come first serve. So buy early and buy often.

## Attention New Members: May the Clouds Not Be With You

Since we live in the Cloud Capital of the World, we really appreciate when new folks join our clear-sky organization. Welcome to these latest inductees to the AAAP:

Paul Ericsson	Michael Riesmeyer
Alan D. Janus	Landon Shaw

## Never A Shortage of Interesting Occultations

(continued from page 3, column 2)

There is also a grazing occultation around 8 o'clock on **December 13**, but someone decided to schedule a meeting. If you are going to be in West Virginia instead of the AAAP meeting, let me know and I can provide details about this graze.

Asteroidal occultations are more rare. Firstly, the path of the occultation is about as wide as the asteroid, so they are typically less than 100 miles across. Secondly, the precise path is difficult to predict due to inaccuracies in the known position of the asteroid (and to some extent the star). Thus, seeing an asteroid occultation requires some persistence and a bit of luck. But thanks to the CCD revolution, updates are available for many events a few days in advance. With these updates, observers can travel to the predicted path with more confidence of actually seeing an event.

Below are the details for a favorable event this month. Favorable indicates that the predicted path crosses our area, the magnitude drop of the combined star and asteroid will be easy to see, the star is well placed, and so on. My homepage (<http://members.aol.com/jwholtz/>) provides finder charts and links to other pages with prediction updates as the date approaches.

Date:	Dec 23	Dec 24	Dec 28
Time (EST):	5:14 am	4:57 am	2:25 am
Asteroid:	Olga	Chicago	Oort
Star (SAO):	119067	97327	76696
Star Mag.:	10.0	8.5	9.2
Mag.: Drop:	5.3	5.1	5.8
Duration (sec):	5	13	5
R.A. (h m s):	11 49 46.3	07 52 45.6	04 40 9.6
Dec. (deg. m s):	+0 38 20.2	18 49 37.5	20 32 53.6
Altitude:	49	47	37
Azimuth:	162 (S)	253 (WSW)	265 (W)

## Classifieds

**FOR SALE:** 16" f/4.5 Meade Starfinder Dobsonian. Professional-quality grade-A fine-annealed pyrex optical system, 8 x 50 mm viewfinder, MA 9 mm, MA 12 mm, MA 25 mm eyepieces, 2" rack-and-pinion focuser. \$900 Contact Mike Yeager at 412-655-1269.

**FOR SALE:** Meade 12-inch LX200. UHT coating, tripod with new in box 18V-33 amp Kendrick battery and dew-control system (valued at \$500.00+). Asking \$2750.00. Contact Bernie at 412-787-1171.

**FOR SALE:** Meade 8", LX200GPS, field tripod, accessory kit. Brand-new, won in sweeps. \$2000 or best offer. Call 724-226-2847

**WANTED:** Observatory dome large enough to house 12" LX-200. Contact Tony Orzechowski, of Kiski Astronomers at torzechowski@ppg.com.

## GSOL: Snail-Mail List Shrinking

The Guide Star snail-Mail list will soon be under 400 as the GSOL list continues to grow. Maybe you will be the one reduce the list to 399 my subscribing to the on-line version. Contact Alison Conte (alison.conte@wordwritepr.com) to "unsubscribe."

### 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

#### 2001-2002 Officers:

President:	Larry McHenry	412-884-4924
Vice President:	Terry Trees	724-337-3231
Treasurer:	John Holtz	724-352-7596
Corresponding Sec:	Alison Conte	412-741-3216
Recording Sec:	Dennis Derda	724-224-4688
Membership Sec:	Brent Hudock	724-437-5990
Guide Star Editors:	Eric Fischer (news)	412-487-7011

#### 2000-2001 Executive Committee (in addition to officers):

Wade Barbin** (724-443-3404)	John Radzilowicz (412-388-1562)
Bob Kepple (724-295-4128)	Tom Reiland* (412-487-8326)
Ken Lippert (724-444-1045)	Dave Smith (412-390-0870)
Ed Moss (412-734-0255)	Flacus Stifel** (412-486-8067)
Bob Novack (724-538-4242)	Bill Yorkshire (412-793-9552)

\*Wagman Observatory Director, \*\*Associate Directors

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#### Guide Star Associate Editors

Ann Norman (412-242-6806) Cathy Rivi (412-782-4605)

#### AAAP Member Dues\*\*\*:

AAAP Dues:	\$18.00
Junior Member (under 18):	\$13.00
<u>Sky &amp; Telescope Magazine:</u>	Add \$30.00
<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

## Leonid Shower Wrap-Up



Jerry Zhu's picture of the lunar halo on Leonids Night

Compiled by Ann Norman

Leonid meteor night 2002 will be remembered in Pittsburgh for the pretty halo of ice crystals around the moon. (Photographed by Jerry Zhu above. See the following site for more: <http://www-2.cs.cmu.edu/~zhuxj/astronomy/astronomy.html>)

Peaks in the meteor shower were predicted for 11:00 pm and 5:30 am. Pittsburgh was supposed to be clear until about 12:00 and totally clouded after that. You know the joke about the man searching for his lost keys, not where he thinks he lost them, but under the streetlight, where the light is better? Like that man, a lot of us got out early in the evening to look for meteors. There was little reason to believe they would be there at that time, but we figured there was no chance of seeing them otherwise.

Some observers would be luckier than others:

### MONDAY NIGHT

"We didn't have a storm...we didn't even have a drizzle."  
(Terry Trees)

"Used the hot tub observatory. Zero Leonids."  
(Tom Nagy)

"Clouds shifted and changed, but did not seem to drift. Contrails moved southwest-to-northeast, casting shadows when they passed under the moon and a conspicuous lunar halo. ... did see one really bright, long Leonid, which appeared just under Saturn and ended in the southwest. Color was pale yellow. It must have been very bright to see right through the clouds. The angle appeared to be almost horizontal. Was this an "Earthgrazer"? (Flacc Stifel)

"I did some observing in the evening and never saw one meteor, but the lunar halo was one of the best I've seen in a while. I watched a plane contrail move up from the South and pass in front of the Moon, forming a "No Moon" sign with the halo. (Tom Reiland)

"Saw the halo around the moon. Very Pretty, but not when you want to see "fast moving stars". (Nelson Merrick)

"We drove out to Somerset trying to beat the clouds for the early peak. I saw 1 bright meteor through the clouds at about

(continued at upper right)

9:10 while driving along the PA Turnpike. Although it was nearly clear at Somerset, I didn't see any other meteors."  
(Charlotte Tunney)

### TUESDAY MORNING

"I awoke to see a few breaks in the clouds and went out for to get the paper and saw 5 meteors in 5 minutes or less. I ran inside and put on my winter clothes, grabbed my sleeping bag and lounge chair and went back out just before 5:30. I observed the bright satellite that was listed as a -5 Iridium at 5:32+ and two other satellites heading North to South about two or 3 minutes later. They were 30 seconds apart and listed as Grace -1 and -2. I counted 13 or 14 Leonids in about 15 minutes, two that lit up the clouds they passed above. I could just imagine what it would have been like if we had clear skies. Guess I'll have to wait until 2099 for the next one. Meet yinz all at Wagman that night." (Tom Reiland)

"From 5:15 till 5:40, I observed 8 bright Leonid meteors. Most were about as bright as Jupiter, and considering my observing conditions, (hazy, a few miles from downtown Pittsburgh), must have been spectacular from a clear darker sky. I also noticed several cloud flashes just outside my field of view. The grand finale: an Iridium flare. While not the "once in a lifetime" show I was hoping for, I could go to sleep with a little smile on my face." (Larry McHenry)

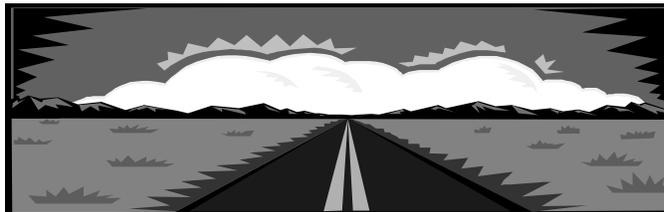
(5:35 - 5:50 AM) "There was a break in the clouds overhead through which Jupiter was shining brightly. I saw one bright Leonid and possibly two faint ones through clouds. Also a bright artificial satellite. Certainly no storm." (Truman Kohman)

"Between 5:35 and 5:44, I counted 8 bright Leonids, all white / greenish, magnitude estimated to be between 2 and -2. Also saw a bright satellite, which turns out to be Iridium 11." (Jerry Zhu)

"I counted 14 Leonids this morning in about 15 minutes of observing time until the clouds took over that part of the sky overhead that was clear." (Pete Zapadka)

"I went out at the now-famous "Jupiter Hole" during the so-called "peak period" but the hole closed. Didn't see any."  
(Suzanne "Susy" Coholic)

"I counted 18 morning Leonids between 5:25 and 6:25, most through my own private whole in the clouds. The first meteor was a bright streak seen through thick clouds." (Ann Norman)



Pittsburgh in the rearview mirror

I headed out around 7:30 pm thinking I would go to Salisbury, MD, but ended up around Williamsburg, VA instead. I saw my first meteor of the morning at about 1:16 AM. while still driving. More quickly followed and I got quite a show for about 5 minutes. I saw 7 during that period with at least two being very

(continued on page 7, column 2)

## Star-Asteroid-Holtz Alignment

by John Holtz

The skies were clear all of the way from Harrisburg to Bedford last night (Sat, Nov 2) as I made my way back from a business trip: pretty convenient so that I could try for the occultation by the asteroid Nephela. To provide maximum coverage for the possible occultation, I was directed to man a position 45 kilometers from the centerline. As I drove and drove, I was starting to worry that I would not make it to the desired spot. The turnpike has lots of twists and turns, and on many occasions I watch the GPS indicate that I was driving parallel to the centerline, and in some cases, actually getting closer to the centerline!

With an hour to go, I got off of the turnpike at Bedford. Fortunately for me, that turned out to be almost exactly where I wanted to be. I drove around frantically searching for a dark site without any obstructions. I hadn't realized how low the target star would be. The GPS lead me out to the country where I found a suitable site. I got the scope set up and located the target star: a nice bright magnitude 5.9! I didn't bother trying to see the 13th magnitude asteroid. If the occultation occurred, I would know because the star would disappear.

My heart was racing a little bit as the time approached, but not as with some other events. Watching.... waiting.... and all of the sudden this bright star just vanished before my eyes. It was so shocking that I almost (0.1 second delay:-) forgot to call out the event into my tape recorder. Several seconds later, a bit longer than I expected, the star again popped into view. My third successful asteroidal occultation of the year. In one year, I have had more asteroidal occultations than the previous 13 years combined!

An incredibly bright star, convenient time of night (9 o'clock), and clear skies made this an event to try for. I hope some other people got to see it.

## Leonids Get Mixed Reviews

(continued from page 6)

*bright leaving a trail. Things really started to get good after five and grew with intensity up to around 5:50 when I finally packed it in. There was one very large one that left quite a trail that lingered for a quite a while. I have to estimate the numbers since I was trying to photograph at the time and was counting exposure seconds, but between 5:00 and 5:50 the estimate is at least 150 meteors. What a night! I am very glad I took the trip"* (Phil Hughes)

*"Managed to get to Hilton Head to see the relatives and got a wonderful view of the shower. I was out along the beach with horizon-to-horizon views. From 4:30 to 6:30 probably saw 200+. Busy sky towards sunrise as we were watching the occasional meteor, the beginning of dawn, the moon setting, saw several satellites pass near Leo, and then saw an Iridium flare to the southwest. Back in the Burgh now. Lovely weather. :-)"* (Gary Van Drie)

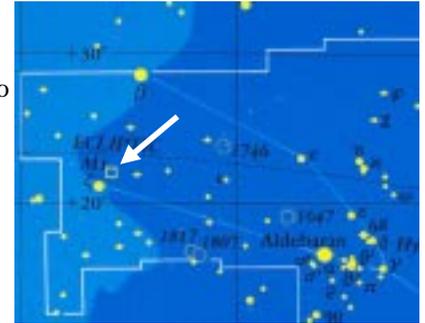
*"From a cornfield near the city of Springfield Illinois I was able to see many Leonids between 4-5 AM Central Time this morning. Most were short but a few were very bright and long. Many colors as well. It was beautiful."* (Steve Schafer)  
(continued at left)

## Time to Check Out Saturn

by John Cheng (from AAAP Listserver)

Just a reminder. At present, Saturn is approximately 3° 30' east of Messier 1, the Crab. So both are now within the field of view of many wide-angle eyepieces.

The planet will continue to move almost directly West (retrograde) at the rate of more than 4' per day and will pass in front of the supernova remnant on the evenings of January 3rd and 4th 2003. It will continue West until February 18th 2003 when it will reverse direction and move East (prograde) approaching the Crab once again.



## YEEHAW!

by Leonard Ashcroft (from AAAP Listserver)

Is everyone lucky enough in their lives to have an epiphany? Tonight for the first time on my own I gazed upon another world. Saturn was beautiful; I saw the rings clearly with a noticeable gap between them and the body of the planet. Four moons were also visible although I couldn't name them if I tried.



What a wonderful feeling this is

*"The weather here in Florida was perfect.... enjoyed one heck of a show. Between 5:07 and 6:07, I counted 274 meteors (about 4.5 per minute)! The longest I went without seeing one was about 31 seconds. A majority were fast and faint, but several dozen were bright and very colorful. Nothing that I would label fireball, but brilliant nonetheless. Every once in a while, three or four in a row in a matter of two seconds. I was rocking my head back and forth at times like I was watching a Ping-Pong match."* (Jeff Miller)

## BETTER THAN A LEONID

*Wow! What a week. I live in Lakeland, Florida and just saw my first nighttime launch of the Space Shuttle. I am about 90 miles from Kennedy Space Center (as the crow flies). I was FANTASTIC! It was so bright as it went up (much brighter than Venus) and it was about as bright as Venus while it slowly disappeared on the horizon. I was able to see it for 6 minutes, 15 seconds after lift off. First clear weather for the Leonids and now this! I just wish one of my buddies from Pennsylvania could have been here to see it."* (Jeff Miller)



## Helping Out At Laurel Hill State Park

by George Guzik

A program titled "Staring at the Stars" to be held in Laurel Hill State Park, near Somerset, on October 5 sounded interesting so I contacted the organizer, Rebecca Lindeman, and offered to assist. She is the Environmental Education Specialist for Laurel Hill, Kooser, & Laurel Ridge State Parks.

October 5 looked really hopeless in the afternoon with predictions of better conditions for the evening. I made a quick trip to the Intellicast web site and viewed the recent satellite photos. Despite the mess overhead they showed clearing moving in from the west.

Rebecca and I discussed the potential for clearing sky and decided that the event was a "Go." I loaded the car and headed for the Turnpike.

As I traveled eastward along Route 31 from Donegal the sky began to clear and the late afternoon sun did a spectacular job of highlighting the fall colors already appearing near the summit of Laurel Hill.

I decided to set up in the parking lot for the picnic area. Trees surrounded the lot blocking the view of the horizons but the view upward was clear. "Staring at the Stars" was the first astronomy event for Rebecca but she arrived prepared with a handful of very good "home made" planispheres for the guests.

We had a total of just nine guests but what the group lacked in numbers it made up for in enthusiasm and interest. How were the skies, you ask? Actually, pretty good! Cherry Springs is darker but Laurel Hill is still quite good considering that it is not far from populated areas. The Milky Way ran up from the trees in the south where Sagittarius was hiding and reached well across the northern sky.

After Rebecca gave the guests an overview of the event, I started with a short, informal introduction including a bit of background on the AAAP and a mention of a few of Leo Scanlon's many contributions. We then toured several constellations and used the scope to observe M57, M13, Alcor & Mizar, Alberio, M31, and the Double cluster.



Did I mention enthusiasm? The guests spotted at least a half-dozen meteors in the northern sky (while I was facing south, of course) and I managed to see one that left a trail. We also spotted two Venus-brightness satellite flares near the northern tree line, traveling northeast, within a few minutes of each other. My favorite moment of the event was when a young astronomer (age 7 or so) brought out her children's astronomy book and compared one of its illustrations of a galaxy to her telescope view of M31 and to a color photo of M31 in my Peterson's book. She was even comparing the colors in her book to the colors in the Peterson photo!

With dew beginning to settle, we wrapped up the event at 9:30 PM and departed for points east and west. This first evening at Laurel Hill State Park was most enjoyable and I'm certainly looking forward to a return visit.

## Book Recommendations

### RED ALERT; Mars Approaches

by John Cheng

**Review of *Observing the Craters of Mars*, by Rodger Gordon. Release: mid-November; price \$20.00 plus \$5.00 shipping. For more information write to Mars Book, 313 Raphael Ave. Middlesex, N. J. 08846-1224.**

The coming opposition of Mars in August 2003 is more than a once in a lifetime occurrence; it's worth noting on a millennial scale. To an observer, the planet will be brighter than Jupiter and its disk will be almost as large.

That being the case, a small book which is due for mid-November release, on *Observing the Craters of Mars*, by Rodger Gordon couldn't be better timed. The publisher, Gordon Bond, who's also responsible for *The Practical Observer*, posted the following to an Internet group:



*"As you are probably well aware, visual observation of craters on Mars from earth has been a rather controversial topic. Professional astronomers as well known as Barnard intentionally suppressed their crater observations for fear of the peer ridicule that would probably follow! Yet there is ample historical and technical evidence to prove that this feat can and has been accomplished. It's just very difficult, requiring excellent seeing conditions on both planets, quality optics and observing skill. It is an ultimate challenge for the Mars observer!"*

With the 2003 opposition being the closest in the last 3,000 years, this presents an amazing opportunity to see what can indeed be seen.

Rodger's book will present the evidence and give tips. Among the material we've collected are rare Lowell sketches, never before published G.H. Hamilton drawings, rare personal correspondences from John Mellish and the never before published last article by the late Charles Capen!

### Galileo's Daughter

by John Cheng

**Review of *Galileo's Daughter* by Dava Sobel, Walker Publishing, New York, 1999.**

You may have seen the recent Nova presentation based on Dava Sobel's *Galileo's Daughter*, a recent best seller. If you've ever entertained the thought of reading this book, please do. Sobel's book is a fair treatment of his relations with the Church and a decent introduction to his scientific accomplishments.

Galileo had three illegitimate children, two girls and a boy. The oldest, Virginia, is the daughter of Sobel's book. Both girls were placed into a convent at a very young age, never to leave, while Galileo eventually legitimized his son.

*(continued on page 11, column 1)*



# Ho, Ho, Ho, From NASA



FROM A NASA WEBSITE 2001

'Twas the night before Christmas,  
when all through the stars  
Not a creature was stirring,  
not even on Mars.

The space boots were hung  
by the airlock with care,  
In hopes that St. Nicholas  
soon would be there.

The robots were nestled  
all snug on their tires,  
As visions of upgrades  
danced through their wires.

Mom put on her headset  
while I counted prime numbers,  
We had settled our brains  
for a long winter's slumber,

When out on the dome  
there arose such a clatter,  
I sprang from my sack  
to see what was the matter.

Away to the porthole  
I flew like a flash,  
Tore open the air filter  
with a great clash.



The moons on the crest  
of a new volcano,  
Gave an alien luster  
to objects below.

When what to my wondering  
eyes should appear,  
But a small UFO,  
and eight rocket reindeer,

With a little old driver  
so lively and quick,  
I knew in a moment  
it must be St. Nick.

More rapid than light,  
his rockets they came,  
And he whistled, and shouted  
and called them by name:

"Now Saturn! now, Sputnik!  
now, Titan and Atlas!  
On, Redstone! on, Delta!  
Apollo, Polaris!  
To the top of the dome!  
to the top of the wall!  
Now blast away! blast away!  
blast away all!"



As meteors blaze through  
the heavens up high,  
When they meet with the  
Atmosphere, burn in the sky,  
So up to the dome-top  
the rockets they flew,  
With a ship full of toys, and St.  
Nicholas, too.

And then in a twinkling,  
I felt on the ceiling  
The heat of the thrusters and  
landing tiles peeling.

As I covered my head,  
and was turning around,  
Through the airlock  
old Santa Claus came with a  
bound.

He was dressed all in plastics,  
from his feet to his head,  
And his clothes were all covered  
in dust that was red;

A bundle of toys  
he had flung on his back,  
And he looked like a scientist  
opening his pack.

His visor- how it twinkled!  
his filter how scary!  
His gloves were from Earth,  
the logos quite merry!  
His space boots, how costly!  
They played songs and glowed!  
The frost on his suit  
was as cold as Pluto;

The stump of his air tube  
held tight in his teeth,  
And oxygen swirled round his  
head like a wreath;  
He had a broad face  
and a little round belly  
That shook, when he laughed,  
like a bowlful of jelly.

He was chubby and plump,  
a right jolly old elf,  
And I laughed when I saw him  
in spite of myself;  
A wink of his eye  
and a nod of his head,  
Soon gave me to know  
I had nothing to dread;

He spoke not a word,  
but went straight to his work,  
And filled all the space boots;  
then turned with a jerk,  
And spreading his fingers  
just like Mr. Spock,  
He quietly exited  
out the airlock.

He sprang to his sleigh,  
to his team gave a whistle,  
And away they all flew  
like a high flying missile.  
But I heard him exclaim,  
ere he drove out of sight,  
"Happy Christmas to all,  
and to all a good night.



# December 2002

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 	2	3	4 	5	6	7 
8	9 	10	11 	12	13 AAAP Holiday Party 7:30 PM 	14
15	16	17 Saturn at Opposition 	18	19  "Wolves Run Together" Moon (Dakota Indian)	20	21 Winter Solstice 8:14 PM EST.
22 Reindeer Occultations	23 	24 Christmas Eve	25 Christmas Day 	26 	27	28 
29	30	31 New Year's Eve	66 Days Until Wagman Winterfest (4 P.M. Saturday MARCH 8, 2003)			

**Fridge Calendar** by Cathy Rivi

 <p><b>He telleth the number of the stars; he calleth them by all their names. Psalm 147:4</b></p>	<p style="text-align: center;"><u>AAAP Long-Range Meeting Schedule</u></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">Jan. 17, 2003</td> <td style="width: 25%;">Apr 18</td> <td style="width: 25%;">Sep. 12</td> <td style="width: 25%;">Nov. 7</td> </tr> <tr> <td>Feb. 14</td> <td>May 16</td> <td>Oct. 10</td> <td>Dec. 5</td> </tr> <tr> <td>Mar. 14</td> <td></td> <td></td> <td></td> </tr> </table>	Jan. 17, 2003	Apr 18	Sep. 12	Nov. 7	Feb. 14	May 16	Oct. 10	Dec. 5	Mar. 14			
Jan. 17, 2003	Apr 18	Sep. 12	Nov. 7										
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Mar. 14													

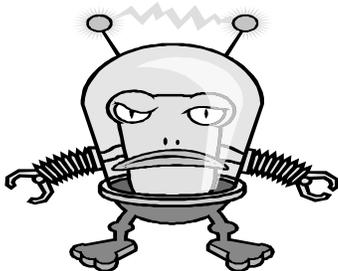
# John Cheng Book Review of Galileo's Daughter

(continued from page 8)

There are 124 letters from Virginia (Sister Maria Celeste) to her father, a small number of which are printed by Sobel. They show her as a woman of great sensitivity and extreme intelligence who was a life-long support to the father who remained in the world she'd had to leave behind.

One of the most touching things is that Sister Maria Celeste, who had signed all of her letters with just that name chose, when her father was being brought before the Roman tribunals, to begin signing her name "S.M.Celeste Galilei" to proclaim her solidarity with her father.

No need to recount the many things that accrue to Galileo...but add one more, he had a wonderful daughter.



What, indeed, *can* be seen?

## Write a feature!

John Cheng, George Guzik, Bob Schmidt, John Holtz, and I are having fun writing feature for Guide Star. YOU ARE WELCOME TO JOIN US!

What is a feature? Review a book; share vacation memories; tell an interesting, shocking, or heartwarming anecdote; alert members to upcoming astronomical attractions; provide biography on noteworthy AAAP members; offer advice, opinion, or perspective; contribute HUMOR, including cartoons.

Send your creative output to Ann Norman, [redmarsmom@aol.com](mailto:redmarsmom@aol.com).

(Include "Guide Star" in the title of the post or I may not open it.) Call 412-242-6806 if not online. HAPPY WRITING!



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