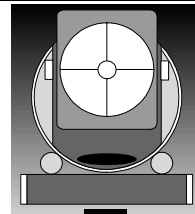


STARLITE



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December 2002

**PEORIA
ASTRONOMICAL
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Leonid Storm Outshines Full Moon at Jubilee

by John Barra

It may not have been the meteor storm of the century. But meteor counts at Jubilee during this year's peak of the Leonid Meteor Shower classified as a storm anyway.

A rainy sky until late in the evening and the full Moon high above the sky did not deter about a dozen meteor observers at Jubilee. Waiting until the 4:30 a.m. predicted second peak proved to be most worthwhile.

The meteor counts provided in this article are approximate averages of the viewers at Jubilee. During the four-plus hours after 1:00 a.m., each observer saw over 400 Leonid meteors. The sky was very clear throughout this time period. But the full Moon limited even the viewing of the brightest stars to less than half of the sky.

As the peak hour approached, Leonid activity intensified, signaling to the viewers that something unique was about to happen. Of that 400 total, about 300 were observed during the hour surrounding the peak period. Most impressive

was the fact that over 200 were observed during the half-hour period around the 4:30 a.m. midpoint.

Over 100 were counted during the ten-minute period between 4:25 a.m. and 4:35 a.m. If you extrapolate from the fact that each observer could only see at most about one-half the sky and the other observers' reactions verified that any one observer was unable to see one meteor for every meteor they actually saw, the zenith hourly rate during this ten-minute pick had to be over 1000/hour. That figure equates to a bona fide meteor storm.

A few of us did wonder how many meteors we would have seen had there been a new Moon instead of a full Moon. However, we went away from Jubilee ecstatic over the amount we had seen. Included were many instances of viewing three meteors at a time. And we left knowing that we probably will never see that rate again during our lifetime. ☾

PAS Seeks Grant from Peoria Academy of Science

In a November 22, 2002, e-mail to the Peoria Astronomical Society's Yahoo group, PAS member and chairperson of the Light Control Committee Rich Tennis got us "up to speed" on his latest idea to darken the Central Illinois night skies.

Tennis has applied (on behalf of the PAS) for a \$1000.00 grant from the Peoria Academy of Science. If received, the grant would be used to fund the PAS's project, "Full Cut-off Street Lighting Benefits."

The project, Tennis writes, "is going to change the way the streets look at night with better full cut-off lights on three demonstration streets near the Lakeview Museum. Maybe for the entire city in ten years, if all goes well.

"In the project description," he goes on, "PAS will hold an informational meeting

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Needles from the Hay Stack

by Scott Hay



The Leonid meteors were great! I'm happy to be here with all of you. Thank you for your support and kind words.

Just as we've always done in the past, we need to find a way to provide reinforcements to relieve members who've gone above and beyond their duty to the Peoria Astronomical Society for years. I am looking for the right person or persons to relieve John Barra and Mike and Jessica Frasca of the burden of editing this *Starlite* newsletter. They have carried it well for the past five years and now we are seeing that their lives have become too complex. We would like to make astronomy fun for them again.

Similarly, I was about to ask for relief for Eric Clifton in the form of a Jubilee Chairman, someone who would take an ownership-type role over that property and address its needs. But just before press time, Tim McGrath agreed to take on this position. As an avid observer, Tim has impressed all of us in the Society and I know everyone will be pleased to work with him at Jubi-

lee. Thank you, Tim!

We're tightening up and pulling together as a group because I think we all sense that the endgame is shaping up. This is fourth-quarter crunch time for saving NorthMoor Observatory. I have a lot of folks to thank and it would take the rest of this "Needles" to do so. When we succeed, I'll look forward to writing that "Needles" and thanking all of you who are helping.

Our community is as enthusiastic about having an observatory as it was 50 years ago when ground was broken at NorthMoor. A recent flurry of positive newspaper opinion and editorial columns motivates us. We've got to stay on this task while it is hot.



These articles have motivated both PAS and the Peoria Park District to own up to a mid-1980s agreement to share in the costs related to repairing/replacing NorthMoor Observatory's exterior structural envelope. Neither group has the necessary money so it must come from outside the group from

things like private donations, grant money, and/or a one-time property tax levy.

To reach this end, the PAS board has accepted an offer of help from our Peoria Academy of Science President Dr. Bert Princen. Bert is familiar with the problems we have had because I have spoken to him over the years. He has expressed to me on several occasions his wish that NorthMoor be kept open. He brings a high level of experience and passion to our cause as well as a vision of how to work with other community resources that is based on history. Also to his credit, he has been involved in raising money for Lakeview Museum and is currently involved with fundraising for the new Glen Oak Zoo.

Eric Clifton and I met with Dr. Princen and four members of the Peoria Park District Board of Trustees (President Tim Cassidy, Trustee Roger Allen, Head of the Park District Bonnie Noble, and their Head Engineer Mike Baietto). We agreed to keep this group together as an ad-hoc committee to work for this purpose. It was concluded that NorthMoor will be viable for the next 50-plus years for the kinds of things the public normally wants to see; the

(Continued on page 9)

*...We're
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pulling
together
as a
group...*

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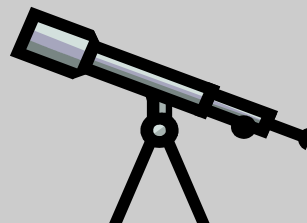
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Visit our site on the World Wide Web at <<http://www.astronomical.org>>



PeoriaAstro@yahoogroups.com

compiled by Michael Frasca

Here are some highlights from the Peoria Astronomical Society's e-mail group. If you are an active member of the PAS and would like to subscribe to PeoriaAstro, send an e-mail message to Michael Frasca <frasca@uic.edu> with the following information: name, snail-mail address, and e-mail address. You will be added to the group.

@ @ @

From: Timothy J Lester
<katlester@juno.com>

Date: Sat, 31 Aug 2002

Subject: Power of Ten — Java version

Here is a cool Power of Ten demo — similar to the video we watched at a monthly meeting. From 10^{23} (10 million light years) out in space to 10^{-16} meters (100 attometers) — the quark level of an oak tree leaf.

<<http://www.micro.magnet.fsu.edu/primer/java/scienceopticsu/powersof10/index.html>>

@ @ @

From: Steve Wrigley
<BigWrig42@aol.com>

Date: Mon, 16 Sep 2002

Subject: Astrofest 2002

This was a very good year for Astrofest with two out of three nights clear. PAS was represented by Carol Wrigley when she won the book *Our Spacious Skies* (signed by two of the authors) at the door prize give away at the closing ceremonies Saturday evening. For those who might be interested in attending next year — the dates are September 18, 19, 20, and 21, 2003. Start planning now.

@ @ @

From: Dan & Barb Son
<sunshine92@insightbb.com>

Date: Tue, 24 Sep 2002

Subject: NASA Movie of the Crab

I thought some of you might like to see this. An amazing assemblage of images of the Crab using Chandra X-ray and Hubble. Pretty cool.

<http://science.nasa.gov/headlines/y2002/19sep_crabmovie.htm?list570464>

@ @ @

From: Gene Hodel
<ghodel43@mchsi.com>

Date: Sun, 29 Sep 2002

Subject: Annual meeting

After the potluck, I had some requests for the recipe for the chocolate pie. Here is the recipe:

In a large bowl, whisk together $2\frac{1}{2}$ cups of milk, 2 packages of Jello instant chocolate pudding (I used sugar-free), and 1 cup of whipped topping (I used Cool-Whip). Mix until smooth. Spoon into a graham cracker crust. Cover and refrigerate for at least 3

hours. If desired, top with more whipped topping. Easy huh?

@ @ @

From: Calene Fleming
<sswords3@insightbb.com>

Date: Sun, 29 Sep 2002

Subject: Angel Food

As promised, here is the recipe:

1 angel food cake mix (I prefer Duncan Hines)
1 can unsweetened crushed pineapple including juice (this is used instead of the water)

Mix together and bake according to instructions; cool, cut and serve topped with Lite Cool Whip.

That was the original recipe that I got. So, I just substituted raspberries and 1 cup of juice (if you don't have enough juice, just add water to equal one cup). Don't know why other berries or fruits couldn't be used. Anyway, the best part is that it is sugar and fat free. So ENJOY!

Calene

@ @ @

From: Eric J Clifton
<ericjclifton@insightbb.com>

Date: Mon, 30 Sep 2002

Subject: Annual meeting

Thanks for sharing your Banquet recipes... and from the point of view of a guy who can sure eat 'em but can't cook worth a damn... thanks even more for bringing your treats to the Picnic.... Someone, I don't recall who, asked me for Becky's zucchini-brownie recipe, so you'll find that write-up below.

Becky's Zucchini-Brownies

Great-tasting and moist...a terrific way to use up all those zucchini that your gardening neighbors drop off at your doorstep.

2 c. shredded zucchini
1½ c. sugar
½ c. oil
1½ tsp baking soda
½ tsp salt
1 tsp vanilla extract
2 c. flour
⅓ c. cocoa

Mix all ingredients together. Pat into a greased 9 x 13-inch pan. Bake at 350° for 30 to 35 minutes.

@ @ @

From: Gene Hodel
<ghodel43@mchsi.com>

Date: Fri, 4 Oct 2002

Subject: stuff

I found an interesting website, but don't have a link to it. It is <badastronomy.com>. It covers a lot of misconceptions about astronomy and even has movie reviews. It really is a lot of fun.

@ @ @

From: Tim McGrath
<astropunk_2000@yahoo.com>

Date: Tue, 15 Oct 2002

Subject: First moon pics

I snapped some pics of the Moon tonight with my new digital camera. These are my very first ever astro-images. I've done nothing to digitally enhance them yet, other than reduce their size.

<<http://home.insightbb.com/~tkmcgrath/astro/astropics.htm>>

@ @ @

From: Tim McGrath
<astropunk_2000@yahoo.com>

Date: Mon, 4 Nov 2002

Subject: Lunar software

Check out "Virtual Atlas of the Moon."

<http://astrosurf.com/avl/UK_index.html>

It's free, and Very Cool!!!

@ @ @

From: John Barra

<Jbarra31@cs.com>

Date: Tue, 19 Nov 2002

Subject: Leonid Results
NEWSFLASH 11/19/2002 6:00 a.m.

Here are some figures that shows that it is worth viewing a meteor shower during a full Moon.

At Jubilee:

Total Leonids (1:00 a.m. to 5:10 a.m.)
+400

Peak Hour (4:10 a.m. to 5:10 a.m.)
Approx. 300

Peak half-hour (4:20 a.m. to 2:50 a.m.)
Approx. 200

Peak 10 minutes (4:30 a.m. to 4:40 a.m.)
100

And these are just the ones I saw and doesn't include the many that others saw in a different direction.

@ @ @

From: Sheldon Schafer
<sschafer@lakeview-museum.org>

Date: Tue, 19 Nov 2002

Subject: Leonid Results

Around 4:30 a.m. — 5:00 a.m. the display was pretty impressive for about 20 minutes or so. At one point I saw five at once, averaging one every few seconds for awhile. The Moon was more of a distraction than a usual full Moon because of the thin ground fog from the earlier rain, but it was perfectly clear. I could see fourth-magnitude stars easily, but trails that faint were probably washed out. I didn't do an accurate count, but am guessing a peak zhr of one to two thousand. I'm glad I went out.

@ @ @

From: Michael Shelton
<mjstjs@insightbb.com>

Date: Tue, 19 Nov 2002

Subject: Leonid Results

I was out at Jubilee from 1:15 a.m. to about 5:30 a.m.. It was worth it. I counted over 400! The peak was right on schedule. It was slow until around 4:00 a.m.. We

(Continued on page 6)

Of Starlites Past

by John Barra

40 YEARS AGO Winter Newsletter 1962/63

“Bob Hanlon has accepted the job of working up our display for the Arts and Science Federation ‘Fair in the Park,’ which takes place May 24th, 25th, and 26th. He will be ably assisted by Andy Tiritilli who has been active in this job several times before.”

It sounds like the predecessor to Astronomy Day. The club remains active today in trying to bring astronomy to the public. Check the monthly calendars from the membership meetings or check our website at <www.astronomical.org> to find events where you can assist the club at viewing sessions for different organizations.

“Dean Eater, who I mentioned previously has taken over special events, has also an interesting schedule worked up. Highlights are: an opportunity to see the two asteroids — Vesta and Ceres — late in March. (I wonder how many of you have ever seen an asteroid.)”

Today there is more to seeing an asteroid than as another star-like dot in our telescope. You can see photos of asteroids from the Hubble Telescope. Better yet, you can see close-ups from satellite fly-bys. Future space probes are scheduled to land on asteroids to get samples. Follow their missions in the astronomy magazines.



25 YEARS AGO December Starlite 1977

From Rollin Van Zandt: “As past-president of the Astronomical League, I am still very much involved in a program of making the national organization more effective in catering to the needs of the amateur astronomer. One such activity is the Observer’s Package being offered to League members at a discount price.”

Van was not only instrumental in making the PAS what it is today, he was also instrumental in making the national Astronomical League a success. Many of his ideas, such as having various League observing handbooks available, have become an important part of the League’s accomplishments.

“Messier Chairman Report: We have finished this year of minimum observing activities. Our Friday night schedule was clouded or rained all but three times. Next year will be much better.”

As Cub fans know, next year will not be better just because Ernie Banks says so. Likewise, we can count on many cloudy nights. (Did a meteor shower get its name from the fact that it surely will rain whenever one is scheduled?) But we still have to enjoy those few Moonless nights when the clouds are also gone.

Astronomical Calendar

- November 30
Star Party at Jubilee Observatory
- December 4
PAS Members Meeting, 7:30 p.m.
Lakeview Planetarium
Show & Tell: What I Want, What I Got
Total solar eclipse over S Africa, Indian Ocean, and S Australia
New Moon
- December 7
Star Party at Jubilee Observatory
Venus at greatest brilliancy, mag. -4.7
- December 11
First-quarter Moon
- December 13
Peak of Geminid meteors, late evening till dawn
- December 18
PAS Board Meeting, 7:30 p.m.
Northpoint Shopping Center Hardee’s
- December 19
Full Moon
- December 21
Winter Solstice at 7:14 p.m. CST
- December 26
Last-quarter Moon
- December 28
Star Party at Jubilee Observatory

December 2002						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

January 2003						
S	M	T	W	T	F	S
		1	2	3	4	
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

February 2003						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

- January 1
NO MEMBERS MEETING
- January 2
New Moon
- January 4
Star Party at Jubilee Observatory
Saturn crosses Crab Nebula
Earth at perihelion
- January 5
Latest Sunrise
- January 10
First-quarter Moon
- January 11
Venus at greatest elongation west
- January 15
PAS Board Meeting, 7:30 p.m.
Northpoint Shopping Center Hardee’s
- January 18
Full Moon
- January 25
Star Party at Jubilee Observatory
Last-quarter Moon
- January 27
Moon 0.48° SSE of Mars

- February 2
Jupiter at opposition
- February 5
PAS Members Meeting, 7:30 p.m.
Lakeview Planetarium
AstroJeopardy!
Gene Hodel
- February 1
Star Party at Jubilee Observatory
New Moon
- February 9
First-quarter Moon
- February 16
Full Moon
- February 19
PAS Board Meeting, 7:30 p.m.
Northpoint Shopping Center Hardee’s
Starlite Deadline
- February 23
Last-quarter Moon



The Bulletin Board

New Members

Welcome to:

James Martin

Jeffrey Pittenger

☺ ☺ ☺

Thanks for Helping!

Mike and Jessica Frasca would like to thank all the members who came out to Jubilee on Friday, November 1st, during our Cub Scout group outing. All the boys had a great time, and we truly appreciate all your help!

☺ ☺ ☺

New Editors Wanted

Have you ever wanted to edit *Starlite*? Here's your chance! John Barra and Mike Frasca (co-Editors-in-Chief) and Jessica Frasca (Layout

and Copy Editor) are looking to step down. John plans to continue writing articles for the newsletter, only without the "title." Michael and Jessica may still contribute to *Starlite* in some capacity. If you think these positions are something you'd enjoy, and you'd like to find out more, feel free to contact us at <jbarra31@cs.com>, <frasca@uic.edu>, or <frasca@att.net>.

☺ ☺ ☺

NorthMoor Restoration

Don Ware has written an article on NorthMoor Observatory and has posted it on the PAS website (<www.astronomical.org>). It gives more details behind our request (see enclosed flyer) for restoration funds. Check it out!

☺ ☺ ☺

Extra! Extra!

The *Peoria Journal Star* has mentioned the PAS a few times recently. Columnist Terry Bibo devoted a column and a half to NorthMoor Observatory (9/1/02 and 10/23/02). PAS member Brian Bill wrote a letter to the editor (9/7/02) in support of NorthMoor. And astronaut Eugene A. Cernan of Houston, Texas, added his voice (11/9/02) in favor of repairing NorthMoor and keeping it open to the public. With all this support, how could we possibly close it?

☺ ☺ ☺

Mark Your Calendars

Astrofest 2003 is scheduled for Thursday, September 18th through Sunday, September 21st next year at Camp Shaw-Waw-Nas-See near Kankakee, Illinois. For information, contact the Chicago Astronomical Society at <http://www.chicagoastro.org>.

Joint Star Party a "Grape" Success

By Rich Tennis

On Saturday, September 7, 2002, the Peoria Astronomical Society (PAS) and the Twin City Amateur Astronomers (TCAA) held a joint star party at the Mackinaw Valley Vineyard, hosted by Paul Hahn. This was the first such star party held between the two Central Illinois astronomy groups. The site of the star party was located just off Route 9 near Mackinaw and allowed a very good view of the entire sky with fairly dark skies.

TCAA Chairperson Sandy McNamara and PAS member Rich Tennis organized the gathering. About 50 or so astronomers showed up with telescopes ranging from the Astroscan to Astro-Physics name brands; designs such as Dobsonians, refractors, Newtonians, and SCTs; eyepiece apertures from two to 15 inches wide; and tripods ranging from delicate to able to hold a tank. Some folks came with two telescopes and some with just their eyes.

Host Paul Hahn provided a wonderful site at his 11-acre vineyard and processing facility. Paul showed us how wine is made and provided samples to test the past season's yield. Paul provided a tasting room that was still in the rough stages of completion with a stepladder access.

The evening was one with superb viewing, with the new Moon that evening, no wind, and a low dew point. As the viewing started, the organizers "planned" an aurora borealis for all to see. It covered

most of the northern horizon with hues of red and some yellow streamers. Then, dark crept into the night skies for the rest of the night and early morning. Conversation, comparison, and good viewing carried the star party to about 3:00 a.m.

All agreed that the star party was a success. Host Paul Hahn gave an open invitation to both groups to come back for another star party...with the promise that the hospitality room would be more refined and accessible. The wine tasters agreed that another visit was warranted. ☺



Monthly Program Schedule

Unless otherwise noted, meetings will be held in the Lakeview Museum Planetarium, with all programs beginning at 7:30 p.m.

December 4, 2002

Show & Tell: What I Want, What I Got

January 1, 2003

NO MEETING

February 5, 2003

AstroJeopardy!
Gene Hodel

March 5, 2003

TBA

Can You Spot This? Open Cluster NGC 1981

by John Barra

Can You Spot This? *premiered in Starlite Issue #144, December 2000.*

Among the many nebulae and tightly-compacted open clusters in Orion is one rather loose, but remarkable and clearly seen, open cluster, NGC 1981. This open cluster is easy to locate and easy to recognize. I have always enjoyed it because it is so different from the many other objects in this most-recognized winter constellation.

To locate it is no challenge. Just open your eyes and turn them toward the mighty Orion. Then look at the three stars that comprise the sword of the Great Hunter. With a low-power eyepiece in your telescope, aim your Telrad or finder at the top star of the sword stars,

marked star one in Chart 2. With your eye in the eyepiece, slowly move your telescope in the opposite direction from star two (the Orion Nebula). NGC 1981 should be noticeable after very little movement.

This loose cluster is almost one-half degree in size. It is been described as two parallel lines of three or four stars of nearly the same magnitude. However, if you look at it for a moment or two and include a few fainter stars, a conspicuous M or W shape is quickly discerned, depending on the orientation of your scope. All the stars of this shape seem to sparkle, especially if you increase the power of your eyepiece until the cluster just fills the view.

If you have a large enough main objective and good eyepieces, you

should be able to spot the nebulosity of NGCs 1973, 1975, and 1977 on the path between the top star of the sword and NGC 1981. If you find the nebulosity first, take your time to enjoy it. But don't forget to keep going later to find NGC 1981. The open cluster is not much more than a half-degree from the top sword star.

...easy to locate and easy to recognize....

OBJECT STATISTICS:

Name: NGC 1981

Type: Open Cluster

Magnitude: 4.6

Size: 25'

Coordinates: 05 hr. 35.2 min.; -04 deg. 26 min. ☼

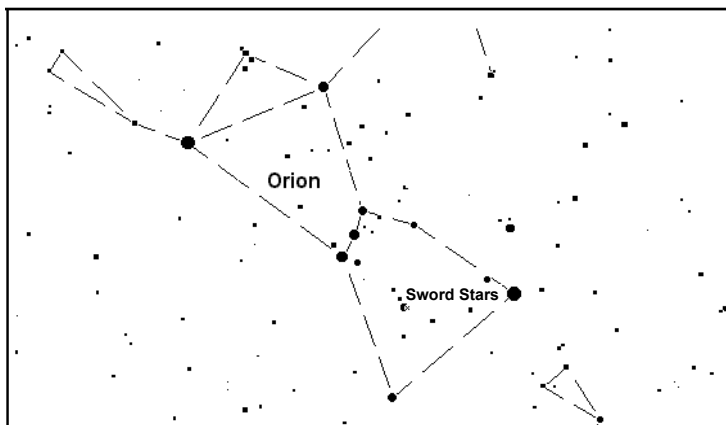


Chart 1: Low Power

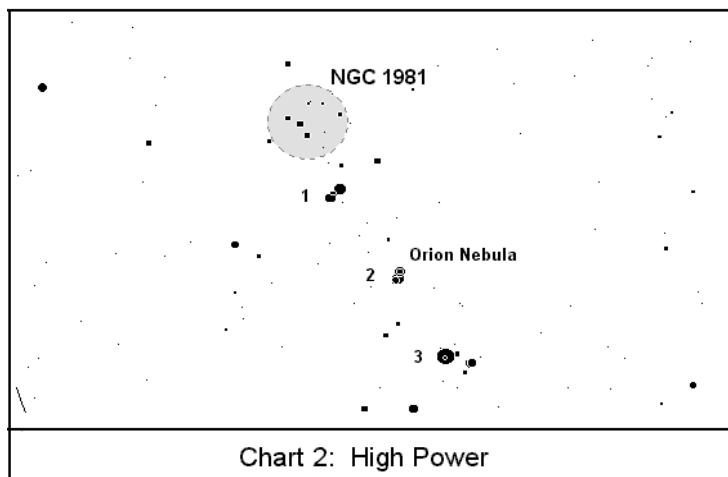


Chart 2: High Power

PeoriaAstro....

(Continued from page 3)

saw two that left a trail in the sky for over two minutes. At one time five or six shot from the radiant in one second. A vast majority went through the Big Dipper bowl. There also were quite a few below Jupiter. Most were very fast! If the Moon was not out we could have seen 600 or more. This was the best one I have ever seen.

@ @ @

From: Brian D. Bill
<bdbill@mtco.com>

Date: Tue, 19 Nov 2002

Subject: Leonid Results

My wife, daughter, and I were out from 4:10 a.m. — 5:10 a.m. We saw approximately 290 during this hour. Between 4:45 a.m. and 4:55 a.m. we counted 100! I would have guessed this to be the peak time. We observed in Eureka with my house blocking the Moon to the west. It was great! Several of my high school students also observed them. Most of the ones who observed didn't stay out long. They complained about needing sleep and about the cold. Teenagers! ☼



Minutes of the Board of Directors

by Dan Son, PAS Secretary

Board meetings take place on the third Wednesday of the month. Those referenced below were held at the Hardee's of Willow Knolls Court in Peoria. Future PAS Board meetings will be held at the Hardee's of Northpoint Shopping Center in Peoria. Meetings start at 7:30 p.m.

August 21, 2002

Academy of Science: (Scott Hay) Bike ride was a success; the weather was also great. Will be writing a grant for a dome.

Jubilee Observatory: (Eric Clifton) JC Kline will use a power washer on the 14-inch dome.

14-Inch: (Mike Shelton) Working on the CAT system and power module.

Light Pollution: (Rich Tennis) Will be talking to Fondulac Park District on October 8th. Will be setting up a booth if possible at the Central Illinois Mayors Association of Illinois.

Nominating: (Stephen Russell) The slate for upcoming election will be:

President — Scott Hay

Vice President — Tim Lester

Secretary — Dan Son

Treasure — Mike Shelton

Legal Agent/Parliamentarian — Mike Hay

Nominating — Steve Russell

NorthMoor Observatory: (Bill Cole) John Barra made a motion to close NorthMoor Observatory to public viewing at the end of the viewing season unless the Peoria Park Board gives some needed support. Motion was seconded by Rich Tennis. A motion to table this vote till September meeting was passed.

NorthMoor Restoration: Terry Bibo article will run on Sunday, August 25th.

Observing Club: (John Barra) The PAS and TCAA Star Party will be September 7th. SAS Dark Sky Party will be October 3rd-6th.

Program: (Dan Son) September will be Part 1 of Telescope building with John Dobson; October will be Dr. Steve Williams from the Smithsonian; November will be Part 2 of the Dobson video.

Starlite: (Mike and Jessica Frasca) Deadline for *Starlite* will be November board meeting.

Membership: (Scott Swords) We have a new member, Jeffrey Pittenger.

<www.astronomical.org>: (Tim McGrath) Remove email from members' list area and update programs.

New Business:

Picnic: who brings what? Dan Son — Baked Beans; Mike Frasca — Ham; Scott Swords — Coffee.

September 18, 2002

Treasurer's Report: (Mike Shelton) Proceeds from the Interplanetary Bike Ride totaled \$88.45. Jim and Susan Weber do-

nated \$250.00 for NorthMoor. Mike made a motion that a special account be set up for NorthMoor restoration or public viewing. Seconded by Eric Clifton. Motion passed.

Academy of Science: (Scott Hay) Thanks to all those who helped on the Interplanetary Bike Ride. Next year the Ride will be August 9th and 10th.

Education: (Scott Hay) Scott Hay will do a class for Bradley's Continuing Education starting January 2003.

Jubilee Observatory: (Eric Clifton) Rich and JC power washed the dome. Then some small holes were fibreglassed. New template plans were received from Tim Lester. The New DaVinci's from Lakeview will be coming out October 3rd, with a rain date of the 10th. An ICC class and a 4H group will come out on October 4th, with a rain date of the 5th or 26th. November 1st will have an Eagle Scout troop coming out with a rain date of the 22nd or 23rd. A reminder was made to keep New Moon weekends group-free for our members' viewing pleasure.

14-Inch: (Mike Shelton) The old CAT system is broken but we have a new CAT system with a Y2K chip in it.

Light Pollution: (Rich Tennis) On October 15th Brian Bill will be bringing a group out to Star House. The group is some home schoolers from 6th to 12th grades. Rain date is October 24th or 29th.

Nominating: (Stephen Russell) Vote yes!

NorthMoor Observatory: (Bill Cole) Girl Scout troops coming out September 20th.

NorthMoor Restoration: On August 27th, members from PAS met with Tim Cassidy. We will continue with the dialogue for future meetings. The next meeting for PAS and Park Board was September 16th. Seven people met and will continue to meet to work for a positive end. Members of PAS will have to come up with more money for this restoration to take place.

Observing Club: (John Barra) PAS and TCAA had a great star party. The aurora was a nice touch, who set that up? Around 50 people showed up for this fun event.

Program: (Dan Son) October: Smithsonian Speaker; November: John Dobson video, Part 2; December: Show & Tell: What I Want/What I Got.

Starlite: (Mike and Jessica Frasca)

Deadline for *Starlite* will be November board meeting.

<www.astronomical.org>: (Tim McGrath)

Let Tim know if anything needs to be added to the site.

New Business:

We have a new loaner scope (Astroscan) thanks to Tim Lester and Sheldon Schafer.

October 16, 2002

Academy of Science: (Scott Hay) The science grant application is now downloadable online at <www.geocities.com/peoriascience>. An outstanding slate of officers has taken shape. The new officers will be voted in this December.

Education: (Scott Hay) Don Hill will continue to offer his excellent astronomy class at NorthMoor Observatory through the Peoria Park District. They begin October 27th and end November 17th, totaling five consecutive Sunday evenings. We wish to thank past president Jerry McElyea for manning the telescope and supporting Don's educational efforts. I will also be helping Don with the final three classes.

Jubilee Observatory: (Eric Clifton) The New DaVinci's were clouded out. On Oct 10th, six of them showed up for a viewing session. On October 14th we had Boy Scouts and a church group come out.

On October 25th and 26th, the Glasford 4H and Peoria County 4H will come out. On November 1st, a Dunlap Boy Scout group and Mike Frasca's Cub Scouts will come out. We may try using Tri-X next year to kill the weeds.

14-Inch: (Mike Shelton) Dan Son painted the dome inside and out a nice bright white using Epoxy paints. Eric, Tim Lester, and Tim McGrath worked on the scope October 10th and have the Compustar working.

CCD: (Stephen Russell and Tim McGrath) Bradley University students want to do some CCD work using the PAS scopes.

NorthMoor Observatory: (Bill Cole) On Oct 18th, St. Vincent Boy Scouts will be coming out. Oct 25th will bring Cub Scouts from Armstrong School. A suggestion was made to have all monies collected on viewing nights be written in logbook. Bill Cole made a motion to send a letter to PPD. Seconded by Steve Wrigley. Motion passed.

NorthMoor Restoration: (Eric Clifton and Scott Hay) A 22-foot dome is \$55,000. We could use an 18½-foot dome for
(Continued on page 9)



The REAL meeting room...
Photo by Michael Frasca

Illinois Dark Sky Star Party

by Tim McGrath

The first annual Illinois Dark Sky Star Party, hosted by the Sangamon Astronomical Society of Springfield, Illinois, occurred on October 3rd, 4th, and 5th, 2002. The star party was held in the newly opened Jim Edgar Panther Creek State Fish and Wildlife Area, about 25 miles northwest of Springfield. Peoria Astronomical Society members who attended were Dan Son and myself. As many as six other PAS members had hoped to attend but could not due to other commitments. Overall attendance at the event was around 150.

I took Friday off work and left Peoria around 10:30 a.m. in the pouring rain. By the time I arrived at the park around 1:00 p.m. (I got lost twice trying to find it) the rain had quit, but it was still cloudy and windy. Friday's weather forecast called for clear skies and reduced winds after 10:00 p.m. The forecast for Saturday was clear, with clouds rolling in late, and for rain Sunday morning. When I left Sunday in a light drizzle, I commented to Dan that this was the first time I remembered the forecast to be right!

After settling down and walking around checking out the other telescopes, my first impression was that this was a Meade convention. It seemed everyone there had a Meade LX series or ETX series telescope. I even walked in on a talk given by Mike Weasner and Dr. Clay Sherrod on how to use the Meade Autostar controller. Mr. Weasner runs a well-known website dedicated to the Meade ETX (<http://www.weasner.com/etx/menu.html>) and Dr. Clay Sherrod is known for his advice and maintenance tips in the LX200 and LX200GPS yahoo users groups (<http://groups.yahoo.com/group/LX200/>) and (<http://groups.yahoo.com/group/LX200GPS/>).

It wasn't until later that I found out that the second annual Mighty ETX Star Party was being held in

conjunction with the Illinois Dark Sky Star Party. They brought with them many loyal followers from as far away as Virginia. They also had plenty of Meade accessories and telescopes to give away to lucky winners.

Daytime events included trivia games, accessory swaps, and speakers. Our own Sheldon Schaffer spoke about the scale of our solar system in terms of sizes and distances.

Other speaking topics included photography, Mars, telescope tune-ups, and one youngster's account of his three trips to Space Camp. He even showcased a model rocket demonstration.

There were also plenty of other things to do at the park, such as fishing, boating, hiking, and biking. I went on a scenic 17-mile mountain bike ride around the lake.

The best part, however, was the sky after nightfall. We had two nights of great seeing. Friday night started partly cloudy, but cleared off completely by midnight. Saturday was crystal clear all day and night until eventually clouding over around 2:00 a.m. We were able to see sixth-magnitude stars with the naked eye. The Milky Way stretched across the sky from horizon to horizon. M31, the Andromeda Galaxy, was a ridiculously easy naked-eye object. In Sagittarius, M24 and M8 were also easy naked-eye targets. The campground had great views with no major obstructions around the entire horizon.

Dan and I spent most of our time with our own scopes, comparing views and swapping eyepieces. However, we also took the time to check out other scopes. Among all

the Schmidt-Cassegrain telescopes there was a good variety of other scopes, including Dobsonians and refractors. The biggest attraction of the night was a 20-inch Obsession alt-azimuth telescope. It always had a steady line of people waiting to get a glimpse through it, and for good reason...the view of the Orion Nebula almost knocked me off the ladder!

The SAS provided meals for those who opted, catered by area restaurants. I made the mistake of

NOT purchasing meal tickets at registration. Fortunately, I was able to purchase a meal ticket for Saturday evening; the menu consisted of barbecued ribs, mashed potatoes and gravy, and baked beans, catered by

Damon's. After dinner, they held the drawings for door prizes which included books, solar filters, eyepieces, and software. The grand prize was a Meade ETX-90 telescope, provided by Shutan Camera & Video. The winning ticket was #980 — ME!

This was only the second star party I have attended. The first was Astrofest 2001. In my opinion, the SAS party was far better than Astrofest. Although it did not have many vendors, the facility and the location were far superior. I expect that over the following years the Dark Sky Star Party will gain more notoriety and more corporate sponsorship. There was even speculation that Astrofest may be held there sometime in the future. I talked with several SAS members, and they were very courteous. I wouldn't be surprised if we were asked to co-host next year's event, or at least have a joint star party with them. In either case, I will certainly try to be there again. ☀



*Campers at the
Illinois Dark Sky Star Party
Photo courtesy of Tim McGrath*

Needles....

(Continued from page 2)

planets, the Moon, and other bright objects. Its sizeable, well-lit parking lot and handy location add to its desirability from the public's standpoint.¹ Everyone on this committee wants to see this happen.²

We have set up a separate account with South Side Trust and Savings Bank called "Peoria Astronomical Society — Public Observing Fund" to hold money just for this cause.³

When you give, please be sure to attempt to double your money by getting matching donations from your employer or by challenging folks you know in the community to match you. You can also give monthly, quarterly, semi-annually, or annually, whichever you prefer. PAS would be happy to send timely reminders via e-mail or snail mail.

Think about how much work it was to get that telescope together and working after parts of it were found stored in several different areas of Bradley University. Think about how strong the desire our founder Rollin Van Zandt and the others must have been to turn people's eyes skyward and get them excited. Think about how much vision those folks had to give something to future generations. Think about how much passion PAS members had 50 years ago to fundraise. That PAS group in its time was extraordinary and we should be proud to carry on their legacy. Even today, our founder Rollin Van Zandt and the other PAS members have reached through time to give it all to us up to this point. We just need to put the crown on their work.

—Scott Hay

Footnotes:

¹ Before PAS met with PPD, we talked about other options that included using a roll-off roof that would roll onto the roof of the warm-up room; a different mount

(using mirrors to track and reflect light into the immovable scope, Hobby-Eberly style, making parts of the sky off-limits); using a smaller diameter dome (a structural engineering nightmare); dismantling the scope to protect it and abandoning the NorthMoor idea (could we ever get it back together again correctly and more importantly, *would* we?); and starting a new observatory. Eric Clifton's words came to mind and have weight because he witnessed how the Decker-Grebner-Van Zandt site at Jubilee State Park came to be: "It is a lot of work to build an observatory, a lot more than people realize." I believe him and do not think we have the resources.

What I am saying is, "How could this group possibly think about building another observatory farther out, harder to reach, in darker skies, when we barely have any members willing to learn how to open and close the observatories we do have? Nobody is knocking down doors asking to be trained on these telescopes in order to bring astronomy to the people."

The path of least resistance is to replace the dome.

Here we have an observatory, already practically done. That tremendous mount is already in place, resting on a 20-foot long concrete footing that goes 12 feet down to bedrock. The scope is working. All we need to do is add the final crowning dome. With a little carpentry and flooring inside and a couple of new steel doors to secure the perimeter, we can once again quench our community's appetite for hands-on visual astronomy.

² When the joint committee meets again on Dec 3, 2002, Eric Clifton will provide an up-to-date itemized list of what is needed and current projected costs. Then we will set up a fundraising committee and appoint a fundraising chairman. PPD and PAS must try

to provide as much support for them as we can. We still could apply for grants, ask for help from the Antique Telescope Society, etc. We need your ideas and your willingness to roll up your sleeves and get to work. This has to be done quickly. The dome manufacturer will need up to an eight-month lead time to produce the dome.

³ We deliberately left out the name NorthMoor, because, if we are unsuccessful in saving NorthMoor Observatory and if the telescope goes into a museum case somewhere, never to be used publicly again, we would like to use that fund to construct a scaled-down public observing program in keeping with the spirit in which those monies were donated. ☛

Minutes....

(Continued from page 7)

\$30,300. These do not include installation. Bart Benjamin drafted a letter to send to the editor of the Journal Star about the importance of saving the NorthMoor scope and dome. It was decided best to not try to get monies from those people who have come out to NorthMoor in the past. Steve Wrigley made a motion to get fund-raising chairmen. Seconded by John Barra. Motion passed.

Observing Club: (John Barra) Leonids meteor shower will be November 18th.

Starlite: (Mike and Jessica Frasca) Deadline for *Starlite* will be November board meeting. John Barra will contact the Frascas about finding a new editor.

<www.astronomical.org>: (Tim McGrath) The calendar works in the private members area using file 2.

ETX Club: (Tim McGrath) Tim won a Meade ETX-90 during the Dark Skies Star Party. The PAS now has several members who own ETXs: Scott Hay, JC Kline, Rodney Nordstrom, and Tim McGrath. Tim Lester is helping to get Rodney's scope able to be driven by Starry Night planetarium software from a laptop.

New Business:

Eric made a motion to send flowers to Michael Thompson, son of former president Dr. C. Thompson. Seconded by Mike Hay. Motion passed. Motion made by Scott Swords to move our Board meetings to Hardee's at Northpoint Shopping Center. Seconded by Calene Fleming. Motion passed. ☛

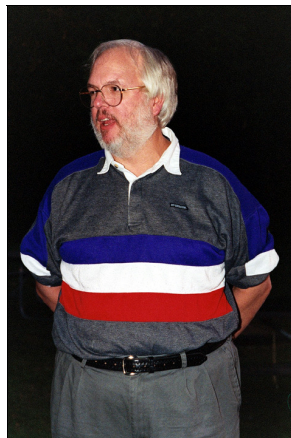
PAS Banquet 2002 Wrap-Up

Photos by Steve Russell and Michael Frasca

The PAS Annual Banquet on September 28, 2002, boasted beautifully clear skies for the fifth straight year. We must be doing something right!

The following slate of officers was elected during the banquet to serve the 2002-2003 term: President, Scott Hay; Vice-President, Tim Lester; Treasurer, Mike Shelton; Secretary, Dan Son; Legal Agent and Parliamentarian, Mike Hay; and Nominating Chairman, Stephen Russell.

Here and on the following page are photos from the event.

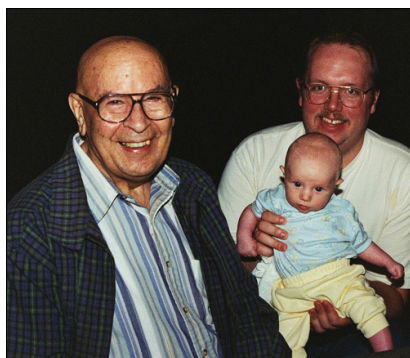


Out with the old, in with the new...

Outgoing PAS President Steve Wrigley (left) and Incoming President Scott Hay



SR



*Sam Decker and Jon and Joshua Alexander Wrigley
The oldest and newest members of PAS
We'll keep them all*

SR



Chuck Lamb checking out the equipment as Tim McGrath and Company look on

MF



Sheldon Schafer as the Official Banquet Taste Tester

SR



Ah, this is what banquets are all about!

MF



Eric Clifton and Chuck Lamb, deep in discussion about Life, the Universe, and Everything

MF

Grant....

(Continued from page 1)

for the residents along the selected streets before the non-glaring street lights are installed. This is anticipated to be before mid-March 2003. A follow-up meeting will be conducted to get feedback. This will be in time for the scheduled talk by PAS to the Heart of Illinois Association of Mayors, on March 19th, 2003. The full cut-off lighting on these streets will be the demonstration site for the mayors of about forty communities to come and see. PAS will conduct light meter readings on the affected lights before and after the changeover for a report. This report will be used to talk to any community that may think lower power lights, 100 to 70 watt HPS, may mean lower illumination of the intended areas. Our rough calculations show that it will not."

The Society would not be alone

in working toward darker skies, Tennis adds. "The Lakeview Museum Planetarium will hold a "Dark Sky Month" where they will show how wasteful outdoor lighting affects the viewing of the stars at night. PAS will be responsible for a 12 to 15 minute presentation before each performance on five Saturdays on how full cut-off outdoor lighting can be beneficial to the area, and could REDUCE LIGHTING COSTS for the communities that seize control of their outdoor lights."

Tennis also thanked everyone who sent him information to include in the grant application. He has high hopes for our chances: "The grant recipients will be announced at their annual meeting in mid-December, so look for the announcement...and be there...I have a good feeling about PAS's chances for the \$1000.00 requested."

Volunteers from among our members to serve in a "speakers pool" would be most welcome. Participants would be asked to give a short talk on light control and explain its benefits.

"So, if you have a group that is looking for a program of this kind," says Tennis, "let anyone on the Board know, and we (the committee has four members, so far) will get back to them."

Any member who would like to join the Light Control Committee would not be turned away. Chairperson Tennis says, "I am looking for those who are inspired to have the night skies as dark as we have now, or even better, for their grandkids. They deserve the thrill we get today to look into the Milky Way and other treasures of the night sky."

Tennis closed his message with his wish that we all have "a very blessed Thanksgiving." 🌟

Banquet Pictures....



Jessica Frasca and Steve Wrigley: two "outgoing" members sharing a lighter moment before nightfall

MF



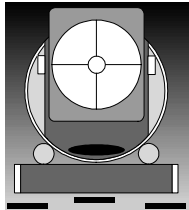
"Are you sure you have enough dessert there, young man?"

MF



Gene Hodel and friends, swapping recipes

SR



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 Peoria Academy of Science
 c/o Princen
 677 E. High Point Terrace
 Peoria, IL 61614

#152, December 2002

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In This Issue...

Leonid Meteor Storm, Peoria Academy of Science Grant, Can You Spot This?, and more....

Observing Club Notes

**Tennis, McGrath Earn
 AL Observing Awards**

Two Peoria Astronomical Society members received awards from the Astronomical League for their achievements in observing Messier objects.

Rich Tennis received the AL certificate for having viewed all 110 Messier objects. He also received a Messier Club pin from the League.

Tim McGrath was presented an Honorary Messier Certificate for having viewed 70 Messier objects. Actually, McGrath has now viewed over 100 of the objects and should be earning his regular Messier certificate and pin in the near future.

Anyone wishing to work toward receiving any of the many League certificates should visit the League's website to learn the rules. One must

by John Barra

complete a log of his or her observations and have the log verified by the Society's Observing Chairman — me.

**Leonid Shower
 Odds and Ends**

In addition to the meteor storm, Leonid observers were able to see several other phenomena rarely seen around here. For example, observers were treated to not one but two bright meteors that left a trail that could be seen for nearly two minutes.

Another unusual observation was a meteor that split into two segments. The broken segment followed the first as the pair moved quickly away from the Leonid radiant.

That radiant had an unusual guest nearby, the bright planet Jupiter. Most of us used the planet rather than the radiant for a point of reference. Nearly a quarter of all meteors seen left very short trails and were only a few de-

grees apart from this focal point.

The planet Venus also had an unusual appearance in the low, early morning sky.

Since Venus is near its closest point to Earth, it was unusually bright. However, since it was so low and had to be seen through a greater portion of our atmosphere, it appeared much bigger than usual. It looked more like a small, bright ball than its usual naked-eye appearance as a bright point of light.

However, the rarest object seen all night was Steve Thomas. A few years back, Steve could always be counted on to appear at marathons, meteor showers, or other observing events. But because of his schedule, he has not been able to attend such functions for a few years. His appearance was welcomed and he indicated that his schedule will permit him to be more active again. The Messier Marathon is only three months away. ☾

*...a meteor...
 split into two
 segments....*