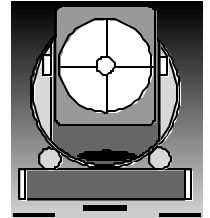


STARLITE



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**PEORIA
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History & Future of North Moor Observatory

by Dr. Bert Princen

In 1930 the Peoria Academy of Science was formed by a group of local science educators, researchers and interested amateurs for the purpose of bringing a better understanding of scientific matter to the citizens of central Illinois. One year later the fledgling organization decided that it would be beneficial to create a number of topical sections. Ornithology, botany, astronomy, geology and entomology still do exist today and are very active. Others fell out of favor and disappeared. Among them archeology, anthropology and microscopy. Others were added later, such as herpetology. Several of the chapters incorporated in their own right, and a few of them even received their own 501-(c)-(3) status from the U.S. Government.

Most of the sections never had any need to own buildings or equipment. They all found good meeting places, such as Lakeview Museum, Forest Park Nature Center or privately owned meeting halls. However,

to function to the satisfaction of the members and the general public alike, the Astronomy Section, later renamed the Peoria Astronomical Society, decided to develop a good observatory. That opportunity came when Bradley University offered its fine telescope to the Peoria Academy of Science as an outright donation. This quality instrument had not been used for a number of years and did not serve anyone during all that time. Its manufacture dates back to 1909.

The Academy and Astronomy Section started a campaign to raise the needed funds and find a suitable permanent location for this large refractor telescope. Together with the Peoria Park District an excellent site was found on the North Moor Golf Course at the north end of town. In July 1955 the observatory was completed and dedicated. Although the building was the property of the Astronomy Section from the beginning,

(Continued on page 10)

Academy

Honors

Eric Clifton

By Becky Clifton

On April 11, 2003 The Peoria Academy of Science held their annual banquet at Barracks Cater Inn. Among the members was longtime Peoria Astronomical Society member, Eric Clifton Eric was recognized and awarded an Honorary Membership in the Peoria Academy of Science for years of work for it's Astronomy Section. Eric has earned recognition for his many contributions and accomplishments over the last 41 years. Here is an outline of Eric's involvement with PAS and the passion he holds for astronomy.

Pre-PAS Activities

Developed interest in Astronomy at age 8 – found Dad's college astronomy text book

First Northmoor visit (Northmoor was just one year old) was at age 8; stood in line with his Dad for more than an hour to see Mars

(Continued on page 8)

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Needles from the Hay Stack

by Scott Hay



I have to compliment Jeff Pittenger for putting together the previous terrific *Starlite* newsletter. Do any of you know who put together the first *Starlite* newsletter?

(Answer is at the end)

I hope you all enjoyed the lunar eclipse. Now is the time to look at Mars over these next few months. It will be closer than at any time for 60,000 years.

Few people on Earth have the opportunities that PAS members and Peorians enjoy viewing Mars through such a perfect instrument especially suited to solar system observing. (NorthMoor Observatory)

Even if you can only afford five or ten dollars, please make your check out to "Peoria Astronomical Society-Public Observing Fund" to show that you think it is worthwhile to keep NorthMoor Observatory open. It is the gesture that counts.

I am pleading with you poor folks to send us a check for any

dollar amount. This is absolutely essential in order for Bert Princen to convince outside givers that this group believes we should keep NorthMoor open for public observing. Why should somebody outside our group help us rescue our own scope when only 20 percent of our own membership has contributed anything? These groups will ask what percentage of our membership has shown support for this cause. If 80% of the membership would not even give a five dollar bill, an outside group would wonder why are they being asked to join us in our efforts. What are we missing? Does astronomy really no longer play in Peoria Astronomical Society?

For me, the highlight of the last several months was seeing Eric Clifton was awarded an honorary membership to the Peoria Academy of Science for between 35 and 40 years of hard work for the astronomy section. Eric told me his jaw dropped when he heard the news. He was not expecting it. When I look at the amount of time and effort Eric puts in behind the scenes even today, given he has a family ordering him to cool his jets, it would be hard to imagine how much different our situation might be if it were not for his sense of duty toward PAS.

We have had some excellent speakers recently. PAS alumni Dr. Bernard Jackson returned to Peoria to give us the early results from his solar weather prediction experiments. One of his goals is to get earlier warnings and better measurements back to Earth. Dr. Linda French spoke about her research to sort out the histories of asteroids and comets. Brian Poelker allowed us to hold a piece of Mars, the Moon, Vesta, and other items while he explained some of the geology of meteorites.

Thanks to Dan Son, Nerio, Mike Shelton, Scott Swords, Calene Fleming, Steve Russell, Sheldon Schafer, David Grebner, and everyone else who organized and came out to our Astronomy Day event in conjunction with Lakeview Museum. Thanks to Sheldon Schafer for providing several nice prints and posters courtesy of Lakeview Museum and NASA.

-Scott Hay

(Answer: The first person to put together the first *Starlite* newsletter was past president Bernice Grebner.)

... We have
had some
excellent
speakers
recently...

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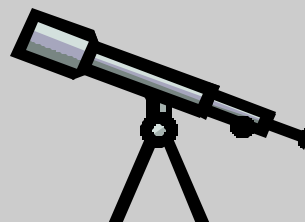
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Visit our site on the World Wide Web at <<http://www.astronomical.org>>



PeoriaAstro@yahoogroups.com

compiled by Jeff Pittenger

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 email address. You will be added to the group.

From: "Dan & Barb Son" <sunshine92@i... >
Date: Thu Mar 13, 2003
Subject: Fw: A Stargazing/Introductory Astronomy Workshop in the Fall?

----- Original Message -----

From: "Rebecca Baggett" <Rbaggett@i... >
To: <sunshine92@i... >
Sent: Thursday, March 13, 2003
Subject: A Stargazing/Introductory Astronomy Workshop in the Fall?

I am the Community Education Coordinator at ICC and I am interested in offering an Astronomy workshop in the Fall semester as a non-credit 2-3hour workshop. Is there anyone in your organization who would be interested in teaching something like this? Rebecca Miller Baggett Community Education Coordinator Illinois Central College 309.999.4562

From: "Dan & Barb Son" <sunshine92@i... >
Date: Wed Mar 26, 2003
Subject: T-shirts

I'm sorry to say that between a format of the computer I have not been able to find the T-shirt order list. Im sorry for this to happen. I will keep looking ut in the mean time Please email me sunshine92@insightbb.com. with how many shirts you would like and size's. Price is \$12 for Small, Med, Large & XL add \$2 for XXL. Again I will hopefully will find the original list but the computer list is gone. My apologies for this.

From: "gene Hodel" <ghodel43@m... >
Date: Wed Mar 26, 2003
Subject: What does this means?

I just bought a new map of deep-sky objects. There are several objects labeled with the letters "Stk" followed by an arabic number. As far as I can tell, all of these objects are open clusters. The largest number I could find was Stk23. Does anybody know what "Stk" stands for? I couldn't find it in any of my reference books. Thx, Gene

From: "gene Hodel" <ghodel43@m... >
Date: Fri Mar 28, 2003
Subject: Re: [PeoriaAstro] What does this mean?

Thanx Tim or anyone else who can help. The three objects I found are: Stk1 in Cas at 2h 15.0m +59 25, Stk2 in Cam at 3h 16.3m +59 25, and Stk23 in Vul at 19h 35.8m +25 13. These are all shown as open clusters. Gene

From: "Dan & Barb Son" <sunshine92@i... >
Date: Fri Mar 28, 2003
Subject: Re: [PeoriaAstro] What does this mean?

In the book, The night sky observers guide they call it : Stock 2 open cluster, their is also a Stock 5 open cluster nearby! Their a about 15 stock objects listed in the Autumn Winter version of the book.

From: Tim McGrath <astropunk_2000@y... >
Date: Mon Mar 31, 2003
Subject: Successful Marathon!!
Last night John Barra, Gene Hodel, Tim



Lester, Rich Tennis, Brad Karnes, and I met at Jubilee for the PAS Messier Marathon. The weather called for partly cloudy skies, and at times, we were clouded out. But for the most part the skies remained cloud-free, and by 2:00 they were completely gone for the night. This was the first time I was able to complete the marathon from sundown to sunup. My previous two attempts were clouded (or snowed!) out. I was never able to get the ones in Sagittarius until last night. John Barra and I were the only remaining two at sunrise. I ended up with 102 objects, and John had 106. This goes down as a success in my book!

From: "Brad Karnes" <bak12@g... >
Date: Mon Mar 31, 2003
Subject: Re: Successful Marathon!!
Glad to hear you were able to see it through to completion. Congratulations! I'll take your inspiration to do better next year.

From: "Richard Tennis" <mtennis@m... >
Date: Thu Apr 3, 2003
Subject: Re: [PeoriaAstro] Meeting

We would love to have the mighty PAS Messier Marathoners to do their stuff at the Star House site. However, I don't know if the straight south views would be very good from our inner yard. The trees would block anything below -25 degrees declination. The west view is very poor, as well. Which means M77 is not possible. I would like for an evaluation as to the possibility for our site to be acceptable....John?

Another site would be the Mackinaw Valley Vineyard. I could ask Paul Hahn, the owner of the place. We already are cleared for the second star party at their place August 23rd with TCAA and possibly SAS, Sangamon Astronomical Society.

From: <heyhay@b... >
Date: Wed Apr 23, 2003
Subject: Peoria Academy of Science Banquet Pictures posted on the web
<http://www.geocities.com/peoriascience/banquet.html> You will be happy to see longtime member Eric Clifton being recognized and awarded an Honorary Membership in the Peoria Academy of Science for years of work for it's Astronomy Section. Way to go, Eric!

From: "Richard Tennis" <mtennis@m... >
Date: Sat May 3, 2003
Subject: PAS Dark Sky Month publicity

I don't know how many of you get the Peoria Times-Observer, North Peoria issue, but the April 30, 2003, had a good article on the Proclamation at the City Council meeting in Peoria on PAS dark-sky month in May. We got page 3! It was a good article that covered not just my opinion, but that of Steve Van Winkle, head of the public works dept, and Bart Benjamin, director of the Cernon Space Center at Triton College in River Grove. The picture did not show the FCO light well. It looks very glaring.

From: <heyhay@b... >
Date: Fri May 23, 2003
Subject: First picture of earth from Mars
http://news.nationalgeographic.com/news/2003/05/0522_030522_earthmars.html

From: Tim McGrath <astropunk_2000@y... >
Date: Tue May 27, 2003 3:23 pm
Subject: PAS member on CNN web page
PAS Member Karl Haisch is mentioned in the following article from the CNN website:

(Continued on page 10)

Of Starlites Past

by John Barra

40 YEARS AGO
June Newsletter 1963

“One can always tell when our group does something successful because we have what might be called a ‘success thermometer’. Have you ever noticed our president when our group is successful? If you have, you have noticed that he indicates success just like a thermometer indicates temperature.”

I guess we will have to keep a careful eye on our president, Scott Hay, to see if he is a “success thermometer.” If he comes to a meeting with a red face, just ask him what the “success” was.

“On Friday, July 12, Barbara Becker and Eric Clifton will give a resume of facts on our atmosphere accumulated by everything from a weather balloon to the latest satellites.”

Let me see, how old was Eric then giving presentations in 1963. Add forty years to that and—well, I guess Eric is older than I thought. Also given the few satellites then, and the many since, it would probably take a lot longer to give such a presentation to our club now.☼



25 YEARS AGO
June Starlite 1978

“On Saturday, August 12, at Van Zandt Observatory, plan to come out for a night of scientific accomplishment. We will organize into teams for an official meteor count. Our report will be sent to the National Observatory in Washington, D.C. to be included in the statistics for 1978.”

I sure hope they had more success than we did during the Perseids of 2002. We had clear skies and no Moon for most of the night, but not all that many meteors. Since there is a full Moon during this year’s Perseids, for once I can say I don’t even care if it will be cloudy that night.

“FOR SALE: Tasco Refractor Telescope 2.4” 500X....Ask for Gary Bussman....Gary is a former member who has rejoined our group. WELCOME BACK GARY!”

Gary has been a long-time member ever since. He can often be seen out at Jubilee viewing, as he was on April 26. And I can guarantee his viewing equipment has improved in both terms of quality and cost since he sold that “department store” Tasco. (Actually after reading the list of accessories that were included in that ad, I am sure that telescope didn’t fit that term either.)☼

Astronomical Calendar

June 7
First Quarter Moon

June 9
Pluto is at opposition

June 14
Full Moon

June 18
PAS Board Meeting, 7:30 p.m.
Northpoint Shopping Center Hardees

June 19
Moon passes 1.7° south of Mars, 1:00 a.m.

June 20
Mercury passes 0.4° south of Venus, 9:00 p.m.

June 21
Last Quarter Moon
Summer Solstice, 2:10 p.m.

June 24
Saturn in conjunction with the Sun

June 28
Star Party at Jubilee Observatory

June 29
New Moon

June 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					

July 2
Moon passes 4° north of Jupiter
PAS Members Meeting, 7:30 p.m.
Lakeview Planetarium

July 4
Independence Day
Earth is at aphelion 1 a.m.

July 6
First Quarter Moon

July 13
Full Moon

July 15
Moon passes 5° south of Neptune, 12:00 a.m.

July 16
PAS Board Meeting, 7:30 p.m.
Northpoint Shopping Center Hardees

July 17
Moon passes 0.3° north of Mars 3:00 a.m.

July 21

July 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		

Last Quarter Moon

July 25
Mercury passes 0.4° of Jupiter, 8 p.m.

July 26
Star Party at Jubilee Observatory

July 29
New Moon

August 2
PAS Board Meeting, 7:30 p.m.
Northpoint Shopping Center Hardees

August 4
Neptune is at opposition, 9:00 a.m.

August 5
First Quarter Moon

August 6
PAS Members Meeting, 7:30 p.m.
Lakeview Planetarium

August 12

Aug 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

(Continued on page 5)



The Bulletin Board

New Members

Welcome to:

Jacqueline Buster



Help Wanted

There is plenty of work to be done to get the 14 back in working order. If you are able and willing to help please contact Tim McGrath regarding any work 'parties' that he may have scheduled.



Extra! Extra!

Well, we made dark skies a household phrase on April 22 with

the proclamation being read at the Peoria City Council meeting. Thanks to all that helped to get this to get our mission noticed: Kellie and Tim Lester, Jon and Steve Wrigley, Scott Hay, Sheldon Schaffer, and Jeff Pittenger.

We have a long way to go and hopefully we will be successful with laws in the books on this subject



IDA Booth at AARP

Dave Teppen, IDA leader of the Illinois IDA, asked for help in manning the IDA, International Dark-Sky Association, booth at the upcoming AARP (American Association of Retired Persons) convention in Chicago, Illinois. The convention dates are September 5 - 7 and the times that the show at McCormick Place are 10:00 A.M. to 6:00 P.M. Dave is asking for volunteers to man the booth in groups of three for at least four hours.

The objective of the booth is to provide information on the use of non-glare, full cut-off lights in outdoor lighting and the safety and energy/\$ savings benefits of such lights in our communities. This is the same goal that our own PAS Light Control Committee is

seeking. The off-shoot of this effort is clearer viewing of the evening skies for us few astronomers.

This could be an opportunity for a weekend in Chicago for you and whomever you might like to invite to come along. Adler Planetarium is just a few blocks away. I don't know if the Bears are playing in Chicago that Sunday.

If you would like to help out in this effort, please contact Rich Tennis



Lighting Grants Available

Dear PAS members, PAS has a wonderful opportunity to participate in helping your favorite civic, church, school, little league baseball fields or community group improve their outdoor lighting. YOU can participate in a new Smart Lights from AmerenCILCO by helping your favorite civic/community organization write a grant for up to \$5,000 for improving energy-efficient outdoor lighting.

Grant applications are to be sent in after April 1, 2003 and before September 1, 2003. For the first time Smart Lights are being made available to the AmerenCILCO customers. So, we are getting our bids early if we act to apply. There will be 50 applicants awarded these grants to AmerenCILCO area. The web site below is the application that you can

(Continued on page 10)

Calendar...

(Continued from page 4)

Full Moon

August 13

Perseid meteor shower peaks

August 14

Mercury is at greatest eastern elongation, 27° (evening)

August 19

Last Quarter Moon

August 20

Deadline for September Starlite PAS Board Meeting, 7:30 p.m. Northpoint Shopping Center Hardees

August 23

Star Party at Jubilee Observatory

August 24

Uranus is at opposition

August 27

New Moon

August 28

Mars is at opposition

August 30

Star Party at Jubilee Observatory



Monthly Program Schedule

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

July 2, 2003

Tim Lester

Software Aided Astronomy

August 6, 2003

TBA

September 3, 2003

TBA

October 1, 2003

TBA

Can You Spot This? Globular Cluster NGC 6712

by John Barra

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

Not all globular clusters are like M13, M5 and M3. And while we expect to find globular clusters in Sagittarius and Ophiuchus, seldom do we think of Scutum to find one. Rather, when one thinks of Scutum, the great Wild Duck open cluster, M11, usually comes to mind or M26, the other bright open cluster in that constellation. But NGC 6712, a globular cluster of lesser fame, gives an amateur astronomer the chance to strengthen his starhopping skills while finding something different in this small constellation near the heart of the galaxy.

The first, but most important step in this endeavor is to locate the

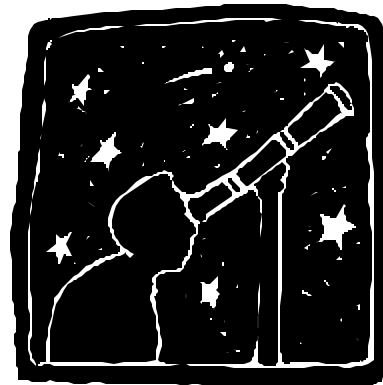
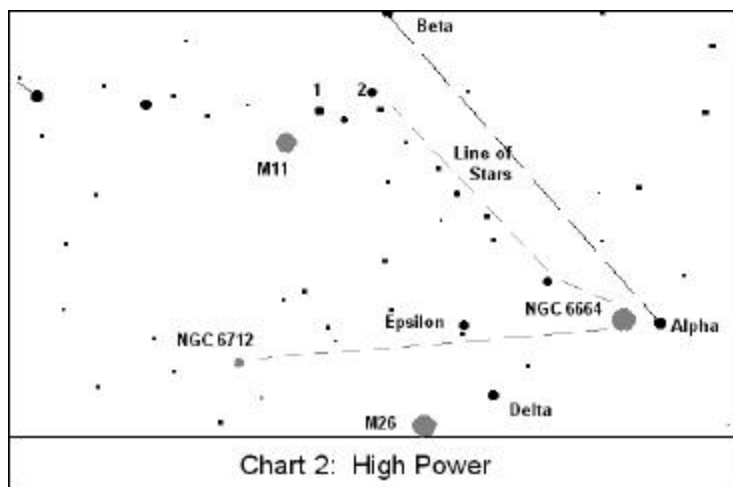
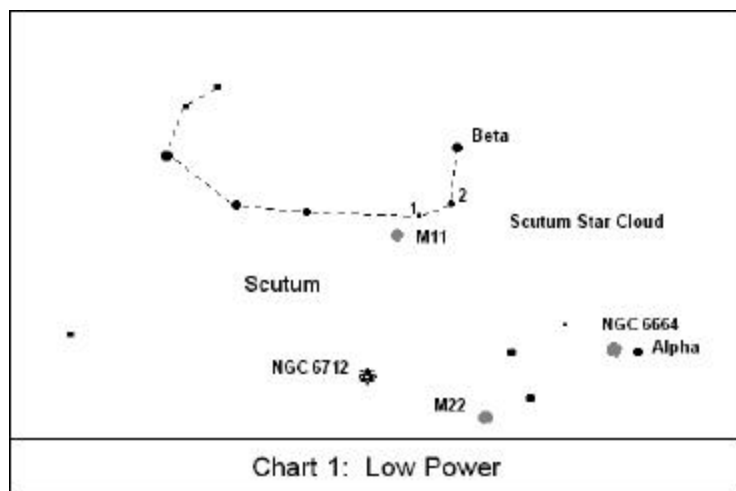
constellation Scutum. You can find it about halfway in between Aquila and Sagittarius. Notice the hook pattern comprised of several fifth-magnitude or greater stars as shown in Chart 1. Right next to this hook is the Scutum star cloud, which helps one in locating this pattern.

If one has a copy of my "Locating Messier Objects", you should be able to find both M11 and M26 in charts 88 and 89. Then you can skip chart 1 and go straight to Chart 2. Otherwise use Chart 1 to locate stars 1 and 2 with low power. Follow these two stars until you locate M11. Move back to star two, then using either low or high power, follow the lines of stars shown in Chart 2. This line is parallel to an imaginary line between Beta and

Alpha Scuti.

Move your scope from Alpha to Delta to M26, then back again to Alpha. Note the position of Epsilon above Delta. Now move from Alpha to Epsilon and continue about the same distance until you reach NGC 6712. It will look very small, so if you are still using low power to starhop, put in your higher power eyepiece and you should be able to resolve a few stars to confirm that you have in it a globular cluster. But don't expect to find anything like M13. However, you will be able to be rewarded by the fact that you have successfully starhopped to this location and found a globular in an area rich with open clusters. When you are at Alpha, you might want to try and locate open cluster NGC 6664 right next to it. This cluster is not very bright, as open clusters go, and it may be overwhelmed by bright star Alpha, so you may have to put the star just outside the edge of your eyepiece to actually identify the open cluster.

**...a globular
in an area
rich with
open clusters...**



OBJECT STATISTICS:

Name: NGC 6712
Type: Globular Cluster
Magnitude: 8.2
Size: 13'
Coordinates:
R.A. 18 hr., 51.1 min.;
Dec. -06 ° 16 min.



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.

February 19, 2003

Academy of Science: (Scott Hay) The Academy of Science annual banquet will be April 11th at 6 pm. The guest speaker is Dr. Bernard Jackson.

Jubilee Observatory: (Tim McGrath) GFI outlets have been installed. April 12th and May 17th are scheduled work party dates; start time will be 10 a.m. Looking for a cabinet system for the new scope with security and portability. Tim and Tim decided that a few items are needed for the new scope, an 11lb counter weight system, a power supply and diagonal for the scope. John Barra made a motion for a maximum of \$300 be spent for these items. 2nd by Rich Tennis. Motion passed.

CCD: (Stephen Russell & Tim McGrath) I will send a thank you letter (copy attached) to Ron Wodaski for a copy of his book.

Light Pollution: (Rich Tennis) Light shrouds are on in the test area.

NorthMoor Observatory: (Bill Cole) April 5th is cleanup date. Start time is 9a.m.. Schedule is out for Saturday night host's.

NorthMoor Restoration: A presentation is being made to show to possible donors for funds.

Observing Club: (John Barra) March 29th is Messier Marathon night.

Program: (Dan Son) March-Video-April-Dr. Linda French-May -TBA

Starlite: (Jeff Pittenger) Deadline for Starlite will be May board meeting. Sunday evening March 2nd will be Starlite party at the Frasca's.

www.astronomical.org: (Tim McGrath) Don Ware has given PAS notice of his resignation come March. We can keep www.astronomical.org. We will look into what is needed to keep the web site up and running, including expenses. Dan Son made a motion to give \$100 for 1 month to keep the web site up and running till the next board meeting. 2nd by Scott Hay. Motion carried.

Old Business: PAS will continue with the shirts with Mr. Cernan's name removed from the original artwork. Permission was given to remove the name from the artist. In hopes of getting a good turnout in possible logo design's PAS will offer a 1 year membership to PAS for the grand prize winner. PAS board will pick the finalist's.

New Business: Bike ride will be August 9th. Rich asked and the board agreed to have another Wine Party. TCAA and SAS will be invited and possible date is August 23rd.

March 19, 2003

Academy of Science: (Scott Hay) 73rd Annual banquet is April 11th at Barricks Cater Inn, cost is \$19 per person for meal, the program is free. Former Peorian Dr. Bernard Jackson, University of California at San Diego, will speak on cutting edge astronomy. Also please join us as we award an Honorary Membership to the Peoria Academy of Science to Eric Clifton.

Jubilee Observatory: (Tim McGrath) Steve Wrigley made a motion to put gravel on driveway. 2nd by Tim Lester. Motion passed. Tim Lester will service the tractor. We have received the new counter weights and diagonal for the new scope. Works well. April 25th ICC class with 26th & 27th rain dates. May 9th Cub Scouts with 30th & 31st rain dates. May 10th Church group.

14 Inch: (Mike Shelton) The ring is now clamped onto the dome.

Light Pollution: (Rich Tennis) Rich is working with the City of Normal on rewriting it's Lighting Ordinance. Will be talking to



Pekin Rotary in April. Ameren is awarding SmartLights energy-efficient lighting grants to nonprofit, civic, and community organizations as well as public bodies throughout AmerenCILCO's service territory. Individual grants of up to \$5,000 will be issued for new or replacement energy-efficient indoor and outdoor lighting equipment. Past recipients include athletic fields, walking paths, playgrounds, museums, school gymnasiums and fairgrounds. <http://www.cilco.com/OurCommunity/Programs/SmartLights.asp>

NorthMoor Observatory: (Bill Cole) Work date is April 5th. March 27th ICC class with 28th & 29th as rain dates.

NorthMoor Restoration: (Scott Hay) Fundraising committee will schedule meeting next week.

Observing Club: (John Barra) Messier Marathon is March 29th.

Program: (Dan Son) May meeting will be Brian Poelker on Meteorites.

Starlite: (Jeff Pittenger) Deadline for Starlite will be May board meeting.

Membership: (Scott Swords) We have 1 new member Jacqueline Buster.

www.astronomical.org: (Mike Radigan) Getting with Don Ware on the transfer of the web site.

Old Business: Shirts will be ordered soon. Dark Sky proclamation is April 22nd at City Hall, meeting starts at 6:00.

New Business: June 12th has Patrick Huth, a NASA astronomer at ICC. Discussion was made about selling unused equipment and items donated to PAS.

April 16, 2003

Academy of Science: (Scott Hay) The Academy awarded an Honorary Membership to PAS member Eric Clifton. In addition to the attached list of Eric's accomplishments: When Scott Swords was president; Eric was instrumental in dealing with the State of Illinois to enable PAS to keep the lease for the land at Jubilee College State Park. He was the driving force for the astronomy section, working for several years to achieve that agreement. He continues to keep good relations as a good will ambassador with the park staff & brass through all these years.

Education: (Scott Hay) Bradley's Institute for Learning in Retirement students will be at NorthMoor May 9th (no rain date) and at Jubilee on May 23rd with a 24th rain date. Approx 15 people at each event.

Jubilee Observatory: (Tim McGrath) Mower works great thanks to Tim Lester. He had to replace a hub due to mowing the hill sideways. We will stop mowing the hill. Gravel is in the drive.

Light Pollution: (Rich Tennis) On April 22nd around 5:30 be at Council Chambers for Peoria's council meeting. Rich is looking for volunteers to go to Chicago on Sept 5th, 6th & 7th. IDA need help at the McCormick Place during an AARP convention.

NorthMoor Observatory: (Bill Cole) Thanks to those 7 people who showed up to help clean and lubricate the dome.

NorthMoor Restoration: (Scott Hay) With the help of Bonnie Nobles staff, Tim Cassidy, Roger Allen and others at Peoria Park District, a packet was put together. Bert Princen wrote a nice summary which ties all the information together and explains the situation in a single page. Bert, Helen Ware and I have begun setting up appointments with some big potential donors. The committee wishes to thank PAS members and concerned citizens who made donations.

Observing Club: (John Barra) Will be having an Aug. 23rd star party with TCAA at the Mackinaw Valley Winery.

Program: (Dan Son) June: Web site with Don Ware = July: Software with Tim Lester. = Aug ???

Starlite: (Jeff Pittenger) Deadline for Starlite will be May board meeting.

Old Business: Astronomy day is May 10th.

New Business: Data used from the Jubilee photometer was published in Astronomical Society of the Pacific in January 2003.

Eric Clifton...

(Continued from page 1)

(Barry Redenbo - the big brother Eric never had - was in that same line; they found that out about 30 years after the fact!) Got a paper route in 7th grade in order to finance the purchase of his first telescope ... which lead to his meeting Van ... which lead to Eric's joining the PAS (it was a morning paper route - and any of you who really know Eric, realize he's not the best "morning person" around; he must've really wanted that telescope)

PAS Activities

Joined PAS 41 years ago-at age 14

Took Dick Johnson's (first Lakeview Planetarium Director) Astronomy class at Wilcox library at age 14

Became a NorthMoor keyholder in 1963

Served as NorthMoor Chairman 1968-69

Became a Jubilee keyholder in 1978

Served as Chairman Jubilee Observatory 1978-2002 (24 years)

Served as PAS President 1980-82 and again in 1996-98

Served as PAS Vice-President 1995-96

Served as Chairman - Light Pollution Committee - 1986-87

Served as Trustee - Lakeview Museum for 6 yrs.

Served as Trustee - Peoria Area Arts & Science Council for 6 yrs.

Elected as Honorary Member of the PAS in 1984—one of the youngest members ever to receive that honor

ALCON-82 - 1982 Nat'l Convention of Astronomical League - PAS President

Re-wrote the Society's By-Laws

Jubilee Observatory

Chairman - 1978-2002

Organized work parties for 3 yrs. to build Jubilee

Was active in the design and construction of the 24-inch telescope-including fundraising for a photometer, guide scope, & CAT system

Trained almost all of the current Jubilee keyholders

Eric digs wonderful outhouse holes

One Back surgery ... two hospitalizations ... three cortizone shots



Eric Clifton, long-time active member of the Astronomy Section is awarded honorary membership in the Academy of Science

Public Viewing

Headed up public viewing at Jubilee Observatory for Scouts, ICC Classes; Bradley Classes, Church Youth Groups, etc. or "took the show on the road" to other locations

Headed up the Halley's Comet Star party -where nearly 3000 people showed up at an empty road near Washington IL at 4AM

Also has spear-headed numerous other PAS public star parties-for Hale-Bopp, Hyakutake, etc.

Public Relations

Has presented the story of Jubilee Observatory (the slide show of the history of DGVZO) to astro clubs across the Midwest; as well

as being the featured speaker at the Rocky Mountain Star Stare in Colorado Springs; has presented the show to numerous other groups and organizations-from Cub Scouts to church groups

Has 9 accumulated minutes of totality during total solar eclipses. Speaking of eclipses, he organized and operated a daytime star party for 1500 CAT employees for the 1994 annular eclipse; many CAT employees use Eric as their "astro guru"

One of Eric's proudest moments: during a star party for Comet Hale-Bopp, he helped a severely visually-handicapped young girl (so vision-impaired that she was legally-blind") to see her first star, first planet and first comet

Has presented various papers and programs for ALCON (astro league's annual national convention) in Illinois, Wisconsin, and Colorado

Has been PAS media liason; created win-win relationships w/ Central IL radio/tv stations-becoming the resource for everything from announcing meteor showers to alerting public to such things as solar flares (creating unusual aurora), iridium flares, and International Space Station

fly-overs.

Early light pollution work-before it was a dirty word

Astrophotography

Two-time 1st. place awards for astrophotography at the Chicago Astronomical Society's AstroFest

Has had one of those award-winning photos published in a textbook - and, typical Eric - gave credit to the Peoria Astronomical Society.

Misc...

Favorite saying: "If I have been able to see farther than others, it is because I stood on the shoulders of giants"-Isaac Newton

(Continued on page 9)

Building My Own Telescope: The Experience Was Worth the Effort

by Andrea Schoch

As I entered my senior year, I came in with the knowledge that all seniors must complete the dreaded "Senior Project" in order to graduate. But in all honesty, this project encourages all students to accomplish something new and different, something that they may have never done without a little push. Senior Projects involve finding a mentor, completing an interview, writing a research paper, completing 15 to 20 hours of service, and finally presenting the project to a panel of community and school judges.

At first I did not have any direction for my project, but after speaking with my physics teacher, Mr. Calgaro, I had an idea. I would build a telescope! For me, this was a huge task, because in no way did I consider myself a builder. I always loved book learning, so to remove myself from that box was a gigantic step.



In the beginning...

While researching the topic, I found my telescope making kit at Newport Glass Works. Since I was on a small time crunch, I opted for a small 6-inch mirror with the pre-generated curve, allowing the skipping of rough grinding. Along with the mirror, the kit included the tool, 6 grits (Silicon Carbide 220, White Aluminum Oxide 30, 25, 20, 15, and 9), Cerium Oxide, and pitch. At this time I also purchased my sonotube from Newport.



Le'go My Eggo..

With my project well on its way, my teacher helped me get into contact with Dan Son. Dan agreed to be my mentor for the project. He was able to get me in touch with Mike Hay, who helped start me on the right foot with grinding and also provided his test equipment when it came time to test the surface of my mirror.

Grinding took me about 20 hours to complete. I was very worried about having to go back to a previous grit, so I was a little fanatical about cleaning. I would wash the tabletop that I was using for a grinding surface about 5 times, wash my bucket about 4 times, take a shower, and change clothes between each grit. After showering and changing, I would then clean my area again! In the beginning grinding was difficult, because I put too much water between the tool and my mirror. This was causing a lot of suctioning, and no grinding was taking place. While grinding, it was also fun to listen to the differences

in the sound between each grit.

After completing grinding, I moved onto polishing. When I poured the pitch on my tool for the first time, it stuck to the mirror. So, I had to carefully remove the small amount that was on the mirror and the rest of the pitch that was on the tool. The second time went a lot smoother. I allowed the pitch to sit on the tool a little longer this time before I tried to shape it with the mirror. Then, I used a doll rod to form the channels. If I had to do this part over again, I would use a different type of pitch. My pitch was very temperamental. Towards the

(Continued on page 11)

Eric Clifton...

(Continued from page 8)

Guest lecturer for Bradley Computer Science classes; topic: the Inter-Stellar Space Flight movie he created while a computer science student at SIU

Was John Dobson's chauffeur

Called Van his "other dad" --- (sadly, lost both dads in 1994)

Co-presenter of the Program at the PAS Annual Banquet in September 1963 along w/ the then "Mr." Bernard Jackson

Taught his wife of nearly 20 yrs the most important lesson she's ever learned: "Look Up"

Loves talking with people about astronomy (duh!)

I would also like mention one additional achievement. According to Scott Swords and Mike Hay, had it not been for Eric working for years with the State of Illinois, PAS likely would not have the current Jubilee Decker-Grebner-Van Zandt Observatory site. Mike Hay stated that the second or third time that the lease came up, things were not looking promising for us staying in the park, and Eric was the fellow who cinched the deal. Scott Swords, who was president at the time, stated that Eric was our head diplomat, and that he spent several years working to achieve the current agreement.

— Eric you are a tremendous asset and the Society would not be same without you !☛

NorthMoor...

(Continued from page 1)

the telescope remained the property of the Academy until the early 1980's when the Board of Directors decided that the telescope would be better served if the ownership were transferred totally to the Peoria Astronomy Society and acted to complete the transaction.

The Astronomy group has taken very good care of the building and the equipment therein. From spring through fall, the observatory is open every Saturday night to the public, barring poor viewing weather, and it is visited by excellent numbers of adults and children, especially when a special event is advertised, such as the appearance of a comet. Also the telescope is excellent for showing features of the Moon and all the visible planets. The moons of several planets can be seen in good detail. Although light pollution has definitely increased during the years, NorthMoor is still an excellent place for these purposes. If people want to see less bright celestial objects they are welcome to make use of the advanced observatory that the Society maintains near Jubilee State park.

Especially the metal parts, such as the rotating dome and the steel doors are subject to eventual corrosion, and after 48 years we have come to the point that they have deteriorated sufficiently that we no longer can keep the units intact by partial repairs. Holes have appeared in the dome that have invited pigeons to nest inside the building, and the instrumentation is beginning to be exposed excessively to moisture and dirt. The estimated cost for removal of the old dome structure and outside doors, repair of the concrete rim at the top of the building and the purchase and installation of the new dome and new doors has been estimated to require approximately \$100,000. The Astronomical Society so far has raised more than \$15,000 from its own members and interested citizens within the past 6 months. It is obvious that other fi-

nancial sources are needed to reach our goal and the Academy and Astronomical Society have started a fund drive for this purpose.

— Please make checks payable to: Peoria Astronomical Society-Public Observing Fund. They can be sent to the PO Box or to the return address shown on the cover of this *Starlite* Newsletter.☛

PeoriaAstro...

(Continued from page 3)

<http://www.cnn.com/2003/TECH/space/05/26/space.planets.reut/index.html>

From: <heyhay@b...>

Date: Tue Jun 3, 2003

Subject: another article about Karl Haisch's astro studies

Sent: Tuesday, June 03, 2003

Subject: Another Article about Karl Haisch

Hi, Ladies & Gents .Just stumbled across another article about Karl Haisch.

http://www.space.com/scienceastronomy/planet_puzzle_030603.html

Again, this might be something worth communicating to the EGroup, in the Starlite and on the Web page. Would someone please forward this link to Mike Radigan for the Web page?

@ @ @

From: "Richard Tennis" <mtennis@m...>

Date: Sat May 3, 2003

Subject: Re: Peoria Home Depot outdoor lighting stock

Dear Kevin Cody ,
Thanks for the quick response to our need for an outlet that stocks FCO lights for the home and farm. I am also copying our Peoria Astronomical Society members that will be observing Astronomy Week May 5 - 11 and our Astronomy Day is May 10. This is the kind of full cut-off, FCO, outdoor lighting fixture that we are talking about. They are just like what you would stock for stores along the ocean shoreline where sea turtles come in to lay their eggs. So, just think of Peoria as being on the Illinois River/Ocean. One question - can the bulb size be lowered from what I understand the numbers to mean? Wattage on the two models: LP175 & rsm100w to mean 175W and 100W? Also, what kind of bulb, HPS or MV? I will not be able to be there to tell folks, but our Light Control Committee will be able to carry the ball on this new source of FCO lights for security lighting and house wall mount lighting. If you would have any models that we could display earlier than your stocking day of these lights, contact our president Scott Hay, 309 686-0405 or Eric Clifton, 309 686-2864

On the way we can show them off. I don't know what could be done as a promotion with the "official" availability day of FCO outdoor lights in Peoria, but maybe those two contacts could think of something. — PAS☛

Bulletin Board...

(Continued from page 5)

print out and take to your favorite civic organization that would benefit from improved outdoor lighting.

Hopefully, as PAS members, the project would lean to lower energy full cut-off light fixtures be placed to the project area. http://www.ameren.com/community/ADC_Smart%20Lights%20Application.pdf It would be a great step to bring full cut-off lighting into the minds of many people in the central Illinois area. Some areas that would be good to look for possible projects are: parking lots of churches, parks...city, county, and state, school parking lots...well, you use your thinking to where you want full cut-off lighting.

I think commercial sites are not included, so the canopy lighting of service stations won't be eligible. If you do take on this project for your favorite, please let me know the details. I would like to accumulate the list of those PAS members who have initiated for the Smart Lights grants. If you look at the application, you will see that it requires full cooperation of the community organization. Most of you know why lower wattage, High-Pressure Sodium, lights can actually provide more light for less cost.

If you need help in convincing them why full cut-off lighting is good, contact one of our PAS Light Control Committee members: Eric Clifton, Jon Wrigley, Steve Wrigley, Jeff Pittenger, Scott Hay, and Greg Potts (who, currently, lives in Boonville, MO).

I will be concentrating on getting each of the 18 communities in Woodford County to get one of the 50 possible awards, however, any Woodford County PAS member can go after their favorite. So, good deeders, let's go for the betterment of our communities and their better lit nights. ☛

Telescope Experience...

(Continued from page 9)

end of polishing, I had to reform the channels about every 5 minutes. It also began to crack, so eventually I had to re-melt the pitch and start over. After completing polishing, I sent my mirror back to Newport Glass Works for aluminizing which was included with my kit.

While still in the polishing stage, I also turned towards constructing a mount and addressing accessories. Obtaining the plans from the San Francisco Sidewalk Astronomers' page, I chose to use a Dobsonian mount. With the help of my dad, the mount was fairly easy to build. The hardest part was find-



Andrea with her completed scope.
Great Job!!

ing Teflon to use for the movement; Magic Sliders work wonders! After the mount was almost complete, I went online to search for accessories. I ordered my f-cuser, spider, and main mirror mount from University Optics. To finish off my telescope, I added wire protection tubing for my end rings.

Overall, my project was a success. I learned so much from this experience. Although I was unable to build my telescope under the price of what you could buy one for, it was a worthwhile experience. So far I have been able to view the stars and the most recent lunar eclipse with my homemade telescope!☘

Astronomy Humor

YOU MAY BE A REDNECK ASTRONOMER IF ...

- You permanently mounted your 20" Dob to the bed of your goose-neck trailer.
- You've ever halted a star party caravan in order to fetch road-kill for the club picnic.
- You've rigged your telescope's power switch to operate using "The Clapper."
- You own an observatory that's mobile and four automobiles that aren't.
- Your best looking piece of furniture is an equatorial mount and tripod.
- You installed a skylight on your outhouse.
- You have to kick you scope every 10 minutes to keep it tracking.
- Your friends are impressed when you show them the Tasco 60mm you tote in your gun rack.
- A fun evening involves a 6-pack, a green laser pointer, and the family cat.
- Your grandma thinks that a COMET is used to remove sunspots and the ring around Saturn.
- You think "retrograde" refers to the year you were held back in school.

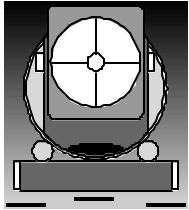
Original source unknown

- You refer to a "Full Moon" as what you saw the last time your mother-in-law pulled weeds.
- You won't go to the club Christmas Party unarmed.
- Your tripod is streaked with tobacco stains.
- Your Telrad or finder scope is held on by a coat hanger and duct tape.
- The major materials you used in your homemade Dob project are PVC and Bondo.
- Most of your telescope accessories were bought at a Home Depot clearance sale.



- You've ever built a scope that required a "cherry-picker" to reach the eyepiece.
- Your 12" Dob has ever been mistaken for a rest area trashcan.

- The new bino-mount you just made used to be a LA-Z-BOY.
- You clean your optics with a roll of Brawny and a can of Gumout.
- You've rolled out a floor jack to adjust the declination angle of your tripod.
- You believe you can "step-up" the mirror grinding process with a Black & Decker power tool.
- Getting to your favorite observing site requires an air-boat and a "Monster Truck."
- You've ever wondered if a 90mm Short Tube would make a good rifle scope.
- You've ever bungee'd your entire scope setup to the luggage rack.
- You refer to your .22 rifle as your "Dark Sky Rep."
- You've ever Simonized your corrector plate.
- You've ever brought a can of bacon grease to a star party ... "Just in case!"
- You hear about "An asteroid grazing Uranus" and think it's an affliction of the lower human torso.
- A tornado totals your "observatory" and you are able to replace your entire inventory with one trip to K-Mart.
- You think a "light dome" is the beer sponsored venue for the next Merle Haggard tour.☘



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In This Issue...

History of NorthMoor, Academy Honors Eric Clifton, Can You Spot This?, and more....

Observing Club Notes

by John Barra

Messier Marathon Results for 2003
 Clouds left the area 20 minutes too late on Friday night, so the PAS held the annual marathon the next evening (March 32-April 1). It was clear at sunset and sunrise, with intermittent cloud-outs during the night. Six members began, but only two the survived the cold the entire evening. John Barra was able to observe 106 objects, while

Tim McGrath finished with 102. Barra was unable to view M74, because it was too low in the sky in late March, and M2, M30 and M55, because of the trees to the southeast. Other members participating were Gene Hodel, Tim Lester, Rich Tennis and Brad Karnes. I think we will look for a new site for the marathon next year. The Jubilee site is still a good site for seeing most

of the objects. However, it is impossible to view some of the late-rising objects in the southeast because of the trees. We will look for a new site—probably south to southeast of Peoria—with a clear horizon from the west to the southeast, but far enough away from Peoria to have a dark sky. Suggestions are welcomed.

The Messier Club is an informal group

Several members have asked why the Messier Club does not have regular meetings anymore. The Messier Club, since it was revitalized a few years ago, was never intended to be a formal club. Rather, it was reformed as a loose group of members attempting to work towards receiving their Astronomical League Messier Club awards for observing all 110 Messier objects—with the help of other PAS members who have accomplished this feat. For a year, we did meet informally before each general meeting

to review the sky to learn how to find those objects new to the sky that month. Since that time, the object of the club has been to have some members available at Jubilee on moonless weekends to help other members learn how to locate objects on the list.

During the past year or so, Rich Tennis and Tim McGrath have completed the list—although Tim is waiting the typical three-month lag time for the Astronomical League to send his certificate and pin. Those members who wish to work towards receiving the Messier awards should head out to Jubilee on clear, moonless Fridays or Saturdays. You might want to check your e-mail—if you belong to the email group—before you head out because members who do go out usually indicate that fact ahead of time through e-mails. For more information on the Messier awards, click on the Messier Club link on the PAS home page.☛

... We will look for a new site....