



Peoria Astronomical Society, Inc.

P.O. Box 10111 Peoria, IL 61612-0111

Section of Peoria Academy of Science

Affiliate of the Astronomical League

www.astronomical.org

STARLITE

SPRING, 2017

WHAT'S IN THIS ISSUE?

- List of Board of Directors
- Editor's Notes
- Address/email changes
- Future Editions of the Starlite
- New Members
- Thomas Jefferson kindergartner David Madison's Project
- Monthly's (March)
- 2017 Astronomy Events
- 2017 Meteor Shower Schedule
- President's Ramblings
- Photos/Articles for Website
- Caterpillar Matching Gifts
- Programs for 2017
- ICC star party for Spring 2017 Classes
- Peoria Riverfront Museum - Upcoming Events
- PAS and the Great American Eclipse
- Eclipse Inquiries
- Nebraska Star Party
- NCRAL Newsletter
- 2017 NCRAL Conference
- Jubilee Maintenance Schedule
- Northmoor Observatory Hosting Schedule
- New location for Board Meetings
- Board Meeting Minutes

Directors:

President: Dan Son, sonshine1992@gmail.com
Vice-President: Jesse Hoover, hooveje@gmail.com
Secretary: Phil Burroughs
Treasurer: Brian Hakes, bhakes02@comcast.net
Parliamentarian: Nick Johnson, johnsnl@comcast.net
Nominating Chairman: Tatiana Johnson, 2gsheps@gmail.com
Legal Agent:
Northmoor Chairman: Nick Johnson, johnsnl@comcast.net
Jubilee Chairman: Robert Pauer, sbpauer@winco.net

PEORIA ASTRONOMICAL SOCIETY IS NOW ON FACEBOOK:

www.facebook.com/PeoriaAstronomicalSociety

Editor's Notes: *Past, present, and future... Thanks to all the contributors to this publication. Thanks to every volunteer of the Peoria Astronomical Society. It is through your support that we are able to promote and teach astronomy. Keep up the good work!*

*Thank you,
Jesse Hoover*

PLEASE NOTE:

Please notify Scott Swords at sswords3@comcast.net if you will be getting a new mailing address, email address and/or phone number. It is important that he has your personal information correct so you will continue to receive the Starlite and the Reflector. He would also like to receive any changes to your e-mail address as this is part of his database.

If you would like to join the Peoria Astro e-group or if you have changed your e-mail address, please notify Mike Frasca at mfrasca@att.net with your e-mail address (for in-club use only – not given out to other sources). He does not need your mailing address or phone number. If you are not a member of the e-group, you may want to consider joining. A great deal of club activity information is sent via the e-group. And by the way, it is free to join!!!

FUTURE EDITIONS OF THE STARLITE NEWSLETTER

New delivery method for the Starlite:

Starlites will be emailed to our Yahoo Email Group, and a copy will be posted online for download on our website.

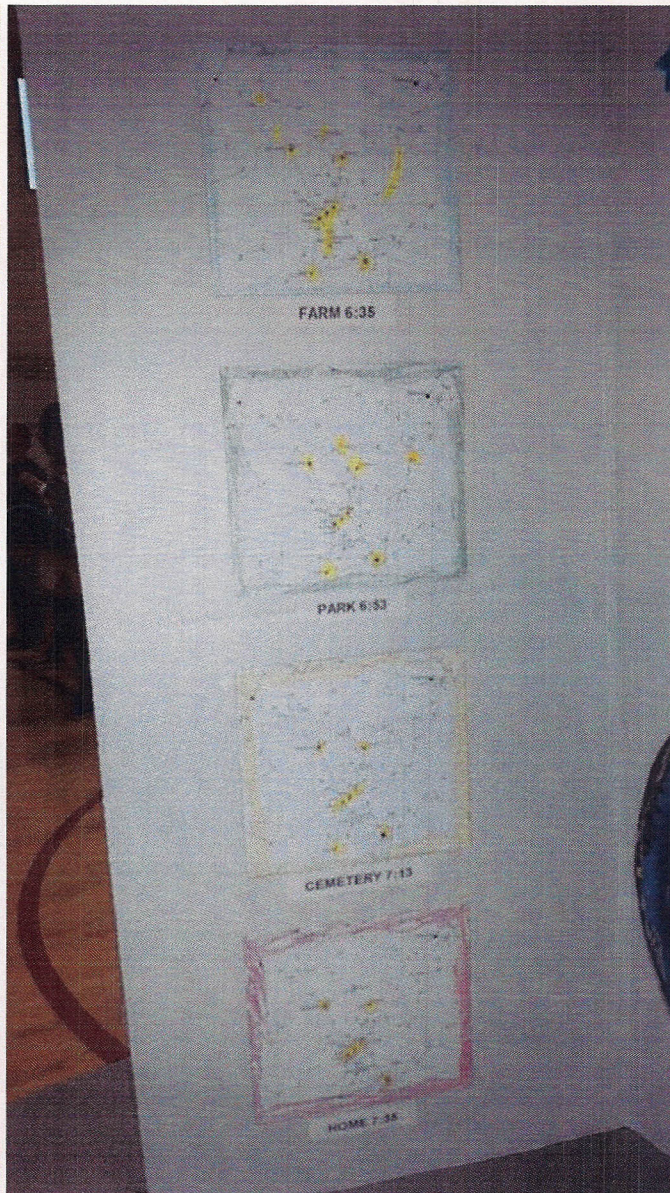
Benefits from joining the email group include the electronic Starlite and also receiving up to date information for star parties and other important communications from the PAS.

NEW MEMBERS:

The Peoria Astronomical Society welcomes new members:

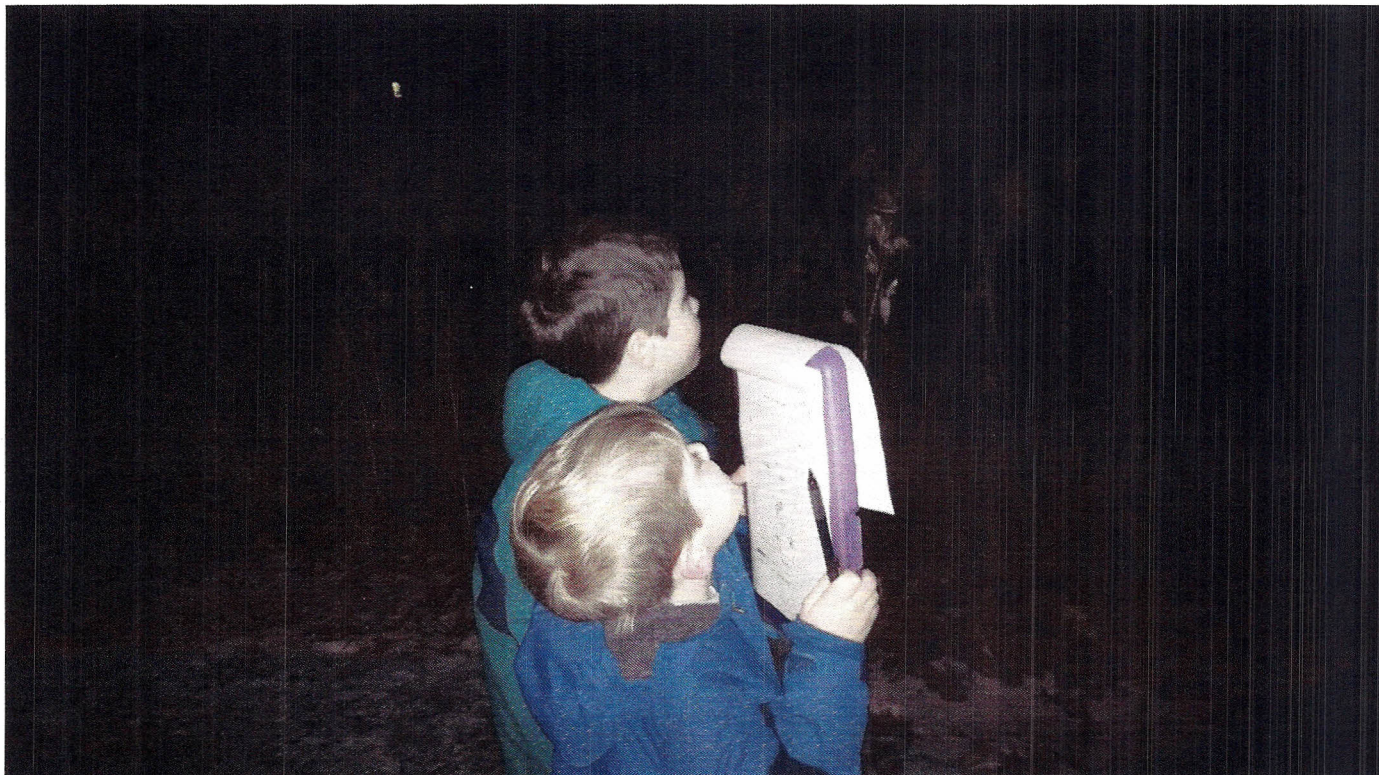
Wayne Openlander Chicago, IL

Thomas Jefferson kindergartner David Madison hits it out of the park with his Science Fair project on Light Pollution!



One of our youngest members, kindergartner David Madison, chose to do an astronomy project for the Thomas Jefferson science fair. David was a devoted weekly visitor at Northmoor Observatory this summer, where he learned about light pollution. For his project, entitled "Star Looker," he had his mom drive him out away from the city lights of Peoria, and then he marked all the stars he could see in Orion.

They stopped at three more places as they drove back into the city, with David carefully observing Orion's visible stars at each stop. His hypothesis was that he would be able to see more stars if he was farther away from the light pollution of Peoria; his hypothesis was proven correct!



This is David and his lab assistant/brother Isaac doing the actual observing part of the project. (Of course I took the picture after they had finished counting so my flash wouldn't ruin their night vision!)

-Laura Petelle Madison
Thomas Jefferson Primary School

March Monthly: Gary Bussman

March 4th, the 1st quarter moon will occult Aldebaran. It looks like around 9pm. I would go out and look at the position of both objects and use a telescope or binoculars. This Saturday night.

Mars and Uranus still close to each other. Telescope is a must! Venus still up high and bright. I looked at it the other night and it is in its crescent stage. Looked pretty neat.

In the middle of the month when the moon is not up, look for Zodiacal lights in the west once twilight is gone. It will look like a faint streak of light coming out of the western horizon. If you get lucky and see it, it is a nice sight to see.

Constellation's

Auriga, the Charioteer. 21st largest constellation in the sky. It's brightest star is Capella, 4th brightest star shining at 0.08 mag also called the "little goat". The Milky Way passes through this constellation. It has 2 nice open star clusters, M38 and M39 in the center of the constellation.

Canis Minor, the little dog is the 71st largest constellation in the sky. Procyon, is the 6th brightest star shining at 0.4 mag.

Cancer, the crab is the 31st largest constellation in the sky; no brighter stars than 3.5mag. The big open star cluster M44, the Praesepe or the more popular name "The Beehive Cluster" is a very large open star cluster. Looks good with binoculars!

The ICC star party is scheduled for this April. The dates are Friday, the 21st with rain dates of 4/22, 4/28, and 4/29. For those of you with scopes and willing to help out, put those dates on the calendar for April. More to be said at a later date.

Spring is right around the corner and we can start observing!

Clear Sky's! Gary Bussman

2017 Astronomy Events: Dan Son

Comet in the nightly sky: 45P/Honda-Mrkos-Pajdusakova magnitude 7 visible in small scope in the early morning hours.
<http://cometchasing.skyhound.com/>

Best dates to view Mercury are April 1st evening and September 12th early morning.

Last year I saw through the Northmoor scope and great double shadows and the Great Red Spot form a smiley face. I will be watching these.

The best night for observing Jupiter is April 7th. This will be Jupiter's closest approach/opposition.

- May 18th Double shadows for 49 minutes starting at 10:55 CST.
- May 26th Double Shadows for 72 minutes starting at 12:47 CST.
- June 3rd Double Shadows for 55 minutes starting at 9:21 CST bonus will be the great red spot.
- June 19th Double shadows for 35 minutes starting at 9:04 CST.

Saturn's night of Opposition is June 15th. This year the rings appear at their widest.

2017 Meteor Shower Schedule: Scott Swords

Over the years I have used many meteor shower schedules. Below is by far the best one I have used.

<http://skytour.homestead.com/met2017.html>

Scott

President's Ramblings: Dan Son

Hello everyone, and I hope you are enjoying the fine winter weather. Most of us are getting ready to view in the coming warmer months but with this warm spell, it is a great time to get outside and enjoy the sky. We are all busy at PAS, Nick Johnson getting Northmoor ready, Bob Pauer is checking on Jubilee. The sky keeps turning, and the work to keep PAS moving forward never stops.

I hope everyone is planning to head to the line of totality on August 21 of 2017. This is for a lot of use the biggest astronomical event we all can witness naked eye. I can't stress it enough for everyone to talk to their friends about this solar eclipse. We will be having a May 3rd meeting at Peoria Riverfront Planetarium about the Great American Eclipse. Come out and join us for this meeting. Sheldon Schafer has arranged some great programs this past year at the planetarium and this will top it off before we take our Summer break.

Dan Son

Submission of photos / article content for the website: Jesse Hoover

If you have taken a nice photo that you would like to display on the PAS website, please send these to our webmaster Stan Pope stan@stanpoppe.net. Photos can be anything relating to astronomy. Maybe you snapped a good photo from a star party, club event, personal viewing, etc. Any astrophotography is encouraged! Also, if you have educational content, tips, techniques, lessons learned, or how-to articles with photos, we encourage that material also for the website. Please send these to Stan for addition to the website. Content is not limited to the website, and is encouraged in Facebook. If you have articles or pictures, we can also add them to www.facebook.com/PeoriaAstronomicalSociety

Note: Content posted on the website and Facebook will be made accessible to the general public.

Thanks!

The Caterpillar Matching Gifts Program: Brian Hakes

As of July 1, 2012 the Cat matching gifts program changed. Employees/Retirees are asked to submit matching gift forms electronically via the Caterpillar Foundation website, www.caterpillar.com/foundation.

The process is easy. Once you made your gift to the PAS you can go online to the Cat Foundation website and complete the electronic form, there is no paper involved. Once the form is registered with the foundation they will notify the PAS and the treasurer will then verify the gift has been received. Because there will be no mailings, the turnaround time for the whole process will be negligible. This is especially advantageous at the end of the calendar (tax) year. This is an excellent way to support the PAS. If you can, please participate in this generous program. This is a great way to help the society and the promotion of astronomy in the greater Peoria area.

Program Schedule for 2017: Sheldon Schafer

| | |
|-----------------|--|
| April 5, 2017 | The Alpha Centauri Star System: Brian Bill |
| May 3, 2017 | Great American Eclipse: Where will you be on August 21, 2017 ? Members of the PAS, Review of individuals' plans, and any group |
| June, 2017 | No program - Replaced with a Star Party! |
| July, 2017 | No program - Replaced with a Star Party! |
| August, 2017 | No program - Replaced with a Star Party! Note on Star Parties - Please check dates and weather updates on the E-Group, Facebook page, and Website |
| September, 2017 | Annual Banquet and Election - Date TBD |

**** Hazardous weather notice:** Monitor email (e-group), local radio stations or PAS Facebook Page if a program may be canceled due to weather. If we determine a risk in the weather, the Society will cancel the event. If we host an event and you feel the weather or road conditions are questionable, please take the safest actions and do not attend the event.

ICC star party for Spring 2017 Classes:

April 21st with rain dates of 4/22, 4/28, and 4/29. These are events where club members bring their scopes to Jubilee observatory for viewing session with students in Astronomy courses at Illinois Central College. Bradley OLLI students will also be invited at this time.

Peoria Riverfront Museum - Upcoming Events

April 23, 2017 Lecture, "Prospecting for Water on the Moon", by NASA's Dr. Jacqueline Quinn

Lecture details and information:

As a part of the Clean Water Celebration, the following program will begin at 6:30 p.m., Sunday, April 23 at the Trailside Event Center (Trefzger's), 4416 N. Prospect, Peoria Heights. The lecture is free, but donations are accepted. It will be preceded at 5:30 by a dinner (\$25), which is not required for those who wish only to attend the lecture. For more information, contact Karen Zuckerman at kzuckerman@hollis328.net

"PROSPECTING FOR WATER ON THE MOON"

Dr. Jacqueline Quinn, NASA Engineer, inventor, & Payload Manager for NASA Resource Prospector will present an overview of the mission to be launched as early as 2021. A three-day journey from Earth to the Moon, the lander will set down on the lunar surface and deploy a rover carrying the In-Situ Resource Utilization (ISRU) instruments to search for subsurface water, hydrogen, and other volatiles. Dr. Quinn will also address careers and opportunities for college and high school students at NASA.

Thank you,
Dave Grebner
Learning Coordinator
Peoria Riverfront Museum

PAS and the Great American Eclipse : Nick Johnson

As you are aware, the premier astronomical event for 2017 is the Great American Eclipse on August 21. The eclipse will be total for a great portion of the United States including much of southern Illinois. In fact, the point of highest duration for eclipse totality is close to Giant City State Park near Carbondale, Illinois. For the Peoria area, the moon will cover about 90% of the sun. Many of you may be traveling to southern Illinois or other locations to view the total eclipse, while others will view in Peoria and still witness an exciting 90% eclipse. Here is how our Astronomical Society will provide eclipse information and participate in Great American Eclipse activities.

In preparation for the Great American Eclipse, we are partnering with both the Peoria Riverfront Museum Planetarium and the Peoria Public Library. Sheldon Schafer, our own eclipse aficionado, has volunteered to act as the PAS representative for this group effort. Sheldon, along with a small eclipse team, will coordinate the PAS roles and activities relating to what he calls "the eighth wonder of the natural world."

Eclipse Information:

The Planetarium will act as "Eclipse Information Central" for all three organizations. An eclipse information page is located on the museum's web page and can be accessed at <http://www.peoriariverfrontmuseum.org/dome-planetarium/total-solar-eclipse-of-2017>. This site contains information overview of the eclipse as well as links to additional sites featuring eclipse information. PAS will add a link to that site on our own website as well as on our Facebook page in the near future. The museum is also offering eclipse related items for sale in the museum gift shop. Included are a wall map of the eclipse path, a handbook on the Great American Eclipse, and eclipse viewing glasses (\$1.95 per pair).

We will also have Great American Eclipse information on display at Northmoor. Included will be an eclipse path map and an eclipse handout used jointly by all three organizations. Since our Treasure Hunt questions focus on the eclipse, we will also have displays that contain the answers to the eclipse Treasure Hunt questions. We will also provide information on the local eclipse day viewing event location and times.

Pre-eclipse Activities:

PAS will monitor and communicate activities and events leading up to eclipse day. Event information includes Planetarium eclipse show schedules, Planetarium eclipse lectures (2 are planned), and Peoria Public Library eclipse information programs. PAS also has one planned pre-eclipse activity. Our May members meeting will feature PAS members presenting their viewing plans, viewing tips, and locations. That meeting will be held at the Riverfront Museum Planetarium on Wednesday, May 3 at 7:30 PM. Don't miss it.

As the eclipse nears, we also expect to receive requests from schools and various groups for presentations about the eclipse. Renae Kerrigan, PAS member and Planetarium Curator, will coordinate all requests of this nature. Renae will either direct the groups to existing eclipse information activities or try to arrange for a speaker to meet with the requesting group. Speakers will come from a pool of Planetarium and PAS resources. A few PAS members have already volunteered to be in this pool. If you have an interest in being added to the pool, please send a note to Nick Johnson through the contact option on our PAS website. Volunteering does not mean you are committing for an assignment. As requests come in, we will distribute to the pool to see if it fits into anyone's personal schedule.

Eclipse Day Events:

The main local viewing event will be held at the Peoria Riverfront Museum. We will suggest this location in all of our material and communications. In the event people show up on eclipse day at Northmoor, Bill Cole has volunteered to be at the Northmoor site. The Northmoor telescope, however, will not be utilized.

Informal Interactions:

As the Great American Eclipse date approaches, you may get involved in discussions about the eclipse with friends and acquaintances. There are two key items you should stress. First, let people know that telescopes or binoculars are not needed to view the eclipse. Secondly, make sure people understand the dangers of trying to view the eclipse with telescopes or binoculars and the ramifications of viewing the eclipse without proper eye protection.

Eclipse Inquiries: Nick Johnson

Sheldon Schafer has agreed to serve as point person for eclipse coordination. He and I will be working together to coordinate PAS activities and participation in eclipse related events. If you receive any inquiries about the eclipse, please forward them to me or have the requester contact me at johnsnl@comcast.net.

Nebraska Star Party: Greg Neaveill

One of the featured speakers at last night's (March 1st) program was Tim McGrath talking about his family trip to a Nebraska Star Party.

If interested, go to these videos for a nice "overview".

2015:

<https://vimeo.com/133813886>

2016:

<https://vimeo.com/181211868>

To register, please visit: www.nebraskastarparty.org/

NCRAL Newsletter:

The North-Central Region of the Astronomical League (NCRAL) is made up of member societies... the six states commonly thought of as the Upper Midwest of the USA, plus the Upper Peninsula of the state of Michigan. The PAS is a member of the NCRAL. Their Region Newsletter, also named Northern Lights, has been resurrected and is better than ever! The **Spring 2017** issue is now available to read on their website can be found here:

<https://ncral.wordpress.com/newsletter-archive/>

As members of the NCRAL, we are allowed to submit our content to their newsletter as well. So if you have really cool articles appropriate for the viewing of the larger regional society audience mentioned above... please send these to Carl.

NCRAL Northern Lights Newsletter

Carl J. Wenning, Editor in Chief

NCRAL Regional Representative

Twin City Amateur Astronomers

Bloomington-Normal, Illinois

Email: carlwenning@gmail.com

2017 NCRAL Conference:

Please visit <http://ncral2017.rochesterskies.org/> for registration, and indicate **IL09: Peoria Astronomical Society** in the Club when you register. Looks like the minimum conference fee is \$149 and Meal, Housing, and T-Shirt cost gets added from there. I did not notice a deadline to register, but I would recommend the sooner the better. It was noted that rooms fill up quickly.

Program Dates: April 21-23

Location: Eagle Bluff Environmental Learning Center, Lanesboro, MN