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Cancellations:

(Repost of Spring cancellation article, updated three bullet points 6/1/20)

We all are aware of the Coronavirus Pandemic and its impact on the activities of our daily routine. Restaurants, libraries, banks and stores are either closed or offer limited services. All of these entities are shuttered to mitigate the spread of the virus. The PAS also is subject to cancellations. At the present, the list of cancellations Include:

- NorthMoor Observatory continues to be closed through at least the end of June
- There is no Science Treasure Hunt in 2020.
- The 24" is down for repairs and maintenance, it is not known when it will be operational.

The PAS Board of Directors will review upcoming events including the opening of Northmoor Saturday night viewing program and the Canton Star party. Any future announcements regarding cancellations will be communicated through the Groups.io and the Yahoo e-Groups as well as communicated in the Starlite. These decisions will be made on at least a month by month basis if not more frequent.

So please watch your emails for notifications. Hopefully the impact of the virus will be minimal and soon be over, but that may not be the case. In the meantime please be patient and we'll all get through this.

Brian Hakes

+---------------------------------------------------------------------------------------------------------------------------------+
Officers:
  President: Brian Hakes, bhakes02@comcast.net
  Vice-President: Jesse Hoover, hooveje@gmail.com
  Secretary: Phil Burroughs
  Treasurer: Dan Son, sonshine1992@gmail.com

Directors:
  Acting Parliamentarian: Dave Monroe, dave.monroe@comcast.net
  Nominating Chairman: Tatiana Johnson, 2gsheps@gmail.com
  Legal Agent: Dave Monroe, dave.monroe@comcast.net
  Northmoor Observatory Chairman: Open
  Jubilee Observatory Chairman: Robert Pauer, sbpauer@winco.net

Peoria Astronomical Society - Facebook Page:
www.facebook.com/PeoriaAstronomicalSociety

Editor's Notes:
I missed one edit, in the Spring Starlite, I forgot to update the 2019 meteor shower schedule to 2020. It is now corrected.

Thank you for supporting the PAS!

-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 or Dan Son at sonshine1992@gmail.com 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 Groups.io 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.
SpaceX Dragon Launch and ISS Docking is a success!
May 30, 2020

NASA Astronauts Launch from America in Historic Test Flight of SpaceX Crew Dragon

For more information, visit official NASA page:

A SpaceX Falcon 9 rocket carrying the company’s Crew Dragon spacecraft is launched from Launch Complex 39A on NASA’s SpaceX Demo-2 mission to the International Space Station with NASA astronauts Robert Behnken and Douglas Hurley onboard, Saturday, May 30, 2020, at NASA’s Kennedy Space Center in Florida. The Demo-2 mission is the first launch with astronauts of the SpaceX Crew Dragon spacecraft and Falcon 9 rocket to the International Space Station as part of the agency’s Commercial Crew Program. The test flight serves as an end-to-end demonstration of SpaceX’s crew transportation system. Behnken and Hurley launched at 3:22 p.m. EDT on Saturday, May 30, from Launch Complex 39A at the Kennedy Space Center. A new era of human spaceflight is set to begin as American astronauts once again launch on an American rocket from American soil to low-Earth orbit for the first time since the conclusion of the Space Shuttle Program in 2011.

Credits: NASA/Bill Ingalls
From Starlites Past... 1970, and 1995:

"...NOW ADD TOTALS OF LINE 9 AND LINE 5 FOR ADJUSTED GROSS INCOME...."

ECLIPSE PARTY

March 7th, at Lakeview Center, members of the Peoria Astronomical Society, directed by Arthur Greiner, provided seven telescopes and one binocular set-up for projected viewing of the event. Weather conditions were ideal except for a high wind. A most interesting added feature was the presence of several sun spots and the occultation of these by the moon. A temperature drop of about 10° was experienced at maximum. It was estimated that over 200 people turned out for this occasion.

The picture at left of Mark Tabute shows his projected view of the eclipse.
What a break we got last July. The weather the previous two years had been terrible for observing during that month. Fortunately, last July was an exception. We had several good crowds at DGV/Jubilee observing the marks left by the impacts of comet SL-9. Everyone was surprised at the 'blackeyes' the larger fragments caused on Jupiter. Even a week after the impacts ended, the impact sites were very visible, and had spread into a band of dark material. It will be interesting to read *Astronomy* and *Sky & Telescope* to find out how the professional astronomers explain the dark spots.

The motorization of the 24 inch telescope dome has been completed. Many thanks to Barry Redenbo and Chuck Lamb for all the work they did on the project. Chuck was responsible for designing the relay circuitry, installing the track inside the dome, and designing and building the motor mount bracket. Barry designed and built the computer interface and then assembled all of the relay components and switches in a plastic electric box similar to the ones which house the telescope drive electronics.

The heavy spring rains along with mower problems have kept us busy mowing the grass at the observatory. Many thanks again to Chuck Lamb who must have spent about 24 hours repairing the mower. He fixed the oil leak, replaced the fuel pump, installed new ignition wiring and fuel lines and other miscellaneous items. The mower is again operating well.

The new ST-7 CCD camera, purchased with money donated by the late R.P. Van Zandt, has been installed in the 24" telescope dome. See the CCD article in this Starfile issue for more details.

Projects at Jubilee this year include:
- Complete painting of the 24" dome
- Repair ground wire on 24" dome
- Repair ring on the 14" dome
- Replace and paint the siding on the building

*Jerry Gunn Director, Jubilee Observatory*
New Members:
The Peoria Astronomical Society welcomes new members:

    Kirk Woiwode from Manito, IL

2020 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.


Scott

Comet finder: Dan Son

http://cometchasing.skyhound.com/

Great web site that has finder charts for visible comets.

Dan
Presidents Message:

Most if not all of us live in light polluted skies. I live on the north side of Peoria and my sky is at least a 6 or 7 on the Bortle scale. From my yard on a dark, moonless night with my 14" f/4.25 and ageing eyes I can still see a 14th magnitude star. For the most part, I can view open and globular clusters and the Andromeda galaxy which is accessible even in my finder but other extended objects are largely elusive. I mostly star hop working off of finder charts generated from my planetarium software to locate my target which is generally a solitary star, but if a messier object is nearby I will also search for it. Without optical aid, I also like to look for fainter stars, usually about magnitude 4, to help better identify the shapes of the constellations.

Before I go outside I also check my computer to see if messages from PeoriaAstro have recently been posted. When Jon Crow messaged about the Skylink satellites it whetted my interest. A few nights later I did see my first passage of Elon Musk's global internet service. While the satellites are impressive with one following another, I dread to think of what 42,000 of these will do. While I make the most of observing from my back yard I also enjoy sharing the night sky and interacting with others either at Northmoor or Jubilee. Because of the pandemic, this summer will be unusual. Northmoor is closed for Saturday night public viewing, at least through June, but members can still have access to the scope. At Jubilee the 24 inch is down for repairs and community star parties (ICC) are canceled. But the state park is open and society members are invited to use the site. PAS members will be able to have star parties or group observing at Jubilee and the PAS annual banquet will be there as well. In the meantime enjoy what you can observing from your home but remember that the PAS facilities are still available to members. The virus is still with us so please remember to take precautions and keep a safe social distance as a courtesy to others.

Clear Skies,
Brian Hakes
**M108 : Dr. James Dire**

<table>
<thead>
<tr>
<th>Date/Location</th>
<th>April 19 &amp; 21, 2020 Jubilee College State Park, Illinois</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camera and Settings</td>
<td>SBIG ST-2000XCM CCD camera -20°C</td>
</tr>
<tr>
<td>Telescope</td>
<td>8-inch f/8 Ritchey–Chrétien Cassegrain (with a Televue 0.8x focal reducer/field flattener yielding f/6.4)</td>
</tr>
<tr>
<td>Mount</td>
<td>Paramount MyT</td>
</tr>
<tr>
<td>Exposure</td>
<td>180 min (18 x 10 min)</td>
</tr>
<tr>
<td>Processing</td>
<td>CCDOpt, Image Plus 6.5, Photoshop CS6</td>
</tr>
<tr>
<td>Other</td>
<td>Magnitude 10.0 galaxy in Ursa Major, 4.0 x 1.7 arcminutes in size.</td>
</tr>
</tbody>
</table>
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@stanpope.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.

Northmoor Observatory blog post: Renae Kerrigan

Hi Everyone,

Like last year, I wrote a blog post about Northmoor Observatory and how people can visit. It was very popular on our museum’s Facebook page – it was viewed by 16,700 people so far, and liked 200 times! That is just since it was posted on Monday at 11 am.

You can read the post here: http://starsoverpeoria.blogspot.com/2016/05/visit-northmoor-observatory-this-summer.html

Hopefully it will help let more people know about PAS and the observatory.

Reflector:

Reflector Magazine digital edition is available for download

You may access an archive of digital issues from the AL website by visiting: https://www.astroleague.org/reflector
**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 latest **Spring 2020** 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

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**Add Your Email Address to NCRAL Member Database**

Add your email address to the NCRAL member database now so that you can get direct mailings of NORTHERN LIGHTS and important and timely announcements about Regional conferences, star parties, and so forth. Your email address will never be shared with or sold to outside entities. Sign-up takes only about a minute. You’ll need to provide your name, email address, astronomy club affiliation (including at-large), and indicate if you hold particular positions within your club. Go to the following case-sensitive URL to add your information to our database: https://goo.gl/gsS8SF

**NCRAL awards and info video**

May 1, 2020
9:00 AM

NCRAL Members,

Here is the official announcement about NCRAL 2020 awards and mini-grants for which many have been waiting. You may view the NCRAL announcement video by going to the following link:

https://www.youtube.com/watch?v=8g3oZVX6uus

This video runs for just over 20 minutes and includes additional NCRAL-related information. Please be sure to watch it all and share it with the members of your astronomy club.

Also, please encourage members of your astronomy club to sign up for official NCRAL emails and our quarterly Northern Lights newsletter by registering online at the link below:

https://goo.gl/gsS8SF

Again, congratulations to all our NCRAL 2020 award winners!
Carl
--
Carl J. Wenning
NCRAL Chair (2017-2021)
carlenning@gmail.com
Cell: (309) 830-4085

4/10/20 notice from NCRAL:

NCRAL Members,

Please carefully read the following important message about the Coronavirus pandemic from the AL national office. At the Regional level, we are in compliance with the following directive. I urge all affiliates to do likewise.

Carl J. Wenning
NCRAL Chair (2017-2021)

National Astroleague message:

To our Regional Chairs and Representatives --

I hope this communication finds each of you doing well in this difficult time for all of us.

League president, Ron Kramer, has asked me to communicate to each of you an Executive Committee decision regarding scheduled or anticipated group activities at the regional level.

Due to the ongoing COVID-19 crisis, the Executive Committee has decided to suspend all League national and regional conventions and group activities until such time as competent medical and government authority determines that large public gatherings and public transportation and travel are safe. Until that time, no region or other entity acting under the League's aegis may conduct conventions, star parties, or other large public gatherings or group activities. Please understand that any person(s) violating this determination could be held personally liable to the League for any loss sustained by the League as a result.

Consistent with this determination regarding regional activities, the League has postponed its national convention for one year, until August 4-7, 2021. Our ALCon ’20 hosts at The Albuquerque Astronomical Society have generously agreed to host ALCon ’21 in Albuquerque at the same Embassy Suites venue. Steps are being taken to refund registrations received for this year's event.

Most League services will continue during this crisis.

All 2020 League awards programs will move forward on schedule with winners announced and recognized in Reflector, but the public presentation of 2020 awards (including League-sponsored youth award convention trips) will be deferred until ALCon ’21. We encourage all regions to continue with their awards programs as well in that these can be conducted and announced without public gatherings.
All League observing programs will continue as well, but we encourage individuals pursuing our observing programs to abide by national and local government orders relating to lock-downs, travel, transportation, and use of public lands and facilities.

Obviously, we are most distressed to have to take these actions, but this is a unique crisis with unique risks to millions and the postponement of conventions and star parties will not harm our mission or our organization. Failure to take these actions, however, could compromise the lives and health of our members and, in so doing, expose the League, the League Council, and Regional officers to legal liability.

If you have any questions about whether a specific regional activity is permitted (i.e. those not involving large gatherings), or if this decision poses unique problems in your region due to existing commitments, please contact a League officer.

Thank you for your understanding. Best wishes for the health and well-being of you and your family and friends.

-- For Ron Kramer, President, Astronomical League, and the Executive Committee,

Chuck Allen
Secretary and past-President, Astronomical League
4005 St. Germaine Ct.
Louisville, KY 40207
(502) 693-5504

**Canton Star Party:**

Canton Park District is asking to try again, a star party in Canton.

**Update: The May event has been cancelled with rain date of June 27th a go.**

Let me know if the date works and are you willing to bring out your scope for this.

Dan Son

**2020 PAS Banquet Date:**

September 19th is the scheduled date for the annual PAS banquet. As always, it is a Saturday and this year it is 2 days after the new moon. For the past few years the banquet has been held in area restaurants. In the past, the annual meeting event was held at Jubilee College State Park, either in a picnic area or at our observatory. This year the PAS board of directors thought it best to hold the banquet at the observatory primarily so we can apply social distance rules and having the event outdoors where we can later observe. The menu and details have not been solidified, but as arrangements are made the board will keep everyone informed using the Groups.io and the yahoo e-groups. We hope you'll be able to attend so please mark your calendar.

**2020 Observe the Moon Night:**

September 26th, @ Northmoor Observatory

We will need volunteers with scopes, and lunar filters are nice if you have some.
Peoria Astronomical Society

Program Schedule 2020-2021

Peoria Astronomical Society Public Programs
All programs are Free and open to the Public. Time: 7:30 p.m.
All programs are held in the Dome at the Peoria Riverfront Museum
Free parking in the museum’s parking deck

Actual schedule will depend on reopening of Illinois and of the museum

October 7, 2020 Getting started with CCD & CMOS Cameras
James Dire PhD. – http://astrojim.net/

November 4, 2020 The Glasford Meteor Crater
Dr. Charles Monson, Illinois State Geologic Survey, University of Illinois
Monson, Charles C <cmonson@illinois.edu>

December 2, 2020 Big Astronomy – the story behind the show (and the show)
Renae Kerrigan

January 6, 2021 No Meeting in January

February 3, 2021 The December 14, 2020 Total Solar Eclipse
(tentative if trips aren’t canceled and right now I think I have a 10% chance that I’ll actually go on my trip-ss )
Sheldon Schafer and James Dire

March 3, 2021 (tentative) The Astronomical Year in Review

April 7, 2021 (month to be confirmed) The New Horizons Mission to Pluto and the Kuiper Belt – Exploring Worlds in the Distant Reaches of our Solar System
Kelsi N. Singer
Senior Research Scientist, SwRI Boulder, CO
Deputy Project Scientist and Co-I on New Horizons Mission

May 5, 2021 The All New Astro-Jeopardy II
Brian Bill

Inclement weather notice: Monitor email (e-group), local radio stations or PAS Facebook Page if a program, board meeting, viewing, or star party 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.
Telescope for sale:

NEW GSO 8-inch f/12 Classical Cassegrain with a used JMI padded hard case. $800 for both. Optical tube assembly comes with two speed GSO focuser, Losmandy-type dovetail plate and Vixen-style dovetail plate. Diagonal, eyepiece, finderscope and mount NOT included; cat negotiable. Superb visual telescope, lightweight, 22 pounds. No hint of coma, excellent for planets and deep space viewing. Contact James Dire at dire@hawaii.edu
Telescope for sale:

10” f/6 Tube Assembly

It was about 40 years ago that society member Ross Backmann built the telescope when he was college student. Later he donated it to the PAS. Eventually the PAS loaned the telescope to the Twin Cities Amateur Astronomers of Bloomington/Normal. They made a simple box and placed the tube assembly in it and used it as a dobson. Several years ago they returned the tube assembly to the PAS where it has been stored in my basement. The board wants to see a PAS member use the tube assembly and has authorized its sale to a member for $50!

The 10 inch mirror is mounted in an aluminum mirror cell which is in a fiberglass tube.

Included are a Telrad and a 5x30 right angle correct image finder by Orion. The focuser is a tall rack and pinion focuser. A vinyl cover on the tube opening is included.

The tall rack and pinion focuser is for 2 inch eyepieces but comes with a 1 1/4 inch adapter. It is mounted to an adapter plate that is matched to the curvature of the tube.

The spider is 4 vane and holds what appears to be a 2.4 inch diagonal.

If you are interested, please contact Brian Hakes at bhakes@sbcglobal.net.
Celestron’s StarSense Explorer is a new approach to aiming a “Push-To” telescope. It is marketed as a component of their entry-level telescopes. The system consists of a special smartphone bracket, and proprietary software. The user needs to provide a suitable smartphone.

The bracket is shaped to fit a much smaller tube, so I fastened it to a wood block, which is secured to the tube with foamy 2-sided tape.

I have an Orion 10” IntelliScope (a Dobsonian Push-To scope). I have found that it’s two-star alignment is time consuming and not very accurate. In addition, alignment can be lost due to a power glitch or an error. In an effort to make my viewing sessions more productive, I bought Celestron’s 114 mm reflecting telescope with the StarSense system for $179. I transplanted the smartphone bracket to my Dobsonian.

After a couple of setup steps, operation is quite simple: start the app, select an object, and point the telescope at any group of stars. Whenever the telescope is stationary, an image (2 seconds of stacked exposures) is taken and plate solved. It is continuously updated every 4-5 seconds. A message "Scope Position Found" is displayed. The sky map display is then centered on the scope position. An arrow appears, showing you which way to move to your selected object. While moving, guidance is provided by the phone's compass and accelerometers. As soon as motion ceases, an image-based update will aid in final positioning.
I have found that accuracy is a bit disappointing.

In fairness, Celestron has cautioned that it is not accurate enough for big scopes. It is targeted at the “beginner” market, so we shouldn’t be too critical when we are using it for another purpose.

The main problem is that calculated scope position constantly changes. The varied results can differ from each other by more than ½ degree. After moving the scope, I wait 30 seconds for several calculations to be displayed. I have found that the best reading is usually the one which is highest in elevation. Centering on this point, the object is usually no more than 0.4 degrees away.

Even with this limitation, the StarSense has given me a tremendous improvement in pointing accuracy. Previously, I would move to the calculated position and explore with a wide field eyepiece. Once the object was found, I had to change eyepieces and re-focus. With StarSense, I can leave the 9 mm eyepiece in place without interruption.

Elimination of the two-star alignment saves at least 20 minutes, so the precious clear-sky time is used more efficiently.

The system performs very well, even in light-polluted skies. It has completed the plate solution in regions where no stars at all were visible to the naked eye. It can work around patchy clouds, as long as enough stars are visible. I have trouble when too many stars are blocked by houses or trees. When the sky has a medium to heavy haze, performance is spotty.

The system requires a compatible smartphone to take the sky images, perform the plate-solve, and prompt the user which way to move the telescope. Celestron has provided a list of "compatible" smartphones, but not all phones are equal. I used an LG G6, which was on the list, but it often gave the message: "Unable to locate telescope. Please aim at a clear area", even when the sky was clear. After switching to an iPhone 6s, I had no further troubles.

The app is geared toward beginners and doesn't have a lot of our favorite features such as observing lists, or the ability to highlight groups of objects. The database includes seven of the Planets, the Messier and Caldwell objects, and a few NGC's. Stars, down to around magnitude 8.5, are included. In most cases, these stars can be used as guides to the uncatalogued deep-sky objects.

This is a real breakthrough in scopes for beginners. The StarSense Explorer is truly easy to use and has a database big enough to keep things interesting for a long time.

Celestron is tight-lipped about any “add-on” system for existing telescopes, but I don’t think that they will miss this opportunity. I didn’t want to wait, so now I have an extra telescope.
Using the StarSense Explorer reminded me of an event when I worked for Chrysler. We were shown a prototype minivan with sliding doors on both sides. Up to that time, domestic minivans had only a single sliding door. I thought: “This will be a big seller.” That was an understatement!

Here are some links for more information:

https://www.celestron.com/pages/starsense-explorer-technology

https://www.celestron.com/collections/starsense-explorer-smartphone-app-enabled-telescopes
Location for Board Meetings on the third Wednesday of every month at 7:30 PM
Proctor Place, Third Floor Conference Room
2724 W Reservoir Blvd, Peoria, IL 61615

Notice: Meetings are held virtually on Zoom until further notice:
The application to be used for hosting the conference is Zoom. This app needs to be downloaded and installed on your
desktop computer, laptop or on a cell phone. Zoom should work on most modern smartphones with a camera, or your PC
and webcam, and speakers. The application can me downloaded from Zoom.us If you would like to join in, please
contact Dan Son to get on the email invite: sonshine1992@gmail.com

Board Meeting Minutes

Peoria Astronomical Society February 2020 Minutes

Meeting called to order at 7:35 pm, Proctor Place third floor conference room, February 19, 2020

Attendees: Dan Son, Tatianna Johnson, Bill Cole, Phil Burroughs, Brian Hakes, Dave Monroe

Minutes: (Phil Burroughs) The minutes of the January Board Meeting were approved.

Treasurer’s Report: (Dan Son) – Dan gave the January 2020 Treasurer’s Report. The January checking account
beginning balance was $3282.19. Receipts were $1840.00 and disbursements were $121.26. Ending balance was
$5000.93. The treasurer’s report was approved.

Jubilee: (Bob Pauer) – None

Northmoor – Dan reported he installed insulation in the window and unplugged the dehumidifier. Observe The Moon
night will be August 18, 2020. Brian attended a Northmoor Sculpture Garden meeting at Cyds.

Nominating: (Tatiana Johnson) – None

Legal Agent: (Dave Monroe) – Dave sent in the Illinois Not For Profit Form and was reimbursed the $11.00 filing fee.

Membership/Alcor: (Eric Clifton/Scott Swords) – Karen Lawrence was a new member. A long time PAS member, Darold
Stafford has passed away.

Starlite (Jesse Hoover) – The Starlite needs articles and the deadline to get them in has been extended from tonight.

Program: (Sheldon Schafer). – The March 4 meeting will be The Curiosity Rover. The canceled Feb. meeting on CD
CCD cameras has been rescheduled for Oct. 2020.

Peoria Academy of Science: (Bill Cole) – Bill will attend the next meeting, Feb 20. The annual banquet is April 3 at
Barrack’s Cater Inn.

Light Control: (Jesse Hoover) –None

Observing Report: (Gary Bussman) – Gary has discontinued the monthly E-groups notice and will concentrate on
Jubilee viewing sessions.

Website: (Stan Pope) – None

Old Business: - ATT and SBC internet users have had problems with Groups IO. Member John Manning has an
astronomical blog on Groups IO. Brian says we need to inventory club scopes and decide what to do with each one by the
next board meeting.
New Business: - Dan will be scheduling a Canton Star Party. The meeting cancellation policy due to weather was discussed. Brian E-mailed articles on recruiting and retaining members. He wants to get more members involved in club activities. Discussion followed on these items.

Meeting adjourned at 9:00 pm.

Minutes taken by Phil Burroughs, PAS Secretary

Peoria Astronomy Club Attracting More Members Meeting

Date – February 23, 2020
Place – Paparazzi Restaurant
Attending – Bruce Brown, Eric Clifton, Brian Hakes, Dan Son, Phil Burroughs

Bruce brought up the following ideas which were discussed to attract new members:
A sign could be added to the Northmoor Parking Lot with a historical aspect.
Student design art contest for adding murals to the side of Northmoor Observatory. A possible resource person on this would be Lindsay Coquette, art teacher at Peoria Heights High School.
Some other resource people would be May Wright of the Peoria Symphony and Jonathon and Nickki Romain at Greeley School.
Make a new Peoria Astronomical Society Brochure.
The PAS Board will follow up on the above items.
Meeting ended at 4:00 PM
Phil Burroughs
Peoria Astronomical Society Secretary

Peoria Astronomical Society March 2020 Minutes

There was no Board Meeting in March.

Peoria Astronomical Society April 2020 Minutes

Meeting called to order at 7:35 pm, Zoom meeting, April 15, 2020

Attendees: Dan Son, Jesse Hoover, Eric Clifton, Phil Burroughs, Brian Hakes, Dave Monroe, Bob Pauer

Minutes: (Phil Burroughs) The minutes of the February Board Meeting were approved. There was no Board Meeting in March.

Treasurer's Report: (Dan Son) – Dan gave the February 2020 Treasurer's Report. There was one new member, Linda Grossinger. The only disbursements were to Ameren. He also gave the March report with income of $100 from Cat Matching Gifts and disbursement of $37.57 to Ameren. There was one new member, Kirk Woiwode. There are 17 or 18 members who have not yet paid their dues. The Treasurer's Report was approved.

Jubilee: (Bob Pauer) – All Spring ICC Star Parties have been canceled because of Covid 19. It might be a good time to remove the 24” mirror and have it re-aluminized. Eric will talk to Bob Pauer about this. Bob reported he had done maintenance on the mower, mowed twice and inventoried the telescopes at Jubilee.
Northmoor – Dan has cleaned up at Northmoor and sent out the Observing Schedule. Emily Cahill, Peoria Park District wants to be kept aware of any changes to Northmoor Observatory. Eric reported on 2 ideas for artwork on the observatory paintings on side panels and a blown-up photograph on the dome. The new rule for weather closure at Northmoor is to not open up if raining. If cloudy, the hosts should open up for a short time. Discussion followed on protecting people at Northmoor from Covid 19. Discussions will continue at the May Board Meeting.

Nominating: (Tatiana Johnson) – None

Legal Agent: (Dave Monroe) – None

Membership/Alcor: (Eric Clifton/Scott Swords) – Two new members as discussed in Treasurer’s Report.

Starlite (Jesse Hoover) – Next Starlite article deadline is the May Board meeting. There are still members on Yahoo E-Groups that need to move to Groups IO. Dan will contact them about moving to Groups IO. Brian recommended shutting down E-groups in December.

Program: (Sheldon Schafer). – Dave recommended canceling the May 6 meeting. Dan seconded the motion and it passed. Sheldon presented next year's program. Dan needs to send a check to the Riverfront museum for the March meeting.

Peoria Academy of Science: (Bill Cole) – Dan will get Treasure Hunt books out to Northmoor.

Light Control: (Jesse Hoover) – April 19 – 26 is International Dark Sky Week. Jesse said IDA meets once a month by Zoom.

Observing Report: (Gary Bussman) – None

Website: (Stan Pope) – None

Old Business: None

New Business: - The status of Sculpture Garden at Donovan Park is unknown. Brian is going out to Jubilee and taking pictures of the scopes so a decision can be made whether to sell them or keep them. Rosback scope was returned from Twin City Astronomers. Eric suggested selling it for $50 or best offer or make a donation to the club. Date for the annual banquet is set for Sept. 19 at Jubilee Park.

Meeting adjourned at 9:00 pm.

Minutes taken by Phil Burroughs, PAS Secretary
Northmoor Opening update -

We will not be opening in June and maybe not in July. If you have questions please email or call me. I do encourage anyone with a key or helper to ask a keyholder to go out and use the Scope.
Dan Son

The board of directors has not yet decided as to when to resume Saturday night viewing at Northmoor. The host schedule has been released, but the date when there will be public observing is largely dependent on when the Peoria Park District and other government agencies resume operations. The board will monitor the situation and keep you informed.
Brian Hakes

Note on Science Treasure hunt:

Friends,

Bill Cole put me in contact with Mike Rucker of the Peoria Academy of Science - He is the coordinator of the Science Treasure Hunt.

Today, I spoke with Mike and he said that effectively the 2020 Science treasure hunt is canceled. There will be no awards ceremony in September. None of the books were handed out to Peoria Public Schools, they are given about 1/2 of the books, and most of the sites are closed. I shared with Mike we too are closed thru June and maybe longer. Mike did say that he has $3,500 of books and we can have as many as we want whenever we open.

Unless someone else sees a purpose for the books, the 2020 Science Treasure Hunt should not be a consideration in our discussion of the opening of Northmoor.

Brian H.
**Northmoor Hosting Schedule 2020 – Dan Son**

*Canceled Dates are lined out
*Tentative Dates denoted by an asterisk (*)

<table>
<thead>
<tr>
<th>Date</th>
<th>Keyholder</th>
<th>Helper 1</th>
<th>Helper 2</th>
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<tr>
<td>May 23</td>
<td>T Beachler</td>
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<td>May 30</td>
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<td>B Bill</td>
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If you have a conflict with any dates, let me know as early as possible and ask the Northmoor group for help to switch dates with another member. Everyone has 3 dates this year.
*Jubilee Maintenance Schedule:*

Keyholders,

Attached (next page) is the maintenance schedule for this year. As in previous years I plan to go out to Jubilee during the week and let you know what needs to be done that weekend. The big issue is filling in pot holes on the driveway. When needed I will ask for help to fill them in. If any changes need to be made in your scheduled time for maintenance please let me know.

Bob Pauer
2020 Jubilee Maintenance Schedule

April 25
Gary Bussman
Dan Son

May 2
Eric Clifton
Bob Pauer

May 9
Jesse Hoover
Brian Hakes

May 16
James Dire
Dave Grebner

May 23
Brian Bill
Bob Pauer

May 30
Jon Crow
Brian Hakes

June 6
Brandt Bechtold
Dan Son

June 13
Eric Clifton
Bob Pauer

June 20
Jesse Hoover
Brian Hakes

June 27
Steve Russell
Dave Grebner

July 4
Jon Crow
Brian Bill

July 11
James Dire
Brandt Bechtold

July 18
Brian Bill
Bob Pauer

July 25
Jon Crow
Brian Hakes

Aug 1
Brandt Bechtold
Dan Son

Aug 8
Eric Clifton
Bob Pauer

Aug 15
Gary Bussman
Eric Clifton

Aug 22
Jesse Hoover
Jon Crow

Aug 29
Larry Russel
Dan Son

Sept 5
Steve Russell
Brian Bill

Sept 2
Brandt Bechtold
Larry Russell

Sept 19
Jesse Hoover
Dave Grebner

Sept 26
Gary Bussman
Eric Clifton

Oct 3
Larry Russell
James Dire

Responsibilities: Check each building to insure security of equipment. Sweep floors, mow lawn and trim around buildings, blow or sweep off grass clippings from walkways. Mowing once a week will help prevent clumping and the need to sweep up clumps. Bring gas to top off mower tank. Currently there is no line trimmer at Jubilee. Since only two people are scheduled each week, it is imperative they insure that someone goes to Jubilee and perform scheduled tasks. Please notify me of any schedule conflicts or problems with the equipment.

Bob Pauer: 309-879-2438