THE EVENT HORIZON

ST. LOUIS ASTRONOMICAL SOCIETY

Devoted to the Interest and Advancement of the Science of Astronomy

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Tracking Exoplanets From Home

by

Laurie and Kimberly Sibbald
Calgary, Alberta

Laurie and Kimberly Sibbald, astrophotographers, will be featured at the September meeting of the Saint Louis Astronomical Society. The meeting will be held in person at McDonnell Hall AND via Zoom. The speakers will only be on Zoom from Canada! The meeting and lecture will begin at 7:30 p.m. on Friday, September 16. Zoom access information is below.

Exoplanets are planets that orbit other stars. They are difficult to detect, both because they only reflect light and because they lie within the glare of the stars they orbit. One detection technique involves measuring the dip in starlight during an exoplanet transit. The transit occurs when the planet's orbit carries it between our line of sight and its star. The amount of starlight blocked can indicate the exoplanet's size and sometimes other characteristics. Telescopes and special cameras and instruments are now available to amateur astronomers that can allow them to detect exoplanets using their own equipment. Laurie Sibbald will explain how he has already measured a number of exoplanet transits. One of the most important new technology advances is the development of cooled CMOS imaging cameras that allow even modest aperture telescopes to produce data for faint stars.

Mr. Sibbald explains, "… we can measure transits not only of well established 'confirmed' planets around distant stars but also new candidate planets. Examples will be shown of a few of these including exoplanet candidates newly identified by NASA's TESS (Transiting Exoplanet Survey Satellite)."

Kimberly Sibbald is an experienced landscape photographer. She also does nightscapes, including wide-field Milky Way scenes. She is now extending her work to include photography of stars, nebulae, and galaxies. Laurie Sibbald is an astrophotographer with expertise in digital image processing

Upcoming Meetings
October: JWST Nathalie Ouellette
November: Brett McGuire, MIT
December: Alan Dyer, Astrophotography

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SLAS Returns to In-Person Meetings! Zoom Conference Meetings will Continue

SLAS meetings for the fall have been scheduled for McDonnell Hall, room 162. It's been too long! The room will be open by 6 pm to allow setup and will remain open till 11. You still ***cannot park in any red spaces***. There are 18 yellow slots on Forsyth which are ok after 5 pm Friday. There are also many yellow slots by the greenhouses west of McDonnell that are eligible after 5 pm. There is also an underground parking garage east of McDonnell at Wrighton Way. Park in any yellow slot. There are also two car chargers near McDonnell and several in the garage.

Can't wait to see everyone in a meeting again! Friday night, 7:30 pm!

We will still run the meeting via Zoom Conference in addition to live and in person. The Zoom room will be open from 7-10 pm.
Below is the invitation to join:
To join Zoom Meeting for SLAS Regular Meeting with computer or smartphone:
Just click the link below:
https://zoom.us/j/8604505790
Meeting ID: 860 450 5790

President's Corner

by

Jim Small

For September, the first benefit of attending the RASC GA conference will play out in the form of a talk by Laurie and Kimberly Sibbald about working with exoplanets with amateur equipment! Can't wait to hear about this one. Next month will be an update on JWST (it's been BUSY!), then it will be a great talk by Alan Dyer (astrophotographer) to finish off the year.

The first Dobson-Fest will be held at the Jefferson College Observatory Saturday, September 17, the day after the September meeting. This is very close to John Dobson's birthday! There will be a contest for the best dob in three categories. For details, see: https://www.slasonline.org/events/dobson-fest or see the article below.

An update for the 16" at the observatory. We did get it working again, but it seems to be very tentative. It turns out that there is very little in the way of support by way of electronics for the telescope, so we are considering having it upgraded to a system developed by Explore Scientific. For about $4000, the entire operating system including the motors would be upgraded to an open source system that can be easily worked on and would completely change how the scope is operated. If we pursue the upgrade, instead of a hand controller to operate the telescope, it would use a tablet or computer instead. It would be a tremendous improvement in the system. Should we decided to do the upgrade, we will come to the membership to approve the funds.

We are also assisting Jefferson College in selecting equipment to be included in a request for funds from the college. If approved, systems of cameras, computers, and even solar telescopes will be added to the observatory. Both SLAS and Jeffco would be able to use the telescope to do some basic research. Maybe even some exoplanet work like we will learn about at the September meeting. It will also include spectroscopy equipment. We will learn a bit more about spectroscopy at the Astro 101 for the September meeting.

Hope to see you at the meeting!! jrs

Dobson-Fest 2022
Jefferson College Observatory
Saturday, September 17, 2022
4pm-10pm

The first annual Dobson-Fest will be held at the Jefferson College Observatory on the campus of Jefferson College in Hillsboro, Missouri on Saturday September 17, 2022 from 4pm to 10pm. This will be an outdoor event with demonstrations and tips from local amateur astronomers on how get the maximum enjoyment out of your telescope. The event is cosponsored by Jefferson College and the St Louis region astronomy clubs and is open to the public free of charge.

Do you know that the "Dobsonian" reflecting telescope is one of the most popular telescopes on the market today? Dobsonian telescopes are very durable and they don't wear out or break easily. You may have a Dobsonian stored away in a closet or garage. Bring it to Dobson-Fest 2022 and let us help you!

Activities and Demonstrations (4-8pm) will include:

1. General telescope info and local astronomy clubs
2. How to select a good first telescope for the family
3. What are Library Telescope and Binoculars?
4. Demonstrations on set up and use your telescope
5. Tips on how to clean and align your telescope
6. Display of best telescope accessories
7. Telescope Making and Mirror grinding

Night time demonstrations (8-10pm) on how to set up and use your telescope.

Do you have a Dobsonian telescope that you love? Show it off at this event. Share your experiences. Prizes will be given to the best Dobsonian in the following categories:

1. Most child-friendly telescope
2. Most colorful telescope
3. Most inspirational telescope

This event is sponsored by the following:

Jefferson College - jeffco.edu/Observatory

https://www.facebook.com/JCObservatory

St Louis Astronomical Society - slasonline.org

https://www.facebook.com/stlastro/?ref=page_internal

Astronomical Society of Eastern Missouri – asemonline.org/

https://www.facebook.com/Astronomical-Society-of-Eastern-Missouri-226572914663884

Eastern Missouri Dark Sky Observers - emdso.org

https://www.facebook.com/EasternMissouriDarkSkyObserver

River Bend Astronomy Club - riverbendastro.org/

https://www.facebook.com/RiverBend-Astronomy-Club-RBAC-137093222969249

Francis Park Stargazing Report
August 31, 2022
by Bill Breeden

SOUTH ST. LOUIS – Our monthly stargazing event at Francis Park has been clouded out (or rained out) for most of 2022. That all changed for the better on August 31, when we finally had clear skies, very mild temperatures in the 70s, low humidity, and very light wind. For all practical purposes, it was a perfect night for stargazing!

For the benefit of our newer members, I will go over the basics of our Francis Park Stargazing events. The park is located on Tamm Avenue in south St. Louis near Ted Drewes. Events are held monthly from April through October, about one Wednesday evening each month near First Quarter Moon. I began these events with my wife back in 2004, when we setup on the other side of the park on Donovan Avenue. The event was soon moved to its current site on Tamm Avenue, due to the wonderful western horizon and view of the ecliptic. The Moon and planets would be easy to see from here, except when first rising in the east. Foot traffic is also quite busy at this spot. Wednesdays were selected since they are not typically booked with other events. This event was created to offer an alternative to the First Friday public telescope viewing at the Science Center. That event was historically our most popular, and Francis Park Stargazing soon rose to the number two position! Another advantage to this event was that it was never a side show to something else going on; this was pure astronomy outreach. Many members and volunteers found the low western horizon great for safe solar viewing as well, since we could observe the sun until it set. Venus and Mercury, which always appear closer to the setting sun due to their orbits, would be visible from this site more often than from many of our other sites. In years past, this event was held every month, even in the winter. The winter months were dropped due to low attendance, and the current April to October schedule began. Sometimes I miss the winter events, if only for the constellations visible during that time.

This was one of our best nights at Francis Park. We had a record number of telescopes and visitors. Photo by Bill Breeden.

Tonight, we had record turnout of visitors, volunteers, and telescopes. I estimate that we had about 160 visitors and kids, and they were very excited to get a first-person view of the beautiful 4-day-old waxing crescent Moon. This year has not been good for planets, as they have all been in the morning sky for the past several months. That too would change tonight!

Cook Feldman observing the Sun (safely!) with his Coronado PST on a tracking mount. Photo by Bill Breeden.

Several volunteers arrived early enough to setup solar telescopes and observe the sun well before it set. Many sunspots were observable in visible light wavelengths, and prominences could be seen in hydrogen alpha (Ha) wavelengths.

This year I have designated our Francis Park Stargazing events in memory of Glenn Greenway (1947-2016), longtime member of the St. Louis Astronomical Society. He loved observing the Moon and planets at our Francis Park events, and was especially fond of searching for Mercury near the western horizon when it was up. This year, Mercury should be visible, but weather has cancelled many of our events. This was the night to search for Mercury in remembrance of Glenn. I searched and searched and searched, carefully aligning my goto SCT to be sure it would point in the right direction.

No luck. All I could see through the eyepiece was bright twilight, a distant radio mast, and the treetops. I was in the right part of the sky, but no Mercury! I should have been able to see it, as it shines at magnitude 0.4 and was still at least 8 degrees above the horizon. Glenn would get frustrated looking for it as well, but he had much better luck in years past than I did tonight. I will try again another time!

In addition to the large number of visitors, we had more volunteers and telescopes than I have ever seen here at Francis Park. We counted 12 telescopes and at least as many volunteers operating them. It was a very impressive scene! The list of volunteers included Bo Cooper, Cook Feldman, Chris Hanson, Randy Harrison, Phyllis Nolan, Christian Schulte, Brad Waller, Cloud Yang, Alan Jeude, and me. There may have been others, so please forgive me

if I missed you. There were many different types of telescopes, but the event seemed to be dominated by Celestron SCTs! They were clustered at the south end of the site, and it was an amazing scene! Most were pointed at the Moon early on. As darkness fell, volunteers began to show other objects such as the bright star Arcturus (/ark-tyur'us/) (α Boo), the double star Rasalgethi (\rayz'el-geth'ee\) (α Her), and the Great Hercules Cluster (M13). Those are my pronunciations shown, and I am sure other amateur astronomers have their own variations.

I decided to point my 8" SCT at something besides the

Me and my Meade LX-90 SCT. I did my best to find Mercury, but had no luck this evening. I am sure Glenn would have succeeded in finding it! Selfie by Bill Breeden.

Moon. Arcturus and Izar (\eye'zar\) (ε Boo) in the constellation Boötes (\boo-oh'tees\) made great targets tonight. Arcturus is very bright and sort of an orange color, and shows well in an eyepiece, even from our urban location. Many visitors were impressed with the view of this bright zero-magnitude star, 36 light-years from Earth. Izar was also interesting – it is a very close double star, with a separation of only about 3 arc seconds. It is just bright enough to spot with the unaided eye from Francis Park if you know where to look, but a goto telescope helps a lot. A few visitors looked in the eyepiece and were able to see that this was in fact a double star.

Rasalgethi, a third magnitude double star in Hercules, appears colorful in the eyepiece! This star is just a star hop away from Rasalhague (\rayz'el-hayg'\) (α Oph), which is visible to the unaided eye from Francis Park. With a separation of about 4 arc seconds, Rasalgethi is easier to split in the eyepiece than Izar. Even some of the kids that looked at it were able to tell that it is a double star, and they could also see color! This proved to be a very popular target tonight (other than the Moon), and I left my telescope pointed at Rasalgethi for quite a while.

I had set my LX-90 up near the north end of our observing site, in memory of Glenn Greenway. He always set his telescope up at this end of the site, so I did the same. Much to my happiness (and to the disappointment of others), Saturn appeared in the east, visible just above the houses and between the trees! I did not expect to see Saturn or Jupiter tonight – I had planned on showing those planets next month. Glenn's spot was just where I needed to be, even if I was somewhat removed from all the excitement of the Celestron SCTs at the south end. Saturn eventually rose high enough for all of us, but I had a solid hour of observing it before everyone else! (Insert snarky *Meade vs. Celestron* remark here LOL!) Anyway, I was very happy at Glenn's spot, and dozens of people enjoyed a crisp, clear view of Saturn through my 15mm Plössl eyepiece. Titan, along with one or two additional moons of Saturn, was visible as well! The Cassini Division was also crystal clear.

Many Celestron SCTs clustered at the south end of our site at Francis Park. Photo by Bill Breeden.

Later, Jupiter also rose into the same clearing in the sky from Glenn's setup spot. Once again, I ushered visitors over to my lone Meade SCT to be the first tonight to share views of Jupiter. All four Galilean moons were visible. Jupiter and Saturn were remarkably clear and detailed; the view must have been at least 4 out of 5 on the *seeing* scale. (*Seeing* in astronomy refers to the steadiness of the air column above you.) Cloud Yang took a nice long look at Jupiter, and she spotted the Great Red Spot! I had also spotted it, but her observation confirmed it. Nice!

A Celestron SCT pointing north, awaiting alignment for a night of stargazing. Photo by Bill Breeden

Cloud Yang was using a very nice SkyWatcher refractor, and the Moon was very sharp and clear. She was using a 2-inch 35mm eyepiece, which gives extraordinary low power

Randy Harrison ventures to Francis Park all the way from Vandalia Illinois, and we are very happy to have his help here at Francis Park. His Celestron SCT is to Randy's right in this image. Photo by Bill Breeden.

Great place to chill! Carol Feldman and Rita Breeden enjoying some time outdoors in the park. My LX-90 is at far right. Photo by Bill Breeden.

in this telescope. This will be a very nice setup for observing star clusters and large nebulae from a dark-sky location. Later, she shared a view of Saturn with this instrument. She commented that Saturn appeared quite small, which is expected at this low power. Still, it was very clear. Several members made suggestions that her next eyepiece should be medium or high power, and some suggested a Barlow lens. This is a new setup for her, and it will provide remarkable views of deep-sky objects. I am jealous!

Volunteers arriving at Francis Park and getting setup for an evening of astronomy outreach. Cook Feldman's famous 8-inch homemade Dobsonian reflector is visible near the center of this image. Photo by Bill Breeden.

The big *news* of the evening also involved Fox 2 News! Angela Hutti, meteorologist for Fox 2 News, had wanted to do a story about our event since last year. Each time she was available, the weather did not cooperate. She contacted us again for this event, and the weather played super-nice!

Our event was covered twice: Once during mid-day for an in-person interview from Francis Park, and again in the evening by a live news crew. I was not available for the mid-day interview with Angela, so Brad Waller stepped up and did a fantastic job. Many, many thanks to Brad. Angela interviewed him at the park, and he brought a library telescope to show as well.

Brad handled the mid-day interview, and the evening Fox 2 News crew interviewed me about the event. I shared much of the same information about our event as Brad had earlier. The crew also interviewed additional volunteers – Randy Harrison among them. They also filmed much of the buzz around our event for most of the evening.

Link to the mid-day interview with Brad Waller:
St. Louis Astronomical Society welcomes all to look to the skies | FOX 2 (fox2now.com)

*Brad Waller did a fantastic job representing SLAS and Francis Park Stargazing with Fox 2 News.
(Video capture from the broadcast.)*

Left: ß This is my interview with Fox 2 News (video capture). Image by Carol Feldman. Right: Fox 2 News (and sister station Channel 11) van rolls up to our astronomy site at Francis Park.

Randy Harrison preparing for his on-camera interview with Fox 2 News at Francis Park. Photo by Bill Breeden.

Brad and I shared general information about our Francis Park Stargazing events with Angela Hutti and the Fox 2 News crew. We talked briefly about the event location, scheduling around the First Quarter Moon and why that phase is the best for viewing, observing the planets when they are visible, when the event began (2004), the Library Telescope Program, and our new observatory at Jefferson College. The evening news crew stayed with us for a good two hours and captured much of the event live. It was a magical evening indeed, which more than made up for all of the cloud-outs we have endured!

Our event is live on Fox 2 News! Photo by Bill Breeden.

The next Francis Park Stargazing events for this year are planned for Wednesday, September 28 and Wednesday, October 5. Although it is rare to hold this event on two consecutive Wednesdays, we have this chance due to the timing of the First Quarter Moon on the calendar. We have a chance to play catch-up!

Clear Skies,
Bill Breeden

Girl Scouts Astronomy Overnight in St. Francois State Park
by Buz McCullough

Bob Brazzle and I arrived about 7PM. It was about 35 miles from my house.

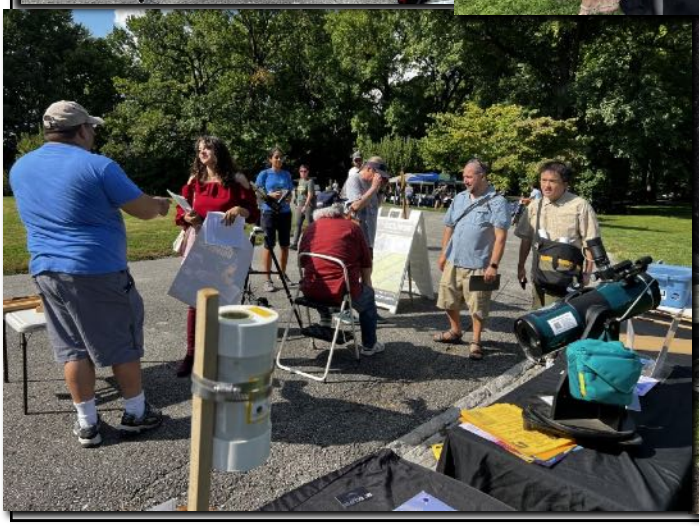
We talked to a park employee who guided us to the campsite and helped us find a suitable spot to set up. Which was not at the campsite that was completely covered by trees. The scouts arrived a little before 8PM. I had my 8" Dob and 10 pairs of binoculars, 20 printouts of the September Skymap from Skymaps.com and 5 sets of images of the relative sizes of the moons of the Solar System, and 5 sets of Skymaps that showed the month to month changes in the orientation of the constellations and the differences between the Skymaps of the Northern, Equatorial and Southern hemispheres. While we were waiting for the sky to clear and the Moon and Jupiter to come up, Bob and I spoke to the scouts about the handouts I had prepared. We had the scouts use the binoculars and the Dob to look at Saturn and any stars that were visible. Mary set up her EVScope and had it track Saturn. By that time the Moon was above the trees and everybody looked at it through the Dob and the binoculars. I had a scout try digiscoping the Moon through the Dob. Jupiter had just risen above the tree line when Mary ended the event a little before 9PM. Bob and I could not stay and observe because the gates close at 10PM and we had to pack up and leave. We got home at about 10 PM. I think it went pretty well. Having the binoculars so the scouts could explore on their own with the Skymaps kept them entertained and Bob was able to help them locate constellations and stars when they were visible between the clouds. Cloud cover was slightly more than 50%. Though it is probably a good dark sky area, unless you can stay overnight, your observing time is very limited due to the park closing at 10PM. I hope the weather cooperated elsewhere. We could see lightning in the clouds to the North.

Sincerely,
Carl

President's note: great job preparing materials for an outreach event! Maybe we can work something out with the park sometime to make it available later! jrs

Right: *Booth set up at the first Tower Grove Astronomy Festival in Tower Grove Park on Saturday September 10th.*

A gallery of photos from the Tower Grove Astronomy Festival. The evening stargazing was cancelled. Dr. Pamela Gay is in the lower right.



St. Louis Astronomical Society
Devoted to the Interest and Advancement of the Science of Astronomy
Executive Board Meeting Minutes 8/8/2022

1. Opening Activities a. Attendance: Jim Small, Larry Campbell, Randy Harrison, Brent Buch, Bill Winningham, Dennis Latinette, Will Snyder, b. Open Meeting Open at 7:30pm c. Approval of last month's meeting Larry motion second by Brent minutes approved d. Next Board meeting date: Dates for 2022: Sep 1, Oct 6, Nov 3, Dec 1 Meetings will be via Zoom until further notice:

2. Upcoming General Membership meeting topics: a. **Speaker**: b. Special Awards needed: none c. Speaker Press Release: info is Rich H d. Special Business – Upgrade to 16-inch telescope e. A101 – none planned Announcements: Star-B-Q, Dob-fest, Doors open at 6:30pm, SLAS Zoom using Planetarium computer, Mark's laptop with dongle, wireless mic for live audience, SLAS cake, plates, forks, napkins. Planetarium will provide coffee, cups, creamers. All 5 of the first images are printed and will be as backdrop. Parking will be open and free. Action: Mark to send artwork for cake to Larry Action: Mark to send panelist names to Will Snyder Action: Mark to start thread about dry run at Planetarium before the meeting

3. SLAS Financial Report (thru June 2022) a. Balance Sheet – total assets $87,489, b. Profit/Loss - report net income $3748, $2600 membership dues, homemade fest expense will be posted in July. $477 donations, MSRAL2022 profit will be posted in July. Recommend to renew some CDs now that interest rates are up. c. Annual Budget meetings – start in September d. Corporate filings: State due in August, about $10 Action: Bill W. will check into this question from Brad W - Sounds like SLAS may have some money coming from when Jerry Loethen was SLAS Treasurer, see link https://treasurer.mo.gov/UnclaimedProperty/en/Property/SearchIndex?lastName=st.%20Louis%20Astronomical%20Society&page=1&propertyId=0&searchType=Person #6758173

4. Speaker Committee a. Budget - $400, balance $400 Action: Brad to submit invoices for speakers including coffee mugs and postage. b. Upcoming speakers: Action: Brad to send mugs to previous 2021 and 2022 speakers. Letters typed and Brad will box ready to ship. Action: Jim to provide addresses for Stephen Hummel, and Scott Roberts

SLAS Monthly Meeting Presentations 2021-2022

Month	Name	Topic	Sponsor
August, 2022	JWST panel	JWST data release	SLSC
September, 2022	Laurie Sibbald	Exoplanets	RASC
October, 2022	Nathalie Nguyen-Quoc Ouellette	JWST	U-Montreal
November, 2022	Brett McGuire	TBD	MIT
December, 2022	Alan Dyer	Astrophotography	Author

d. Topics of interest Katie Bouman e. Stipends f. Travel Action: Jim Small to get contact info for Sep, Oct, Dec speakers for Press Release Action: Jim provided email addresses to Brad and Brad to contact each upcoming speaker

5. Membership Initiatives a. Budget - $500, balance $380 b. Welcome Aboard Meetings – None planned c. Raffles – none planned d. Attendance prizes this month – next planned for September Larry has ordered more lasers for Brad Action: Mark to send personal invitation new members to Aug meeting and to the observatory

6. Membership Recognition a. Total Budget $550, Balance $204 b. NSN Outreach Awards: In Jan-Feb next year c. Special Awards – Plan: send letter in October and plaques in December Action: Brad and Jim Small to distribute the certificates and pins. d. Membership Report: The July 2022 SLAS membership report showing 236 members. Membership has decreased by nine members since our peak of 245 members of May 2022. We have fewer new members than compared to this time of last year and notable increase in expired memberships. Please review the expired membership list for details.
Action: Bill to create form letter with links and text form for members to renewal. Include links to magazines and renewal. No need to create distribution lists for each month. Action: Bill to schedule Zoom to review the letter on Aug 17 or 18 e. Member anniversary Larry submitted invoice for pins, show up on Aug or September financials f. New Award program - $600 budget 1. Special Award Committee report: Chairman – Larry Campbell, Jim Small, Mark Jones, Cook Feldman, Sharon Bertram, Fred Schovanez, Bill Neubert 2. New Award Policy and nomination process 3. Submittal deadlines 4. Nomination reviews: 5. Award selection: Awardees have been selected at July 28th meeting 6. Plaques purchased: Jim to purchase plaques for to give out in December, Award letter in October 7. Awards presented: Action: Jim working perpetual plaques

7. Outreach - a. Budget - $700, balance $676 b. Member Training Program Status: on hold for the time being. c. Purchase of T-shirts for volunteers completed training d. Purchase of lawn signs: none needed e. Upcoming outreach events: Night Sky Over Babler, Dob-Fest f. Awards/recognitions g. NSN Outreach hours 399 hours YTD

8. Old Business:
Action: Bill to purchase 10,000 eclipse glasses before Oct 1st.

9. New Business: Telescope at observatory still having RA motor issues. Have done several fixes. Working ok atm. Consensus decision is if repair work is needed, to have the system upgraded to Explore Scientific's PMC-Eight system. It would be a complete replacement of the electronics and motors/encoders for the scope. – Cost about $3000, approx 3 months down time. We would drive the scope to the company. We would need board approval for the operation and member approval for the funds. To avoid unneeded down time in case it comes to that, I move that the board approve the installation of the PMCC-Eight system and that it be brought before the membership as well to be pre-approved. Both of these votes are *IN CASE* we need to do the upgrade, sort of a pre-approval in case we need to pull the trigger on the operation, we can act without the delay of notification and voting by the membership. That will create the least down time for the observatory. *Motion by Jim Small Seconded Brent Buch: The SLAS board approves the upgrade of the Meade 16" LX200 telescope for the observatory to the Explore Scientific PMC-Eight system electronics at a cost of $3000 plus transportation costs if needed. The motion will be brought before the membership for pre-approval.* Chris Hansen has a system like this. https://explorescientificusa.com/pages/pmc-eight-experiences-and-testimonials https://explorescientific.com/pages/software-and-downloads-for-pmc-eight-system https://explorescientificusa.com/pages/pmc-eight

10. Other Committee Reports: If needed MSRAL 2022: Conclusion of business. Bill W confirmed that $2000 seed money and profit ($1749.46) is in SLAS accounts. Action: Jim and Mark to add new Board agenda item for MSRAL Busines

A. SLSC Business: a. First Friday actions b. Other immediate business Action: Invite Will Snyder to monthly SLAS Board Meeting

B. SLCL Business a. Annual contract – b. Upcoming events -

C. Jefferson College Business: a. Committee Meeting report: b. Upcoming Outreach Event:

D. Library Telescope Committee a. Budget – $300, balance $300 b. Upcoming builds or maintenance events c. Maintenance budget - $100d. Mileage re-imbursement – see abovee. Promotional materials - $200

E. SLAS Social Events a. Budget - $300, balance $220 b. Homemade Fest - $100 budget c. Star-B-Q - $200 budget d. Promoting Dobson-Fest event on Sep 17th
Other

F. SLAS Brochures a. Budget $200, balance $144 b. Quarter cards - New quarter cards with Arch events distributed

G. Loaner scope Program a. Budget - $100, balance $100 b. New donations multiple telescope sales ($500 Meyer, $250 Shovanez, $900 Schovanez) c. Replacement Parts for the LPTs d. Items for sale **several:** Action: Bill to check for $900 & $300 from PayPal for telescopes sold Action: Jim put remaining telescope items for sale in Aug newsletter. Items for sale: 8" Dob and Meade ETX-90 Action: New donations - Current SLAS member has donated the following equipment: Sky-Watcher Starlux MN190 f/5.3 Maksutov-Newtonian; iOptron CEM-60 w/ case; iOptron Tri-Pier w/rolling case; Primaluce Labs Eagle 3 control unit; QHY 163, QHY 183 cooled cameras + finder scope cameras; 2" and 1 1/4" eyepieces (Williams Optics, Explore Scientific, Celestron Luminos); MicroZap heated dew shield, focuser, laser collimator, finder scopes, connection cables, spacers, etc.

H. SLAS Library a. Budget - $500, balance $435 b. Other –

I. Merchandise New coffee mug design (JCO logo, SLAS Logo) - www.startorialist.com We used Discountmugs.com in 2018 Action: Anyone can go take Astro-photo of the JCO for the coffee mug and submit before September Board meeting

J. Telescope Making K. Newsletter a. Budget $600, balance $338

L. Website - a. Budget $750, Balance $535 **M. Social Networking N. Night Sky Network O. SLASdialogs P. Dark Site Q. Observing Programs R. Star Parties Donation:** $300 donation from City Museum **11. Closing Activities** Motion to adjourn the meeting by Brent, second by Larry, meeting adjourned at 10:40pm.

St. Louis Astronomical Society
Profit & Loss Budget vs. Actual
January through August 2022

	Jan - Aug 22	Budget	$ Over Bud...
Ordinary Income/Expense			
Income			
Events Income	1,970.00		1,970.00
Magazine Subscription	2,019.70	2,559.55	(539.85)
Membership Dues	3,150.00	3,425.00	(275.00)
Merchandise Sales			
General Merchandise		520.00	(520.00)
Total Merchandise Sales		520.00	(520.00)
Total Income	7,139.70	6,504.55	635.15
Cost of Goods Sold			
Magazine Subscriptions	1,994.70	2,559.55	(564.85)
Total COGS	1,994.70	2,559.55	(564.85)
Gross Profit	5,145.00	3,945.00	1,200.00
Expense			
1-Programs & Events	1,578.83	2,060.00	(481.17)
2-Newsletter	333.93	350.00	(16.07)
3-Library expense	65.00	375.00	(310.00)
4-Astronomical League D...	1,105.00	945.00	160.00
6-Brochures	56.35	400.00	(343.65)
7-Insurance	1,049.50	1,050.00	(0.50)
8-Website	275.27	640.00	(364.73)
9-Administrative Expenses	432.29	2,557.20	(2,124.91)
Total Expense	4,896.17	8,377.20	(3,481.03)
Net Ordinary Income	248.83	(4,432.20)	4,681.03
Other Income/Expense			
Other Income			
Donations	852.45		852.45
Interest Income	17.83	32.00	(14.17)
LTP Receipts	1,691.12		1,691.12
Non-Operating Income	1,749.46		
Proceeds from Lens Sales	2,151.96		
Total Other Income	6,462.82	32.00	6,430.82
Net Other Income	6,462.82	32.00	6,430.82
Net Income	**6,711.65**	**(4,400.20)**	**11,111.85**

St. Louis Astronomical Society
Balance Sheet
As of August 31, 2022

	Dec 31, 21	Aug 31, 22
ASSETS		
Current Assets		
Checking/Savings		
Checking - First Bank	7,447.09	14,406.34
Deposit, Certificate of	15,952.97	15,968.44
Library Telescope Escrow	797.00	2,372.00
PayPal	705.80	372.27
Savings - First Bank	41,149.86	41,152.22
Total Checking/Savings	66,052.72	74,271.27
Other Current Assets		
Inventory Asset	675.61	675.61
Investment in Mid-States 2...	2,000.00	0.00
Total Other Current Assets	2,675.61	675.61
Total Current Assets	68,728.33	74,946.88
Fixed Assets		
Accum Depr - Office Equp	(216.65)	(216.65)
JC Scope and Observatory	15,783.04	15,506.14
Office Equipment	216.65	216.65
Total Fixed Assets	15,783.04	15,506.14
TOTAL ASSETS	**84,511.37**	**90,453.02**
LIABILITIES & EQUITY		
Liabilities		
Current Liabilities		
Accounts Payable		
Accounts Payable	770.00	0.00
Total Accounts Payable	770.00	0.00
Total Current Liabilities	770.00	0.00
Total Liabilities	770.00	0.00
Equity		
Opening Bal Equity	8,497.66	8,497.66
Retained Earnings	74,279.95	75,243.71
Net Income	963.76	6,711.65
Total Equity	83,741.37	90,453.02
TOTAL LIABILITIES & EQUITY	**84,511.37**	**90,453.02**

We could use articles for the newsletter. The following topics are fine for submission.

1. Star party reports. Let us know how a star party you attended went! Photos would be most welcome in addition to the article.

2. Observing reports. Actually made it out observing? Let us know how it went. Taken some astrophotos? Please submit!

3. Bought something or built something? How about a review or an article!

Send to newsletter@slasonline.org

Upcoming Star Parties and Other Events

For details on these and other upcoming events, check out the Night Sky Network Calendar linked on the Home Page for SLAS at http://www.slasonline.org

SLAS Executive Board Meetings All meetings are on First Thursdays unless noted. ***Note: Board meetings will be via Zoom until further notice.*** Dates for 2022: Oct 6, Nov 3, Dec 1

SLAS Dark Sky Observing Dates Sept 24, Oct 22, Nov 26, Dec 17

Francis Park Events: These events are on Wednesdays of the week nearest the first quarter Moon
Sept 28, Oct 5,

Aim for the Stars Public events held on 1st Sundays at the Jefferson College Observatory and Patio.
Oct 2, Nov 6, Dec 4

Stargazing at the Arch Events for the public held at the Gateway Arch
Oct 8

Sky Orienteering Events For members who want to gather and do some relaxed observing at Babler State Park (BSP) or at the Jefferson College Observatory (JCO) Please RSVP if you plan to come!
Nov 6 (JC)),

SLSC Public Telescope Viewing Events: These events are held the first Friday of the month Planetarium shows start at 7pm
On hold until further notice due to Covid 19

Pattonville Observatory Public Viewing Dates 2022-2023: 9/30, 10/7, 10/14, 11/4, 11/11, 12/2, 12/9, 1/6, 1/27, 2/10, 2/24, 3/10, 3/31, 4/14, 4/28, 5/5, 5/12

Broemmelsiek Astronomy Park Public Viewing
Every Friday

UMSL Observatory
For directions and map
http://www.umsl.edu/~physics/About%20the%20Department/astro.html All sessions include viewing of 1st quarter Moon with additional objects
Skywatch Hotline: 314-516-5706
Saturdays:

LET US KNOW YOU ARE COMING!

To RSVP for any of these events log in to the Night Sky Network and submit your RSVP. If the event is canceled, you will be notified immediately according to the preferences you have selected.

SLAS Events

September

16 Fri	SLAS Regular Meeting
17 Sat	First Annual Dobson-Fest
20 Tues	Missouri Master Naturalists
23 Fri	JCO Auction Winner
24 Sat	Scouts at Babler
28 Wed	Francis Park
28 Wed	Cedar Hill Homeschoolers

October

1 Sat	Girl Scout Round Up Camp Cedarledge
1 Sat	International Observe the Moon Night
1 Sat	Camp Vandeventer - Boy Scouts
2 Sun	Aim for the Stars JCO
3 Mon	Cub Scout Pack 778 Meeting
4 Tue	Manchester Parks - Fussner Field
5 Wed	Mascoutah Public Library
5 Wed	Francis Park Stargazing
6 Thur	SLAS Board Meeting
6 Thur	Belleville Public Library
8 Sat	Stargazing at the Arch
14 Fri	Riverside Stargazing
17 Mon	Jamestown Bluffs
19 Wed	Oak Bend Library
20 Thur	JCO Auction Winner (Priv)
21 Fri	SLAS Regular Meeting
27 Thur	Jefferson County Library
29 Sat	Girl Scouts

November

1 Tue	Lewis and Clark Library
2 Wed	Richmond Heights Library
3 Thur	SLAS Board Meeting
3 Thur	Scott AFB Star Party

For other events, watch the calendar on the website. Virtual stargazing events and other online activities will be registered there. We hope you can join us for some of these activities!

SLAS Merchandise Available

SLAS merchandise is now set up for embroidery at **Headz n Threadz at www.headznthreadz.com**

There is now only one location:
1065 Regency Parkway, St. Charles MO 63303
Telephone: 314.528-8100
sales@headznthreadz.com
Simply take the garment, hat, etc you wish to have embroidered and they will take care of it. They have the SLAS logo on file. You may make modifications to the colors if you wish.

SLAS Logo is also available at www.Infini-tees.com

SLAS MEMBERSHIP APPLICATION

Name: Last _____

First, Middle Initial _____

Address _____

City, State, Zip Code _____

email address _____

Please send completed form with check (no cash please) made payable to

St Louis Astronomical Society

Don Ficken, Membership
13024 Barrett Crossing CT
St. Louis, MO 63122

Youth @ $10.00 / 1 year (18 yrs or younger) $_____

Individual @ $25.00 / 1 year $_____

Family @ $40.00/1 year $_____

Publications with discount available with your SLAS membership:

Sky and Telescope @ $43.95 / 1 year $_____

(S&T may also be renewed at their website: http://www.skyandtelescope.com)

Astronomy @ $34.00 / 1 year $_____

TOTAL ENCLOSED **$**_____

Check all that apply:
___ Renewal
___ Address Change Only
___ Please send my newsletter by regular mail
___ ***New Member!***

SLAS OFFICERS

President ***Jim Small*** 314-307-0692
president at slasonline.org

Vice President ***Bradley R Waller*** 314-481-7250
vicepresident at slasonline.org

Secretary ***Mark Jones*** 636-394-2342
secretary at slasonline.org

Treasurer ***Bill Winningham, (Don Ficken - membership)***
treasurer at slasonline.org 636-357-2763

Hospitality ***Larry Campbell*** 636-244-2867
hospitality at slasonline.org

Board Members at Large:

Tom Nickelson 314-346-9565
board23 at slasonline.org

Brent Buch 314-239-0329
board24 at slasonline.org

Randy Harrison 618-267-1659
board25 at slasonline.org

ALCOR ***Bill Winningham*** 636-357-2763
(Astronomical League Correspondent)
treasurer at slasonline.org

MSRAL Rep. ***Peggy Walker*** 918-640-0832
msral_rep at astroleague.org

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Social Media *Vacant*

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dialogsmoderator at yahoo.com

Star Party Coordinator ***Bill Breeden*** 314-276-3613
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Telescope Making ***Bill Davis, Jim Melka*** 314-469-3061
telescope at slasonline.org

Webmaster ***Jim Small*** 314-909-7211
webmaster at slasonline.org

Devoted to the Interest and Advancement of the Science of Astronomy

ST. LOUIS ASTRONOMICAL SOCIETY

We're on the Web!
http://www.slasonline.org

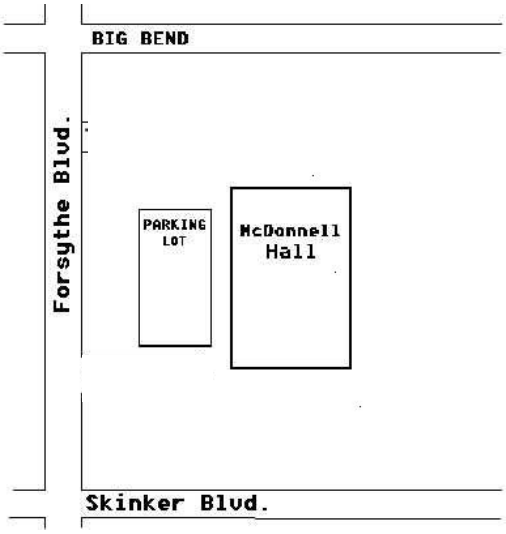
Follow us on
Twitter: @stlastro
Facebook: @stlastro

Who We Are and What We Do

St. Louis Astronomical Society is a not-for-profit organization established in 1936. SLAS is devoted to the interest and advancement of the science of astronomy. Our mission is to promote an understanding of the science of astronomy to our members and to the public. Membership is open to anyone with an interest in astronomy.

For more information contact any SLAS officer or visit our website listed above. SLAS is affiliated with the Astronomical League, Night Sky Network and the Mid-States Region of the Astronomical League.

Meetings are held the 3rd Friday of each month at McDonnell Hall at Washington University. See the map to the right for directions.



St. Louis Astronomical Society

Jim Small
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St. Louis, MO 63122