

THE EVENT HORIZON



ST. LOUIS ASTRONOMICAL SOCIETY

*Devoted to the Interest and Advancement
of the Science of Astronomy*

VOLUME 25, Issue 10
October, 2015

Exploring the Pluto System – and Beyond

Dr. Kari Wojtkowski will be featured at the October meeting of the St. Louis Astronomical Society. The meeting will begin at 7:30 PM Friday, October 16, in McDonnell Hall, Room 162, on the Washington University campus.

When NASA's New Horizons spacecraft flew by Pluto and its five moons on July 14, it provided the first detailed views of these ice worlds over four billion miles away. Dr. Wojtkowski will show some of the spectacular and mystifying images sent back by the robotic spacecraft, and she will describe the puzzling geology being revealed. Pluto is one of the largest

of the thousands of ice worlds detected so far in the Kuiper Belt, a region far beyond the orbit of Neptune. New Horizons is now traveling an additional one billion miles on its way to a much smaller Kuiper Belt object.

Dr. Kari Wojtkowski is a graduate of the Department of Physics and Astronomy at the University of Missouri, St. Louis. Her research there centered on the early stages of star formation. In particular, she studied the chemical composition of the clouds of gas, dust, and ices that condense to form new stars. Dr. Wojtkowski currently teaches courses in physics, earth sciences, and astronomy for Lindenwood University—Belleville and Southwestern Illinois College.

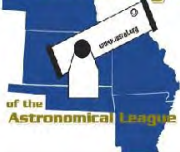
Election to be Held at October Meeting

The Board Member at Large position through 2018 is currently vacant. Nominations were held at the last meeting and Brent Buch was the sole nominee. Nominations will remain open at the meeting for October, then the election will take place.

In addition to the Board position, there are two more positions that need to be filled for SLAS volunteers.

- Star Party Coordinator - this position handles communications with people who request star parties and helps them set dates and outline requirements. Good communication skills and ready access to both phone and email communication vital. See a board member if interested.
- Merchandise Chair - this position handles ordering, selling and setting up opportunities for members to purchase custom SLAS merchandise. Creativity a must!

Mid States Region



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New Members Meeting 6:30 p.m. Friday, October 16

McDonnell Hall, Room 162

There will be a meeting for new members prior to the regular meeting beginning at 6:30 pm. The purpose is to help new members get started using SLAS resources and getting to know each other and SLAS members. The meeting is open to anyone wanting to attend. A welcome packet will be passed out during the meeting and instruction for using Night Sky Network will be presented. People are urged to ask questions. We look forward to meeting you at the meeting! Contact Brad Waller to RSVP at 314-481-7250.

President's Corner by Jim Small

At the meeting last month, we took nominations for the vacant Board Member at Large (2018) position and Brent Buch was nominated. Thanks for accepting the nomination Brent! For personal reasons, Brian Mills had to resign the position. Thank you to Brian for his service! May you recover fully and swiftly. Perhaps we'll see you on the board in the near future again.

We have two other vacant positions: Mike Malolepszy resigned as star party coordinator and merchandise is still vacant. Please volunteer if you are interested!

October has been a terrific month for SLAS!

On October 9, SLAS helped host an eclipse workshop at the St Louis Science Center aimed at city and parks administrators and other such personnel. We had a terrific conference, with over 65 people attending the workshop. It was designed to prepare communities for the onslaught of people that will descend on our area on August 21, 2017 for the Total Solar Eclipse. Presenters included Christian Greer, Anna Green, Michael Bakich, Angela Speck, Cinnamon

Wheeler-Smith, Steve Poaric and a panel moderated by Matt Chambers. The speakers were all dynamic and the workshop enabled a lot of networking among the myriad of city and park personnel that attended. It was very well received and is only the first of several workshops that will be presented before 2017. There will be a more extensive article in the next newsletter.

Cook Feldman and I attended a meeting with Science Center personnel to discuss the volunteer relationship between our groups. It was quickly established that SLAS volunteers were part of a partner group, not actual SLSC volunteers. As a result, we will not be required to have background checks or drug testing etc. as previously thought. After this meeting, I have never felt better about the relationship between the two groups and I am proud to associate with the SLSC in an official partnership.

We got shut out of the Lunar Eclipse, but many folks still showed up at the SLSC, but not nearly the numbers that Bob Baer drew to SIU-Carbondale! They had clear skies for the most part and Bob estimated between 2 and 5 thousand over the course of the evening! What a turnout!

Keep a good eye on the upcoming star parties, there are some evenings when we have as many as three events scheduled. Be sure to RSVP on NSN!

A Challenge for New Amateur Astronomers

by

Bill Neubert

September 29, 2015

Recently, Sky & Telescope Magazine posted an article about exploring the Andromeda Galaxy. The article reminded me of two of the best experiences in amateur astronomy, both of which are often overlooked: binocular observing and sketching. Even today, with large affordable telescopes and the proliferation of electronic imaging, the best views of the night sky are often by making sketches of what you see in binoculars.

Whenever someone asks me "what's the best beginner's telescope?", I answer "binoculars." They are easily found in every home, or easy to borrow from a friend. They are inexpensive if you choose to buy your own. They are portable, light weight and easy to operate. Most importantly, they offer wide fields of view which is so important when first learning the night sky. And, for some large objects, they offer a better view than can be found in large telescopes. Even seasoned observers, with large collections of telescopes, fall back on their binoculars periodically. The Andromeda Galaxy is certainly one of those targets best viewed with binoculars, if you are under a dark sky.

And, the Andromeda Galaxy is a great object to sketch. Sketching forces the observer to really explore an object: its shape, orientation, sharp versus soft edges, neighboring objects, nearby bright stars and other features. Like binoculars, sketching is very inexpensive and the only way to record what an object really looks like to the human eye. I am described as "disastrous" when trying to draw a daytime scene, but even I can make some nice sketches of what I see in the night sky with binoculars. Last spring, I was reviewing my observing notes from 34 years ago. In many of them, I made quick sketches of what I saw. It is fun, now, to compare those drawings to images I see online. In my binocular sketch of comet Hale-Bopp, from 1996, I am able to clearly see the stars of Ursa Minor and, so, am now able to estimate the length of the comet's tail.

I challenge all of us, and especially those new to amateur astronomy, to grab your binoculars and find the Andromeda Galaxy sometime in the next month. Then, sketch it. Scan your sketch, or photograph the sketch with your phone, then post a link in our forum. Or, email the sketch to me and I'll post it. Share it with your friends; they will be impressed. I'm anxious to see the variety of results we find!

The Sky & Telescope article is posted here:

<http://www.skyandtelescope.com/observing/watch-andromeda-blossom-in-binoculars091620151609/>

Bill Neubert

SLAS Volunteer Hours January-September

To the right is a current listing for SLAS member volunteer hours from January 1, 2015 - September 30, 2015. These are the values we will use for qualification for the annual Night Sky Network outreach award. To qualify for the award, you must volunteer for at least 5 events during the calendar year.

St. Louis Science Center - SLAS Volunteer Agreement Clarified

Last month, we had an article regarding volunteering for the Science Center for First Friday events. In that article, we were asked to fill out the volunteer application for the Science Center in order to be eligible for the benefits regular volunteers gain, namely a free Science Center membership and attendance at the volunteer appreciation dinner.

Those requirements no longer apply. In a very good meeting with staff at the Science Center, we clarified the relationship between the two organizations. Rather than being direct Science Center Volunteers, SLAS is officially recognized as a partner organization for the First Friday and other events. Once this long standing relationship was clarified it released SLAS members from filling out the applications and will not be subjected to any of the requirements for regular volunteers, such as background checks and random drug testing.

In order to qualify for the membership benefit and the dinner, SLAS members must volunteer for at least five SLSC events. First Friday duration events will count as one, while longer events such as Astronomy Day will count as two events.. The year for consideration runs from July 1 through June 30. It is not a calendar year.

We look forward to a strong and cooperative relationship with the St. Louis Science Center in the future! Be sure and thank them for this valuable benefit for volunteering for these events!

MSRAL Convention Date and Location Set for June 3-5, 2016 in Columbia, MO

The Mid-States Region of the Astronomical League will have their convention in Columbia, MO, hosted by the University of Missouri - Columbia Physics Department. Dr Angela Speck will serve as the host for the facilities. The convention is co-hosted by the St. Louis Astronomical Society and the Astronomical Society of Kansas City. Jim Small and Carrol Iorg are serving as co-chairs and Cook Feldman will be handling the books. There will be an Eclipse 2017 theme to the convention although it will not be limited to that topic.

We are waiting on ASKC to approve the financial arrangements approved by the membership at last months meeting. They will likely vote on the issue at their October 20 board meeting.

Member Name	Total Hours	Total Events
Donald Ficken	118.5	47
Cook Feldman	111.4	35
John Beaury	104	32
Mark Jones	74	24
Frank Mack	52	22
Larry Campbell	51.5	23
Rick Menendez	48	19
Rich Heuermann	41.8	16
James Small	41.5	13
Jim Trull	38.5	16
Bill Breeden	29	8
Richard Jennings	26	8
Ann Trull	25	10
Richard Fefferman	23.5	11
Sharon Bertram	22	9
Benjamin Winningham	19	7
William Winningham	19	7
Brian Mills	18.5	7
Colleen O'Toole	17	5
Randy Gettman	17	9
Eddie Agha	15	3
Rita Breeden	14.5	4
William Neubert	14.5	5
Steve Sands	14	3
Eric Kovach	13	4
Bill Biermann	12.5	7
Lee Halbeck	12.5	5
Gregory Rigelman	11	3
Dale Engelbrecht	10	4
David Ebers	10	2
Daniel Corso	9.5	4
Renee Mettle	9	2
Edward Frey	8.5	2
Bradley Waller	8	3
Mark Fedde	8	2
Gaylene Engelbrecht	7.5	3
Jerry Loethen	7.5	3
Lynn Fee	7.5	2
Tom Keutzer	7.5	3
Brent Buch	6	1
Roy Lieberman	6	2
Wayne Clark	6	1
Kelly Robinson	5	1
Marcos Do Olival	4.5	2
Chris Nobbe	4	2
Doug Blum	4	2
Jeremy Gibson	4	2
John Boncek	4	2
James Twellman	3.5	1
Dan Duffy	3	1
Gary Holt	3	1
Gregory Gaines	3	1
Joe McHugh	3	1
Mike Saville	3	1
Angie Johnson	2	1
Evan Schmitz	2	1
Michael Callaghan	2	1
Nicholas Kirschman	2	1
Robert Fischer	2	1
James Griffith	1.5	1

Heart of America Star Party

Bill Biermann and Bill Neubert
September 2015



We attended the Heart of America Star Party near Butler Missouri, from September 11 – 14. This annual event is hosted by the Astronomical League of Kansas City at the enviable dark sky site. The event included talks by comet hunter David Levy, Ph.D., Professor Philip Baringer and amateur astrophotographer David Lane.

We arrived Friday night and set up in their large camping field. The field is on a slight hill with good horizons in all directions and, other than near the norther horizon, has exceptional darkness. Unfortunately, it also had exceptional humidity on Friday and Saturday night. Still, we had good observing. Bill B. showed me excellent views of the Veil Nebula with his 18 inch Dobsonian, in between working on his edge-on galaxy list. I concentrated on imaging the Veil Nebula.



There were an estimated 150 attendees. The facility is fantastic, and includes a large shelter with a cooking area, coffee and tea, tables and restrooms all illuminated in red lighting. It was the perfect place to warm up at night and socialize during the day.

Bill N. left Saturday afternoon to chase clearer skies at Danville, while Bill B. continued to represent SLAS through Sunday.

Bill B roughed out the Saturday night skies, which were disappointing to all who attended. Still, this is a resilient group, and they have a camaraderie that is quite obvious. Almost everyone stayed up until midnight, and quite a few stayed up till 3am, despite the fact that there were no stars visible. Bill B stayed an extra night, and was well rewarded. Sunday night/Monday morning by witnessing unbelievably dry skies, and by 3am, no noticeable dew existed. About 30 members



(Continued on page 5)

stayed around for viewing that night. I would say transparency was close to a 10, however seeing was a bit rough, I'd estimate a 7 or so. I decided to give up on the "edge on" galaxy program, as my eyes were having trouble estimating the position angle of a 3 minute by ½ minute edge on, and many galaxies were that size. Instead, I went after "the road less traveled", and viewed many of the secondary objects in the sky. My view of M33 was the best I have ever seen, the Windmill shape was quite evident. I also was able to see the Helix nebula without any filter, but an O3 definitely made it pop out.

If you never have been to a star party, I would highly recommend it. I spend the last 1.5 hours walking around, looking thru other scopes and just socializing. I revisited Carroll Iorg, past president of AL, and Scott Kranz also showed me a Quasar that was 8 Billion years old. Think about that.....Amateurs are able to go back 8 billion years in time!!

Dark sites do have significant challenges, namely security, grass cutting, upkeep etc. However, they also have the advantage of drawing members closer together. This is quite obvious when you hang around, and there is definitely an Astronomy "family". Also, the outreach efforts of a club are not necessarily limited to beginners. Intermediate and serious observers also have a chance to do some serious science and Astronomical league programs when a club has a dark site. The Astronomical Society of KC is a great example of a club. Missouri is really fortunate to have SLAS and ASKC!



Lois Fitter Telescope Sees New Life

by
Grant Martin

A while back, SLAS member Lois Fitter gave the club some of her astronomy related materials. Lois is a long time member of SLAS (and past president). For years she was deeply involved in outreach efforts. Whenever I saw her at star parties, she was using a nifty little 6" f8 Dobsonian telescope that she built. That telescope was up for auction at the August general meeting. The bidding started low and I was in it. At about \$30, it was me and a non-SLAS member left bidding on it. There was just no way I was gonna let that out of the club. Besides, I had plans for that thing. I won the scope.

Over the last several weeks, I added a few features to it and have tested it at a couple of impromptu star parties. My plans were (and are) to allow the public to use it AT star parties and outreach events so they can have some fun and learn how to use scopes of this type. Additionally, it's perfectly proportioned for folks that are wheelchair bound.

The first modification allows the tube to be easily rotated within the saddle. This modification allows folks in a fixed position to rotate the tube to bring the eyepiece to them instead of stretching or bending to the eyepiece.

The second modification benefits everyone INCLUDING the fat old fart that now owns it. That modification is the addition of a laser finder. Laser finders are terrific. They allow you to comfortably & quickly point a low riding scope like this without contorting your body all over the place just to get down low enough to look up through a small optical finder. And it's required if you are observing from a wheelchair.

The best test so far came the night of the lunar eclipse last month. The photo shows the scope in use during the visible part of the eclipse AND we had a wheelchair bound guest show up. I didn't get his name but he was thoroughly enthusiastic as he said he has been looking at scope designs compatible with his situation. I answered all his questions and gave him some guidance. Look for him - he might show up at some meetings in the future.

Everyone that wanted to, were able to push this scope around that night and ALL had a great time doing it.

Thanks Lois! This is a great little scope and people will continue to get enjoyment from it. G.



FOR SALE:

8" Hardin Optical Deep Space Hunter, plus extras

\$400 OBO for Everything!
(selling as entire package only)

TELESCOPE:

Hardin Optical Deep Space Hunter 8-inch Dobsonian
Manuals/documentation included
Purchased new in 2003 – One Owner

Eyepieces (all 1.25-inch, but telescope can also accept 2-inch)

Astrola Plossl 9mm and 25mm (came with telescope)
Scopetronix Plossl 15mm
Celestron 2x Barlow

Filters

Scopetronix Basic Color Filter Set – Yellow/Green/Blue/Red
Lunar Filter

ViewFinders

Rigel QuikFinder (includes extra mount and tape w/ instructions)
8x50 Finder Scope

Collimators Tectron Sight Tube AND Tectron Cheshire Eyepiece. Includes detailed collimation instructions printed from web

Extras!

Additional 9mm Plossl (has minor flaw – replaced by company with eyepiece noted above)
Eyepiece cases (plastic foam-ended cases)
Rigel Infralite LED w/ lanyard
Aluminum Case w/ foam inserts

Additional Information

SORRY, I WILL NOT SHIP! Will travel within St. Louis/St. Charles/Jeffco/Metro-East area to transfer to purchaser. Transaction will occur in a mutually agreed upon public location (for example, police department parking lot). Cash or money order accepted. No personal checks.

Email queries to Ted at gk4239@hotmail.com, with "Deep Space Hunter" in the subject line. I hope this scope finds a new owner that has more time to use it than I have. I had fun with it when I had the time, and I'm sure you will too!

Three Plossl eyepieces (9mm, 15mm, 25mm seen top left);
Barlow 2x eyepiece (middle);
extra 9mm (above Barlow);
Tectron collimation set (top right);
Lunar filter (below collimation tools);
4 color filter set;
Rigel Infralite (in bag, lower center)



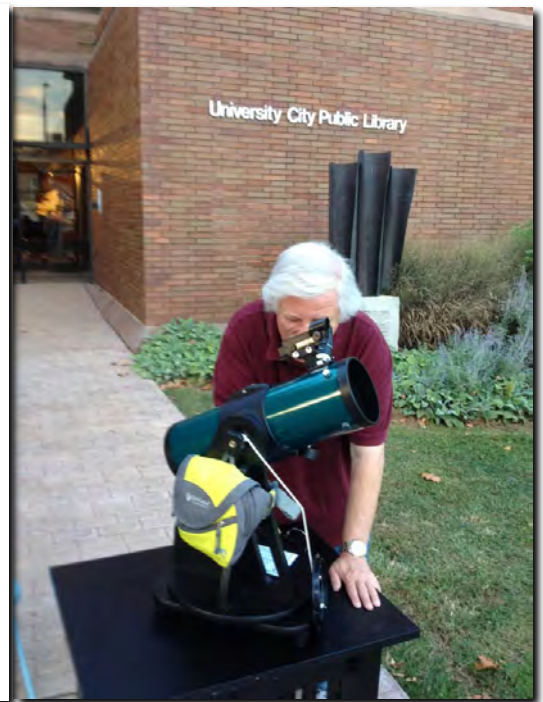
Part of the huge crowd (estimated between 2,000 and 5,000 over the course of the evening) that enjoyed the Total Lunar Eclipse last month at the stadium at Southern Illinois University - Carbondale. Follow [this link](#) for many more photos posted on their Facebook site.





Left: Part of the crowd at a new venue for SLAS, the underground celebration at the St. Louis Art Museum. It was a good crowd of mostly adults for this event. Rich Heuermann allows folks to glance through his 8" Dobsonian.

Right: Cook Feldman setting up a Library Telescope for an event at the University City Public Library, one of the many star parties held at libraries



Left: Chap and Mary Percival selling books and tee-shirts after the September meeting.

Right: The live feed view of the eclipse at the SLSC. The area was clouded out for many disappointed viewers.



Below: From Jim Timper: Ok i managed to get lucky. The first half of the eclipse was clouded out. I observed from Freeburg, Illinois. About 15 minutes before the total phase ended it cleared up. I fought fog, haze, clouds, and dew but managed to get lucky. Something is better than nothing. I almost did not get to see anything at all. I kept getting kicked from online streams, probably due to the high demand. It would play for two minutes then lock up... I got tired of that as well. Photos are of the blood moon full eclipse and some of it moving back out. Aside from clouds....it was nice to get to see at least some of it. Photos were taken with a C8 using an f5 rich field adapter and a Canon 10d



SLAS Board Meeting Minutes - September 10, 2015

1. Opening Activities: Meeting to order 7:00pm Attendees: Jim Small, Larry Campbell, Brad Waller, Paul Baldwin, Mark Jones Brad motioned to approve the July meeting minutes. Minutes were approved. Brad motioned to approve the August meeting minutes. Minutes were approved

2. External Business SLSC: Lunar Eclipse event, Sunday, September 27, event runs from 7-11:30pm, please RSVP HR policy for SLSC – Cook will write article for newsletter.

Next board meeting: Dates for 2015: Oct 8, Nov 12, Dec 10.

Dates for 2016: Jan 7, Feb 11, Mar 10, Apr 7, May 12, June 9, July 7, Aug 10 (Wed), Sep 8, Oct 6, Nov. 10, Dec 7. Jim Small will send dates to Don Ficken and ask they reserve the meeting room at the YMCA.

3. Director Reports:

President: Jim Small

MSRAL 2016 planning: Meeting with Dr. Angela Speck, Carol Iorg, Jim Small and Cook Feldman. Date now set for Jun 3-4, 2016 at MIZZOU. Meeting will be jointly run by SLAS and ASKC. **Jim will not be at Sep meeting, Paul Baldwin will run meeting**

Goals for 2015 and beyond. Continued discussion of a strategic plan

1. Attract new members – We need to plans to increase our base membership significantly during the course of the year. Number? 50? 100?

2. Retain members – We need plans to retain members that join beyond one year. The retention rate for 2013 was only 20%

3. Get members involved – We need significant plans to involve our members in both programs and as volunteers.

Vice President –Paul Baldwin: September - Chap Percival. We are giving Chap \$100 honorarium. Paul will get check from Bill Treasurer. October – Kari Wojtkowski, Lindenwood University Belleville, Will speak about Pluto Nov- Member Telescopes on Display

Astro 101: Sep – Disabled Scope - Tom Nickelson Oct – Space Aps for your iwatch or iphone-Jim Small

Secretary – Mark Jones StarBQ planned for Saturday 12th at Babler Park starts at 2pm.

Treasurer/ALCor – Bill Winningham Monthly reports sent out before meeting. Set up budget, preliminary beginning meetings should start later this month. Meeting Speakers fees budget balance \$215.51

Hospitality – Larry Campbell Larry could use another volunteer for set up for Hospitality at the September meeting.

Board member at large reports

Bradley R. Waller: (2016) Brad has draft for plaques for the naming of Library Telescope. First New Members Meeting went well at August meeting Brad wants to send out the survey Need Pres. or VP to show up 5 minutes before end of new member meeting. Brad has article for newsletter about Mike Clements Brad wants to build up a supply of Mike Brown books for attendance prizes etc. This would come out of Brad's membership initiatives budget. Brad is ready to start an attendance prize contest as a membership initiative. Brad will write article for newsletter-Brad bought two music CDs from Chris Hatfield, Canadian Astronaut, for attendance prizes Planetary Society membership – No club membership yet but SLAS President could join for \$37.00 individual membership National Space Society – membership still

in investigation

Tom Nickelson: (2017) Not in attendance

Brian Mills (2018) Not in attendance

4. Committee Reports: If needed

Library Telescope Program: Next build planned in Edwardsville on Sep 19th.

Membership –See report up to 162 members. Still need to focus on retention of members

Recognition – Larry Campbell Larry looked into the pins available from PinMart. Possible idea of having custom SLAS pins made. See this link: [Custom Pins http://www.pinmart.com/custom-lapel-pins/custom-soft-enamel-lapel-pins.aspx](http://www.pinmart.com/custom-lapel-pins/custom-soft-enamel-lapel-pins.aspx) Larry has not had opportunity to discuss ideas with any of the committee members yet. Also, Grant Martin gave Larry a bag of generic "STAR Performer" pins. [10 pins]

Merchandise – No report

Telescope Making – No report

Librarian - No report

Newsletter – We need articles about stuff that SLAS is involved with. Cutoff date is Sep 13th

Website – www.slasonline.org/joomla

Night Sky Network – No report

SLASdialogs – No report

Dark Site – Next event on Sept 12.

Loaner Telescopes – August auction took in \$231.

Publicity – release sent

Observing Programs – Jerry Loethen is the new coordinator – AL has added 4 new observing programs

Star Parties: Check calendar for upcoming star parties. 2 new venues on September 25th. St Louis Art Museum (SLAM) and coffeehouse in Francis Park.

5. Old Business

Motion by Mark Jones: "Proceeds from the auction, not to exceed \$250, to be used to purchase camcorder for recording meetings" Motion seconded by Larry Campbell. Motion passed and will be presented to membership for approval.

6. New Business

Motion by Jim Small: "SLAS will provide \$1000 seed money for the 2016 MSRAL Convention to be held in Columbia, MO June 3-5, 2016. ASKC will also provide \$1000. Any profits from the convention will be distributed as follows: 50% to the region, 25% to ASKC, 25% to SLAS. The MSRAL account will be opened at Commerce Bank to enable easy coordination with ASKC. Cook Feldman will be treasurer for the account." Motion seconded by Brad Waller. Motion passed by Board to presented to membership for approval.

Motion by Brad Waller: SLAS Library Telescope Loaner Program (LTLP). There are four telescopes currently in this program. Current loaner deposit is \$75 same as the normal SLAS Loaner telescope Program. I propose eliminating this deposit to encourage members to borrow these telescopes. The LTLP manager (Brad Waller) will continue to collect copy of driver's license, signed copy of loaner agreement form and personal information needed to contact the individual borrowing the telescope. Seconded by Paul Baldwin. Board approves motion. This is a policy change and does not require membership approval. Policy change can be implemented immediately.

7. Closing Activities Meeting adjourned at 9:22pm

**St. Louis Astronomical Society
Balance Sheet
As of September 30, 2015**

	<u>Dec 31, 14</u>	<u>Sep 30, 15</u>
ASSETS		
Current Assets		
Checking/Savings		
Astronomy Magazine Award**	0.00	743.53
Checking - First Bank	5,161.12	4,084.26
Deposit, Certificate of	20,068.06	20,098.09
Library Telescope Escrow*	1,660.10	2,324.15
Merchandise Change Fund	20.00	20.00
PayPal	82.81	0.00
Savings - First Bank	3,359.27	5,361.22
SLAS Eclipse Conference Escrow***	0.00	2,741.24
YMCA Trout Lodge Escrow	542.87	542.87
Total Checking/Savings	30,894.23	35,915.36
Other Current Assets		
Inventory Asset	1,614.22	1,410.53
Undeposited Funds	261.95	0.00
Total Other Current Assets	1,876.17	1,410.53
Total Current Assets	32,770.40	37,325.89
Total Fixed Assets	0.00	0.00
TOTAL ASSETS	32,770.40	37,325.89
LIABILITIES & EQUITY		
Liabilities		
Current Liabilities		
Accounts Payable		
Accounts Payable	167.90	0.00
Total Accounts Payable	167.90	0.00
Total Current Liabilities	167.90	0.00
Total Liabilities	167.90	0.00
Equity		
Opening Bal Equity	8,137.66	8,137.66
Retained Earnings	22,221.50	24,464.84
Net Income	2,243.34	4,723.39
Total Equity	32,602.50	37,325.89
TOTAL LIABILITIES & EQUITY	32,770.40	37,325.89

* Funds restricted for the Library Telescope Program. \$1,660 was carried over from the end of 2014.

** Funds from Astronomy Magazine Award, available until 4/10/2016.

*** Registration fees and donations for SLAS sponsored eclipse seminars

**St. Louis Astronomical Society
Profit & Loss Budget vs. Actual
January through September 2015**

	<u>Jan - Sep 15</u>	<u>Budget</u>	<u>\$ Over Budget</u>
Ordinary Income/Expense			
Income			
Events Income****	2,974.52	0.00	2,974.52
Magazine Subscription	1,297.85	1,200.90	96.95
Membership Dues	3,065.00	2,560.00	505.00
Merchandise Sales			
General Merchandise***	239.48	0.00	239.48
Merchandise Sales - Other	150.00	0.00	150.00
Total Merchandise Sales	389.48	0.00	389.48
Total Income	7,726.85	3,760.90	3,965.95
Cost of Goods Sold			
Magazine Subscriptions	1,297.85	1,200.90	96.95
Merchandise			
General Merchandise***	135.35	0.00	135.35
Merchandise - Other	16.52	90.00	(73.48)
Total Merchandise	151.87	90.00	61.87
Total COGS	1,449.72	1,290.90	158.82
Gross Profit	6,277.13	2,470.00	3,807.13
Expense			
1-Programs & Events	1,297.88	2,050.00	(752.12)
2-Newsletter	86.32	135.00	(48.68)
3-Library expense	199.95	225.00	(25.05)
4-Astronomical League Dues	690.00	650.00	40.00
5-Loaner Scopes*	1,027.24	150.00	877.24
7-Insurance	380.00	380.00	
8-Website	131.88	135.00	(3.12)
9-Administrative Expenses	669.79	876.00	(206.21)
Total Expense	4,483.06	4,601.00	(117.94)
Net Ordinary Income	1,794.07	(2,131.00)	3,925.07
Other Income/Expense			
Other Income			
Donations	1,700.05	0.00	1,700.05
Interest Income	31.98	75.00	(43.02)
LTP Receipts	12,928.21	0.00	12,928.21
Non-Operating Income**	2,500.00	0.00	2,500.00
Total Other Income	17,160.24	75.00	17,085.24
Other Expense			
Astro Meg Award Disbursements	1,756.47	0.00	1,756.47
LTP Disbursements	12,270.76	0.00	12,270.76
Non-operating Expense	203.69	203.69	0.00
Total Other Expense	14,230.92	203.69	14,027.23
Net Other Income	2,929.32	(128.69)	3,058.01
Net Income	4,723.39	(2,259.69)	6,983.08

* Budget reflects membership vote to purchase 4 Orion Starblasts for the Loaner Program

** Non-operating Income includes a \$2,500 award from Astronomy Magazine. \$1,756.47 of the award proceeds have been spent to date, the remaining proceeds must be spent by April of 2016.

*** Tyson Raffle, net proceeds of \$104.13 available for Membership Initiatives.

**** Events Income includes \$231 of SLAS telescope auction net profit and \$2,741.24 in SLAS Eclipse Conference fees and donations. The auction proceeds are to be used for the purchase of a video camera for recording General Meetings.

Wanted: Newsletter Articles!

The Event Horizon needs articles from people like YOU!

Interviews, current astronomy topics, historical articles, you name it, we can use it!

Send what you have to

Wanted: Volunteers!

Be sure to sign up on Night Sky Network for upcoming star parties. Lead volunteers need to know who will be there so they can tell where we are falling short. If you aren't sure how to RSVP, please ask anyone at the meeting and we can show you how on the computer after the meeting. Or contact any board or committee member to find out. See you at the next star party!

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 *Location will be at the Edward Jones YMCA*

11/12/2015 12/10/2015

Dark Sky Observing Dates

See you in April!

Francis Park Events: These events are on Wednesdays the week nearest the first quarter Moon

10/21/2015

SLSC Public Telescope Viewing Events: These events are held the first Friday of the month Planetarium shows start at 7pm

10/2/2015

11/6/2015 12/4/2015

YMCA Edward Jones Star Parties

10/19/2015

SLAS EVENTS

October

13 Tue	Star Party at Julia Davis Library
13 Tue	Bristol Elem Science is Fun Night
16 Fri	SLAS regular meeting
17 Sat	Edwardsville Library
19 Mon	Edward Jones YMCA
20 Tue	SLCL Headquarters
20 Tue	St. Chas Library McClay
21 Wed	Francis Park
22 Thur	Florissant Valley Library
22 Thur	St Chas Deer Run Library
22 Thur	6th Grade Camp Babler Outdoor Ed
23 Fri	Faith Academy
23 Fri	Stargazing at the Gateway Arch
23 Fri	Webster Groves Library
26 Mon	Richmond Heights Library
26 Mon	St Chas Library Kathryn Linn

November

4 Wed	St. Louis Public Central Library
6 Fri	SLSC Public Telescope Viewing
7 Sat	SLAS Dark Sky Observing
12 Thur	SLAS Board Meeting
16 Mon	Parkway North High School
16 Mon	Lewis and Clark Library
17 Tue	Belleville Library
18 Wed	St Louis Public Library Barr Branch
19 Thur	St. Louis Public Library Macheck Br.
19 Thur	St Charles Library Kisker Road
20 Fri	SLAS Regular meeting
23 Mon	St Charles Library Corporate Parkway
24 Tue	St. Louis Public Library Central

December

4 Fri	SLSC Public Telescope Viewing
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SLAS Merchandise:

Soon to be available at Johnny Mac's Sporting Goods!

Watch for notification through NSN and the website!!

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 Merchandise

Available

SLAS merchandise is now set up for embroidery at Headz n Threadz at <https://hnt.threadthis.com/>

There are two locations:

Galleria: 2495 St. Louis Galleria, St. Louis, MO 63117

Telephone: 314.862.2695
galleria@headznthreadz.com

Delmar: 6662C Delmar Blvd St. Louis, MO 63130 Telephone: 314.863.2695 delmar@headznthreadz.com

[Delmar Map](#)

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 Infini-tees and

Johnny Mac's



SLAS MEMBERSHIP APPLICATION



Name: Last _____
 First, Middle Initial _____
 Address _____
 City, State, Zip Code _____
 email address _____

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 @ \$32.95 / 1 year \$ _____
 (S&T may also be renewed at their website:
<http://www.skyandtelescope.com>)
 Astronomy @ \$34.00 / 1 year \$ _____
TOTAL ENCLOSED \$ _____

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

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	Paul Baldwin	314-781-4080
vicepresident at slasonline.org		
Secretary	Mark Jones	636-394-2342
secretary at slasonline.org		
Treasurer	Bill Winningham, (Don Ficken - membership)	636-225-0269
treasurer at slasonline.org		
Hospitality	Larry Campbell	636-244-2867
hospitality at slasonline.org		
Board Members at Large:		
	vacant	
Board18 at slasonline.org		
	Tom Nickelson	314-346-9565
board17 at slasonline.org		
	Bradley Waller	314-481-7250
board16 at slasonline.org		
ALCOR	Bill Winningham	636-225-0269
(Astronomical League Correspondent) treasurer at slasonline.org		
MSRAL Rep.	Jim Small	314-909-7211
msral_rep at astroleague.org		

COMMITTEE CHAIRS

Dark Site Coordinator	Mark Jones	636-394-2342
darksite at slasonline.org		
Librarian	Jim Small	314-909-7211
librarian at slasonline.org		
Library Telescope Program	Don Ficken	636-851-9630
lirbrarytelescope at slasonline.org		
Loaner Equipment	Greg Gaines	314-277-3082
loaner at slasonline.org		
Merchandise	Vacant	
merchandise at slasonline.org		
Membership	Don Ficken	636-225-0269
membership at slasonline.org		
Newsletter Editor	Jim Small	314-909-7211
newsletter at slasonline.org		
Observing Programs	Jerry Loethen	314-329-8008
observing at slasonline.org		
Publicity	Rich Heuermann	314-962-9231
publicity at slasonline.org		
Recognition	Larry Campbell	636-244-2867
recognition at slasonline.org		
'SLASdialogs' Moderator	Mark Jones, Rhonda Whelan	
dialogsmoderator at yahoo.com		
Star Party Coordinator	Vacant	
starparty at slasonline.org		
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>

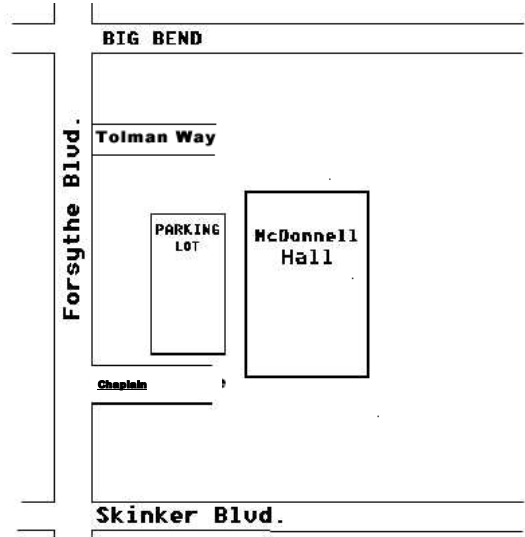


Who We Are and What We Do

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
13128 Cozyhill Drive
St. Louis, MO 63122

