

Last updated on December 4, 2017

# Visit us at www.slasonline.org/librarytelescope.html

### 1. Who is the St. Louis Astronomical Society?

The St. Louis Astronomical Society (SLAS) is a 501(c)(3) non-profit organization established in 1936. The Society's mission is to promote the advancement of the science of astronomy to our members and the public. With over 150 members, SLAS is one of the largest amateur astronomy clubs in the country. The society meets on the third Friday of each month at 7:30 p.m. at Washington University in the McDonnell Hall Auditorium. Meetings are free and open to the public.

Over the last five years, the society has donated over 4,000 hours to conduct star parties for the public benefit. Frequent locations include the Saint Louis Science Center, Gateway Arch, schools, scouting organizations, community parks and, of course, many public libraries.

In 2015, Astronomy Magazine awarded the Society its coveted national outreach award in recognition of the extensive outreach programs delivered to the public each year. In April 2016, St. Louis County Library's implementation of the St. Louis Program was featured by the American Library Association Public Programs Office website (<a href="www.programminglibrarian.org">www.programminglibrarian.org</a>) as a model program.

For more information about the society, please visit our website at <a href="http://www.slasonline.org">http://www.slasonline.org</a>

## 2. What is the goal of the Library Telescope Program (LTP)?

To foster scientific literacy, stimulate an interest in astronomy, and provide people who have never looked through a telescope the opportunity to experience the excitement that comes from discovery.

## 3. What telescopes are used in the St. Louis Program?

The St. Louis program uses two different telescopes as noted below. The "Library Telescope" is for night time use and is available for checkout by both the general public and educators. The "Sunspotter Solar Telescope" is for daytime use to project the Sun and is available for use by educators only.



(1) Library Telescope

Night time use - Available for checkout by the general public and educators



(2) SunSpotter Solar Telescope

Daytime use - Available for checkout by educators but not for checkout by the general public



Last updated on December 4, 2017

# Visit us at www.slasonline.org/librarytelescope.html

#### 4. Where are the telescope sourced?

The telescopes used in the St. Louis program are sourced as follows:

Library Telescope – This night time use telescope is an Orion StarBlast 4.5" reflecting telescope
which is modified by amateur society volunteers to make the telescope more patron durable and
patron friendy. About six hours of modifications are required for each telescope with all labor
provided at no cost.

The modification design was developed by The New Hampshire Astronomical Society and has become the standard design for most library telescope public checkout programs. The NHAS telescope design was featured in the January 2011, **SKY & TELESCOPE MAGAZINE** which fueled the implementation of the program by astronomical societies in states such as Missouri, Illinois, Florida, Maine and Massachusetts. In 2012, NHAS won the "Out-of-this-world" award from **ASTRONOMY MAGAZINE** for this program's innovative outreach design. In October 2014, **SKY & TELESCOPE MAGAZINE** featured a follow-up four page article that further heralds this innovative program. More details on the NHAS Library Program can be found at <a href="http://nhastro.com/ltp.php">http://nhastro.com/ltp.php</a>

The night time version of the St. Louis Library Telescope Program uses the NHAS design and has found it durable and easy-to-use. However, implementation of the program was much different because St. Louis has multiple library systems compared to New Hampshire that has a statewide library system. St. Louis program is standardized across all area libraries so patrons will have the same experience no matter where they live. Standardization also simplifies promoting the program area wide. Additionally, St. Louis has developed a unique training program that provides library patrons with "hands on" experience using the telescope while also encouraging volunteers to get involved and support the program.

• SunSpotter Solar Telescope – This daytime use telescope is manufactured by Science First and is unmodified. By using a series of mirrors, the device projects a bright 3.25-inch solar image onto a 5-inch white viewing screen through a powerful 62mm diameter objective lens. The telescope is safe to use and allows multiple people to view the image at once.

## 5. When was the program launched in the St. Louis area?

St. Louis launched it night time version of the library telescope in November 2014 with 18 telescopes. The program expanded quickly and now has 135 telescopes of which 131 telescopes are for public checkout and 4 telescopes are reserved for educator checkout.

The "SunSpotter Solar Telescope" daytime use program was launched in St. Louis during 2017 in preparation for the historic August 21, 2017 Total Solar Eclipse. Through generous funding of the American Astronomical Society's National Science Foundation and a donation by the Astronomical Society of Eastern Missouri, 13 solar telescopes were distributed to St. Louis area libraries:



Last updated on December 4, 2017

# Visit us at www.slasonline.org/librarytelescope.html

### 6. Which St. Louis area libraries are participating in the program?

Effective November 2017, the St. Louis Program has 151 telescopes in its library telescope program. The program has 138 night time use telescopes of which 133 telescopes are for public checkout and five telescopes are exclusively reserved for educator checkout. Additionally, there are 13 daytime use telescopes exclusively reserved for educator checkout. Detail counts of telescopes by library are as follows:

#### MISSOURI (TOTAL 131 telescopes: LP = 113 telescopes, LE = 5 telescopes, SE=13 telescopes)

- Brentwood Public Library (LP=1)
- De Soto Public Library (LP=3; SE=1)
- Cape Girardeau Library (LP=1)
- Ferguson Public Library (LP=1,S=1)
- Festus Public Library (LP=3, SE=1)
- Jefferson County Library (LP=6, SE=1)
- Jefferson College Library (LP=3)
- Kent Library at Southeast Missouri State University (LP=1)
- Kirkwood Public Library (LP=2)
- Maplewood Public Library (LP=1)
- Richmond Heights Memorial Library (LP=1)
- Riverside Regional Library (LP=8)
- Rock Hill Public Library (LP=1)
- Sainte Genevieve Public Library (LP = 1)
- Scenic Regional Library (LP=10)
- St. Charles City-County Library (LP=19, LE=1, SE=1)

- St. Louis County Library (LP=36, LE=2, SE=4)
- St. Louis Public Library (LP=7, LE=2, SE=3)
- University City Public Library (LP=4, SE=1)
- Valley Park Public Library (LP=1)
- Webster Groves Public Library (LP=2)
- YMCA Trout Lodge & Camp Lakewood (LP=1)

#### ILLINOIS - (TOTAL LP=20 telescopes)

- Belleville Public Library (LP=3)
- East St. Louis Library (LP=1)
- Edwardsville Public Library (LP=3)
- Fairview Heights Public Library (LP = 1)
- Glen Carbon Centennial Library (LP=3)
- Hayner Public Library in Alton (LP=5)
- Louis Latzer Memorial Library (LP=2)
- Mississippi Valley Library District in Collinsville (LP=2)

#### Legend:

LP = Library Telescopes for public checkout

LE = Library Telescopes for educator checkout

SE = SunSpotter Solar Telescope for educator checkout

## 7. Has the program been popular with the public?

The public checkout program has been very popular with library patrons. Telescopes are continuously checked out and many have a "waiting list" of patrons asking for the telescope.

The educator checkout program is growing in popularity as educators learn about the telescopes and supporting educational programs.

## 8. What other items are included with the telescope?

Each night time telescope includes a spiral-bound instruction manual, a moon map glued to the telescope, a red headlamp to protect night vision and a constellation guide.



Last updated on December 4, 2017

# Visit us at www.slasonline.org/librarytelescope.html

The daytime use telescope includes the manufacturer user guide that includes some sample educator programs.

#### 9. What kind of equipment problems have been encountered?

The night time telescopes have encountered only minor equipment problems so far. Mostly smudged eyepieces, a few "red dot finder" with defective switches had to be replaced by the manufacturer, and a few lost accessories. All issues have been resolved for little to no cost.

No issues have been reported with the daytime telescopes in part because the program is new.

### 10. What kind of training is included?

Society volunteers (based on availability) can provide workshops to library staff and patrons. Typically, libraries will host one or more "star parties" outside their facility to help promote the program.

### 11. What is the cost of a telescope and how is the purchase funded?

Current pricing for the night time telescopes is \$325 per telescope which includes cost of materials with labor donated at no cost. Pricing may vary based on retail pricing changes. Each year, the St. Louis Astronomical Society sets aside funds to purchase a limited number of telescopes for placement into greater St. Louis Metropolitan area libraries. But most of the telescope purchased have been funded by the libraries themselves or by donations from third parties.

Pricing for the daytime telescope is approximately \$450.00 and is available from a number of retailers.

## 12. How does the purchase procedure work?

Due to the significant number of volunteer hours to upgrade each telescope, the St. Louis Program only adds new telescopes to the program twice each year. Requests for new telescopes must be delivered to us by February 1<sup>st</sup> or by July 1<sup>st</sup>. A signed commitment must be delivered by that date. Payment is requested within 30 days of commitment. The goal of the program is to deliver the upgraded telescopes within 90 days of the order date.

# 13. Who owns the telescope?

The scope and all accessories will belong to the library. The society will remain available for maintenance, repair, and promotional activities.

## 14. What are the telescope "checkout" procedures?

Each library handles checkout procedures based on their own lending policies. But as a general rule, patrons must sign a form that they accept the liability of any damages. Patrons are typically required to be a minimum of 18 years old and hold a valid library id card. The typical checkout time is seven days.



Last updated on December 4, 2017

# Visit us at www.slasonline.org/librarytelescope.html

The checkout forms typically include a checklist of all components to be verified at check-out and check-in. Libraries must also include a statement about "never point the telescope at the sun" that the patrons must agree to and sign.

#### 15. What happens if the telescope breaks or needs maintenance?

The night time Orion Starblast 4.5" Reflector telescope has proven to be durable. If maintenance or repair is needed, a society volunteer will be designated for assistance.

Due to its unique design, the daytime use SunSpotter Solar Telescope must be repaired through the manufacturer.

### 16. If my library is interested in joining the program, what should I do?

The St. Louis Astronomical Society is providing support to libraries in the Greater St. Louis area that are interested in joining the program. If your library is outside the Greater St. Louis area but within a reasonable driving distance of St. Louis, we are happy to include you in our program on the condition that proper educational and equipment support can be arranged to make the program successful. Often this is accomplished by partnering with local colleges or amateur astronomy clubs.

For more information about the program, send an email to <u>librarytelescope@slasonline.org</u> or call Don Ficken, Program Chair, at (314) 550-7191 or Jim Small, SLAS President, at (314) 307-0692.

The St. Louis Astronomical Society would like to express its appreciation to the New Hampshire Astronomical Society for sharing their Library Telescope Program design and lessons learned.