



St. Louis Astronomical Society

Library Telescope Carrying Case Design Contest

Help Us Design a Telescope Carrying Case

Win a Prize and Bragging Rights

Contest Timeline:

- SLAS Meeting, Friday, February 20, 2015. Submit your design ideas.
- Homemade Fest, Saturday, February 21, 2015. Present your idea. **
- SLAS Meeting, Friday, March 20, 2015. Winners announced.

** Presentation at this event is optional but might help you sell your idea.

Contest Winners will be judged by the Library Telescope Steering Committee.

The top three designs will be selected.

Prizes include:

- 1st place - \$50 gift card
- 2nd place - One year individual membership in SLAS
- 3rd place - One year individual membership in SLAS
- All winners will receive bragging rights.

See attachment for contest details

Questions? Email us at librarytelescope@slasonline.org
or call Don Ficken at (636) 851-9630



St. Louis Astronomical Society

Library Telescope Program

Telescope Carrying Case Design Contest

CONTEST DETAILS

BACKGROUND:

The SLAS library telescope program is well underway with 17 telescopes delivered to St. Louis area libraries in 2014 and more deliveries expected for 2015. One issue left unresolved is an appropriate carrying case for the telescopes.

The current method of carrying the telescope is by hand, holding the base similar to the method shown in the photo. The telescope is about 14 pounds fully configured, so this is easy for most people. Using this method, the telescope is carried to the car and placed into a car seat like a child and secured using a seat belt. A YouTube video published by a member of the New Hampshire Astronomical Society talks about the telescope and how to transport the telescope in a vehicle: <https://www.youtube.com/watch?v=QZvQ8EVolek>

All libraries are currently using the car seat/seat belt method of transporting the telescopes. No problems have been reported so far. But from the outset, the library boards and executives have been nervous about this method of transportation. They preferred a carrying case. We did not have an immediate solution to recommend so some libraries pursued their own solutions. But their solutions proved impractical or unproven and were abandoned:



- One library placed their telescopes into 48 gallon trash cans which they lined with foam rubber to cushion the telescope against the edges. But this method proved impractical because 1) the case was too large to fit into the passenger and/or trunk area of smaller cars, 2) reaching to the bottom of the trash can to grab the base was not practical for people who are height challenged and/or not able to touch their toes and 3) the added weight made it difficult to transport the telescope and container to the car without having two people. The library abandoned using the trash cans for public transport and has adopted the car seat approach.
- Another library contacted Orion to find a solution. Orion suggested an “Orion 15100 Soft Case for StarBlast 6” which looks like a duffle bag. However, the library telescope has the zoom lens and red dot finder permanently mounted to the telescope and it was questionable if the telescope would even fit into the bag. There was also concern the eyepiece and red dot finder would be damaged if the bag were placed on its side in the trunk. This library abandoned this idea and also has adopted the car seat approach.

Contest Goals:

Let’s be honest. We are not excited about spending money for carrying cases when we think the car seat/seat belt method works just fine. For the money spent to buy/build a carrying case, we can replace a lot of eyepieces and red dot finders (the most likely items to be damaged). However, we also think that the first telescope that is damaged might bring back the request for a “carrying case”. Some boards might even require a case as a condition of loaning it to the public. So we want to be ready.

Our goal is to identify an affordable, easy to use carrying case that will protect the telescope, be attractive to look at and easy to make/buy. Once the design is identified, we will take the design and cost to the libraries to see if they have interest in buying the case if we build it. We will only charge them for the cost of the materials. We have tested the waters with the libraries and they are open to the idea if cases are affordable and practical. If approved, we will need to build/deliver as many cases as they order.



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Contest Scoring:

Contest scoring will encompass our five main design goals using a 100 point scale:

1. Protection (30 points) – The design should protect the vulnerable areas of the scope. The bases are relatively sturdy, and the top end of the scopes have the finder protruding which can easily be knocked out of alignment. To protect the scopes in transport, they should provide protection whether in a car seat area, on the floor, or in the trunk of small cars.
2. Ease of Use (20 points) – A combination of size, weight and handling. The borrowers of these telescopes will be of all shapes and sizes, so they need to be manageable by small people. Think of a mom or grandma with two kids and purse in hand and parked across the parking lot.
3. Simplicity of Design (20 points) – Parts/Materials should be readily available, and assembly should be straightforward and repeatable.
4. Cost (20 points) – Total cost per unit. We would prefer a unit cost of \$50 or less. However, we will entertain solutions with unit costs up to \$100. There may be “scale” opportunities if the libraries really like the idea/cost. If you think scale opportunities are possible, let us know.
5. Aesthetics (10 points) – Here’s an opportunity to get points for style. Your design should be functional and pleasing to look at.

Contest Timeline:

Submissions are due by Friday, February 20, 2015 (the regular SLAS monthly meeting). Submissions should provide a detailed parts and materials list, including sources of those parts/materials with associated costs, and detailed fabrication and assembly instructions. Drawings and/or photos would be helpful to help the judges visualize your solution. A short narrative on each judging category will help make your case to the judges for points in that category. We suggest that you deliver your designs to us on a CD or electronically. Paper will be accepted but you might makes the judges cranky.

If you would like to present your solution to homemade fest on Saturday, February 21, 2015, you are welcome to make your case. Judges reserve the right to limit the presentation time to five minutes.

Final results will be announced at the Friday, March 20, 2015 regular SLAS meeting.

Contest Winners:

Contest submissions will be judged by a committee appointed by The Library Telescope Program Steering Committee. Three finalists will be selected. Decisions of judges are final.

- The winner will receive a \$50 gift card.
- The runners up will each receive a 1-year SLAS membership.

Access to the Telescope:

The telescope will be available to see at the following events. Event details including location addresses can be found on NSN. Additional arrangements can be made to view the telescope as requested.

1/22/2015	6:00 pm – 8:00 pm	Star Party – SLCL Lewis & Clark Branch
1/26/2015	6:00 pm – 8:00 pm	Star Party – SLPL Headquarters
1/28/2015	7:00 pm – 9:00 pm	Star Party – SLCL Tesson Ferry Branch
1/29/2015	7:00 pm – 8:30 pm	SLAS Training - SLPL Schlafly Branch
2/5/2015	6:00 pm – 8:00 pm	Star Party – SLPL Barr Branch



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Telescope Details:

MODEL: Orion StarBlast 4.5 Astro Reflector Telescope

Website: <http://www.telescope.com/Orion-StarBlast-45-Astro-Reflector-Telescope/p/102010.uts>

Note: Our telescope has been modified to include a permanently mounted zoom lens.

