Supporting STEM and Space, Inc.
114 W. 5th Street
Fayetteville, AR 72701

Giant Telescope Coming to Northwest Arkansas

NORTHWEST ARKANSAS *(April 24, 2017)* — One of the largest refracting telescopes in the world will offer public views of space as the centerpiece of a science and engineering center in Northwest Arkansas.

The historical instrument is coming to the region through a partnership between Swarthmore College in Swarthmore, Penn., and Supporting STEM and Space Inc., a nonprofit organization based in Northwest Arkansas. STEM is an acronym for science, technology, engineering and math being used in the education, tech, and science sectors.

Swarthmore College donated the telescope, which is 24 inches in diameter, through an agreement reached April 19, 2017.

"We are very excited to be bringing such a large telescope to Northwest Arkansas, where we plan to use it as the centerpiece for a STEM recruitment-related facility with a planetarium and observatory in Northwest Arkansas," said Katherine Auld, chairman of the board of directors of Supporting STEM and Space. She explained the two-year-old nonprofit learned that Swarthmore College (which wants to use the building housing the telescope for another purpose) was requesting proposals for the next phase of the telescope's life. The board submitted a proposal.

"We were shocked, to say the least, when we got an email telling us that we had the telescope pending the college finalizing a few details," Auld said. Final word came April 19. "I was speechless," she said.

Swarthmore College will pay for disassembling and loading the telescope. Supporting STEM and Space must bear the cost of insurance and transportation to Northwest Arkansas. A fund-raising effort is being launched to fund transportation, which is estimated to be about $20,000. More information may be found at http://nwa.space or the group's recently created GoFundMe, www.gofundme.com/sproulrelo.

Board member Clint Branham was in Suffern, N.Y., for the Northeast Astronomical Forum only three hours from Swarthmore College. While there, he made a site inspection to meet with college officials before Supporting STEM and Space submitted its proposal.

"It is hard to describe how big this telescope is," Branham said. "However big you think it is, it's bigger than that." The 36-foot-long telescope is two feet in diameter and mounted on an enormous base that weighs 50,000 pounds.

While at the Forum, Branham contacted Fred Orthlieb and Ken Launie, two leading experts in telescope restoration who participated in the most recent servicing of the telescope in 2005, for an assessment of the requirements to complete this project.

The long-focus refracting telescope was made by the John A. Brashear Company in 1911 and has an amazing history involving the earliest claims of the detection of an exoplanet.

Similar telescopes are currently being used at the Roper Mountain Science Center in Greenville, S.C., and Lowell Observatory in Flagstaff, Ariz. The Swarthmore telescope is the sixth largest refractor in the United States — tied with the 24-inch Clark telescope at Lowell Observatory.

"I am thrilled that Sara Schnecher, committee member of the American Astronomical Society Working Group for the Preservation of Astronomical Heritage, had the vision to find this telescope a new home where it can continue to inspire the people of Northwest Arkansas in their STEM-focused efforts for years to come," Auld said. "I want to thank Swarthmore College for putting the time and effort into finding a new home for the telescope, and their amazing generosity in donating it to us."

Supporting STEM and Space plans to restore the telescope to operation, upgrade the control system to work with modern computer systems and use it for public outreach. Once installed in an observatory planned for the I-49 corridor in Northwest Arkansas, the telescope will offer spectacular views of the heavens to the public.

"We are a long way from having our science and technology center with the planetarium and observatory," Auld said. "Our timeline originally put construction years in the future; however, with such a spectacular centerpiece, we plan to accelerate plans and fundraising."

Kent Marts, a member of the board of directors of Supporting STEM and Space and a founding member of Sugar Creek Astronomical Society, recently commented, "It is wonderful that this turn-of-the-century specimen of engineering — which is an engineering work of art — has found a new home here in Northwest Arkansas."

Supporting STEM and Space, Inc. and the Library Telescope Project

Supporting STEM and Space, Inc. was born from Auld's desire for local planetarium field trips with her astronomy classes at Northwest Arkansas Community College in Bentonville. The group has grown over the last few years into a vibrant assemblage of educators, professionals, and astronomy aficionados who work together to support all branches of STEM education in Northwest Arkansas.

The group's booth is swarmed at First Friday on the Bentonville Square, where they demonstrate science experiments and solar telescopes. Members have attended library events in both Washington and Benton counties, including supporting the recent *Explore Space: A Cosmic Journey* exhibit at the Bentonville library with five public events and an educators workshop. The *Explore Space* event was attended by more than 7,000 people.

Moon on Dickson, a Sidewalk Astronomy event with telescopes on a street corner in Fayetteville, Ark., is becoming increasingly popular. During one event in the fall of 2016, more than 1,000 pairs of eyes looked through the telescopes. Space Hogs, the astronomy club of the University of Arkansas, participates in Moon on Dickson by bringing their telescopes to join the fun.

In 2016, Supporting STEM and Space launched a local chapter of the Library Telescope Project, which places telescopes available for check out in a public library. One telescope has been placed at Bentonville Public Library. On April 23, 2017, the organization announced the eight additional regional libraries that will receive telescopes in the current phase of this project: Bella Vista, Gravette, Prairie Grove, Springdale, West Fork, Bentonville, Rogers, and Fayetteville. (http://www.nwaonline.com/news/2017/apr/23/local-libraries-to-offer-telescopes-201/)

During an event Saturday, April 30, 2017, the organization will deliver the telescopes to representatives of the eight libraries. The event, a fundraiser wrapped around science demonstrations, will be from 3 p.m. to 5 p.m. at WaterWay Christian Church, 4074 S.W. H St., Bentonville, Ark.

The Benton County-based amateur astronomy club, Sugar Creek Astronomical Society, was started almost 20 years ago by Paul and Cathy Anderson. Over the years, the group has grown and expanded. A partnership with Hobbs State Park that began in 2010 created the Hobbs Star Parties, the most widely attended events in all the state parks throughout Arkansas, according to Park Interpreter Steve Chyrchel. At a recent event with complete cloud cover during the day of the event, nearly 100 people attended simply to hear the public lecture. One event last year drew more than 300 people to Hobbs State Park for a chance to look at the stars, despite the long winding drive home in the dark.

Because of their shared interest in science outreach and some shared membership, these two groups are working closely together. Since the beginning of 2017, Sugar Creek Astronomical Society and Supporting STEM and Space have together received requests from four public libraries, one state park, Westark Area Boy Scout Council, and the Bentonville School District to co-host star parties or solar observations. In addition, members have received requests to speak at two middle school career day events and two elementary school STEM or STEAM (science, technology, engineering, art and math) night events.

"This shows the thirst for astronomy in Northwest Arkansas is overwhelming," Auld said. "Using this telescope as the centerpiece of the science and technology center and planetarium is the perfect fit to inspire students, and adults alike, into STEM careers."

About The Telescope

The great equatorial telescope of the Sproul Observatory at Swarthmore College saw first light in 1911. Made by the John A. Brashear Company of Pittsburgh, the objective lens has as 24-inch aperture and focal length of 36 feet. The tube of heavy sheet steel is bolted to a cast iron centerpiece mount and pier that weighs 50,000 pounds. The refractor currently sits in a 45-foot diameter dome. Acclaimed in its day to be an excellent visual telescope, the refractor was also heavily employed in astronomical photography. By 1974, it had taken 100,000 5-inch by 7-inch glass plates. The astrographic camera used to create those plates is now in the collection of The Smithsonian Institution.

The Swarthmore telescope is of historical significance, having been the instrument by which Peter van de Kamp studied Barnard's Star and claimed in 1963 to have discovered an exoplanet.

A refracting telescope is an optical telescope that uses a lens as its objective (at the front of the telescope tube) to form an image that is focused by another lens at the eyepiece end. The design is the type used by Galileo Galilei to revolutionize observation of the night sky.

For More Information

• High-resolution photographs of the telescope are available at http://nwa.space

• Katherine Auld, Chairman, Supporting STEM and Space Inc., may be reached at Katherine.Auld@nwa.space or at 479-282-5159.

• Susan Smythe ADA Program Manager/Senior Project Manager of Facilities Management Department at Swarthmore College may be reached at ssmythe1@swarthmore.edu.

Members of the Supporting STEM and Space Inc. board of directors are:
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