

The November membership meeting will be held on Thursday, November 15, 2007 at 7:30 pm at the Adventure Science Center

On Thursday, November 15, 2007 we will hold our regularly scheduled membership meeting at the Adventure Science Center. Our speaker this month is our own Dr. Spencer L. Buckner. Department of Physics & Astronomy at Austin Peay State University.

His topic is "All I Want For Christmas Are Astronomy Presents". He will cover the basic types of telescopes and mounts with their advantages and disadvantages. Dr. Buckner will also cover a variety of astronomical accessories such as planispheres, eyepieces, tripods, dew zappers, Tel-rads and much more. Finally, he will conclude with a few suggestions on where you can find good astronomical equipment at reasonable prices with sales people that are knowledgeable about the products they sell.

You won't want to miss this if you ever wanted to know the ins and outs of purchasing a telescope.

Message from the President

Astronomy is to telescopes as Geology is to picks and shovels. Well something like that. Most people, when they are becoming interested in Astronomy immediately want to go out and buy a telescope. They may see a brightly colored box at some discount store with colored pictures of Mars, Jupiter or Saturn, which would indicate that this is what they would see through this telescope. Boy! It even will magnify the image 500 times. So they happily purchase their new telescope and can't wait until the night sky will allow seeing some of these heavenly objects. They cannot see anything with the higher power eyepieces and are disappointed with what they do see with the lower power eyepieces. And there is no color, everything is fuzzy and shades of gray and not bright at all. This is usually when the telescope is placed back in the box and relegated into the back of some closet.

Now, this is where we, the BSAS comes in. We might not be able to get this person who made the poor purchase to continue his effort to become an amateur astronomer, but we can offer advice to him or others and if he/she should become a member, we do have loaner scopes they can borrow to see how to use these telescopes. We always recommend that a person, interested in astronomy attend meetings of the BSAS, go to our star parties and see what other members are using, look through their telescopes, ask questions and in general just what type of telescope they should buy.

We are very fortunate to have, as a member of the BSAS, Dr Spencer



Message from the President

Continued from Page 1

Buckner, Head of the Astronomy Department at Austin Peay State University to make a talk at the November meeting of the BSAS. Dr. Buckner will bring a “truckload” (his definition) of telescopes and other astronomical equipment for us to see. In his speech, he will discuss the different telescopes and may make recommendations which telescope should be for the beginner. We need to get as many persons to attend this meeting as possible, so get on the telephone, email friends, write letters and come to our membership meeting on November 15, 2007. It should be exciting to see the new equipment available to amateur astronomers (and to dream about what you have seen.

Also this is a reminder that at the November meeting we will vote on the new officers and board members for the 2008 year. The nominations are as follows: Terry Reeves, president; Keith Burneson, vice-president; Bob Rice, secretary; Randy Smith, treasurer, and board members, Spencer Buckner (to replace Keith Burneson) and Tony Campbell and Theo Wellington (to replace Tony Campbell and Mike Benson).

by Bill Griswold,
President

FREE TELESCOPE OFFER!!!

Did someone say free telescope? Yes, you did read that correctly.

The BSAS Equipment & Facilities Committee has free telescopes ranging in size from 2.6” to 8” that current members can actually have to use for up to 60 days at a time. We also have some other items in the loaner program such as a photometer, H-alpha solar telescope, educational CDs, tapes, DVDs, and books. Some restrictions apply. A waiting list is applicable in some cases. The BSAS Equipment Committee will not be held responsible for lost sleep or other problems arising from use of this excellent astronomy gear. For information on what equipment is currently available, contact Lonnie Puterbaugh at (615) 661-9540

MAGAZINE SUBSCRIPTIONS FOR BSAS MEMBERS

We are always able to accept requests for new and renewal yearly subscriptions to SKY AND TELESCOPE and ASTRONOMY from our members in good standing.

The current yearly rates are as follows:

SKY AND TELESCOPE: \$32.95

ASTRONOMY: \$34.00

Checks or Money Orders should be made out to the Barnard-Seyfert Astronomical Society (BSAS) and sent to the following address:

BSAS
P. O. Box 150713
Nashville, TN 37215-0713

DUES INFORMATION

On your Eclipse mailing label is the expiration date for your current membership in the BSAS. There will be a two month grace period before any member’s name is removed from the current mailing list. You will be receiving a number of warnings informing you that your membership is expiring.

Dues per year are \$20.00 Regular (1 vote); \$30 Family (2 votes); \$15.00 Student (under 22 years of age)(1 vote); \$15 Seniors (65 years or older)(1 vote); \$25 Senior Family (65 years or older)(2 votes).

Contact president@bsasnashville.com if you have questions. Dues can be sent to:

BSAS
P. O. Box 150713
Nashville, TN 37215-0713

THE ECLIPSE NEWSLETTER

Editor: Pam Thomas
pam.thomas@charter.net

BSAS Officers:

Bill Griswold, President
Terry Reeves, Vice President
Bob Rice, Secretary
Randy Smith, Treasurer

Mark Manner, Immediate Past President

Board of Directors

Keith Burneson
Donna Hummell
Steve Wheeler
Mike Benson
Tony Campbell
JanaRuth Ford

Kris McCall, Ex Officio

BSAS website: www.bsasnashville.com

BSAS Logo by Tony Campbell

Happy Birthday Sputnik 2

by Robin Byrne

As we celebrate the 50th anniversary of the launch of the first Sputnik, the first manmade object to orbit Earth, this month we honor the second satellite to go into orbit. After the success of Sputnik 1, Nikita Krushchev wanted another Soviet first for the 40th anniversary of the Bolshevik Revolution on November 7, 1957. Sergei Korolev, the Soviet space program's chief designer, had been working on another satellite, but it would not be ready in time. Over the next 4 weeks, Korolev and his team built a completely new satellite.

The cone-shaped capsule was equipped with instruments for radio telemetry, scientific experiments, and environmental controls. Among the scientific experiments were ultraviolet, x-ray and cosmic ray detectors. The environmental controls were there because Sputnik 2 would have a passenger: a dog named Laika. Laika's cabin contained sensors for monitoring both the room's condition, as well as Laika's vital signs.

Sputnik 2's occupant, Laika, was a stray found on the streets of Moscow. She was originally named Kudryavka, meaning "Little Curly", her name was later changed to Laika, which means "Barker." The American press derisively called her "Muttik." She was approximately 3 years old, and was a mutt of questionable heritage, with some saying she was mostly Siberian Husky, while others say she was part Samoyed terrier. The Soviets had been using dogs for high altitude rocket testing already. Three dogs were trained for the Sputnik flight, including being housed in ever smaller cages to adapt them to the cramped conditions of the space capsule.

On the day of November 3, 1957 (4 days earlier than Krushchev's desired launch date), Laika and Sputnik 2 launched into Earth orbit. Part of the spacecraft did not jettison as planned after reaching orbit, which ended up affecting the capsule's temperature controls. As a result, the cabin reached temperatures as high as 104 °F.

The cabin had enough room for Laika to stand or lie down, although she was harnessed to keep her in place. Food and water were supplied to Laika in a gel form. Her respiration rate and blood pressure were sent to ground control for 15 minutes during each pass over the Soviet Union. The capsule was designed to provide 7 - 10 days of life support. Because of the rush to go to orbit, and space technology being in its infancy, no provisions were made for Laika to return safely to Earth. Instead, the plan was to euthanize her with poisoned food before the life support ran out. That was the official Soviet version of how Laika died until about 5 years ago. At the 2002 World Space Congress in Houston, it was revealed that within a few hours of launch, Laika died from stress combined with heat exhaustion. Six months later, the orbit of Sputnik 2 had decayed enough to reenter Earth's atmosphere and burn up.

Despite Laika's tragic end, her short mission did prove that a living creature could survive in space. And, in the West, her fate renewed the debate over using animals for scientific testing. Even some Soviet citizens were outraged over, what they called, a propaganda stunt. Today, Laika is memorialized as part of a monument which honors all fallen cosmonauts. She can be seen peeping from behind some of the cosmonauts depicted in the statue. There is also a plaque remembering her at the center in Moscow where she had been trained.

We have come a long way in our short 50 years of spaceflight. With all the celebrations of the first Sputnik, which was remarkable in its own right, let's not forget what was probably a much more amazing feat: Laika and Sputnik 2.

References:

Sputnik 2 - Wikipedia, the free encyclopedia

http://en.wikipedia.org/wiki/Sputnik_2

SPACE.com -- The True Story of Laika the Dog by Anatoly Zak

http://www.space.com/news/laika_anniversary_991103.html

Sputnik 2

<http://www.astronautix.com/craft/sputnik2.htm>

BBC NEWS Science/Nature First Dog in Space Died Within Hours by David Whitehouse, October 28, 2002

<http://news.bbc.co.uk/1/hi/sci/tech/2367681.stm>

Space Today Online - Animals - Dogs in Space

<http://www.spacetoday.org/Astronauts/Animals/Dogs.html>

Barnard-Seyfert Astronomical Society Minutes of a Regular Meeting of the Board of Directors Held on Thursday, October 4, 2007

Present: JanaRuth, Bill Griswold, Steve Wheeler, Joe Boyd, Mike Benson, Terry Reeves, Randy, Keith, Lonnie

Treasurer report - Randy:

- \$2999.47 in the account – considered adding \$0.53 of his own money. • Will order 15 each of Observer's Handbook and Astronomy Wonders of the Universe calendars – tomorrow. • Will write an article about paying for S&T subscriptions and polling for those who might want Ottwell calendars.

Tony Campbell – not present

- Promised to add something to eclipse email but did not • Is he on top of things? • Officers list on website is old
- Some people report not receiving board and other BSAS emails. • Bottom of web page still says to contact Joe Boyd* Bill will assemble a current board list and forward to Tony and all of us.

Programs report - JanaRuth:

- William Teets for October • Spencer Buckner for November * JanaRuth will get a description of the November program out to everyone so we can start spreading the word. • Charlie Warren for December – astronomy jeopardy • How to use a scope for January • By-laws do not require VP to handle programs • Keith could chair. Lonnie and JanaRuth offered to help – voila, a committee • Recommended getting a February program lined up ASAP

Night Sky Network: • Still active • JanaRuth has been negligent in adding names to the list

- president@bsasnashville is probably still going to Mark Manner • BSAS is at top of second tier in activity
- why do we only get 25 people at meetings with great programs? • Send November program announcement to Ms. Cheap and weather-casters • Contact Amy Batten at KOCHAB re program • No one is using the forum on the BSAS website

Meeting degenerated into impressions of John Dobson: •How many seconds are there in a year? Think fast!

* Twelve: January 2nd, February 2nd . . . • Can Lonnie hack into the LED billboard on I-65?

Joe Boyd suggested that when members do not pay dues that they receive Eclipse for three months, and then cut them off. Bill G. says we already do that. Mike B. says he needs an updated member list for AL by end of 10/07

Keith presented a TNSP summary report:

- we made money • Due to attendance and response, should we consider stopping TNSP? • How can we keep prices down? • Was the poor attendance this year due to price increase? • Registration price remained the same
- cost for food and cabins went up • lost money on having 15 extra meals • How can we make sure everyone paid to eat and sleep? • a 16 bed cabin was full with 8 people • Steve - likes TAG, would need batteries to observe. • Terry – TAG is nice site but don't have enough attendance. • Lonnie – we need a sign-up sheet and checklist. • Joe – got to have a TNSP committee. • Keith – did not have a REAL committee but did communicate. • Steve – had nice weather, should have had more walk-ins, great speakers, best ever! • Lonnie – will donate \$125 to stop TNSP. • Too much work. • Can't do his without wife Karen's assistance and she says too much work. • Loves the star party and speakers. • Bill – part of the problem is lack of delegation. • Lonnie – S&T is promoting spring and fall astronomy days, maybe we should stop TNSP and do those. • Keith – core group is burned out, he does not want to do TNSP. • JanaRuth – should we focus on speakers? • Need to build core again. • Approach schools, youth, and church groups. • Satellite groups could meet. • Bill – heard all good things about TNSP except for the presence of annoying cub scouts. • Bill Madewell brought them. • Terry – TNSP is a moneymaker, but the cubs do not pay to attend. • Lonnie – maybe do TNSP for club members only.
- Not intended as public outreach. • Bring your own food. • Only rent cabins you need. • We do great star parties. • Received a nice thank you from Scott Hawley. • Mike – used to get a bunch of people from Knoxville and Smokies when at Nakanawa. • JanaRuth – are other clubs experiencing a fall off in members and participation? • VBAS has core of 12 people. • Mike – AL is down to 17K from 22K members. • NCLB is only math and English focused. • Lonnie – teachers want BSAS to come to their schools. • JanaRuth – students at MTSU take astronomy because they need a science and the slot fits their schedule. • VBAS having astronomy day on 10/20 with Homer Hickam as guest. • They open in the morning, close 3 to 4 hours in the afternoon, and open in the evening for planetarium shows and speakers. • Lonnie – Brentwood Middle needs a visit from TAC.
- A parent went to the principal because the teacher did not contact Lonnie to arrange a visit when it was recommended. • Maybe BSAS plan its own astronomy retreat? • What about going to another regional star party as a group, and let someone else do all the work? • Discussion Committee – Keith as chair with Terry, Steve, and Bill. • Seems that when programs are real science, attendance drops at monthly meetings. • Programs on amateur astronomy seem to draw more people. • Mark says he has ideas for fundraising.
- Nominations for elections to occur at November meeting

Respectfully submitted,
Kris McCall

Barnard-Seyfert Astronomical Society
Minutes of the Monthly Membership Meeting
Held On Thursday, October 18, 2007

President Bill Griswold called the meeting to order at 7:36 P.M. in the Adventure Science Center (ASC). Mr. Griswold asked for any corrections to the minutes of the previous meeting held on September 20, 2007 and, there being none, then asked for a motion to accept them as published in the October 2007 edition of the *Eclipse* newsletter. A member so moved, followed by a second, and the minutes were approved by a unanimous voice vote. Joe Boyd then welcomed new members Tim & Bunty Cantwell along with guest Mike Davidson.

Star Party Coordinator Steve Wheeler announced these upcoming private star parties: November 10 at the Natchez Trace Water Valley Overlook site and December 8 at Natchez Trace Parkway mile marker 433. He also announced a public star party to be held on December 15 at Warner Park. Bill Griswold reminded the audience that Treasurer Randy Smith had ordered 15 copies of the 2008 *Observers Handbook* and 15 copies of the 2008 *Deep Space Mysteries* calendar for purchase and pick-up at the November meeting.

Nominating Committee Chair Dr. Donna Hummell announced this slate of recommended candidates for the annual election to be held at the November meeting: Dr. Terry Reeves for president; Keith Burneson for vice-president; Bob Rice for secretary; Randy Smith for treasurer; and Dr. Spencer Buckner, Tony Campbell, and Theo Wellington for the three director-at-large positions. Dr. Hummell noted that all candidates had agreed to serve in these positions. She then asked for nominations from the floor and, since there were none, Bill Griswold moved that nominations be closed. A member seconded this motion that was subsequently approved by a unanimous voice vote.

Program Committee Chair JanaRuth Ford announced that for the November meeting, Dr. Spencer Buckner will deliver a program on "How to Pick a Telescope;" for the December meeting, *Amateur Astronomy* magazine editor Charlie Warren will speak and present his popular version of "Jeopardy" during our annual holiday potluck dinner; for January, we will present a "How to Use a Telescope" session as a follow-up to the November program; and for February, we will have a presentation on Dark Skies. Ms Ford announced that the evening's scheduled speaker had unexpectedly been forced to cancel his appearance due to undisclosed circumstances. She told the audience that, following a brief delay to arrange the necessary equipment, a video would be shown in lieu of the announced program.

Dark Sky Committee Chair Powell Hall announced that this committee met on the 1st Tuesday of each month and invited those who were interested to attend the next meeting on November 6th. Mr. Hall also announced that the committee had approved an award to be made to H.G. Hill Properties for their recent installation of non-polluting light fixtures at their new site in Green Hills. Bill Griswold described the good viewing at last Saturday night's private (club-members-only) star party off the Natchez Trace Parkway and noted that he was able to make several corrective adjustments to his telescope during the evening.

Steve Wheeler thanked Lonnie Puterbaugh for his many contributions to the September TNSP (Tennessee Star Party) and particularly for making electricity available on the observing field. In appreciation for these efforts, he presented Mr. Puterbaugh with an enlarged digital display image of M33 that he had personally taken and had framed. Mr. Wheeler announced that a similar award would be given to Keith Burneson, who was not present, for his superlative contributions to the TNSP.

Lonnie Puterbaugh reminded the audience about the Von Braun Astronomical Society's upcoming public Astronomy Day open house to be held on October 20th in Huntsville, Alabama. Mr. Puterbaugh also announced that he had CDs available for handout from Dr. Steele Hill, Media Specialist for NASA's STEREO mission, containing his keynote presentation and other information from the ScopeOut 2007 Astronomy Fair held on September 22 in Cincinnati, Ohio. Mr. Puterbaugh additionally explained that the STEREO mission involved two satellites placed in orbit around the earth at widely separated positions to provide the first-ever 3D images of the Sun.

The audience then watched a video copy (provided by Kris McCall) of Timothy Ferris' recent PBS TV special *Seeing in the Dark* that described the growing number of amateur astronomers and their activities. One segment showed the over one hundred year old annual gathering of amateur telescope makers at Stellafane in rural Vermont. Another segment showed the public outreach activities of the Sidewalk Astronomers in San Francisco. One particularly interesting feature described the life and accomplishments of BSAS namesake Edward Emerson Barnard who was born in Nashville and attended Vanderbilt University. One disturbing sequence toward the end noted that, due to increasing light pollution, only one in five Americans living today has seen the Milky Way.

Joe Boyd urged everyone to meet and greet the new members and Bill Griswold reminded members to turn in their name badges following the meeting. Vesta Griswold commented about the interesting dinner and subsequent meeting with John Dobson on October 3rd. Kris McCall announced that she had located several pertinent videos that could be shown at future meetings.

Since there was no further business to discuss, President Griswold declared the meeting adjourned at 9:01 P.M.

Respectfully submitted,
Bob Rice, Secretary

ACTIVITIES and EVENTS*November 1—30, 2007*

11/1 BSAS Board of Directors mtg., 7:30 p.m. at Girl Scout Office, LAST QUARTER
11/4 Daylight Savings Time ends, Saturn 1.8° N of Moon
11/5 Venus 3° N of Moon
11/8 Mercury 7° N of Moon
11/9 NEW MOON
11/10 Private star party 8:30 p.m. Natchez Trace, mile marker 412
11/15 BSAS Membership mtg. 7:30 p.m. at ASC
11/17 FIRST QUARTER, conj. of Neptune & Moon
11/18 Leonid meteors peak
11/24 FULL MOON
11/27 Mars 1.7° S of Moon

December 1—31, 2007

12/2 LAST QUARTER, Saturn 2° N of Moon
12/6 BSAS Board of Directors mtg., 7:30 p.m. at Girl Scout Office
12/8 Private star party 8:30 p.m. Natchez Trace, mile marker 435
12/9 NEW MOON
12/14 Geminid meteors peak, conj. of Neptune & Moon
12/17 FIRST QUARTER
12/20 BSAS Membership mtg. & annual holiday event 7:30 p.m. at ASC
12/22 Winter Solstice
12/24 FULL MOON
12/28 Saturn 3° N of Moon

*All times listed are Central Time

BSAS**P. O. Box 150713****Nashville, TN 37215-0713**