



# ECLIPSE



*The Newsletter of the Barnard-Seyfert Astronomical Society*

Celebrating our 76th Year in 2004

October 2004

## October Meeting of the Barnard Seyfert Astronomical Society

Come to the BSAS meeting on October 21 to be held at the Adventure Science Center. Our speaker will be our newly elected president, John Harrington. The meeting will start at 7:30 pm.

Mauna Kea in Hawaii is a 13,600 foot tall extinct volcano and home to many of the world's great observatories. John Harrington has the good fortune to be traveling to Hawaii and visiting Mauna Kea, and will show digital photos of the various observatories and scientific stations there. He will describe his visit, along with explaining some of the reasons why Mauna Kea is regarded as such a favorable site, what future developments are expected there, and what other sites may someday challenge Mauna Kea's dominance. Please plan to attend John's presentation describing the current Mecca of astronomy.

## FROM THE PRESIDENT

Hello! I'd like to thank you for the confidence you've expressed in me by electing me to serve as president of the Society. I will do my best to be worthy of that confidence throughout the coming year. I think that, thanks in large part to Joe Boyd's strong leadership and the outgoing BSAS Board's diligent work over the past two years, we are in a strong position to continue furthering the cause of amateur astronomy throughout middle Tennessee. We have more loaner telescopes available than ever before, we have just held a successful Tennessee Star Party despite the threat of Hurricane Ivan, our membership stands at some 140 people, and we are financially stable.

Building on that strong base, I'd like to set out my vision for the BSAS for the coming year:

1. I want to emphasize the central importance of private star parties to the BSAS. I feel, and I believe many others share this view, that one of the most enjoyable aspects of BSAS membership is the opportunity presented by club star parties for learning and for good fellowship under starry skies. Towards that end, I will work with the incoming BSAS Board and Dark Sky Committee in an effort to locate, if possible, a (reasonably) dark sky site closer to Nashville than the current Water Valley Overlook site, which is quite dark but rather distant for most of our members. Although Warner Park officials are enthusiastic about our holding star parties at the Park, we cannot under the park's rules hold all of our star parties there.

My goal is to host not less than one private star party per month, hopefully at a new and closer site.

2. I believe we should continue to share our knowledge of the skies with the public through outreach events, particularly when there is a special celestial event that attracts public interest (a bright comet or favorable apparition of Mars, for example). We can accomplish much outreach through coordination with the Adventure Science Center, which graciously provides our club with meeting space.

3. With regard to the committee system, I believe it has enabled the BSAS to achieve much over the last few years, particularly with regard to public outreach, equipment acquisition and future planning. However, I will ask the BSAS Board at our next meeting to formally restructure the existing committees so that a total of six committees will remain:

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## Happy Birthday, Robert Goddard

by Robin Byrne

This month we honor the father of space exploration.

Robert Goddard was born October 5, 1882 in Worcester, Massachusetts. The only child of a bookkeeper, salesman and machine shop owner, Robert displayed great curiosity about the physical world. He read about physics and math, and dreamed of creating great inventions.

In 1898, Goddard was inspired by H. G. Wells' book War of the Worlds and dreamed of building a space flight machine. On October 19, 1899, Goddard climbed a cherry tree in his backyard and "...imagined how wonderful it would be to make some device which had even the possibility of ascending to Mars..." Goddard would refer to this day as his "Anniversary Day".

Goddard studied physics at Worcester Polytechnic Institute then went on to Clark University to earn his doctorate. It was here that he proved how thrust and propulsion could take place in a vacuum. (I still can't believe that it took this long to figure out a direct consequence of Newton's Third Law!)

Goddard was the first to develop a rocket motor that used liquid fuel. On March 16, 1926, the world's first brief flight of a liquid-propelled rocket engine took place on his Aunt Effie's farm in Auburn, Massachusetts.

Goddard moved to Roswell, New Mexico to continue with his experiments. (I would think all those aliens there would have helped.) At Roswell, "Moony" (as Goddard was called by the press because of his dream of going to the Moon) was the first to shoot a liquid-fueled rocket faster than the speed of sound in 1935. He also received the first patents for rocket steering mechanisms. With the onset of World War II, Goddard closed down his lab in Roswell and worked for the military.

Robert Goddard died August 10, 1945 in Baltimore, Maryland due to throat cancer. Goddard never saw a fully operational rocket fly.

Robert Goddard dreamed of flying to the Moon or Mars. A little over 20 years after his death, Men walked on the Moon. That "giant leap for mankind" got a big boost from rockets descended from Goddard's early achievements. We have much for which to thank this month's celebrant. Happy birthday, Robert "Moony" Goddard.

References: The New Encyclopaedia Britannica, 1995

### 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: \$29.00

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). Please call President, Joe Boyd, (615) 386-3134 if you have questions. Dues can be sent to:

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

### THE ECLIPSE NEWSLETTER

Editor: Bill Griswold  
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BSAS Officers:  
John Harrington, President  
Pam Thomas, Vice President  
Bob Rice, Secretary  
Randy Smith, Treasurer  
Joe Boyd, Immediate Past President

### Board of Directors

Mike Benson  
Tony Campbell  
JanaRuth Ford  
Bill Griswold  
Kris McCall  
Gary Wilkerson

BSAS Logo :  
Tony Campbell

**Barnard-Seyfert Astronomical Society  
Minutes of a Regular Meeting of the Board of Directors  
Held On Thursday, September 2, 2004**

The Board of Directors of the Barnard-Seyfert Astronomical Society met in regular session at the Jefferson Square Club House in Nashville, Tennessee on September 2, 2004. A sign-in sheet was passed around in lieu of a roll call. President Joe Boyd declared a quorum to be present and called the meeting to order at 7:55 P.M. Board members Mike Benson, Joe Boyd, JanaRuth Ford, John Harrington, Kris McCall, Lonnie Puterbaugh, Bob Rice, and Pam Thomas were present. Board members Tony Campbell, Bill Griswold, and Powell Hall were absent. In addition to members of the board, BSAS member Keith Burneson was also present. The minutes of the previous regular board meeting held on August 5, 2004 were approved as published in the September 2004 issue of the *Eclipse* newsletter.

Mentoring Committee Chair JanaRuth Ford announced that Middle Tennessee State University (MTSU)'s Physics and Astronomy Department would be hosting a series of star parties this fall to be held on campus on the first Friday of each month from 6:30 to 8:30 PM. Ms Ford distributed copies of an article from a Murfreesboro newspaper giving further details about these outreach projects.

Tennessee Star Party (TNSP) Treasurer Bob Rice reported that 66 persons had pre-registered for this event and that the checking account balance was \$4,154.10. Lonnie Puterbaugh announced that he had ordered T-shirts for the TNSP that morning.

Joe Boyd announced with regret that Dudley Pitts had resigned his position as BSAS Historian and distributed copies of Mr. Pitts' letter to the board. Mr. Boyd suggested that "...to provide an opportunity for camaraderie" should be added to the BSAS' draft mission statement.

Equipment Committee Chair Lonnie Puterbaugh moved that the money remaining in the committee's budget be spent to purchase two Telrads, two Dew Shield Plus units, and two Rigel Quick Finders in addition to cases for the Society's 8 inch and 4.5 inch dobsonian telescopes. Bob Rice seconded this motion and it passed by a unanimous vote.

Joe Boyd announced that MTSU had invited the BSAS to participate in its upcoming star parties on October 1, November 5, and December 3 of this year. Pam Thomas moved that the BSAS accept this invitation and Bob Rice seconded the motion. Following a brief discussion, the motion passed by a unanimous vote.

JanaRuth Ford commented that having both the annual election and the TNSP so close together each September was very inconvenient for many members. Noting that this action would require amending the bylaws, Ms Ford suggested that the board consider for 2005 and thereafter moving the election to November with the new officers assuming their posts in December. During the discussion all agreed that changing the election to the third Thursday in November would be a great improvement. Joe Boyd and John Harrington volunteered to draft this recommendation. Pam Thomas moved that this recommendation by the board be presented to the BSAS membership for their consideration and vote. Lonnie Puterbaugh seconded this motion and it passed by a unanimous vote.

Joe Boyd presented a proposed amendment to the BSAS' bylaws to suspend a member's dues during military service. Kris McCall noted that the proposed amendment appeared to specify service in the National Guard or Reserve components and suggested that it be modified to include service in the active military branches as well. All agreed that this would be a proper change and Mr. Boyd said he would prepare the revision. Pam Thomas moved that the amendment as modified be presented to the BSAS membership for their consideration and vote. Bob Rice seconded this motion and it passed by a unanimous vote.

Kris McCall announced that April Welch at Long Hunter State Park had expressed an interest in having the BSAS host a star party. Ms McCall said that she would check with Ms Welch about doing this on October 9 with November 6 or 9 as alternate dates. She also noted that the Origins Event was scheduled for Saturday, September 25 at the Adventure Science Center.

**Minutes of a Regular Meeting of the Board of Directors**, continued from Page 3

Lonnie Puterbaugh moved that the BSAS participate in the Australian Festival on September 11 and 12 at Centennial Park; this participation was to be optional for individual members who could attend as their schedules permitted. John Harrington seconded this motion and it was passed by a unanimous vote.

Lonnie Puterbaugh suggested that September 23, 24, and 25, 2005 be considered as dates for the next TNSP noting that this timing would fall under a first quarter moon. Mr. Puterbaugh said that he would ask attendees about this at the upcoming 2004 TNSP. Program Committee Chair John Harrington said that he was seeking input from Dr. Paul Lewis at the University of Tennessee (Knoxville) and Dr. Bob O'Dell at Vanderbilt University as possible speakers at the next TNSP.

Kris McCall inquired about ordering Observers Handbooks for 2005 noting that the Society sold all 25 copies that were ordered last time. Following a brief discussion, the board decided to order 25 Observers Handbooks and authorized Ms McCall to investigate the price break for ordering 25 Guy Ottewell calendars. Ms McCall said that she would make an announcement at the next membership meeting.

There being no further business, President Boyd declared the meeting adjourned at 9:30 P.M.

Respectfully submitted,  
Bob Rice  
Secretary

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**Barnard-Seyfert Astronomical Society  
Minutes of the Monthly Membership Meeting  
Held on Thursday, September 16, 2004**

President Joe Boyd called the meeting to order at 7:36 P.M. at the Adventure Science Center and welcomed new members and visitors. The minutes of the previous membership meeting held on August 19, 2004 were approved as published in the September 2004 issue of the *Eclipse* newsletter.

Joe Boyd announced that the Board of Directors had recommended four amendments to the BSAS bylaws. Written copies of the board's recommendations were handed out to the membership and were as follows:

**Section 205 - Annual Meeting.** The annual meeting of the members shall be held on the third Thursday in November in each year at 7:30 P.M., for the purpose of electing officers and directors and for the transaction of such other business as may come before the meeting. If the day fixed for the annual meeting shall be a legal holiday in the state of Tennessee, such meeting shall be held on the next succeeding business day. If the election of officers and directors shall not be held on the day designated for any annual meeting of the members or at any adjournment thereof, the board of directors shall cause the election to be held at a special meeting of the members as soon thereafter as may be convenient, subject to Section 208.

**Section 303 - Term of Office.** Each director at large shall hold office for a three (3) year term, except as otherwise provided in these bylaws, such term to expire at the meeting of the members held on the third Thursday in December in each year at 7:30 P.M. Thus there shall be two directors at large to be elected each year to serve three year terms.

**Section 402 - Election and Term of Office.** The officers of the corporation shall be elected each year by the membership at the annual membership meeting. The term of office of each officer shall be one year, beginning with the end of the meeting held on the third Thursday in December in each year at 7:30 P.M., and ending with the end of the meeting at which the term expires. If the election of officers shall not be held at such meeting, the election shall be held as soon thereafter as it conveniently can be. Each officer shall hold office until his or her successor shall have been duly elected and shall have qualified.

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**Minutes of the Monthly Membership Meeting**, continued from Page 4

After allowing time for review, Mr. Boyd asked for a motion to vote on all three recommendations as a group. Bob Norling so moved and Powell Hall seconded the motion. There was no subsequent discussion and the motion passed by a unanimous voice vote.

Mr. Boyd asked the members to consider a resolution by the board of directors authorizing suspension of membership dues due to military deployment. This resolution read as follows:

BE IT RESOLVED by the Board of Directors of the Barnard-Seyfert Astronomical Society that:

- (1) In the event of the call or recall to active duty or the deployment of a member of the Barnard-Seyfert Astronomical Society (BSAS) by the United States military active services or their reserves, the National Guard, the Air National Guard, or the Coast Guard, the dues of such member of the Society shall be suspended for the duration of the active duty service or deployment of such BSAS member for a period up to two years; and
- (2) During such period of service or deployment, the member shall continue to have, and enjoy all the privileges of, full membership in the Society, including but not limited to membership access to the BSAS web site, receipt of the Eclipse newsletter, and opportunity to participate in such BSAS activities as the member may participate in either from a distance of while in the area on leave, with the exception of the holding of elective office in the BSAS; and
- (3) Upon release from active duty, the member's dues shall be considered paid after deducting from the member's paid up status upon recall or deployment for the time the member was on active duty or deployment, so that upon return, the member shall be a fully paid up member for the time remaining since the last dues payment to the date of recall or deployment.

Mike Benson moved for adoption of the resolution and John Harrington seconded the motion. There was no discussion and the motion passed by a unanimous voice vote.

Mr. Boyd announced the recommendations of the Nominating Committee for officers and directors at large which were: for President, John Harrington; for Vice-President, Pam Thomas; for Secretary, Bob Rice; for Treasurer, Randy Smith; for directors at large, Mike Benson and Tony Campbell. Mr. Boyd then asked for a motion that the recommendations of the Nominating Committee be accepted. Spencer Buckner so moved and Bob Norling seconded the motion. There was no discussion and the motion passed by a unanimous voice vote.

Mr. Boyd called for nominations from the floor for the offices of President. There were none and, without objection, Mr. Boyd declared the nominations closed. Nominee John Harrington was elected to the office of President by a unanimous voice vote. Mr. Boyd then called for nominations from the floor for the office of Vice-President. There were none and, without objection, Mr. Boyd declared the nominations closed. Nominee Pam Thomas was elected to the office of Vice-President by a unanimous voice vote. Mr. Boyd next called for nominations from the floor for the office of Secretary. There were none and, without objection, Mr. Boyd declared the nominations closed. Nominee Bob Rice was elected to the office of Secretary by a unanimous voice vote. Mr. Boyd then called for nominations from the floor for the office of Treasurer. There were none and, without objection, Mr. Boyd declared the nominations closed. Nominee Randy Smith was elected to the office of Treasurer by a unanimous voice vote. Mr. Boyd called for nominations from the floor for the office of Director at Large. There were none and, without objection, Mr. Boyd declared the nominations closed. Nominee Mike Benson was elected to the office of Director at Large by a unanimous voice vote. Mr. Boyd called for nominations from the floor for the office of a second Director at Large. There were none and, without objection, Mr. Boyd declared the nominations closed. Nominee Tony Campbell was elected to the office of Director at Large by a unanimous voice vote.

Mr. Boyd announced that since Pam Thomas was a Director at Large, her election to the office of Vice-President now left that position vacant. Mr. Boyd announced Gary Wilkerson as the Nominating Committee's recommendation to fill that post. Mr. Boyd then called for nominations from the floor for the office of Director at Large. There were none and, without objection, Mr. Boyd declared the nominations closed. Nominee Gary Wilkerson was elected to the office of Director at Large by a unanimous voice vote.

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**Minutes of the Monthly Membership Meeting**, continued from Page 5

Mr. Boyd then asked for a motion that the members vote on all of the officers and directors just elected as a group. Bob Norling so moved and Powell Hall seconded the motion. The motion passed by a unanimous voice vote without additional discussion.

Programs Committee Chair and newly-elected President John Harrington introduced our speaker, former astronaut Dr. Rhea Sedden. Dr. Sedden participated in three NASA shuttle space flights in 1985, 1991, and 1993. She is now the assistant Chief Medical Officer of the Vanderbilt Medical Group in Nashville. Noting that all astronauts are trained to use cameras, Dr. Sedden showed and commented upon a fascinating "home movie" made by herself and fellow crew members during their 1991 dedicated space and life sciences mission. Dr. Sedden described several experiments that she conducted during this flight regarding the redistribution of fluids inside the body. She also commented on being able to clearly see smoke from the oil well fires in Kuwait during the 1<sup>st</sup> Gulf War that was then ongoing. In summary, Dr. Sedden commented that she believed the human body was remarkably adaptable to the rigors of space flight. Following her presentation, Dr. Sedden enthusiastically answered members' questions and responded to their comments. Mr. Harrington thanked Dr. Sedden for her outstanding program and for coming out during the inclement weather resulting from the remnants of hurricane Ivan. Following her departure, many members openly commented that this had been one of our best programs ever.

Joe Boyd recalled the meeting to order at 8:55 P.M. Equipment Committee Chair Lonnie Puterbaugh announced that the Society was purchasing 2 Telrad and 2 Rigol reflex unit-power finders and padded cases for the club's 8 inch and 4.5 inch dobsonian telescopes.

Mentoring Committee Chair JanaRuth Ford asked for members to work with Kris McCall on the NOVA "Origins" program at the Adventure Science Center (ASC) on September 25. Ms Ford also noted these upcoming events: the 1<sup>st</sup> MTSU star party on October 1; the solar observing get-together at Warner Park on October 9; and the total lunar eclipse observing session at the ASC on October 27.

Tennessee Star Party (TNSP) Treasurer Bob Rice announced that the star party would go on as scheduled at Camp Nakanawa despite threatening bad weather from the remnants of hurricane Ivan. Mr. Rice reported that 90 people had pre-registered for the TNSP and that the event's checking account balance was \$5,377.10.

ASC's Sudekum Planetarium Director Kris McCall thanked Joe Boyd, Lonnie Puterbaugh, and the BSAS for their participation at the Australian Festival in Nashville on September 12. Ms McCall announced with regret that she would not be able to attend or bring the Starlab equipment to the TNSP because of the threatened wind and lightning. She invited all BSAS members to attend the "Origins" event at ASC on September 25. Ms McCall took a quick poll of members who would be interested in purchasing 2005 editions of the RASC's Observer's Handbook and Guy Ottewell's Astronomical Calendar. Eleven indicated interest in the Handbook and seven in the Calendar.

Joe Boyd commented that he counted 121 people who looked through his telescope at the Australian Festival. Mr. Boyd noted that the BSAS' membership had grown remarkably during the past two years and that more members than ever were actively working in the Society's committees. Mr. Boyd then turned the meeting over to newly-elected President John Harrington.

Mr. Harrington thanked Joe Boyd for his hard work during his two terms as President. There being no further business, Mr. Harrington declared the meeting adjourned at 9:17 P.M.

Respectfully submitted,

Bob Rice  
Secretary

From the President, continued from Page 1

- Dark Sky
- Equipment, Facilities & Grants
- Finance & Budget
- Long Range Planning
- Mentoring, Outreach and Publicity Programs

I will appoint Committee chairs over the next few days and a full list will appear in the next issue of The Eclipse. I want to emphasize that every member of the BSAS is invited to serve on a committee! There is no better way to contribute your energy to the club.

While I'm at it, I would like to recognize several individual coordinators who will continue to provide leadership to our club:

- ALCOR—Mike Benson
- Hospitality—Pam Thomas
- Night Sky Network—JanaRuth Ford
- Webmaster—Tony Campbell

4. The Equipment Committee has done a fine job over the last year or two in acquiring, through both purchase and donation, additional loaner equipment for our members to borrow. We not only have a growing collection of telescopes available for loan, including 4" and 8" dobsonians, an 8" Schmidt-Cassegrain and a 70mm refractor, but also some fairly exotic but very useful equipment, including two equatorial tracking tables which enable dobsonians to track the stars. I believe we should concentrate our efforts during the forthcoming year on restoring our two large-aperture reflectors, one of which is of substantial historical interest as it was built by one of our club's namesakes, Carl Seyfert, and the other of which is a classic 10" Cave long-focus reflector, which should yield beautiful planetary images.

5. I would like to propose an annual BSAS field trip. There are a variety of fascinating, astronomy-oriented sites within driving range: the National Radio Astronomy Telescope at Greenbank, West Virginia, for one, and NASA's Marshall Space Flight Center in Huntsville, Alabama, for another. We should also consider a caravan to a major star party elsewhere (perhaps the Mid-South Star Gaze at French Camp, Mississippi, coming up in April), and certainly should arrange a visit to the Tamke-Allen Observatory at Roane State Community College.

6. We are fortunate to have neighboring astronomy clubs that share our passionate interest in the skies. I will work with the incoming BSAS Board and the to-be-named Chairperson of the Mentoring, Outreach and Publicity Committee to arrange joint star parties with the Cumberland Astronomical Society, the Von Braun Astronomical Society in Huntsville, Alabama or other nearby clubs.

I'd like to close this message by saying that I am very enthusiastic about the year ahead! We can accomplish much over the coming year, and my goal is to have FUN doing it! I look forward to working with all of you, and to seeing you under the stars.

Clear skies,  
John Harrington

**THE TENNESSEE STAR PARTY  
PRELIMINARY STATEMENT OF OPERATIONS  
SEPTEMBER 17-19, 2004**

INCOME

Registration Fees	\$2,046.00	
Less: Refunds <sup>(1)</sup>	<u>25.00</u>	
Net Registration Fees		\$2,021.00
Meals & Dining		2,009.00
T-Shirt Sales	\$1,155.00	
Less: Refunds <sup>(2)</sup>	<u>15.00</u>	
Net T-Shirt Sales		1,140.00
Cabin Fees		765.00
Camping Fees		366.00
Snack Bar Sales		<u>113.50</u>
 Total Income		 \$6,439.50

EXPENSES

Camp & Facilities	\$2,000.00	
Meals & Dining	1,566.00	
T-Shirt Cost <sup>(3)</sup>	1,270.00	
Snack Bar Cost	325.73	
Portable Toilets	200.00	
Speaker Expenses <sup>(3)</sup>	150.00	
Registration Expenses	14.80	
Printed Checks	9.90	
Cash Shortage	<u>3.00</u>	
 Total Expenses		 <u>\$5,539.43</u>
 Net Gain on Operations		 \$900.07

NOTES

- (1) Refund of \$5 BSAS member registration discounts not taken  
(2) Refunded because requested size was not available.  
(3) Estimated

**COMMENTS**

This statement reflects the results of financial operations for the three-day duration of the TNSP. Fortunately, we managed to do fairly well despite lower attendance due to the threat of inclement weather from hurricane Ivan. This statement is "preliminary" because two expenses are estimated. The t-shirt cost is a realistic estimate based upon close contact with the vendor. NASA speaker Paul Johnson's expenses will include \$72.91 for his motel room that we know about plus mileage from Huntsville that we have not yet received. Consequently, the mileage was estimated at 25 cents per mile. We will also receive income from continuing sales of the remaining t-shirt and snack bar inventories. However, for convenience these future sales will be shown as general BSAS income to avoid holding the TNSP's books open for an extended period. I will report any significant variations from these estimates that may occur to the Board of Directors and the membership.

Bob Rice,  
TNSP Treasurer



**TNSP 2004**  
**September 17-19**

By Pam Thomas

It looked like we were going to have a very rainy, dreary Tennessee Star Party this year, but on Friday, the gods decided that we had worked too hard to let Hurricane Ivan ruin our weekend. After a bit of drizzle on Friday afternoon, the skies cleared and we had the most fabulous view of the heavens that many of us have ever seen in Tennessee! Many people began arriving early afternoon and were delighted to hear Powell Hall's presentation on Sky Royalty. After dinner, Lonnie Puterbaugh gave a very enlightening and absolutely hilarious presentation on Asteroid Toutatis. We not only laughed, but we actually learned a few things. Later, several attendees set up their equipment on both the observing field and closer to camp where all who had the opportunity to take a peak were not disappointed.

We awoke Saturday morning to cloudless blue skies (a few of us actually saw the sun rise and knew it was going to be a marvelous day). After breakfast, our first presenter was Paul Johnson from Marshall Space Flight Center, NASA in Huntsville, AL. He gave a highly entertaining presentation on the Space Shuttle, and all things NASA, and left us with lots of goodies to bring home including postcards, stickers and a make your own space shuttle. We had several wonderful speakers throughout the day including Lisa Tackett, Dr. Eric Klumpe from MTSU, Dr. David Fields from Roane State College, and Mary Boyd who's presentation on making Astronomy fun and safe for kids was excellent and quite timely considering all the public outreach we are doing. Throughout the day, we were fortunate enough to look through a variety of solar scopes set up near the middle of the camp. The solar flares seen through Lonnie's Coronado H-alpha filter were absolutely stunning!

After dinner, we gave away several door prizes. There were some fantastic eye pieces donated by Bill Burgess and books donated by the Dyer Observers. Finally, some of us made our way out to the observing field, while others decided to remain near the cabins to do some observing. Lonnie had his 32 inch monitor, scopes, and cameras set up next to Paul Lewis from UT. There was some good natured competition all night on which was better-the eyepiece or CCD? (Personally, it was a tough call, but there is A LOT to be said about video). We panned the sky and were able to see numerous nebulae, clusters, galaxies, and finally the elusive Asteroid Toutatis!

Unfortunately, the initial forecast and unforeseen problems kept quite a few from coming to TNSP 04. We did however, have a good turnout with 110 amateur astronomers in attendance. In all, everyone had a great time. We made new friends, got to reacquaint with some old ones, and learned quite a lot. Not to mention, we could not have asked for clearer skies. If you were there, you know what I mean, if you were unable to attend, you missed a phenomenal weekend!

**Dr. Seddon takes us into space again.**

For those who missed Dr. Seddon's most excellent talk at the September membership meeting (because of the severe weather associated with Hurricane Ivan), you have another chance. She is scheduled to address several Boy Scout troops on Monday, November 1, in Wood Hall at the Adventure Science Center. The actual meeting runs from 7:00 to 9:00 pm with her presentation slated to begin at 7:30. Admission is free.

Dr. Rhea Seddon is Assistant Chief Medical Officer of the Vanderbilt Medical Group and an astronaut who flew three Space Shuttle missions. Dr. Seddon, who lives in Murfreesboro, is a graduate of the University of California, Berkeley, and the University of Tennessee College of Medicine. She served in NASA from 1978 to 1997. She is active in biomedical research and special projects on astronaut health and the study of bioastronautics for the exploration of the Moon and Mars. Her topic will be "Life Sciences Research in Space."

If you have questions about this event, contact Kris McCall at 401-5077.

## Activities and Events

October 1 — 31, 2004

- 10/3 Venus 0.2° S of Regulus
- 10/5 Mercury in superior conjunction
- 10/6 LAST QUARTER, Jupiter at 0° declination
- 10/7 Saturn 5° S of Moon, BSAS Board of Directors meeting,  
7:30 Jefferson Square
- 10/10 Venus 4° S of Moon
- 10/12 Jupiter 1.6° S of Moon
- 10/13 NEW MOON, Partial solar eclipse
- 10/20 FIRST QUARTER, Orionid meteors peak
- 10/21 Neptune 5° N of Moon, BSAS Membership Meeting,  
7:30 pm Adventure Science Center
- 10/23 Uranus 4° N of Moon
- 10/24 Neptune stationary
- 10/27 FULL MOON, Total Lunar eclipse (the Hunter's Moon)
- 10/31 Daylight Savings Time ends, Mars 3° N of Spica, Vesta  
stationary

November 1 — 30, 2004

- 11/4 LAST QUARTER, Venus 0.6° N of Jupiter
- 11/5 Double shadow transit on Jupiter
- 11/9 Jupiter 1.0° S of Moon, occultation; Venus 0.2° N of  
Moon, occultation
- 11/10 Mars 0.5° N of Moon, occultation
- 11/11 Mercury 2° N of Antares
- 11/12 NEW MOON, Double shadow transit on Jupiter
- 11/13 Mercury 0.9° N of Moon, occultation
- 11/18 FIRST QUARTER
- 11/20 Mercury greatest elongation E (22°)
- 11/26 FULL MOON

Note: all dates &amp; hours according to Central Time

**BSAS**  
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**Nashville, TN 37215-0713**

