



# ECLIPSE



*The Newsletter of the Barnard-Seyfert Astronomical Society*

**Celebrating our 75th Year in 2003**

**December 2003**

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## December Meeting

The December meeting of the BSAS will start at 1830 (6:30 pm) at the Adventure Science Center as we celebrate our Annual Holiday Season pot luck supper on December 18<sup>th</sup>. The club will furnish the meat, drinks, and plates, cups, plastic silverware, etc. You bring your speciality dish for us all to enjoy.

Our December meeting will feature Professor Richard Schumde of Gordon College in Georgia. A veteran planet watcher, Dr Schumde will focus on the recent close approach of Mars, as well as the current apparitions of the gas giant planets, Jupiter and Saturn. Dr Schumde has been working to monitor the light curve of these planets through out their apparition, a task never before completed. We hope to see you there.

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**Please see page 9 for new rules on membership and dues**

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## FROM THE PRESIDENT

Joseph M. Boyd, Jr.

The large number of new members and visitors at our last membership meeting on 20 November is an indication of the growing interest in astronomy in our society today, and particularly here in Middle Tennessee. We welcome all of you who are new to the BSAS, and hope you will be an active participant in all of our activities.

I want to take this opportunity to urge all of our members to welcome our new members and visitors at each of our membership meetings. If you see someone there you don't know, please make the effort to introduce yourself and get acquainted. They will appreciate this more than you know. Have you ever gone to the meeting of an organization for the first time, and no one spoke to you or made any effort to make you feel welcome? Treat them like you would want to be treated if you were a stranger, and perhaps you will be rewarded by finding a new friend. The word "Society" in our name, The Barnard-Seyfert Astronomical Society, says it all; it implies that we are an organization which is inclusive, rather than a "club" which is exclusive.

We have several very important events coming up. On Wednesday, 5 December, the annual Seyfert Lecture will be held at Vanderbilt. This year for the first time, BSAS is a cosponsor of the Lecture with the Department of Physics and Astronomy, and therefore we are one of the hosts. Thus it behooves as many of us to attend as possible. The lecture starts at 1700 in Vanderbilt's Wilson Hall, Room 126, with a reception to follow at 1800. A description of the program is found in an announcement elsewhere in this Eclipse.

Then on Saturday, 13 December, starting at 1900, we are cosponsoring the public star gazing event at the Warner Park model airplane field. This is a joint venture of the Sudekum Planetarium of the Adventure Science Center, the Warner Parks, and the BSAS. If the weather permits, this will be a major event, and there will probably be a large crowd, so we will need plenty of telescopes and additional people to staff the BSAS booth and to help guide the people to the telescopes and explain what they will be seeing. Several of you signed up at the last meeting to come, but if you were not at that meeting, or failed to get access to the list that was passed around, please call me at 386-3134 and let me know you can participate.

And finally, our regular monthly membership meeting, combined with our annual holiday dinner, will be held on Thursday, 18 December, at the Adventure Science Center. This is a family covered dish dinner, which will start at 1830 rather than at our regular time of 1930. Our Hospitality Committee chair, Pam Thomas, passed out sign up sheets at the last meeting, and many of you signed up saying what you will bring. Pam does not like leaving anything to chance, so if you have not signed up, please call Pam at 361-6131 to tell her what you will bring. Our speaker that evening is Prof. Richard Schumde, Jr., whom many of you know to be a vivacious and entertaining speaker.

Our newly appointed Membership Chair, Bill Griswold, who actually volunteered for this position, has spent many hours preparing an up to date membership list, the first comprehensive list we have had in many years. The computerized list can be used to send the Eclipse by email or to address mailing labels, to show which members

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**FROM THE PRESIDENT, Continued from Page 1**

are on each of the various committees, to show whose dues are paid and whose are delinquent, and to enable us to determine your interest in working in the BSAS. Our thanks go out to Bill for this great service to our Society.

Some of you are still getting your Eclipse by regular mail. Bill Griswold, our editor, recently calculated that sending the Eclipse, with the present limited number of pages, costs almost one dollar per person per issue. He requested recently that as many of you who have email give him your address so you can receive the Eclipse promptly and at much less expense to the Society. But I have another personal reason for wanting you to get it by email. We want to expand the Eclipse so we can use more articles from our own members and more articles of general interest. When we exceed five sheets, the postage costs increase dramatically. This has held us back in the past, but I feel it is time to expand the newsletter substantially. If you are currently getting the Eclipse by regular mail but you have an email address, won't you contact us and let us send your Eclipse by email?

I look forward to seeing you and your families at the annual dinner in December. And all of us on the Board of Directors wish you a clear holiday season, and the greatest viewing you have ever had in 2004.

**SEYFERT LECTURE COSPONSORED BY BSAS**

The annual Seyfert Lecture will be held at 1700 on Wednesday, 3 December 2003, in Room 126 of Wilson Hall on the Vanderbilt Campus. A reception will follow at 1800 just outside the lecture room.

This year's speaker is Saul Perlmutter of the Lawrence Berkeley National Laboratory. His topic is "Supernovae, Dark Energy, and the Accelerating Universe". Dr. Perlmutter summarizes his talk as follows: Will the universe last forever, or someday will it come to an end? Surprisingly, this apparently philosophical question can be answered empirically. Light from the cataclysmic explosions of distant stars – supernovae – provides us with natural mile markers across the vast expanses of space, markers that can be used to track the past expansion of the universe and extrapolate its fate. The most recent results are unsettling, at last to physicists. It appears that the universe will last forever, and that its expansion will speed up indefinitely. If so, some fundamental physics concepts may need to be revised, and some mysterious "dark energy" – perhaps Einstein's "cosmological constant" – may pervade the universe. This is the first decade in which we can begin to answer such cosmological questions with a variety of measurement techniques. By developing new detector systems and larger telescopes both on earth and in space we are opening a new chapter of striking discoveries.

This is the first year that the Barnard-Seyfert Astronomical Society has cosponsored the Seyfert Lecture with the Vanderbilt Department of Physics and Astronomy. Dr. David J. Ernst, Chair of the Department, wrote to the membership to state, "I write to thank you for your contribution to the Seyfert Lecture Fund. Your participation in and support of the Seyfert Lecture is very much appreciated. I look forward to the Department of Physics and Astronomy and the Barnard-Seyfert Astronomical Society working together on this project for many years to come."

Dr. Ernst has stated that the BSAS will have a significant role in planning the annual lecture series starting with the 2004 lecture.

Joe Boyd, President of the BSAS, urges all members who can attend the lecture to do so, since we want to have a good showing of support for this event.

**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: \$29.95  
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**

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Logo Photograph:  
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## Happy Birthday SOHO

by Robin Byrne

This month we celebrate the anniversary of the launch of a spacecraft that has revolutionized our view of the Sun. SOHO, the Solar and Heliospheric Observatory, was launched on December 2, 1995. The spacecraft was built by the European Space Agency (ESA), but was launched by NASA. NASA is also responsible for ongoing mission operations, including use of NASA's Deep Space Network to track and communicate with the observatory.

SOHO observes the Sun continuously from a gravitational balance point between the Earth and the Sun, called the L1 Lagrangian point, which is 1.5 million kilometers from the Earth. Although originally designed to last for 2 years, SOHO has far surpassed its original mission.

The main purpose of SOHO is to study solar activity, both internal and external. Three instruments are designed to observe the Sun in a way that allows us to infer information about its interior. Since we cannot see past the Sun's photosphere, the layer of the Sun we see when looking at the Sun with a white light solar filter, other techniques are used to glean information about what lies below. Both the GOLF (Global Oscillations at Low Frequencies) and VIRGO (Variability of Solar Irradiance and Gravity Oscillations) instruments measure small changes in the Sun's size and output. This provides information about the rate of energy production in the Sun's core and gives clues about the overall conditions in the very center of the Sun. MDI/SOI (Michelson Doppler Imager/Solar Oscillations Investigation) is able to measure, with a high resolution, oscillations on the surface of the Sun. These oscillations are related to events occurring in the Sun's convective layer, the layer just below the photosphere.

Several instruments are designed to study the outer layers of the Sun, known as the solar atmosphere. In particular, they study the Sun's corona, which is the layer of the Sun normally only visible from Earth during a total solar eclipse. SUMER (Solar Ultraviolet Measurements of Emitted Radiation), CDS (Coronal Diagnostic Spectrometer) and EIT (Extreme ultraviolet Imaging Telescope) observe the part of the corona closest to the Sun. UVCS (Ultraviolet Coronagraph Spectrometer) and LASCO (Large Angle and Spectrometric Coronagraph) both observe all portions of the corona. In particular, these instruments are capable of monitoring outbursts from the Sun, such as coronal mass ejections (CME's), which are large portions of plasma blasted away from the Sun. Other instruments on board continuously monitor the solar wind, providing invaluable information about outbursts heading toward Earth.

At the time of this writing, several major sunspot groups, flares and coronal mass ejections had been observed over the course of about two weeks. On October 28, 2003, the third largest solar flare ever observed erupted from the Sun along with a very large coronal mass ejection. Moments later, SOHO detected high energy particles streaming past and heading toward Earth. Thanks to SOHO's warning, satellites were placed into "safe mode" to prevent irreparable damage before the CME arrived the next day. Also, the crew of the International Space Station, when on the side of the Earth facing the Sun, remained in the section of the station that provides the most protection from solar outbursts. Another eruption followed the next day, producing auroral activity visible much farther south than usual, including in the Tri-Cities area. Then, between November 2 and 3, 2003, three more flares erupted in an unprecedented series of solar events. Once again, SOHO spotted it first. Among the casualties of this week of activity: two Japanese satellites failed due to the electrical output of the eruptions, and part of Sweden lost power as the activity interfered with their power grid. Considering the level of energy associated with all of the solar events over this short time, the amount of damage is minimal compared to what could have happened had SOHO not provided us with advance warning.

Ironically, just as all this activity was taking place, Congress was debating whether to cut funding for, or completely eliminate, NOAA's Space Environment Center, which, in conjunction with SOHO, provides an early warning system for activity of just this nature.

As we observe those amazing naked-eye sunspots, or view the tremendous prominences through the park's H-alpha filter, or look up in awe at the northern lights, we can thank SOHO for the past 8 years of probing deeper into the Sun, providing a better understanding of our nearest star, and for letting us know ahead of time what the Sun is up to. Without SOHO, we would have all been caught without a warning and might have been left in the dark, in more ways than one.

### References:

The Solar and Heliospheric Observatory Web Page <http://sohowww.nascom.nasa.gov/>

ESA Portal - Another giant solar explosion follows Tuesday's enormous solar flare [http://www.esa.int/export/esaCP/SEM6N9WLDMD\\_index\\_0.html](http://www.esa.int/export/esaCP/SEM6N9WLDMD_index_0.html)

Sun on Fire, Unleashes 3 More Major Solar Flares by Robert Roy Britt [http://www.space.com/scienceastronomy/solar\\_flares\\_031103.html](http://www.space.com/scienceastronomy/solar_flares_031103.html)

Space Weather Forecast Center Faces Stormy Future by Jeremy Singer [http://www.space.com/news/space\\_wx\\_congress\\_031030.html](http://www.space.com/news/space_wx_congress_031030.html)

## The Most Fun You Can Have Without a Telescope

ALCON 2003 Nashville

By Rod Mollise

When I'm asked how I liked the 2003 Astronomical League Convention in Nashville, my answer is simple: "Most fun I've ever had without a telescope." As a long-time AL member and supporter, I'd always wanted to attend one of the League's yearly conventions, but, somehow, Just never got around to it. This year, however, things were different. ALCON 2003 was being held within fairly easy driving range, Nashville, Tennessee. And, most of all, I'd been invited to give a presentation. As an 11 year-old back in the 1960s reading about AL conventions in the *Sky and Telescope's* Amateur Astronomers column, I dreamed about just *going* to an ALCON. Pass up *speaking* at one? No way!

While Nashville is a relatively easy drive from Mobile, Alabama, the fact that Dorothy and I couldn't leave until early afternoon made the trip a two-day affair. But the convention didn't get underway until Wednesday, July 9, anyway, and our hotel reservations began on that day as well, so we did not feel pushed to drive too hard on Tuesday. We stopped for the night in the little town of Enterprise, Alabama, not far from Huntsville, and stayed in a clean if not elaborate Best Western. There was an Applebee's restaurant in the parking lot whose food was fine, but imagine my dismay when I ordered a beer and the waitress informed me, "Sorry sir, this is a DRY COUNTY."

Nashville is a genuinely big city, and there is currently a lot of congestion on the Interstates in the area due to road-work on all the major routes through town. Nevertheless, Dorothy and I found the convention hotel, the Airport Embassy Suites, without trouble. Our first stop was the convention registration desk, which was staffed with the friendly folk of the sponsoring club, Nashville's Barnard Seyfert Astronomical Society. Let me say right here and now that the reason for ALCON 2003's success was the tireless hard work by this club. If every club had members this dedicated and industrious, amateur astronomy would be in great shape!



**The ALCON 2003 Attendees and BSAS Members**

The Nashville Embassy Suites is slightly smaller and older than some of the chain's hotels I've stayed in in the past, but is very nice nevertheless, with a decent free breakfast buffet and FREE DRINKS for a couple of hours in the evening. You can bet that I took full advantage of that little perk! Dorothy and I were very pleased with our suite, which offered a splendid view of the lights of Nashville in the distance.

Wandering around, checking-out the vendors' room after we arrived, I was pleased to see some familiar faces including the Barnard-Seyfert's Mike Benson and *Sky and Telescope's* Kelly Beatty. I also found fellow MASer Judy Anderson in the considerable crowd in and around the main hall and vendor area. I made some new friends, too, in the relaxed ALCON atmosphere. Bill Burgess and wife Tammy were there showing and selling an impressive array of merchandise. And I had the opportunity to talk over planetary observing, a big current interest of mine, with new ALPO Director Richard Schmude. Oh, I finally met sci.astro.amateur's famous (or is that infamous?) troll/clown, the Knoxville Observers' Shawn Grant. Shawn definitely injected some levity into what would otherwise have been some slightly serious proceedings! And despite his current persona on s.a.a., he seemed a knowledgeable and committed observer.

There were some excellent presentations Wednesday afternoon, but in the course of getting checked in, unpacked and settled in the hotel, I'm afraid I missed most of them. The highlight of the day was the Star-Be-Que,

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**The Most Fun**, continued from Page 4

held at Vanderbilt's historic Dyer Observatory. We were bussed out to this beautiful little facility, which features a classic-looking dome housing a 24" telescope. The dinner was held in the observatory's lovely library. This area holds the prototype of what will be the operations center for the ISS AT—the International Space Station Amateur Telescope. Since the skies did not look at all promising, Dorothy and I departed on a bus after consuming plenty of the excellent catered barbeque. A few folks stuck it out, and Kelly Beatty told me that they had a look at Mars but that the seeing just wasn't good enough for the 24 to strut its stuff. Arriving back at the hotel, Dorothy and I called it a night. I was scheduled to give my presentation, "The Past, Present and Future of the SCT" at 10:30 am the next morning, and I wanted to be at least semi-rested.

I was happy to be giving my talk on Thursday morning, since it meant I'd have all day Friday and Saturday to play without worrying about PowerPoint disks or memorizing my notes. My session was very well attended and I received a kind and warm response that was very gratifying. If you'd like to see my PowerPoint slides, just go to <http://members.aol.com/RMOLLISE/index.html> and choose "Rod's Presentations" from the menu of choices you'll find.

Do you want to talk about information overload? There were so many excellent presentations that my head was spinning by the end of the week. I mean, we had Richard Berry talking CCDs, Ron Wodaski talking CCDs, and Don Parker talking CCDs! And that just scratches the surface. I found myself spending 8 hours a day or more in sessions—something unusual for me at a conference of any kind. One talk that interested me in particular was Lonnie Puterbaugh on video imaging. He simply amazed me with his real time video of deep sky objects. Folks, it's amazing what can be done with this medium these days. Video is *not* just for the Moon and planets anymore.

The facilities and a/v equipment were top-notch, and all the talks I attended were very professionally presented. There was one slight hiccup Thursday night. That evening's program had to be held in the cramped vendors' area, as the main hall couldn't be booked for that night. It was occupied instead by a plus-size models' convention. No, I am not making that up!

While I did not take a telescope to ALCON, that does not mean I didn't do any observing. We had an impromptu star party in the hotel parking lot Friday night after the last session ended at 10 pm. This was largely a demo of the fantastic Stellacam deep sky video imagers that Lonnie Puterbaugh had talked about on Thursday evening, but some of the vendors brought dobs in the parking lot, and I took along a pair of 15x70 binoculars that I had purchased from Bill Burgess.

The Stellacam was truly amazing. Imagine, if you will, the Omega Nebula in its full glory in *real time* on a large-screen monitor. Nebulosity and dark lanes everywhere. And all this with a near full Moon in the sky and with all the lights of Nashville around us. The hotel had switched off the parking lot lights, but there were plenty of other hotels around us, and the skies over Nashville tend to a sodium-streetlight-pink color. In addition to Omega, we also had fantastic (black and white) views of M13, M22, M 51 (lots of spiral structure) and M81/82. I was mightily impressed. The Stellacam video camera, in addition to being able to show deep sky objects in real time, can also send video to a computer or VCR for later study or for the production of still images.

Saturday offered many more interesting programs, including Kelly Beatty's thought-provoking "Where Have All the Young Astronomers Gone?" It was also, unfortunately, the last day of ALCON 2003. But it ended on a high note. Following happy-hour cocktails, Dorothy and I attended the annual AL banquet. The food was surprisingly good, the speaker, Dr. Mnartin Weisskopf of the Chandra X-Ray Observatory was very interesting, and the annual awards—including the Young Astronomer Award—were inspiring.

It had been a very intense week, but I was genuinely sorry to have it end. Next year's ALCON will be held on the west coast, and, much as I'd like to go again, I'll probably give it a miss. Probably. But I can tell you this, if you get the chance to attend an Astronomical League Convention, just DO IT. You will, like me, find it's the most fun you can have in amateur astronomy without a telescope!

(Printed in its entirety by permission of Rod Mollise from his newsletter *Rod Mollise's Astro Land!*)

**2004 BUDGET COMMENTS**

The 2003 fiscal year that ended on October 31<sup>st</sup> was a very good one for the BSAS. We finished the period with \$10,506 in cash and certificates of deposit and with no outstanding debts of consequence. Much of this was due to successful results from the Astronomical League Convention (ALCON) and the 2003 Tennessee Star Party (TNSP). But in fact we worked hard and succeeded with most of the projects we undertook during the year. As a result, I doubt if many astronomy clubs in Tennessee - or even in the Southeast - are currently enjoying a similar financial well being.

In deciding how to use what we have accumulated, we elected to judiciously spend about 42% on activities and acquisitions that directly benefit our membership while holding back about 58% for contingencies and future plans. This is detailed in the accompanying budget for 2004 which includes expenditures for more loaner scopes and improved audio visual equipment among other things. However, we will be spending more than we plan take in as revenue which will result in an operational deficit for 2004. Again, this simply reflects our intent to draw against favorable earnings from the prior year and should not be construed as a regular fiscal practice.

Bob Rice, Chairman

Finance & Budget Committee

**BARNARD-SEYFERT ASTRONOMICAL SOCIETY  
2004 OPERATING BUDGET**

INCOME

Interest On Deposits	\$ 30
Donations	250
TNSP (net of expenses)	1,250
Membership Dues	<u>1,400</u>
	\$ 2,930

EXPENSES

Legal Registrations & Filings	\$ 60
Office Supplies & Postage	200
Website	300
Awards & Recognition	350
Newsletter Costs	550
Liability & Casualty Insurance	675
Audio Visual Equipment	713
Organizational Memberships	750
Committee Expenses	1,675
Loaner Scopes & Equipment	<u>2,100</u>
	\$ 7,373
Operational Deficit	<u>(4,443)</u>
	\$ 2,930

NOTE: Our total cash and certificates of deposit at 10/29/2003 was \$10,506 so this projected deficit would still leave a balance of \$6063 or 58%.

Committee Expenses

Dark Sky	\$ 75
Long Range Planning	75
Outreach	75
Programs	75
Membership (includes \$125 for name tags)	150
Mentoring	150
Hospitality	175
Public Relations (includes \$800 for public information brochures)	<u>900</u>
	\$1,675

**BARNARD-SEYFERT ASTRONOMICAL SOCIETY**  
**Board of Directors Meeting Thursday 6 November 2003**

A quorum of the members being present, BSAS president Joe Boyd called the meeting to order about 7:30 and gave out agenda sheets. Attending the meeting: Joe Boyd, presiding Powell Hall, secretary pro tem, JanaRuth Ford, Bill Griswold, Kris McCall, Dudley Pitts, visitor, Bob Rice, visitor, Pam Thomas, Mike Benson, John Harrington, and Tony Campbell.

In the absence of Jill Thompson, sec'y, a request for one to take the minutes was issued; Powell Hall volunteered. After welcoming visitors and guests, Joe Boyd made a brief president's report, which included his attending a "Thinking Outside the Box" program sponsored jointly by the public library and Vanderbilt University. Its topic this time was astronomy.

Powell Hall, ch. Dark-Sky Committee, reported briefly on his representing IDA at a meeting of the Illuminating Engineers dinner program Nov. 6 at Adventure Science Center. Pam Thomas, ch Hospitality, made her report. She recommended that BSAS obtain a Sam's Club card, in order to save on hospitality purchases. Approved. Bob Rice, ch Finance and Budget, reported and presented the budget recommendations for the new fiscal year, beginning November 2003. This was adopted with slight alterations. (The budget adopted has been e-mailed to the board in a separate communication.) In the absence of treasurer Lonnie Puterbaugh, who was reported ill, Rice reported a very large balance of \$10,506.65, as of 31 Oct. 2003. The BSAS checking account has \$5,784.65. (Net proceeds from ALCON & TNSP accounted for \$4,181.35 of this.)

Bill Griswold volunteered to handle membership matters for the BSAS. He was named new membership chairman.

Membership dues, as of Nov. '03, were approved, as follows:

Regular (1 vote) \$20.  
 Family (2 votes) \$30.  
 Student (1 vote) \$15.  
 Senior (1 vote) \$15.  
 Senior family (2 votes) \$25.            APPROVED.

When we came to the planning for TNSP 2004, problems with the contract with Camp Nakanawah were aired. The contract the camp insists on deprives us of valid insurance coverage. So an alternate location was suggested and discussed. To be explored.

Tony Campbell announced that he was still preparing a policy statement for our web site.

BSAS is one of the co-sponsors of the Dec. 4 Seyfert lecture

Outreach Committee needs new chairperson.

Tony Campbell was elected a member of the Board of Directors to replace Greg Selah, who had resigned.

Dudley Pitts was appointed BSAS historian.

JanaRuth Ford and Kris McCall presented a schedule for next year. It includes the possibility of a mid-spring picnic at Warner Park and was approved.

Before 10 o'clock Joe Boyd declared the meeting adjourned.

Respectfully submitted,  
 Powell Hall, Sec'y pro tem

### **WEB SITE GROWING IN SIZE AND IMPORTANCE**

For those who have not visited the BSAS web site recently, you are in for a big surprise. Thanks to the diligence and creativity of our webmaster, Tony Campbell, the web site now contains a wealth of information as well as a host of links to other web sites and information. One innovation which should be of help to all BSAS members is to provide each member with a discreet code which can be used to access certain information on the web site that will not be available to non members. For example, one proposal is to put back issues of the Eclipse on the web site, with access to all except the last three issues available to anyone. The last three would require the member code for access, thus providing a concrete benefit for membership. Other items on the web site which will be restricted will be certain membership data and committee assignments.

Information about upcoming events will be available immediately, and is generally updated daily. Therefore, all members are urged to check the web site every day or so to see what is planned and what plans have changed. Information about the annual holiday dinner in connection with the membership meeting on 18 December will be on the web site, as well as information about the Seyfert Lecture.

## Minutes for Barnard-Seyfert Astronomical Society Monthly Membership Meeting on Thursday, November 20, 2003

The monthly membership meeting was called to order by Joe Boyd at 7:35 P.M. in the library of Dyer Observatory. Due to the absence of the Treasurer, Lonnie Puterbaugh, there was no Treasurer's report. The minutes of the last meeting were approved as presented.

Joe introduced the new Membership Committee Chair, Bill Griswold. Bill then announced that he had brought a list of all members and that each member present should review his or her name and other relevant information to verify that it is current. He also announced that if members who are delinquent in their dues will pay by the end of December, they will receive a credit for the time missed and their membership will begin in December. There was a plea for members to receive the Eclipse by e-mail instead of on paper, because this will save the club money in postage and printing. The membership dues have increased slightly. The single membership fee is \$20, family is \$30, student (under 22) is \$15, senior (65 and up) is \$15, and senior family is \$25. The expiration date of membership will be listed on the mailing label of the paper Eclipse, or, for those receiving the electronic version, the expiration date will be noted at the top when the membership is delinquent.

Because of the appearance of auroras caused by the recent solar flares, Rocky Alvey interrupted the meeting to give information to local reporters. For this reason, the business section of the meeting was switched with the planned activity, so as not to interrupt the film.

Pam Thomas, Hospitality Chair, announced plans for the potluck dinner for the December 18<sup>th</sup> membership meeting. This year the meeting will start at 6:30 P.M., which is an hour earlier than usual. Pam passed around a sign-up sheet and indicated that the club will be providing the main course, plates, and silverware. Dinner and fellowship will kick off the meeting, followed by the regularly scheduled speaker and business meeting. Guests of members are encouraged to attend. Pam will also post a notice on the Tennessee Astronomy Group on Yahoo as a reminder.

Joe acknowledge the visitors present that evening and noted that the monthly membership meetings for December, January, and February will be held at the Adventure Science Center.

John Harrington announced that the speaker for the December membership meeting is Richard Schmude, who will be speaking on the recent Jupiter, Saturn, and Mars oppositions. He also noted that the equipment committee is deliberating the purchase of several new loaner telescopes and an equatorial mount.

Steven Balay announced that he had a telescope that he would donate to the club.

Joe Boyd announced that subscriptions to *Astronomy* and *Sky and Telescope* may be purchased through the club at reduced rates. Additional information will be posted in the next Eclipse.

Webmaster Tony Campbell reported that our web site has moved to a new server and is moving to a new visual design. He has many plans for the web site and encourages any and all input. Those who wish to contact him may send an e-mail message to [prettymuchanything@tonyc.com](mailto:prettymuchanything@tonyc.com) with their comments.

Mike Benson announced that he will be ordering the Guy Ottewell Astronomy Calendar in bulk in order to get a lower rate. Anyone who wishes to order a catalog should contact Mike.

Powell Hall announced that he had two calendars from *Astronomy* Magazine which should belong to someone. Two individuals indicated that they had not yet received their copies.

Joe Boyd then discussed the Seyfert Lecture scheduled for December 4, 2003. The first lecture is on December 4, with the symposium planned for the following day. It is intended principally for Physicists and Astronomers, but all members of the BSAS are invited as well. Dr. David Ernst, chair of the Physics and Astronomy Department, will notify Joe Boyd of further details on Monday, 24 November and this information will go into the Eclipse and on the web site. Joe also announced the creation of a new lecture series, entitled the Wendell Holiday Lecture. In addition, Joe announced the next club event at Warner Parks on Saturday, 13 December. Joe indicated that he would like to have 20 telescopes there.

Joe indicated that Lonnie Puterbaugh would like to change the star parties from Friday evening to Saturday evening so that those interested individuals who worked during the week would have time to arrive and set up before the event. It was explained that the events have been held on Fridays because it was easier to get volunteers to park cars. Joe Boyd indicated that Heather Gallagher, naturalist from Warner Parks, was willing to accommodate the request, but she wanted a poll of the preferences of the club members. The vote was 10 to 5 in favor of moving the events to Saturday nights.

Deborah Paschall from Murfreesboro Parks indicated that they would be willing to host the BSAS events any night of the week.

With a reminder to members to verify their records with Bill Griswold and an additional welcome to visitors, Joe turned the meeting over to Presentations Committee Chair, John Harrington, at 8:25 P.M. John announced that the scheduled speaker, Jeff Moersch, was unable to present because he was in training at the Jet Propulsion Laboratory. In his place, *Asteroids: Deadly Impact*, a National Geographic Program was shown. The film featured geologists Gene and Carolyn Schumaker and was very interesting and informative. After reminding members to put up chairs and leave the area cleaner that they found it, without objection Joe Boyd adjourned the meeting at 9:25 P.M.

Respectfully submitted,  
Jill Thompson, Secretary



**Membership Changes**

By Bill Griswold

At the last meeting of the Board of Directors we voted to approve the recommendations made by the Finance Committee with a couple of exceptions. The new annual membership rates are as follows:

Regular member ( 1 vote) .....	\$20.00
Regular member, family (2 votes) .....	\$30.00
Senior member (65 or older)(1 vote) .....	\$15.00
Senior member, family (65 or older)(2 votes) .....	\$25.00
Student (under 22 years)(1 vote) .....	\$15.00

If you question the accuracy of your record, please, notify us so that we may make appropriate changes. We know that there might be many mistakes or oversights. We are trying to bring the records up to date.

Many of our members are delinquent in the payment of their dues. Some go back as far as the last time they paid was in 2001. We would love to have everyone catch up and to facilitate this, a full membership will be allowed by making your payment at the rate noted above to the BSAS. This should be done as of or at the next BSAS meeting (Our Holiday Covered Dish Party and meeting on December 18, at 6:30 at the Adventure Science Center.) A complete list of each member's record will be displayed for you to inspect and make corrections that will be made to the BSAS list of members.

We are asking that, where possible, either a new member or old member renewing, accompany their check with a membership application form properly filled out. (Please use a little care to make the letters legible. It is very hard to make out some of what has been written down.) This membership form will be kept on file and replaced when the new form is turned in on your anniversary date. We will have this hard copy and also in the computer.

In the future, if you are receiving your Eclipse by US mail, your mail label will show your expiration date. If you are receiving your Eclipse by email, if you are becoming delinquent, your Eclipse will show on the first page that you need to renew now. Those receiving the Eclipse by email and are current in their dues there will be no notice. There will be a two-month grace period, in any case, before you are removed from the ACTIVE list to the INACTIVE list. In no case will the member's record be removed from the membership list unless the member so desires.

**IMPORTANT – MEMBERSHIP IN THE BSAS**

By the end of this year approximately 68 of our members will become delinquent in their dues.

If you receive your Eclipse by US Postal Service, your mail label will have the expiration date of your membership. If the date is past the present date, you should immediately send an application form and check to the address of the BSAS shown on page 2 of the Eclipse

If you receive your Eclipse by email, and you are delinquent, there will be a note in a box on the first page of the Eclipse, in which case you should immediately send an application form and check to the address of the BSAS shown on page 2 of the Eclipse.

We will forgive you for the months in arrears if you promptly pay now. Your membership will continue from the date you paid. This offer is only good through January. After that time those who have not rejoined will no longer receive the Eclipse or have the rights of membership. We will normally allow a two month period in arrears before any action is taken.

If you have any questions concerning the membership, records or the dates of your membership call Bill Griswold at 297-2387.

Note: those receiving their Eclipse by US Postal Service can always see their membership expiration date on the mail label. After two months in arrears you will not receive the Eclipse

Note: those receiving their Eclipse by email will have no notice on their first page until the first month that they are delinquent. The second month will also have the notice. After the two months of notice you will not receive the Eclipse.

Mail dues and membership forms to the following address and the check made out to BSAS

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

**Activities and Events**

December 1 – 31, 2003

- 12/1 Conj., Moon & Mars
- 12/4 Board meeting, 7:30 p. m.
- 12/8 FULL MOON
- 12/9 Mercury, gr. elong. e. (evening star)
- 12/10 Conj., Moon & Saturn
- 12/12 Conj., Pluto & Sun
- 12/13 Public Star Party, Edwin Warner Park's model airplane field; Geminid meteors
- 12/15 Conj., Moon & Jupiter
- 12/16 LAST QUARTER
- 12/18 BSAS COVERED-DISH DINNER, 6:30 p. m. at Adventure Science Center
- 12/22 Winter solstice
- 12/23 NEW MOON
- 12/25 CHRISTMAS DAY; Conj., Moon & Neptune; Moon & Venus
- 12/26 Mercury in inferior conjunction
- 12/27 Conj., Moon & Uranus
- 12/30 FIRST QUARTER; conj., Moon & Mars; Moon & Neptune
- 12/31 Saturn at opposition.

January 1 – 31, 2004

- 1/1 New Year's Day, (Board of Directors 7:30? Check with Joe Boyd 386-3134)
- 1/4 Earth at perihelion; Quarantid meteors
- 1/6 Conj. Moon & Saturn
- 1/6 Dark-Sky Committee, 7:30 p.m., at McKendree Towers, Room 201
- 1/7 Full Moon
- 1/12 Conj., Moon & Jupiter
- 1/14 LAST QUARTER; Conj., Venus & Uranus
- 1/15 B.S.A.S. meeting at Adventure Science Center, 7:30 p.m.
- 1/17 Mercury, gr. elong. west (It's a morning star.)
- 1/19 Conj., Moon & Mercury
- 1/21 NEW MOON
- 1/23 Conj., Moon & Uranus
- 1/24 Conj., Moon & Venus
- 1/24 Private Star Party, Natchez Trace site
- 1/27 Conj., Moon & Mars

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