

ECLIPSE



The Newsletter of the Barnard-Seyfert Astronomical Society

December 2002

BSAS Program, December 19, 2002

The regular December membership meeting will be held at the Adventure Science Museum (Cumberland Science Museum) on Thursday, 19 December, at 1830 hours rather than the regular meeting time of 1930. This is the annual BSAS covered dish dinner, so each family is requested to bring a dish to share. The meat and drinks will be furnished by the Society. Please contact Hospitality Committee Chair Melissa Miles to coordinate what you will bring. Melissa can be reached by phone at 615-794-7859 at night, and at 615-369-0777, Ext. 2111, during the day. Her email address is mgm711@bellsouth.net. This event is always a highlight of the Society year, since it is an opportunity to get better acquainted with the other BSAS members and their families

The speaker will be Dr. Schmude and the title of his talk will be "Jupiter in 2001 and 2002." This talk will summarize the recent 2001 – 2002 apparition. Highlights will include the passage of a giant storm past the Great Red Spot, the strange appearance of the North Equatorial Belt and the winds, clouds and meteorology of Jupiter. People will also learn about the author's polarization measurements of Jupiter and will get to see polarized light.

FROM THE PRESIDENT

By Joseph M. Boyd, Jr.

As we approach the holiday season, I want to express my thanks for the cooperation of the members of the BSAS, and the willingness of many of you to serve in so many different capacities.

I have now contacted 99 of you, either by phone or in person, about your service in the Barnard-Seyfert Astronomical Society. Of course that figure counts spouses and other family members, but I am happy to report that I only have a few whom I have not been able to contact. Again, I ask that if I have not contacted you, please call me at 615-386-3134 or email me at boydjoe@alumni.vanderbilt.edu. I am gratified that most of you have expressed a willingness to serve on one or more committees of the BSAS, and the spirit of cooperation permeates the organization.

Our committee structure is now staffed. A list of the committees, with a description of the duties of each committee, is in this issue of the Eclipse. Every member of the BSAS is invited to serve on a committee. If it seems that some people are serving on several committees, that is because they have asked to do so. We will try to have a list of the members of each committee in the next issue of the Eclipse. However, the committee chairs and their phone numbers and email addresses will be found on Page 9 of this issue. Each chair is being furnished a list of his/her committee members with full information on how to contact them. As an ex officio member of each committee, I will try to attend as many committee meetings as I can. If I have a conflict, our vice president, John Harrington, will attend for me.

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 Treasurer at the following address:

BSAS Dyer Observatory 1000 Oman Drive Brentwood, TN 37027

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 are \$20.00 per year for Regular and Family memberships and \$15.00 per year for Seniors (over 60 years of age), and \$10.00 for students (under 22 years of age). Please call the Dyer Observatory (373-4897) if you have questions. Dues can be sent to:

BSAS c/o Dyer Observatory 1000 Oman Drive Brentwood, TN 37027

THE ECLIPSE NEWSLETTER

Editor: Bill Griswold bgriz@comcast.net

BSAS Officers:

Joe Boyd, President
John Harrington, Vice President
Evelyn Wright, Secretary
A.G. Kasselberg, Treasurer
Powell Hall, Immediate Past President
Board of Directors
Mike Benson

oard of Directo Mike Benson John Bradford Bill Collins JanaRuth Ford Bill Griswold Kris McCall

Logo Photograph: Francisco Diego

BSAS COMMITTEES FOR 2002-2003

The following are the standing committees for the Barnard-Seyfert Astronomical Society (BSAS) for the 2002-2003 year. The list is followed by a description of the duties and responsibilities for each of the committees.

ALCON 2003 Committee
Dark Sky Committee
Equipment Committee
Finance and Budget Committee
Hospitality Committee
ISSAT Committee
Liaison Committee
Long Range Planning Committee
Membership Committee
Operations Committee
Program Committee
Public Relations Committee
TNSP 2003 Committee

The **ALCON 2003 COMMITTEE** will plan, organize, prepare for, and carry out the annual convention of the Astronomical League, to be held in Nashville in July, 2003. The BSAS is the sponsor of the event, as voted by the BSAS membership. A contract has been signed to have the convention at the Embassy Suites Hotel, located at 10 Century Boulevard, just off Elm Hill Pike. The objective of the committee is to put on an outstanding convention for 2003. The committee must: (1) make all financial arrangements for the convention; (2) provide adequate and continuous publicity and other means of publicizing the convention; (3) arrange for a meeting of the Executive Board on Tuesday of the week of the convention for all of that day and evening; (4) provide for registration of those attending the convention; (5) arrange for all of the meals which will be a part of the registration, including the Saturday night banquet; (6) set up and staff the hospitality room, including providing all of the refreshments; (7) arrange and assign space for exhibitors and contact and promote exhibitors; (6) arrange airport transportation for those attending the convention; (8) arrange tours, including the transportation; and (9) settle financially with the Astronomical League after completion of the convention.

The **DARK SKY COMMITTEE** will serve as liaison with the International Dark Sky Association (IDA), of which BSAS is a member. In addition, the committee's duties are to (1) promote dark skies in the Middle Tennessee area, by working with local groups, particularly shopping centers and schools, to inform them of the advantages of dark skies and of the ways they can help achieve dark skies and save money at the same time; and (2) contact local power distributors and inform them of the availability of full cut off lighting and its advantages. The committee should obtain materials from the IDA and other sources, and should become informed on all aspects of light pollution and ways to reduce and/or prevent it.

The duties of the **EQUIPMENT COMMITTEE** are to (1) investigate and make recommendations regarding the utilization, use, repairs, and maintenance of the C-14 Bergquist telescope, (2) investigate and make recommendations regarding the assembly, refurbishing, utilization, use, and maintenance of the approximately 12 inch telescope purchased by the BSAS in 2001, and (3) investigate and make recommendations regarding any astronomical equipment owned by, purchased by, or used by the BSAS. The committee will review all proposals for additional equipment and make recommendations regarding such proposals to the Board of Directors.

The duties of the **FINANCE AND BUDGET COMMITTEE** are to (1) prepare an annual budget for the BSAS for submission to the board of directors, (2) prepare guidelines and procedures for fund raising for the Society for adoption by the board of directors, (3) make recommendations to the board of directors regarding all proposed fund raising activities, and (4) make recommendations to the treasurer regarding bookkeeping procedures and investments of Society funds.

The duties of the **HOSPITALITY COMMITTEE** are to (1) arrange for receptions sponsored or hosted by the BSAS, (2) coordinate the food and drink at picnics or covered dish events of the BSAS, (3) arrange refreshments at membership meetings when requested to do so, and (4) arrange for, or assign board members to be responsible for, refreshments at board of directors meetings. The receptions envisioned are social events designed to honor someone who has made a special accomplishment, is a special guest speaker or program presenter, or is a special

honoree of the BSAS. If at any time in the future an annual banquet is established, the committee would coordinate the event, particularly as to the food to be served and the location of the event.

The **ISSAT COMMITTEE** is responsible for coordinating the participation of BSAS, or its members who desire to participate, with the Astronomical League ISSAT committee and with Dyer Observatory in the work of the International Space Station Amateur Telescope. Since all members of the committee will be those who volunteer to participate, the committee's duties are largely administrative, such as keeping the participants informed and in responding to requests from the AL ISSAT committee and Dyer Observatory. A primary duty is keeping the board of directors and the membership informed on ISSAT activities and accomplishments, and securing additional help where needed.

The duties of the **LIAISON COMMITTEE** are to institute and/or maintain good working relationships of the BSAS with other groups or organizations and to coordinate the activities of BSAS with other groups or organizations, including, but not limited to, Dyer Observatory, Vanderbilt University, Tennessee State University, Belmont University, Lipscomb University, Volunteer State Community College, Nashville Community College, Cumberland Science Museum, and all astronomical clubs or societies in the area. To these ends, the committee should (1) contact the entities mentioned above, and others the committee feels should be included, (2) set up a coordination arrangement with those contacted so there can be cooperation and avoidance of unnecessary duplication or overlapping, (3) maintain good relations with the various entities, particularly Dyer Observatory and Vanderbilt University, and (4) establish joint programs such as star parties, social events, and programs.

The duties of the **LONG RANGE PLANNING COMMITTEE** are (1) to recommend to the membership a set of goals and objectives for the BSAS for the next five years, with consideration given to an even longer time span; (2) to present preliminary and then final recommendations to the board of directors; (3) to prepare a professional presentation, such as a Power Point[©] presentation, setting out and illustrating its findings and recommendations; and (4) to present the full professional presentation to the membership at a membership meeting. The plan should be innovative, bold, and realistic, and should reflect the various interests represented in the membership of BSAS.

The duties of the **MEMBERSHIP COMMITTEE** are to (1) set up procedures for membership promotion and retention; (2) set up and operate a mentoring program for new members or members new to astronomy; (3) set up and assist the secretary in maintaining membership records; (4) prepare a new member's kit, which should include an explanation of what is available to BSAS members and a copy of the membership list. The new member kit should be designed to make the new members feel a part of the organization from the start.

The **OPERATIONS COMMITTEE** shall be composed of the chairs of all other committees. It shall provide a means of coordination among the various committees so they do not overlap in their efforts to carry out their respective duties.

The duties of the **PROGRAM COMMITTEE** include planning a program for each membership meeting; choosing, inviting, and making the arrangements for guest speakers or program presenters; preparing a formal introduction for all guest speakers or presenters; arranging suitable payments of honoraria and expenses for non member program presenters and providing certificates or other evidences of appreciation; and, in certain cases, introducing the speakers. The committee, by the bylaws, is chaired by the Vice President of BSAS, who is the Program Chair. Members of the committee will assist the Program Chair.

The **PUBLIC RELATIONS COMMITTEE** should arrange and provide positive publicity for the BSAS and for astronomy in general. The committee should make and maintain contacts with the various media, and help arrange speakers for outside organizations which request speakers and programs from BSAS. In addition, the committee can cooperate with Dyer Observatory, Cumberland Science Museum, and the Metro Parks System in providing and staffing public star observations.

The **TNSP 2003 COMMITTEE** will plan, organize, prepare for, and carry out the BSAS sponsored annual Tennessee Star Party for the year 2003. The committee must (1) arrange a suitable site for the event, with proper attention paid to the financial arrangements for the site, (2) provide for registration or participants, both in advance and at the door, (3) arrange for all of the meals and concessions, (4) arrange and assign space for exhibitors, (4) provide programs for those attending, both for those new to astronomy and for those who are experienced, (5) provide promotion and publicity for the event, and (5) carry out all of the details needed to have a successful star party.

Regular Meeting of the Barnard-Seyfert Astronomical Society Board of Directors on November 7, 2002

The meeting was called to order by Joe Boyd at 7:01 PM on Thursday November 7, 2002 at the Jefferson Square Clubhouse. A quorum was present consisting of board members Mike Benson, Joe Boyd, Bill Collins, JanaRuth Ford, Bill Griswold, and Evelyn Wright. Board members John Bradford, John Harrington, and A.G. Kasselberg arrived later in the meeting. Board member Kris McCall was absent due to a work conflict. Guests attending were Rocky Alvey, Lonnie Puterbaugh, Larry Southerland and Lloyd Watkins.

A motion was made to approve the minutes of the last board meeting as printed in "The Eclipse" with the correction "Bill Collins had notified Joe Boyd that his contact is Hill McAlister, current chairman of The Ensworth School Project board of directors". The motion was seconded and approved unanimously.

Since no one remembered who volunteered to send TNSP 2003 invitations to organizers of regional star parties, Bill Collins volunteered to coordinate with Lloyd Watkins, John Bradford, and John Harrington to get the letters of invitation sent.

Treasurer A.G. Kasselberg gave a financial report on TNSP 2002, declaring total income to be \$8901.05, and expenses other than telescope parts to be \$5988.59. The telescope cost will be either \$800 if Bill Burgess can deliver on 8 telescopes, or \$1400 if the money must be refunded. Rocky noted that he has been "extremely upset" over the inability to provide the telescopes as promoted. The regular financial report indicated the checking account had \$2636.38 after outstanding checks were accounted for. A motion was made to order 25 of the Astronomy Handbooks published by The Royal Canadian Astronomical Society and sell them for \$16 with a savings of at least \$6 off the cover price. The motion was unanimously approved. The 12 month certificate of deposit is \$1600 and the 90 day certificate is \$1064. Powell Hall moved that 1) the treasurer be authorized to cash the CDs and put them in the BSAS checking account, and 2) the treasurer investigate where to invest the certificate money in order to be liquid for ALCon 2003. Bill Collins seconded the motion which carried. Powell Hall also moved that there be a club resolution that the club bank account signatures be amended to provide that the current club president and treasurer be the only ones having signature power on the club bank account. Bill Collins seconded the motion. The motion carried unanimously. Powell will get the proper paperwork to the secretary so that his name will be removed from the account, and Joe Boyd's name added.

Mike Benson reported that he has sent ALCon 2003 notices for the December issue of "The Reflector", "Astronomy" and "Sky & Telescope" magazines. Lloyd Watkins and Bill Griswold reported on tours, noting that there was high interest in the heritage aspect of this area, but the listed price for a tour of The Hermitage was extremely high. There is still no treasurer, so Mike Benson will ask the AL for startup money and put it in a separate bank account he will open. Joe Boyd asked Mike to schedule another committee meeting and report back on its results at the next board meeting.

Rocky Alvey reported that the C-14 (Bergquist) telescope at Dyer Observatory does not track well for long periods of time, and needs repacking of the bearings, collimation, polar alignment, and cleaning of the corrector plate. Rocky has keys to Dyer Observatory ready for distribution to whoever should have them. Joe Boyd asked for recommendations by the telescope committee at the next board meeting.

JanaRuth Ford reported that the Dyer public night schedule will change in March to be the 2nd Thursday and the 4th Friday, with a speaker and theme for each night. It is hoped that the BSAS can provide volunteers to staff basic and advanced 15-minute modules on how telescopes work, what to look for when buying one, and how to use them. Additional BSAS volunteers will be needed for manning the C-14 and DeWitt telescopes (training will be required and volunteers will be rotated to prevent fatigue), and directing parking and people flow. The intent will be to keep people moving between workshops and telescope viewing so that they are not waiting in long lines for long periods of time.

Joe Boyd asked for a meeting of the Budget and Finance committee and its report at the next board meeting. Mike Benson moved that the BSAS renew its membership in the International DarkSky Association. Powell Hall seconded the motion, but moved that it be amended to <u>recommend to the club</u> that the BSAS renew its membership in the International DarkSky Association. John Harrington seconded the amendment. Joe Boyd asked for a roll-call vote on the amendment, and all but Joe Boyd voted for the amendment. The vote on the amended motion passed unanimously.

Joe Boyd noted that Heather Gallagher said Warner Parks would like to help BSAS advertise ALCon 2003, and would also be willing to display BSAS exhibits in its nature center or other locations. He turned the matter over to Mike Benson, who noted that Kris McCall normally handles the Warner Park contacts. To be sure that there was an official declaration, Bill Griswold moved that the BSAS continue assisting with Warner Park Star Parties, Powell Hall seconded, and the motion passed unanimously.

Joe Boyd asked that the certificate of insurance obtained through the Astronomy League be delivered to the

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secretary to be put in the BSAS records.

JanaRuth Ford and A.G. Kasselberg will see if they can locate recent membership applications included in the TNSP 2002 registration forms.

Joe Boyd asked if the BSAS wanted to officially declare support of Cumberland Science Museum's Astronomy Day. Lloyd Watkins noted that he would like to see a budget to see whether funding will be available to help CSM out with its speaker fund.

Joe Boyd passed around his description of committees and his list of committee assignments, relating the results of his phone campaign to reach all members, and stating that he wants to receive notice of all committee meetings so that he or John Harrington can attend them. Lloyd Watkins offered his house and Joe Boyd offered the Jefferson Square Clubhouse as meeting places for committees given sufficient notice.

As an incentive to get members to switch from the printed form of "The Eclipse" to the electronic form, Bill Griswold noted that he would like to include color photos in the newsletter, but only in the electronic version due to the high cost of printing in color.

Joe Boyd suggested to Lloyd Watkins that he send out a survey to TNSP 2002 attendees to find out what worked, and what did not. Joe Boyd will turn over arrangement of the drinks/meat/utensils for the covered dish supper in December over to the Hospitality Committee. Lloyd Watkins and Bill Griswold will bring refreshments for the next board meeting.

With no objection, Joe Boyd declared the meeting adjourned at 9:26 PM.

Respectfully submitted, Evelyn Wright, Secretary

Do you own "the cheapest telescope in the club"?

By Lonnie Puterbaugh AKA "Captain Video"

If your telescope, mount, and accessories such as books, charts, tables, and lights were given to you free, then this article doesn't apply to you. It only applies to those of us who have acquired our equipment with the use of dollars traded (in most cases) for the fruits of our own labor. Some have taken the "cheaper" route and have given up their labor and time by manufacturing the equipment themselves. There is a balance here that's different for each individual based on knowledge, time, and dollars available. This article is not meant primarily to extol the virtues of ATMing (amateur telescope making), but it certainly might help make your telescope "the cheapest telescope in the club". Even if you don't actually manufacture your own telescope, such as Rocky Alvey and Steven Balay have on more than one occasion each, there are other items that can be made to help lower the cost of this hobby. Larry and Evelyn's homemade dew shield and dew heater, for instance, has saved them ~\$100. Lloyd Watkins and Dennis Williams have each made their own wheelie bars and saved themselves over \$100 each. John Bradford and Bill Collins are making many improvements to their scopes to make them more functional. I believe that some members in our club have made their own solar filters and saved themselves nearly \$50 each. All of this will help each one of the individuals mentioned inch closer to having "the cheapest telescope in the club".

Now you are probably noticing that their total cost is still going up when they make these improvements, how can they be getting closer to having "the cheapest telescope in the club"? This is where I take some liberal license and give you my definition of exactly what I think "the cheapest telescope in the club" is. While some of us might define our cost as the actual dollars and labor paid, I choose to look at those dollars and time as an investment in others' and my personal future. It's an investment in others' futures if you attend any of the many public outreach programs the club participates in. Your investment may just sway a young mind into choosing a career in science and becoming the next Hubble, Hawking, or even Einstein. Certainly your own future is important. This is one hobby that you can participate in to a ripe old age. Technological advances, such as video cameras, can even help you observe when your eyesight starts to degrade and "go to" can help when you can no longer bend a bad back or get on one knee to look through the Telrad on your dob.

I still have not answered the question. The second part of the equation is the amount of time you and others use the telescope. The answer is now quite clear. "The cheapest telescope in the club" is the one that's used the most! Any improvements will only make it easier for you to use the equipment more often and therefore your dollars-perhour of use will decrease. The guys that show up most regularly at the club dark-sky site such as Steve Yarbrough and Pat Denning are on their way to the title as are those of us who observe regularly in our own backyards including our President, Joe Boyd, and VP, John Harrington.

Some have toiled for hours to attain this equipment only to have it sit in a cold dark basement waiting for attention. Go enjoy your equipment! Get to Warner Park and Dyer and let someone else have some fun with it also. One more thing...there won't be an award presented for this title. The reward will be self-evident if you choose to make your telescope, "The Cheapest Telescope in the Club"!

Happy Birthday Gerard Kuiper

by Robin Byrne

This month we celebrate the birthday of a man whose name has become synonymous with a region of our solar system. Gerard Peter Kuiper was born December 7, 1905 in Harenkarspel, The Netherlands. Kuiper went to the University of Leiden to study astronomy. Here, he received his BS in 1927, and his PhD in 1933.

Upon graduation in 1933, Kuiper moved to the United Stated and became a naturalized citizen in 1937. His first job in the U.S. was at Lick Observatory. In 1935, Kuiper became a lecturer at Harvard University. A year later, he moved to another position at Yerkes Observatory, run by the University of Chicago, where he stayed for 3 years, before moving on to McDonald Observatory in Texas.

In 1949, Kuiper developed an unusual theory concerning the formation of the solar system in which each planet formed out of its own separate cloud. Although this theory did not catch on, other of Kuiper's contributions were more useful. In 1944, Kuiper discovered that Saturn's moon Titan has methane in its atmosphere. In 1948, he predicted that Mars would have a carbon dioxide atmosphere, which was later proven to be true by the Mariner spacecraft in 1965. Kuiper discovered two moons in his lifetime: Uranus' mooon, Miranda, in 1948, and Neptune's moon, Nereid, in 1949.

In 1951, Kuiper proposed that there exists a region outside of the orbit of Neptune in which short-period comets reside. This region now carries his name and is known as the Kuiper Belt.

During the 1950's and 1960's, Kuiper did a great deal of research about the Moon. In particular, he proposed that craters on the Moon are due to impacts, rather than being volcanic in origin, which was the popular theory at the time. This led to his involvement in several NASA programs, including the Ranger, Surveyor, and Apollo lunar missions. He also participated as a program scientist in the Mariner 10 flight to Venus and Mercury, which was launched shortly before his death.

In 1967, Kuiper made use of a new NASA facility - a 4 engine jet Convair 990 aircraft with a telescope aboard for infrared observations. Kuiper used it to study the Sun, stars and planets. Kuiper's observations of Uranus and Neptune led to the discovery of methane in their atmospheres.

Gerard Kuiper died in 1973. He received many posthumous honors. The International Astronomical Union named a ray crater on Mercury after him. The Kuiper Airborne Observatory, dedicated in 1975, was an airborne infrared telescope, built upon the pioneering work that Kuiper had begun.

However, Kuiper's contributions to science have not ended with his death. The region that bears his name, the Kuiper Belt, continues to be studied. As more objects are found in this region, astronomers will have to struggle with our basic definitions of solar system objects. In June, 2002, the largest Kuiper Belt Object (KBO) to date has been found. Officially named 2002 LM60, but unofficially dubbed "Quaoar", this object is 1.5 billion kilometers farther from the Sun than Pluto and has a diameter of 1300 km, which is a little larger than Pluto's moon Charon. This discovery has reopened the debate on the status of Pluto. Is Pluto a KBO or a planet? Should Quaoar be the solar system's tenth planet? No one, yet, has a definite answer to either of these questions, but I'm sure Kuiper would have loved the debate.

References:

NASA Quest>Space Web Page by Jane Wee http://quest.arc.nasa.gov/lfs/kuiper-bio.html

Kuiper, Gerard Peter. The Columbia Encyclopedia, Sixth Edition. 2001 Web Page http://www.bartleby.com/65/ku/KuiperGer.html

The Lake County Astronomical Society Astronomy Bio Web Page by Jay Bitterman http://homepage.interaccess.com/~purcellm/lcas/Articles/kuiper.htm

xrefer-Kuiper, Gerard Peter (1905-1973) Dictionary of Scientists Web Page http://www.xrefer.com/entry/494721

Space-Talk-Largest Object Discovered in Kuiper Belt since Pluto Web Page http://www.spaceflightnow.com/news/n0210/07quaoar/



Saturn with a video camera Photo by "Steve" from the videoastro yahoo group -- 1600 frames stacked using a 13.1" Coulter dob on an equatorial platform and a Sony mini DV cam Posted: 30-Oct-2002 - Resolution: 360×375

Note: This picture of Saturn is in color. Those receiving their newsletter by e-mail will see it in color, those receiving their copy by U.S. Mail see only black & white.

HOT FLASHES

By Jerry Lappin

What's wrong with this picture? An article on astronomy is illustrated with a photo of an amateur astronomer peering through the eyepiece of a six inch Newtonian telescope on a homemade German mount and a professional astronomer scanning the heavens at the eyepiece of a forty inch refractor. Well, nothing if the article is one I might have read back in the early years of the last century but if it's a current publication the illustration is totally cockeyed. It should show an amateur using a large high- tech Cass or a very big Dobsonian and the professional sitting in front of his computer. How far in the future would we have to go to see just someone with a computer to illustrate both worlds? Probably not as far as you might think. As we amateurs have been staining our eyeballs and our wallets to capture those elusive photons from deep space the real astronomers (those who get paid for having fun with the stars) seem to be in a race to see who can get the farthest from a telescope in the least time. Why risk freezing or anoxia on a high mountaintop when you can sit at your computer and command remote telescope or satellite to do your observing.? Easier yet, you can just down load some of the untouched raw data from other observing projects to beef up your latest theory. Very soon all the data available from every observing system will be available on the Internet, there for any astronomer to dig through for scientific gold. Already the champion discoverer of comets is not a dedicated comet watcher going sleepless on every clear night but a satellite the real purpose of which is to observe the sun. I'm sure that it would be quite possible today for someone to earn a PhD in astronomy without ever laying eyes on a real telescope. The next step may be computer programs, which sort through the data and formulate theories by the dozen without interference from any human. Just yesterday I read that we can learn much more about the early days of the universe by computer modeling than can be learned from actual deep sky observations. Telescopes may soon become like astrolabs, interesting relics of a bygone age of no real use to anyone except, perhaps, a few die-hard antiquarians who persist in doing things the old way.

Minutes of Regular Monthly Membership Meeting of Barnard-Seyfert Astronomical Society on November 21, 2002

President Joe Boyd called the meeting to order at 7:30 PM Thursday, 21 November 2002 in the library of Dyer Observatory. Approximately 35 members and 2 visitors were present. All were encouraged to update their phone numbers and addresses on the circulating attendance list.

As there were no additions or corrections to the last meeting's minutes, they stood approved as published in the November issue of "The Eclipse" newsletter.

Treasurer A.G. Kasselberg reported that the club will have \$3908.44 in its account once he deposits the two CDs that were liquidated in order to prepare for expenses related to ALCon 2003.

Lloyd Watkins indicated the slide show from TNSP 2002 running on a laptop computer, and noted approximated the TNSP 2002 profit at \$1725, minus the money required for telescopes as yet to be delivered or refunded. TNSP 2003 is already set for September 26-28 at Camp Nakanawa (na KAN a wa). Surveys will be sent to TNSP 2002 attendees in order to get feedback on what to improve. Anyone wanting to serve on the TNSP 2002 committee was encouraged to contact Lloyd.

Mike Benson reported that ALCon 2003 announcements to "Sky & Telescope" and "Astronomy" magazines have been sent and Rocky Alvey has set up a preliminary ALCon 2003 website. Letters to exhibitors and speakers are being written.

Bill Griswold noted that the Long Range Planning Committee had their first meeting on November 12th and plans to work closely with the Equipment Committee. Lonnie Puterbaugh noted that the Equipment Committee will be concentrating initially on maintaining the C-14 and the club's other telescopes. The 6" Dobsonian loaner scope can be taken home for short periods of time by any member.

Regarding the club's application for tax-exempt status, Joe Boyd stated that the IRS requested more information such as a copy of "The Eclipse" and the BSAS website to see how much paid advertising the club uses before continuing with 501(c)3. The IRS also indicated that 509(c)4 status might be more appropriate for the club. Joe Boyd will try to comply with the IRS deadlines for the additional information.

Bill Griswold encouraged everyone who can to switch from receiving "The Eclipse" by postal mail to receiving it by email. Those interested in switching should contact Treasurer A.G. Kasselberg. It would reduce cost, allow additional space for more pictures, set no limit on the total number of pages per issue, and color pictures could be viewed and printed on color printers.

Joe Boyd brought up the honor Mike Benson earned for himself and the BSAS by his exemplary service to the Astronomical League. Mike displayed the GR "Bob" Wright Service Award he received from then AL President Chuck Allen at ALCon 2002 this past summer in Salt Lake City, Utah. Mike has served as BSAS President, South East Regional Astronomical League (SERAL) Vice President and current President, certifies 6 of the AL observing awards and launched a 7th, is ALCon 2003 Chairman, and has enthusiastically educated the public on the night sky at many a star party. Mike expressed his thanks for the honor, but said he does what he does because he loves it, not for any awards. A very long round of applause followed.

A motion to accept the BSAS board of directors' recommendation to continue group membership in the International DarkSky Association at a cost of \$100 was made and carried.

Joe Boyd noted that volunteers and telescopes are needed at Warner Park's next star party at 7:30 PM on Friday December 13, 2002 at the model airplane field. Rocky noted that Kris McCall is normally involved in the go/no-go decision, and the usual procedure has been for BSAS members to contact Warner Park or the Sudekum Planetarium Astroline by 4:00 PM that afternoon to find out whether the event has been cancelled due to uncooperative weather.

Dr. Chappell pointed out the changes in the Dyer Observatory library, and that the dome and director's house will be undergoing renovation.

Joe Boyd noted that the next meeting will be at the Cumberland Science Museum which Bill Hayden noted has changed its name to Adventure Science Center. The covered dish dinner will start at 6:30 PM on Thursday December 19th, 2002. He asked that everyone coordinate with Hospitality Committee Chair Melissa Miles to avoid winding up with only green bean casseroles. The program will be by Dr. Richard Schmude of Atlanta, GA (active in the Association of Lunar and Planetary Observers, ALPO) on what Jupiter and Saturn will be doing next year.

Joe Boyd stated that the January and February meetings of 2003 will also be at the Adventure Science Center to avoid having to get up the road to Dyer Observatory during inclement weather.

At 8:16 PM, Vice President John Harrington introduced the night's speaker, Immediate Past President Powell Hall, who has been interested in astronomy since learning the constellations at age 15, and who is now a retired minister. Powell's topic was "The Poetry of the Pleiades". He discussed the possibly Greek/Sumerian origin of the name, and went through several cultures' views of the open star cluster (Messier #45) as daughters, sisters, maidens, virgins, birds, or jewels. He also traced mention of the Pleiades through historical and religious writings,

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Lord Tennyson's poem "Locksley Hall", and current references such as <u>Burnham's Celestial Handbook.</u> An Indian legend links the Pleiades to Devil's Tower (remember "Close Encounters of the Third Kind"?) in Wyoming, and the Suburu automaker logo is an adaptation of the Pleiades.

Returning to club business, Rocky mentioned that Dr. Doug Hall has donated textbooks he received for review, and they can be perused in the Dyer Observatory library. Also in the library are IAPPP papers for historical reference and tests Dr. Hall gave to his students over the years. John Harrington reported that he has received no reply to his letter about cut-off lighting to The Ensworth School Project. Gary Yarnall invited members to view the telescope parts he acquired recently that he hopes to assemble into working scopes. Lonnie Puterbaugh indicated the running video of the Leonid meteors he took in an Arkansas cotton field after Lonnie, Steve Yarbrough, and Bill Collins made a trip west when the skies over Tennessee clouded over.

With no objections, Joe Boyd declared the meeting adjourned at 9:13 PM.

Respectfully submitted, Evelyn Wright, Secretary

From the President, continued from Page1

If you missed the November membership meeting, you missed a very scholarly program by Powell Hall, who combined philosophy with technology so skillfully that one person in the audience described it as brilliant. We will have another good program at our December meeting.

I wish all of you a happy holiday season. May the stars shine brightly, may they do so nightly, may your steps be sprightly, hold your loved ones tightly.

B.S.A.S News

HONOR TO MIKE BENSON

At the 2002 Astronomical League Convention in Salt Lake City, our own Mike Benson was presented an award for his many years of outstanding service to the League and his promotion of public interest in astronomy in general. Mike serves as the president of the Southeast Region of the League, and is a past president of the BSAS. The League has seven certificate programs, such as the Messier Marathon, and Mike is the reviewer and certifier of six of those programs for the entire League. At the November membership meeting, BSAS President Joe Boyd recognized Mike for his accomplishments and his award. We are proud of Mike and congratulate him on this honor.

COMMITTEE CHAIRS.

The following are the names, phone numbers, and email addresses of the BSAS committee chairs. If only one phone number is given, it is the home number.

ALCON 2003 - Michael Benson - 615-883-6571 (H), 6150460-4130 (W), Ocentaurus@aol.com

Dark Sky - Powell S. Hall - 615-872-0162, powell.hall@worldnet.att.net

Equipment - Lonnie Puterbaugh - 615-661-9540, lputerbaugh@irby.com

Finance and Budget - Robert L. Rice - 615-673-7366 (H), brice_65@yahoo.com

Hospitality - Melissa Miles - 615-794-7859 (H), 615-369-0777, X 2111 (W), mgm711@bellsouth.net

ISSAT - Rocky Alvey - 615-591-5170 (H), 615-373-4897 (W), r.alvey@vanderbilt.edu.

Liaison - David B. Hartmann - 615-227-2735, hartmannd@comcast.net

Long Range Planning - William A. (Bill) Griswold - 615-297-2387, bgriz@comcast.net

Membership - Thomas E. Murdic - 615-794-6029, murdic1@bellsouth.net

Program - John J. Harrington - 615-269-5078 (H), 615-231-3650 (W), jjhmiata@mindspring.com

Public Relations - Kristine (Kris) McCall - 615-383-2514 (H), 615-401-5077 (W), krismccall@csmisfun.com

TNSP 2003 - Lloyd Watkins - 615-824-3005, watkinslk@comcast.net

Activities & Events

December 1 - December 31, 2002

- 12/1 Mars & Venus s. of Moon
- 12/4 NEW MOON; total solar eclipse (Indian Ocean)
- 12/6 Venus at gr. brilliancy (mag. -4.7)
- 12/7 Private star party, Natchez Trace site
- 12/8 Neptune n. of Moon
- 12/9 Uranus n. of Moon; Pluto in conj. with Sun
- 12/11 FIRST QUARTER
- 12/13 Geminid meteors
- 12/17 Saturn at opp.
- 12/19 BSAS holiday potluck, 6:30 pm at The Adventure Science Museum, 8:00 pm. speaker, Dr. Schmude
- 12/19 FULL MOON; Saturn s. of Moon.
- 12/21 Winter solstice, 7:14 p. m. CST.
- 12/23 Jupiter s. of Moon
- 12/25 CHRISTMAS DAY
- 12/26 LAST QUARTER
- 12/28 Private Star Party, Natchez Trace site
- 12/29 Mars s. of Moon, occultation
- 12/30 Venus n. of Moon

January 1 - January 31, 2003

- 1/1 New Years Day
- 1/2 NEW MOON
- 1/3 Conj. Moon & Mercury
- 1/4 Conj. Moon & Neptune, Earth at perihelion; private star party, Natchez Trace site
- 1/5 Conj. Moon & Uranus
- 1/10 First Quarter; private star party, Natchez Trace site
- 1/11 Conj. Mercury & Sun, inf.
- 1/15 Conj. Moon & Saturn
- 1/16 BSAS Meeting, 7:30 pm at The Adventure Science Center, 800 Ft Negley Blvd.
- 1/18 FULL MOON
- 1/19 Conj. Moon & Jupiter
- 1/25 LAST QUARTER; private star party, Natchez Trace site
- 1/27 Conj. Moon & Mars
- 1/28 Conj. Moon & Venus
- 1/30 Conj. Moon with Mercury and Uranus with Neptune

BSAS c/o Dyer Observatory

1000 Oman Drive

Brentwood, TN 37027