



# ECLIPSE



*The Newsletter of the Barnard-Seyfert Astronomical Society*

## March Meeting of the B.S.A.S. , March 20, 2003, 7:30 pm, Dyer Observatory

The March BSAS program feature will be titled "Beginning Astrophotography and Imaging by Low-Cost Methods". This will probably be of interest to everyone in preparation for the warm summer months and the return of Mars as it has never been seen before. Two of our own BSAS members will present an overview of how to get started in saving your incredible eyepiece observations. BSAS member Lloyd Watkins will begin the presentation with excellent information on how to use 35mm film cameras with entry-level homemade mounts. Lloyd will demonstrate with the use of the BSAS' own Olympus OM-1 35mm film camera that Lloyd himself donated to the club. This camera is available for use by members of the BSAS and is renowned for being the best 35mm camera available for astrophotography purposes. Then Lloyd will venture into the use of digital cameras and eyepiece projection. Lonnie Puterbaugh will takeover and show you a low-cost color camera solution that is setting performance records for amateur imaging capabilities of the solar system. This solution should yield amazing images of Mars this year! Lonnie will also show you another use for your camcorder and give an update on video camera costs and capabilities. A comparison of all of the provided solutions will be made and both speakers will be available for questions.

### FROM THE PRESIDENT

By Joseph M. Boyd, Jr.

Our membership meeting on Thursday, 20 February, was a resounding success. Our speaker, Jeff Bary, Ph (he hopes to add the "D" by August), presented a most informative program that was entertaining as well. We wish him well as he continues his studies and achieves the degree which has been his goal for the last few years. Our attendance was the best we have had in a long time, with 57 people signing in. We had some obstacles to overcome due to the other event at the Adventure Science Center (ASC), but we hope not too many became discouraged and went back home without finding us.

With our March meeting, we will be returning to the Dyer Observatory for our meetings. We appreciate the ASC's cooperation in allowing us to meet there during the three winter months.

As you will see from the announcement elsewhere in this Eclipse, our program in March will be by two of our own members who have distinguished themselves in astronomical imaging. Many of you have been asking for some "how to" courses and programs, and this is one answer to those requests. Let's have a big turnout and show our support for Lonnie Puterbaugh and Lloyd Watkins as they both tell and show us how it is done. John Harrington, our program chair, is planning many other outstanding programs for future meetings.

(Continued on Page 5)

#### 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  
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#### 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  
John Bradford  
Bill Collins  
JanaRuth Ford  
Bill Griswold  
Kris McCall

Logo Photograph:  
Francisco Diego

**Regular Meeting of the Barnard-Seyfert Astronomical Society  
Board of Directors on February 6, 2003**

The meeting was called to order by President Joe Boyd at 7:09 PM on Thursday February 6, 2003 at the Jefferson Square Clubhouse. A quorum was present consisting of board members Mike Benson, Joe Boyd, JanaRuth Ford, Bill Griswold, Powell Hall, John Harrington, and Evelyn Wright. Board members John Bradford, Bill Collins, A.G. Kasselberg, and Kris McCall were absent. Larry Southerland attended as a guest.

With no objection, the minutes of the January board meeting were approved as printed in the February issue of "The Eclipse". Joe Boyd distributed copies of his "President's Report to Board of Directors" which indicated that a few committees have not met yet. Joe Boyd hopes to name a replacement chair for Bill Griswold on the Long Range Planning Committee. Bill Griswold will continue as a member of that committee, and as the Editor of "The Eclipse". The report indicated that the March and April regular BSAS membership meetings would need an alternate meeting place since Rocky's mother's illness might keep him from being at Dyer Observatory, but Rocky has since sent assurance that the regularly scheduled meetings can be held at Dyer as planned. Joe's report extended the BSAS' sympathy to Bill and Melissa Collins because of the death of Bill's father. Joe's report indicated that the BSAS should be looking for a replacement webmaster since Bill seems to like his new employment in Maryland.

As the treasurer was not present, there was no treasurer's report.

Mike Benson reported that \$2500 has been advanced by the Astronomical League to the ALCon 2003 Committee to deposit into a checking account once the proper tax exempt number is supplied by the AL. Sky & Telescope Editor Kelly Beatty has already expressed plans to attend as a speaker, all tours are lined up, and the registration form should be on the website soon.

Powell Hall gave a summary of the recent Dark Sky Committee meeting. The committee is still learning about ways to promote dark skies and welcomed any input anyone would like to pass along.

John Harrington noted that Jeff Bary's program was postponed from the cancelled January meeting to the February meeting. Lonnie Puterbaugh will make a presentation on the Messier Marathon in the near future, and Lonnie and Lloyd Watkins plan a CCD imaging program soon.

People were assigned to call volunteers to show up with telescopes at the Edwin Warner Park star party the following night.

Powell Hall moved that Joe Boyd and John Harrington be authorized to sign tax exempt forms for donations. Bill Griswold seconded the motion which passed unanimously.

Suggestions for a new webmaster were proposed.

Joe Boyd noted that the Membership Committee should be in charge of maintaining the membership list. Bill Griswold described a software package called Panorama (\$300) that the Tennessee Scenic River Association uses for this purpose. Powell Hall proposed that the club buy it, and Mike Benson seconded the motion. Evelyn Wright pointed out that this would take most if not all of the remaining unallocated funds in the budget. Joe Boyd investigated which committees and budget items might be able to do without some of their already allocated funds. Evelyn suggested that the situation be researched so that it could be determined whether it was worth the club spending money on the package. Joe Boyd indicated that the decision could not wait. With one abstention the motion to buy Panorama passed. John Harrington will look for a copy at a reduced price on the Internet.

Joe Boyd noted that alternate meeting places should be lined up in case the BSAS could not hold its regularly scheduled meetings at Dyer Observatory in March and April since meetings require the presence of a Dyer Observatory employee, and Rocky may need to attend to his mother. John Harrington moved that JanaRuth Ford contact the Adventure Science Center about the possibility of the BSAS holding its March and April meetings there. Powell Hall seconded it. Joe Boyd suggested considering a consensus to explore meeting elsewhere year round. After much discussion about the Adventure Science Center, Warner Park Nature Center, nearby community colleges, and the downtown public library, a vote was called on the original motion concerning just the March and April meetings which passed. Joe Boyd said he would contact Richard Chappell to ensure the ALCon Star-B-Que could be held at Dyer Observatory even if Rocky was not available.

Joe Boyd read a resolution he wrote praising the space exploration efforts of NASA and the Columbia shuttle astronauts recently killed on re-entry, encouraging the continuation of these exploration efforts which he wanted to be adopted by the BSAS and sent to NASA to be included in its archives. Mike Benson moved that the resolution be adopted. JanaRuth Ford seconded the motion which passed.

With no objection, Joe Boyd declared the meeting adjourned at 9:18 PM.

Respectfully submitted,  
Evelyn Wright, Secretary

## Minutes of Regular Monthly Membership Meeting of Barnard-Seyfert Astronomical Society on February 20, 2003

The meeting was called to order at 7:43 PM on Thursday, 2 February 2003 by President Joe Boyd in the Ingram Theater of the Adventure Science Center. Approximately 45 members and visitors were present. Joe Boyd welcomed new members and visitors, and all were encouraged to update their phone numbers and addresses on the circulating attendance list.

The minutes of the December meeting as published in the January issue of "The Eclipse" newsletter were approved (the January meeting was cancelled due to snow). Treasurer A.G. Kasselberg noted that the club expenses for the budget year were \$558, with membership dues income bringing in \$335. The club savings account has approximately \$4700. Anyone wishing to see the final TNSP 2003 financial report should see Rocky Alvey.

Mike Benson discussed plans for ALCON 2003 which is scheduled for July 9-12, 2003 at the Embassy Suites—Airport Hotel, with the Astronomical League Executive Committee meeting on July 8. Speakers lined up so far include Dr. Donald Parker (CCD Imaging of Mars) and Kelly Beatty (Sky & Telescope editor). Club members need to be thinking about which days of that Tuesday through Saturday event they will be able to work registration or help in general. There is a block of rooms reserved at the hotel (mention ALCON 2003), and a registration form on the ALCON 2003 website [www.bsasnashville.com/alcon2003.htm](http://www.bsasnashville.com/alcon2003.htm).

Lonnie Puterbaugh listed some of the equipment donated so far now that the club has tax-exempt status, and noted that the club can take donations of any astronomical equipment, including telescopes, finder scopes, eyepieces, etc.

Dark Sky Committee Chair Powell Hall was suffering from a shingles attack, and Jill Thompson reported in his stead on the committee's efforts to educate itself on good/bad lighting. Members will be looking for instances of each in the Nashville area.

Messier Marathon organizer Lonnie Puterbaugh will email his articles from the last two issues of "The Eclipse" to anyone who needs them if given an email address. There will be two marathon attempts, March 8 & 9 and 29 & 30 at the regular BSAS dark sky site on the Natchez Trace. Members were encouraged to have their equipment set up before sunset.

Under announcements, Joe Boyd reminded the group that the March meeting will be at Dyer Observatory. Rocky Alvey noted that Dyer Observatory's public nights will start up again on March 13, 2003, and BSAS volunteers should make plans to help out. Dr. Lou Mayo will speak on the Sun-Earth Connection. Along with an ALCON 2003 doorprize, Jim's Mobile, Inc. sent Mike Benson a video commercial on binocular telescopes that anyone can borrow from Mike if they are interested. Mike Benson also asked for volunteers to be judges at the Middle Tennessee Engineering Science Fair to be held at Vanderbilt University from April 3-5 (judging and free food occurs on Thursday). Mike, Tom Murdic, Dudley Pitts and Ken Mayer volunteered.

At 8:24 PM, John Harrington introduced Jeffrey Bary, a graduate student soon to earn his Ph.D. from Vanderbilt University, who spoke on how long it takes to make a Jupiter. Mr. Bary recounted the steps it has taken for humankind to move from the point of view that the earth is the center of the universe to the realization that "Like, wow, there could be planets everywhere, dude." Using a laptop presentation and a slide projector, Mr. Bary told of his trips to breathless telescope sites in Hawaii (14000 feet altitude + snow) to collect hydrogen emission spectral data on T Tauri Stars (TTS). TTS are young stars with irregular variability that are associated with dark nebula that may be solar system nurseries. Judging from Mr. Bary's beautiful seaside shots, being an astronomer has some advantages. On a local note, Mr. Bary said Barnard (our club's co-namesake) published work on dark nebulae, and Bob O'Dell (Hubble Space Telescope, Vanderbilt University) was the first to optically image a young protoplanetary disk. The current thought is that it takes at least 10 million years for the hydrogen gas detected in and around young stars to get gravitationally sucked into giant gas planets. He indicated that this is not a recursive process, hence Jupiter is just a big gas planet, not a failed sun. Mr. Bary's presentation and question-answering received an appreciative round of applause.

In a final set of announcements, Joe Boyd mentioned that a mentor program is being considered. Steven Balay noted he should be able to round up 6" or 8" telescopes for approximately \$200 apiece.

With no objections, Joe Boyd declared the meeting adjourned at 9:30 PM.

Respectfully submitted,  
Evelyn Wright, Secretary

## Happy Birthday — Jim Lovell

by Robin Byrne

This month we look at the life of a man who has experienced many adventures both in and out of space. James Arthur Lovell was born March 25, 1928 in Cleveland, Ohio and grew up in Milwaukee, Wisconsin. His interest in rocketry began in his early childhood and stayed with him for the rest of his life. While in high school, he built a rocket that rose to a height of 80 feet before exploding “in a splendid suicide.”

After graduating from high school in 1946, Lovell enrolled at the University of Wisconsin and joined the Navy ROTC program with the plan of entering the military upon graduation. After two years, he entered the Naval Air Training Station at Pensacola to learn how to fly. He then was accepted to the Naval Academy at Annapolis, where Lovell received his Bachelor's of Science degree in 1952.

Three and a half hours after graduation, Lovell married Marilyn Gerlach. They now have four children: Jay, Jeffrey, Susan and Barbara.

The following year, Lovell was assigned to the aircraft carrier USS Shangri-La, stationed near Japan. Flying off and onto the deck of aircraft carriers is hard enough, but Lovell once had to land at night with no lights and no instrumentation to help.

Lovell's military career continued at the Aviation Safety School at the University of South Carolina. From there, he served as a test pilot at the Navy Air Test Center and safety instructor at the Naval Air Station in Virginia. Over the years, Lovell logged over 6000 hours of flight time, with over 3500 hours in jets.

In 1960, Lovell was among the men invited to try out for the first group of astronauts. He was not chosen for the first group due to a medical technicality, but was accepted in the second group on September 13, 1962.

Lovell flew on two Gemini missions: Gemini VII and Gemini XII. On Gemini VII, Lovell and Frank Borreman were in orbit for 14 days, proving that man could endure extended periods of weightlessness. On Gemini XII, Lovell was the Commander, and his Pilot was Buzz Aldrin, who performed a flawless spacewalk, helping to pave the way to the Moon.

Lovell then moved on to the Apollo program, where, again, he flew on two missions: Apollo 8, in 1968, and Apollo 13, in 1970. Apollo 8 was the first time people left the Earth's gravity and flew into orbit around the Moon. Once again, flying with Lovell was Frank Borreman, plus a rookie: Bill Anders. After this flight, all three men were named Time magazine's Men of the Year. Apollo 13 has become infamous since the release of the film starring Tom Hanks. During this flight, one of the oxygen tanks exploded, putting the lives of Lovell, Fred Haise and Jack Swiggert in grave peril. Using the Lunar Module as a lifeboat, and thanks to the ingenuity of all the people in ground control, the men made it back to Earth safely. This was Lovell's last trip into space, where he had spent a total of over 700 hours during his four missions.

In 1973, Lovell left NASA to pursue other careers. He first worked at a marine company, then in 1980 joined Centel Corporation as an Executive Vice President. But leaving the space program was not the end of Lovell's adventures. On April 13, 1987 (17 years to the day since the Apollo 13 explosion), Lovell visited the North Pole. Then in January 1999, he traveled to Antarctica and visited the South Pole as part of a meteorite hunting expedition. He spent 5 days there and found 19 meteorites. “It was cold, and it was windy,” Lovell said. “We were in two-man tents. The wind kept blowing the snow over; we had to keep shoveling snow. And I said, ‘Why is a guy who's 71 still out here shoveling snow?’”

Lovell's latest venture is a restaurant located outside of Chicago. Co-owned with his son, Jay, who is a chef, Lovell's of Lake Forest, opened in May 1999. On display throughout the restaurant are some of Lovell's space memorabilia, including a relief map of the Apollo 17 landing site that was made into a coffee table.

Would Lovell ever consider venturing back into space? Of course. After John Glenn's historic return to space, Lovell quipped, “I've often said I volunteered to go as his backup, but I was too young for the job.”

Throughout his various careers, Lovell has earned numerous honors and awards, including: NASA Distinguished Service Medal, Presidential Medal of Freedom, 2 NASA Exceptional Service Medals, 2 Navy Distinguished Flying Crosses, and induction into the Aviation Hall of Fame.

Although he is primarily remembered for the harrowing flight of Apollo 13, Jim Lovell has faced many dangers in his life. Either as a test pilot, a naval aviator, an astronaut, or civilian explorer, Lovell knew dangers were involved. However, the rewards were worth the risk. In the wake of the recent loss of Space Shuttle Columbia, and as we mourn the loss of the seven astronauts, we must also remember that they, too, knew a risk was involved and willingly accepted that risk in exchange for the discoveries that could be made during their mission. So, as we honor a man who survived the dangers of space exploration, we should also remember those whose lives were lost in the pursuit of knowledge and exploration.



## References:

Jim Lovell and the Flight of Apollo 13 web page by Andrea McCurdy and Mark Stokes <http://www.mcn.org/Apollo13/Home.html>

Jim Lovell: Still an Explorer web page by Andrew Chaikin [http://www.space.com/peopleinterviews/apollo13\\_lovell\\_profile\\_000415.html](http://www.space.com/peopleinterviews/apollo13_lovell_profile_000415.html)

Aviation Hall of Fame - Jim Lovell web page <http://www.aviationhalloffamewisconsin.com/inductees/lovell.htm>

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### Thanks From The Warner Park Nature Center

Mr. Joe & BSAS —

Thank you for your continued support of and partnership with Warner Parks. Your astronomers participate in our programs—rain or shine, snow, ice—and always provide a spectacular show with not only their telescopes but also their knowledge of the heavens. Star parties will always be a part of the programming here at the Nature Center—thanks to your society!

I look forward to working with BSAS on other activities. Please feel free to contact me if I can ever be of assistance.

Heather Gallagher, Naturalist  
Warner Park Nature Center  
7311 Highway 100  
Nashville, Tennessee 37221  
(615) 352-6299

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(President's Message, continued from Page 1)

It was a real pleasure to have so many new members attend the February meeting. We signed up four new individuals or families as a result of the Warner Park star party. Interest in astronomy is rampant now, and we should take advantage of that interest in getting new members into the BSAS. **Every member** should have the responsibility to encourage those with an interest in astronomy to join the BSAS. Just a simple invitation is not enough. Give the prospect a copy of the Application for Membership form, explain the different types of membership, and request that he or she fill out the application and return it with the check to you. That way you know the person has actually completed the process, and you won't be embarrassed when you follow through and learn they have already sent it in by mail. You can then submit the form and check to the president or treasurer as soon as practicable. I have found that simply handing out the application form and telling the person to mail it in often results in the person laying it aside and forgetting to follow up on joining. If you don't hear from your prospects in a few days, be sure to follow up and gently remind them of what they are missing.

As Lonnie Puterbaugh, chair of the Equipment Committee, explained at the February meeting, the BSAS needs more equipment, particularly telescopes, so we can loan them out to those who do not have telescopes yet or want to try out a particular type of scope before investing in one. This is a particularly valuable service for our new members. In addition, we can use some donated telescopes for our star parties, such as our Warner Park and Long Hunter State Park events, as well as for other outreach programs. There are many people in the Nashville area who have telescopes that have not been used for a long time, who would like to see them put to good use. Now that we are a tax exempt organization, those people can donate the scopes and other equipment to the BSAS and take a federal income tax deduction. Each of us should be on the lookout for those who might make such a donation. If you find such a person, please do not get the equipment yourself, but **immediately** call either Lonnie Puterbaugh at 661-9540 or Joe Boyd at 386-3134, giving the details and the identity of the prospective donor. We have a procedure for this, and will promptly follow up on it.

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### News of an Upcoming Event

There will be a Public Stargaze at Long Hunter State Park on May 10. Information on time and how to get to Long Hunter State Park will be posted in the April Newsletter.

## Activities &amp; Events

March 1 – March 31, 2003

- 3/1 Conj. Moon & Mercury; Private star party, Natchez Trace site
- 3/2 NEW MOON,
- 3/2 BSAS Board meeting, 7:00
- 3/4 Conj., Mercury & Uranus
- 3/8 **Messier Marathon** practice. Dark Sky Site, Natchez Trace
- 3/11 FIRST QUARTER, Conj., Moon & Saturn
- 3/12 Conj., Venus & Neptune
- 3/13 Dyer Public Night, 7-9 p.m.
- 3/14 Conj., Moon & Jupiter
- 3/18 FULL MOON
- 3/20 Vernal equinox at 7 p.m.;
- 3/20 BSAS MEETING, 7:30 p.m., at Dyer Observatory
- 3/21 Mercury in superior conjunction.
- 3/24 LAST QUARTER
- 3/25 Conj., Moon & Mars
- 3/27 Conj., Moon & Neptune
- 3/28 Conj., Venus & Uranus; Dyer Public Night, 7-9 p.m.
- 3/29 Conj., Moon with Venus & Uranus; **Messier Marathon**. Dark Sky Site, Natchez Trace

April 1 – April 30, 2003

- 4/1 NEW MOON
- 4/3 BSAS Board meeting, 7:00
- 4/4 Binocular Marathon, 7 - 10 pm, Warner Park Nature Center
- 4/5 Private Star Party, Natchez Trace site
- 4/6 Daylight Saving Time begins.
- 4/7 Conj., Moon & Saturn
- 4/9 FIRST QUARTER
- 4/11 Conj., Moon & Jupiter
- 4/16 FULL MOON; Mercury at greatest eastern elongation
- 4/17 BSAS meeting, 7:30 p. m. at Dyer Observatory
- 4/21 Lyrid meteors
- 4/22 Lyrid meteors; Earth Day
- 4/23 LAST QUARTER; Conj., Moon with Mars & Neptune
- 4/25 Conj., Moon & Neptune; Public Star Party at Warner Park, 8-10 p. m.
- 4/26 ASTRONOMY DAY 2003, at Adventure Science Center
- 4/28 Conj., Moon & Venus

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BSAS c/o Dyer Observatory  
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