



ECLIPSE



The Newsletter of the Barnard-Seyfert Astronomical Society

October 2001

PRESIDENT'S MESSAGE

After you elected me president for the coming year, I left Dyer Observatory and started for the Bays Mountain Starfest in Kingsport, Tennessee, where several other B.S.A.S. people were among stargazers attending from five states. One of the three workshops was that led by Rocky Alvey and Mike Benson on the ISS-AT. I had originally volunteered to give a presentation on calendars but backed out when that turned into three workshops. I was proud of Mike and Rocky. My turn came in the closing Sunday session when someone from each astronomy club reported briefly on activities and developments in his club. Getting up to speak for the B.S.A.S., I took the September ECLIPSE and used A.G. Kasselberg's summary of what B.S.A.S. had done the past twelve months. I was teased by Mark Marquette, the coordinator of this year's Starfest, for having notes. B.S.A.S. has done so much, however, that I needed a memorandum in order not to neglect some of the many things accomplished. The only item I added to his list was our participation in Astronomy Day last spring.

At this point I do not have any new projects in mind to offer the Barnard-Seyfert Astronomical Society. I expect us to continue and complete a goal which I had when I was B.S.A.S. treasurer and which I count on being accomplished as I leave that post. I mean the simplification of when memberships and club subscriptions expire.

- Memberships - September
- Sky and Telescope subscriptions - May 1
- Astronomy Magazine subscriptions - January 1

The first two of these is being done. The third very soon will be. Details later.

What I heartily desire is that we continue some of the excellent astronomical things A. G. briefly recalled:

1. Encouragement of beginners in astronomy through our mentoring program and presentations to scouts, schools, and other groups;

President's Message continued on page 2

HAPPENINGS & EVENTS

October 1 - October 31, 2001

- 10/2 FULL MOON Harvest Moon
- 10/7 Conj., Moon & Saturn
- 10/9 Conj., Moon & Jupiter
- 10/10 LAST QUARTER MOON
- 10/11 **Public Night, Dyer Observatory 7:00p.m.**
- 10/12 Board of Directors Meeting at Lloyd Watkins home in Hendersonville. The meeting will start at 7:15 p.m.
- 10/13 Inferior Conjunction, Mercury
- 10/14 Conj., Moon & Venus
- 10/16 NEW MOON Ramadan begins
- 10/18-10/21 Tennessee StarParty 2001 begins at Fall Creek Falls State Park. **BSAS Meeting at TNSP Event**
- 10/23 FIRST QUARTER MOON; Conj., Moon & Mars
- 10/24 Conj., Moon & Neptune
- 10/25 **Youth Night at Dyer Observatory 7:00 p.m.;** Conj., Moon & Uranus
- 10/28 ISS-AT Conference at Dyer Observatory 3:00p.m. key project members of the AL will be present for discussion and project updates; Daylight Savings Time ends, 2:00 a.m.

MAGAZINE SUBSCRIPTIONS FOR BSAS MEMBERS 2001

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 membership 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: Rocky Alvey
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BSAS Officers:
 Powell Hall, President
 John Bradford, Vice President
 William A. Hayden, Secretary
 A.G. Kasselberg, Treasurer
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 Joe Boyd
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**MINUTES OF BSAS ANNUAL MEMBERSHIP MEETING OF 20
SEPTEMBER 2001 AT DYER OBSERVATORY**

President A.G. Kasselberg called the meeting to order at 7:38 PM. 34 members and 8 visitors were present. An agreement having been previously reached to amend the dues structure so that all memberships would expire in September of each year, Treasurer Powell Hall presented a schedule for monies payable between now and Sept., 2002 based on a pro-rated system according to the month of current expiration. In a written handout Mr. Hall also reported club assets at \$ 4673.37. He also stated that our insurance premium of \$ 325. for the year beginning in October had been paid. A motion to make a printed BSAS membership list available at the November meeting was unanimously passed. It was stressed that the list would not be posted on any website, and that members are to individually supply whatever personal information they wanted it to contain. Several "sign-up" lists were circulated for Public and Youth Nights at Dyer through Nov. 8. Those who will assist were asked to volunteer for a specific job. A motion to purchase a telescope to belong to the club for \$ 800. from Lonnie Puterbaugh was unanimously passed. The scope is to reside at Dyer but be made available for transport to events held elsewhere. Discussion of its origin and construction followed. Rocky Alvey announced that enough money for TNSP 2001 has already been raised for BSAS to break even on the event. Lately some reservations have come from the Atlanta area due to newspaper publicity. The cost for attending on just a single day will be \$ 10. Final planning will take place at a Board of Directors meeting at Lloyd Watkins' home at 7:15, Oct. 12. By acclamation, the following club officers were elected to commence terms immediately following the meeting: President (1 year term), Powell Hall; Vice President (1 year term), John Bradford; Treasurer (3 year term), A. G. Kasselberg. By ballot, and by plurality in accordance with the by-laws, Mike Benson and Joe Boyd were elected to 3 year terms on the Board of Directors. Radio emission and magnetic fields surrounding Jupiter comprised the program presented by MTSU Astronomer Chuck Higgins. He showed slides to illustrate ongoing research and speculation, including effects on the planet due to its moons.
Meeting adjourned 9:37 PM.

Respectfully submitted,
William Hayden, Secretary

ISS-AT Event at Dyer

The A. J. Dyer Observatory will host a media event for the ISS-AT Project, Saturday October 27 at 3:00 p.m. The primary intent of the session is to announce delivery/installation of the Dell Servers and to update the local amateur astronomy community on the project status. Key members of the design and oversight team will be available for Q & A. All are welcome. For more information call Rocky Alvey at 615-373-4897.

President's Message Continued-

2. Continuation of observing at the observatory using the arrangements in place and at the dark-sky site;
3. Working with ISS-AT;
4. Assisting with Dyer Observatory public nights;
5. Last but by no means least, conducting a great Tennessee Star Party.

I conclude with a prayer attributed to Sir Francis Drake, 16th-century explorer, circumnavigator, friend of Queen Elizabeth I, and pirate:

"O Lord God, when thou givest to thy servants to endeavor any great matter,
grant us also to know that it is not the beginning,
but the continuing of the
same unto the end, until it be thoroughly finished,
which yieldeth the true glory...."

Powell Hall

TNSP 2001 at Fall Creek Falls State Park, October 18-21

You may find the registration form and event details on our club website at- www.bsasnashville.com
Or call Rocky Alvey at Dyer Observatory 615-373-4897

Happy Birthday Michael Collins

by Robin Byrne

This month we celebrate the birthday of a man who is often forgotten when the first Moon landing is discussed. Michael Collins was born in Rome, Italy on October 31, 1930. He graduated from the Saint Albans School in Washington, D.C. In 1952, he graduated with a Bachelor of Science degree from the U.S. Military Academy (West Point). Soon after leaving school, he married Patricia Finnegan, with whom he had three children: Kathleen, Ann, and Michael.

Collins decided to pursue an Air Force career. From 1959-1963, he was stationed at Edwards Air Force Base in California. Here, he worked as an experimental test officer, testing performance, stability and control of jet fighters.

In 1963, Michael Collins was among the third group of astronauts chosen by NASA. His first mission was as the Pilot of the Gemini 10 mission, with John Young as the Commander. They launched July 18, 1966. The first objective was to catch up with a previously launched Gemini Agena Target Vehicle (GATV), then rendezvous and dock with it. They accomplished this on the fourth orbit. However, the maneuvering required more fuel than anticipated, so some experiments dealing with undocking and re-docking were canceled. Another objective during the mission was for Collins to make three Extravehicular Activities (EVA's). The first involved opening the hatch, standing in place, and taking pictures of Earth and stars. The last was to dump some unneeded equipment prior to reentry. The second EVA was the most important. During this spacewalk, Collins used a jet gun to maneuver to the GATV. On his first attempt, he lost his grip, and tumbled head-over-heels at the end of his umbilical. However, the second try was successful. Once at the GATV, Collins retrieved a micrometeorite package that had been collecting data since the GATV was launched. Finally, the Gemini 10 spacecraft achieved a record altitude (at the time) of 475 miles. Splashdown of Gemini 10 occurred in the West Atlantic, within 3 miles of the recovery ship, the USS Guadalcanal. This was the first time a spacecraft landed within eye and camera range of the prime recovery ship.

Originally, Michael Collins was to be part of the crew of Apollo 8, during the historic first trip around the Moon, but medical problems postponed his assignment to another historic mission. On July 16, 1969, Michael Collins (and a couple other guys) launched aboard Apollo 11 for the first mission to land a man on the Moon. While the other guys were on the Moon, Collins, as the Command Module Pilot, remained in lunar orbit alone for more than 24 hours aboard the Command Module, "Columbia". His primary duty at this time was to be ready for when they came back from the Moon and to perform the necessary docking maneuvers to reunite the two spacecraft. All three men returned to Earth on July 24, 1969 and became instant heroes (although, the other guys got a lot more attention than Collins).

In 1970, Michael Collins retired from the Air Force and left NASA. He served as Assistant Secretary of State for Public Affairs for about one year. Then, in 1971, Collins became the first director of the Smithsonian Institution's National Air & Space Museum. He oversaw its development and construction. It was the first time in many years that a major government construction project in Washington was completed on time and under budget. In April, 1978, Collins became the Undersecretary of the Smithsonian Institution.

In 1980, Collins left the Smithsonian to become Vice President of LTV Aerospace and Defense Company. In 1985, he left to start his own company.

Michael Collins has received many awards and honors over the years, including: the Presidential Medal for Freedom, the NASA Exceptional Service Medal, and the Air Force Distinguished Flying Cross. On March 19, 1993, Michael Collins was inducted into the Astronaut Hall of Fame.

More than once, I've heard former Command Module Pilots discuss how they were trained for the possibility of returning to Earth alone, as a result of the loss of the landing crew. Fortunately, no one had to use that training, including Michael Collins. It takes a special kind of person to be in this role: orbiting the Moon alone, so close to the Moon but not able to join your fellow crew members on the surface, prepared to leave them behind should something go tragically wrong, and return to Earth alone. Michael Collins may be the forgotten Apollo 11 crew member, but he was certainly as heroic as the two men who walked on the Moon.

Resources:

Michael Collins Web Page

<http://www.astronauts.org/astronauts/collins.htm>

Astronaut Bio: Michael Collins Web Page

<http://www.jsc.nasa.gov/Bios/htmlbios/collins-m.html>

Astronaut Bio: Michael Collins (Major General, USAF, Retired) Web Page

<http://vesuvius.jsc.nasa.gov/er/seh/collinsm.htm>

Collins Web Page

<http://www.friends-partners.org/mwade/astros/collins.htm>

Challenge of the Month NGC 457

Mike Benson was the person who introduced this fine open cluster in Cassiopeia to me. He regularly shows the cluster while expertly manning his telescope on public starparty nights. This cluster is commonly referred to as the Owl or the ET cluster. When you see its form, you will clearly understand why. With a visual magnitude of 6.4, this target resides 2145 light years distant and will be bright even in a small telescope. The star Phi Cas associated with the cluster is one of the most luminous known, shining with perhaps 200,000 times the luminosity of our Sun.

Look for the cluster at about 4 degrees SE of Gamma Cas

Coordinates

RA 01hr 91m 01s DEC +58d 20m

Apparent Diameter 13 arc minutes

Rocky Alvey

TNSP 2001 Sneak Preview!

Below, is just one of the graphics which appears on our tshirt this year. We are calling this graphic "Cowpie in the Sky".



Schedule at Sudekum Planetarium October 1 through 31, 2001

NOTE: the Sudekum Planetarium will be closed for annual maintenance of the star projector October 1 through 3

Tuesday through Friday - except October 2 and 3
3:15 Moonwitch

Saturday

11:30 The Light-Hearted Astronomer

1:00 Skies Over Nashville

2:30 The Light-Hearted Astronomer

3:30 Moonwitch

Sunday

1:30 The Light-Hearted Astronomer

3:30 Moonwitch

Skies Over Nashville

Many people are intimidated by astronomy and the night sky. This show highlights those constellations and planets that can be seen from backyards throughout Middle Tennessee and across the United States. If you can "connect the dots", you can draw star pictures. Skies Over Nashville is an excellent way for the entire family to get ready to go out and look at the real sky.

The Light-Hearted Astronomer

This laid-back look at the night sky provides both information and inspiration for anyone to become an astronomy enthusiast. Basic steps to start exploring the universe and how NOT to buy a telescope are highlighted along with a healthy dose of down-home humor and the pure enjoyment of the beauty of the sky.

Moonwitch

Why does the Moon look larger when it's near the horizon than it does overhead? Why does the Moon seem to follow you? And what causes the changing phases of the Moon's appearance? Billy and Diana discover the answers to these and other bewitching questions one Halloween night.

NOTE: Our monthly star charts and related articles can be downloaded from www.SudekumPlanetarium.com

For additional and updated information:
call AstroLine at 615-401-5092
or go to www.SudekumPlanetarium.com