Smoky Mountain Astronomical Society

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S.C.R.A.P.S.

Society's ChRonological Astronomical PaperS

From the President by Bob Arr

As the Hunter's moon waxes, it is tempting to glance back at our efforts so far this year. Our new venue at the Pellissippi Main Campus seems to be a serendipitous event. While Division street was perhaps more centrally located, the Main Campus definitely opens the door to greater participation by Oak Ridgers. With its unrestricted hours, it opens the door to specialized activities before and after the main presentation and the interest of the faculty bodes well for actual interaction with the school.

So far, we have recruited a dozen new members, and participation at Star Parties has been wonderful. Unicoi Crest, with its dark and undisturbed location, has become our de facto main observing site.

Speaking of participation, did I mention that during the Mars opposition week we serviced over 1200 members of the public in five nights? And at the Boy Scout Camporee, we fielded 15 telescopes and binoculars between 2 pm and midnight. Not all 2500 Scouts observed, of course, but there were several hundreds that did (congratulations to Owen Hoffman, our project officer, for a great show.)

Many members have upgraded their telescopes, eyepieces and binoculars, hopefully a sign that looking at the stars has once again become the significant purpose of the club.

With the change of seasons, we know that colder nights will diminish the turnout of viewers. But for those who dress warmly and keep their batteries charged, fall offers splendid skies. Or will, as soon as that Hunter's moon passes.

The Wiz

Dear Wiz, How come sometimes when I change eyepieces I get a big black blob in the center?
R. Maivue

Dear Roonin,

It's because the eyepiece is not designed to accommodate your telescope's geometry. Instead of seeing the whole light cone coming off the primary, it's looking at just the center portion, which includes the shadow of the secondary. And the narrower it looks, the larger the blob looks. In extreme cases, you may see nothing but the blob.

All telescopes with central obstructions ("secondary mirrors") have the potential to run into this problem when you put in an eyepiece designed for longer focal length telescopes. Manufacturers don't tell you what combinations won't work--there are so many variables it would be impractical to try to list them all.

Before you send off for an untried eyepiece, talk to the vendor and tell them just what kind of telescope you're going to use it in. They can probably tell you in a heartbeat whether it will have a problem. If they aren't sure, confirm that they will permit a return. When it arrives, keep the packaging, and check it out quickly. Better yet, borrow the same eyepiece from another member and try it in your telescope and save some shipping charges.

Tennessee Star Party (TNSP), Sept 26-28 2003
by Michael McCulloch

The TNSP was hosted by the BSAS at Camp Nakanawa just west of Crossville, TN. The camp was established in 1920 as a girl's summer camp. The facility is easy to find just off of I-40 and Hwy 70. Overnight accommodations were rustic cabins located within walking distance of the observing field, or camping along the lake or in the observing field itself. Various buildings within the camp were used during the TNSP, primarily including the Wigwam for presentations and the Dining Hall for the obvious. The food in the Dining Hall was good and plenty was provided.


The observing field

A note about the accommodations: the cabins are rustic but functional. No bedding was provided and the mattresses were a bit dusty but reasonably comfortable for persons 6 feet or less. The bathhouse facility is dated and is in need of renovation in my opinion.


Accommodations

I arrived about 4 PM on Friday. After registering and arranging my things in my cabin, I attended the "How to Get Started in Video Astronomy" presentation by Bill Griswold and Dennis Williams in the Wigwam. The focus was on the Philips ToUcam and the AstroVid Stellacam products.

Friday's dinner followed at 6 PM. At 7 PM most attendees moved to the observing field. Two lines of scopes were oriented running east-west on the field. The first night of observing on the 26th (Friday) was initially clear with a heavy haze. The Milky Way was visible, but lacked detailed visible structure. The eastern and southern horizons showed significant light pollution that was amplified by the haze. It made for difficult observing of any object within 30 degrees of the horizon. I concentrated on various objects near zenith with my 12.5" Portaball, which included objects in Cygnus, Lyra, Hercules, and Aquila. Within a couple of hours, Cassiopeia and Andromeda cleared the haze. The evening was warm and rather breezy but the breeze also kept dewing to a minimum. Sometime around 11 PM a cloud bank moved in and disrupted the viewing. After waiting for a half hour, I put my scope away and headed back to the cabin. Of course, on the walk back the sky cleared again. Robb Feldhege and I talked with some of the vendors near the vendor pavilion and observed Mars with a unique "gel card" that contained various filter colors that you placed over the eyepiece while viewing. It made for easy and quick comparisons as to how the various color filters enhance certain features of Mars.

Unfortunately, I decided to turn in early on Friday evening (about 12:30 AM) even though the clouds cleared at midnight. I anticipated that the cold front passage predicted for Saturday would move through and exit before dark on Saturday with the added benefit of cleaning the haze from the atmosphere.


Lakeside camping

At 5:30 AM on Saturday morning, the front arrived with some wind, hard rain and some lightning-nothing serious for cabin-dwellers, but some of the tent campers were worried for a while as I was informed at breakfast at 9 AM. At about 11 AM, another round of storms moved through with some rather vivid lightning and loud thunder. Around noon, I decided to leave the camp and head for Cookeville where I spent the afternoon shopping and visiting my alma mater, Tennessee Tech. The skies in Cookeville (west of the camp) were promisingly clear and sunny at 2 PM, but started to deteriorate with clouds as I started my return to camp.

I arrived back in camp at about 4 PM and attended the presentation "Dynamic Mars: Massive Dust Storms in 2001 to New Findings of 2003" by Dr. Richard Schmude. The presentation was interesting from the aspect that serious research is being conducted using the observations and photos from amateurs located around the world that congregate in the MarsObservers Yahoo group. Since Mars rotates at a similar rate to that of the Earth, observers spread across the globe are critical for full 'round-the-clock coverage of the Martian globe. One of the areas of research most facilitated by amateurs included mapping of the polar cap shrinkage over time for comparison with past Mars opposition events. The conclusion is that the South Polar Cap appeared to be larger than average during the 2003 event.

Once again, dinner followed at 6 PM and we moved to the observing field. Clouds initially blocked the view. At about 8 PM, the skies cleared and the Milky Way was visible-this time with some detailed structure visible. The eastern sky still showed significant light pollution. Observing continued for about an hour (I didn't setup my scope but visited with others) at which point the clouds returned. Given the clouds and a gathering dewy fog on the observing field, I decided to head for home. I hope for better skies next year!

P.S. It is has come to my attention that the sky cleared after I left Saturday night. Sometimes it pays to be patient!

FALL IS THE TIME FOR ASTRONOMY!

But when your not observing, share your astronomical experience with the rest of SMAS and everyone on the Internet by writing an article for SCRAPS. Contact Mike Littleton at (865) 671-1022 or email littlen@ix.netcom.com.

September Meeting by Angela Quick

President Bob Arr began the meeting at 7 PM in Room 223 of the Alexander Building, Pellissippi State Technical Community College Main Campus. 22 people were present, including guests D. R. Fudge, David Fields, and Mary Watson.

New Meeting Location: Bob Arr spoke briefly about the new meeting location at the main campus of Pellissippi State. He explained that there is a $25 meeting fee for groups not affiliated with the college. He distributed a handout that noted that if SMAS entered into a formal relationship with Pellissippi State, the meeting room fee might be waived. We expect that our responsibilities in this relationship would involve hosting the occasional star party on campus.

Telescopes for Kids: Lee and Janice Erickson showed off one of the completed Telescopes for Kids. Volunteers from the club have assembled more scopes to be given away. (Three, I believe?) As soon as mounts are fabricated for the donated finder scopes, we can hand over the scopes to their new owners. One scope goes to the Boys and Girls Club in Sevierville. Are there any suggestions for the other two telescopes?

Eyepiece Cleaning: Bob Arr discussed the theory of cleaning eyepieces, giving a verbal description of the basic procedures. Robb Feldhege recommended lens pens, special optics cleaning pens used by NASA, that are available at www.lenspen.com. Roy Morrow recommended microfiber cloths, like those sold for cleaning eyeglasses, as a great way to remove fingerprints. Bob led a hands-on demonstration at the end of the meeting in which Ed Gorney got all that gunk from the public viewing of Mars off his eyepieces!

The Night Sky-Lyra: Angela Quick gave a night sky presentation on the constellation Lyra. Lyra is notable for its many multiple stars, a variable star, and two Messier object: M57, the Ring nebula, and M56, a globular cluster. We shared our experiences with and impressions of the objects as they were discussed. It was really cool to hear about other people's viewing of the objects in the talk! Angela handed out a sky map of the constellations Lyra and Cygnus. Items to hunt for at our next star parties: Vega, Epsilon Lyrae (the double double), M57, M56, Albireo. Robb Feldhege offered to print out an observing list, finder charts, and observation sheets based on the Messier items discussed in each month's night sky presentation, so that all at the star party would be able to work, bit by bit, on their Messier certificates.

Possible John Dobson Visit: The Club then moved on to a serious discussion of the proposed John Dobson visit. The discussion lasted about one hour.

THE FACTS:

- John Dobson is available the last two weeks of January 2004 (15 – 31).
- He charges a $100 to $200 honorarium.
- He charges an additional $10 per day to cover expenses.
- We must provide lodging and meals by hosting him in private homes.
- Our club cannot charge admission to recover the costs of the visit.
- Each club in the proposed trip shares the travel costs of the trip equally. In math, total cost of tickets / total number of clubs.
- Currently, no other Tennessee clubs are interested in joining SMAS to sponsor a Dobson visit – not Barnard Seyfert, not Bays Mountain, not the Chattanooga club; we do not yet have an answer from ORION.

PROS identified by members:

- Dobson is not young, and the opportunity to hear him speak is closing.
- Dobson has the potential to be a very interesting speaker. He invented the Dobsonian mount, pioneered the construction of telescopes from inexpensive components, and founded the Sidewalk Astronomers movement.

September Meeting (continued)

CONS identified by members:

- January weather may complicate travels, and mean there is no outdoor component to the visit.
- Dobson primarily speaks about cosmology topics, not telescope making or the sidewalk astronomers.
- Cost – the club does not have the money in treasury to pay for the visit; it would need to be funded by private contributions.

TASKS We Would NEED TO DO to Host the Visit:

- Someone must volunteer to be PROJECT COORDINATOR. (SMAS officers will not do this.)
- Dates for the visit must be pinned down.
- The total cost for the visit must be pinned down.
- A venue for the talk must be arranged.
- Hosts for lodging and meals must be arranged.

POINTS OF DISCUSSION:

1) Will Dobson speak on telescope making and Sidewalk Astronomers, or will he talk about cosmology? Dobson's web site and Donna, his agent, indicate that Dobson wants to talk about cosmology. Members indicated that they wanted to hear about telescope making and Sidewalk Astronomers, not cosmology. Is there a way to make sure Dobson discusses the topics of interest in his visit? ACTION ITEM: David Fields will try to talk to John Dobson himself, to get a sense of how engaging a speaker he might be and if he can be persuaded to talk about telescopes and sidewalk astronomy rather than cosmology.

2) We all agreed that the costs of the visit were the heart of the issue. The club does not have enough money in treasury to sponsor the visit from club funds. Therefore, money to pay for the visit would need to come from private contributions.

Lee Erickson moved that no club funds be used to support the visit. In discussion of this, it was noted that there are other projects the club might want to spend its money on instead. It was noted that according to the club constitution, the officers of the club could spend up to $100 without the voted approval of members. It was also noted that many of our members do not care for formal discussion of issues. The motion was seconded, but defeated in a voice vote.

We agreed that club members would have to have more information on a maximum total cost for the visit in order to make a final decision. ACTION ITEM: Bob Arr will call Donna, Dobson's agent, to find out the exact Florida trip itinerary we propose to join in on and to pin down a maximum cost.

We also agreed that we should determine how much money private contributions from club members would total. That way, we would know an approximate amount available for the project. ACTION ITEM: Angela Quick will distribute a poll to SMAS members asking what their maximum contribution to fund a visit by Dobson would be.

AT THE NEXT MEETING: David, Bob, and Angela will report their findings. IF the total cost of a Dobson visit can be covered by contributions from club members, we will ask for a PROJECT COORDINATOR. Then, IF someone volunteers to be Project Coordinator, we will vote on whether or not to sponsor the visit.

Discussion ceased at about 9:10 PM. Bob's hands-on eyepiece cleaning demonstration followed for those interested. Meeting gradually dissolved, with last members leaving the parking lot around 10 PM.

President:
Bob Arr

Vice President:
Rob Feldhege

Secretary:
Angela Quick

Treasurer/ALCOR:
Erik Iverson

SCRAPS Editor:
Mike Littleton

Webmaster:
Mike Fleenor

Observe Chair:
Ron Dinkins

SMAS Website:
http://www.smokymtnastro.org/

October 2003

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2 First Qt. Moon	3 UTK	4 Camporee TAO
5	6	7	8	9	10 SMAS Full Moon	11
12	13	14	15	16	17 UTK	18 TAO Unicoi Crest Last Qt.
19	20	21	22 Orionid meteor shower peak	23	24	25 Look Pebble
26	27	28	29	30	31 1st Qt. Moon	

Schedule of Events

•**10/3/03 and 10/17/03** Public observing from the roof of the Physics Building at UTK

•**10/4/03** SMAS is participating in the Boy Scouts of America Camporee near IJAMS Nature Center

•**10/4/03 and 10/18/03** Public observing at Tamke Allen Observatory

•**10/10/03** SMAS Meeting 7 PM at the Main Campus of Pellissippi State Community College in Room 223 Of the Alexander Building on Pellissippi Parkway

•**10/15/03** Mercury rises at 7:07 AM; Venus sets at 7:43 PM; Mars rises at 5:00 PM and sets at 3:45 AM; Jupiter rises at 4:22 AM; Saturn rises at 11:43 PM

•**10/18/03** SMAS starparty at Unicoi Crest, NC

•**10/25/03** SMAS starparty off Foothills Parkway at "Look Pebble"