OBSERVATIONS

A MONTHLY PUBLICATION OF THE CHESTER COUNTY ASTRONOMICAL SOCIETY

★President: Edwin Lurcott
★Treasurer: Pete LaFrance

JUNE 1995 (VOLUME 3, NO. 6)

★ Vice President: Jim Sylvester
★ Secretary: Nancy Armstrong

CCAS JUNE MEETING

DATE: Friday, June 2nd, 1995 RAIN DATE: Saturday, June 3rd, 1995 (regardless of weather)

TIME: 8:15 PM EDT

PLACE: Brandywine Valley Association (BVA) 1760 Unionville-Wawaset Road (Rte. 842) West Chester, PA (see map)

Beginning this month, CCAS will combine our regular meetings with our observing sessions at the BVA headquarters. If we have poor weather on both nights, we will hold a meeting with no observing session on Saturday evening. This arrangement will continue through the month of August.

At this month's meeting, the newly elected officers will be presented to the membership and officially installed. Following a brief business meeting, Ed Lurcott will demonstrate "The Scale of the Solar System" with his working orrery.

Weather permitting observing of the night sky will begin as soon as it is dark enough. The 4 1/2 day old moon should not be a problem for those deep-sky enthusiasts. Mars, while still high in the west, is 1.2 A.U. (112 million miles) from earth and appears only 6 arc seconds in diameter. Jupiter will be rising late in the evening, dominating the eastern sky. The spring and summer evening skies are full of marvelous objects to see; clusters, nebulae, galaxies, double and variable stars. All are there waiting for you to see.

All are invited. Those bringing 'scopes may drive up the farm road to the left of the parking lot. Members not owning 'scopes are encouraged to come and enjoy the views through the 'scopes. 'Scope owners are always pleased to have others look through them. Plus, binoculars will enable you to see many objects in the sky, bring a pair!

The BVA is allowing us to use their facilities and CCAS members are reminded that we should leave the area as clean as we found it. Your cooperation will be appreciated. Even though it is Spring, the evenings still get chilly, so DRESS APPROPRIATELY! For further information call Ed Lurcott.

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MAY CCAS MEETING

The following people were elected to office at the May meeting:

Edwin Lurcott: President Jim Sylvester : Vice President Pete LaFrance: Treasurer Nancy Armstrong: Secretary

The new officers will be installed at the June meeting. Congratulations to them all. A special thanks to the Nominating Committee: Bob Rivell, Bill O'Hara, and Holly Silverthorn. We appreciate their efforts in this election process.

The executive committee wishes to thank Mike Tucker and Steve Lurcott for their services as Vice Pres. and Treasurer, respectively. Mike has agreed to continue serving CCAS as Observing Chairman. We also want to thank Steve for setting up the checking account, handling membership dues and making mailing labels. All very much appreciated!

Following the business portion of the May meeting, Professor Hugh Harber presented highlights of a new course he is teaching at West Chester University entitled "Aerospace Sciences." His talk included the history of aviation, the beginning of rocketry, modern satellites and planetary spacecrafts. He debated the role of aerospace science in the future of human travel in space. Hugh showed how the aerospace industry is already using communication satellites for public education and is expected to expand in the future.

A great deal of interest was shown by the members as evident by the many questions and comments which followed Hugh's illustrated talk.

Cloudy skies precluded any observing with the WCU telescope.

<u>CCAS INVITED TO LAFRANCE</u> <u>OBSERVATORY</u>

Pete LAFrance is inviting the members of CCAS to observe from his observatory sight in Avondale, PA on **Friday, June 30th** with a rain date of the following Saturday. You are welcome to arrive before sunset to see his observatory set-up.

As you know Pete LaFrance has taken many beautiful photos from his observatory and I am sure he plans many more. Bring your 'scope or view from others and enjoy an evening of stargazing. Pete lives at 413 Church Road Avondale, PA. See map for details.

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COPING WITH LIGHT POLLUTION

by Jim Anderson

Three and a half years ago my wife gave me a 60mm refractor for my birthday, re-igniting my interest in astronomy. Since then I have been using it to get re-acquainted with the sky. Since I live in a third-floor apartment in a complex with very bad light pollution, I thought I'd share some things I've discovered that might help others faced with similar conditions.

Our apartment has a rather large covered balcony that is very convenient for some easy stargazing. Problem is the outdoor lighting here is provided by high-pressure sodium lights on 10-12 foot poles. Even worse, these bulbs are encased in glass globes with no reflectors. Light radiates in ALL directions, even straight up. One of these fixtures is a mere 25 feet from our balcony. Because the building sits lower and the road in front rises, the light is on a level with our balcony. There's another fixture about 150 feet away in the parking lot of the building across the road; it's pretty much in a straight line with the closer ones. These lights were making it nearly impossible to keep my eyes dark-adapted while observing. That of course makes it hard to see faint objects. Other light fixtures are screened pretty well by trees.

Then one day I was looking through an ad for a building supply center. They had 4'x8' sheets of 1/2 inch thick foam insulation board, for use in insulating buildings. I realized that these could be used as lightweight light shields to block those awful streetlights. These sheets are very easily cut with a utility knife, razor blade, or even a steak knife. Perhaps best of all, they are very cheap! Since they are so light, they can be blown easily by even slight breezes. What I did was cut a sheet down into 4 2'x4' pieces. I put one in position to block those 2 lights, resting on the floor and leaning against the balcony railing. Then I lean something heavier against it at the bottom, to keep it pressed against the railing. That prevents the wind from blowing the shield into the telescope. When the trees have no leaves and the other lights become a problem, I use another piece on the other side of the 'scope.

Using these shields to keep my eyes darkadapted has worked well. I have seen the secondary star of binaries (9.5 magnitude!). I recently also bagged M53. This trick has enabled me to see a lot more than I would have thought possible.

Another thing I did was to modify the 'scope and finderscope. These had black plastic dewcaps at the objective end. Since they were plastic, the surface was glossy, and the inside was reflecting some of the streetlight light into the telescope. Again, this made it hard to see much. To fix this I took some fine sandpaper and lightly sanded the inside surface of the dewcaps (first remove the dewcap from the 'scope so you don't get sandpaper grit and scratches on the lens). Then I washed the caps to remove grease, dirt, and grit. Then I applied some very flat paint to the inside. I used some model paint I had sitting around; Krylon makes spray cans of a color they call 'Ultra Flat Black' that is also a very good choice for this. Krylon spray paints seem to be available just about everywhere: hardware stores, home building centers, K-Marts, etc. Just be careful when using it and follow all pre-cautions on the can. Once again, this improved my seeing from my balcony by cutting down on stray light reflections into the telescope. Another trick is to make some "extensions" for the dewcaps, but I haven't felt this is necessary since I painted the dewcaps.

If you're having similar problems fighting light pollution, I hope these ideas may help you a little. If anyone else has come up with other ideas, I hope you'll write them up and share them with the club. If you feel hesitant about that ("I'm no writer!"), then give me a call or talk to me at a club meeting. I'll put any suggestions I receive into another article for the newsletter (and I'll give proper credit for the idea, too).

Until later, Clear Skies! \star \star \star

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SUCCESSFUL "STAR NIGHT" AT RIDGE PARK ELEMENTARY SCHOOL

After some school organized astronomy activities, 40 Ridge Park first grade students and their parents were treated to telescopic views of Mercury, Mars, the moon and some double stars through CCAS members' equipment. Nearby lighting prevented the observation of deep sky objects. Telescopes were provided by Pete LaFrance, Mike Tucker and Ed Lurcott. (We could have used more.) It was pleasing to see how excited the students were when using the 'scopes, especially when viewing the moon.

It was a real delight to see what the first grade teachers at the Ridge Park Elementary School have accomplished in introducing astronomy to their students. All of their students not only know the planets names, but also some facts about each. These teachers have done an excellent job. We encourage this education and were glad to be a part of this event.

The students have since written about their appreciation and drawn pictures on 12"x18" paper, which has been bound into a book and sent to CCAS. Mrs. Hampton and Miss Blackburn are to be commended for their efforts. * ★

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NATIONAL ASTRONOMY DAY RESULTS

Many people stopped by our National Astronomy Day display table set up in the Exton Square Mall, Saturday, May 6th. Some asked about our society and some inquired about particular celestial objects. Twenty-one people signed up to receive complimentary issues of our newsletter. This was not as many as last year, possibly due to the beautiful spring weather this year.

The success of this year's display is due to the many CCAS members who helped with the display and answered the visitors' questions. Many thanks to CCAS members, Pete LaFrance, Nancy Armstrong, Cathy Buczynski, Bob Hartjie, Frank Angelini, Jill Fragale, Bill O'Hara, Jim Sylvester and Ed Lurcott, all who spent time at the table. Thanks also to Mike Tucker. Pete LaFrance and Ed Lurcott who supplied some astronomical photos, large posters, space models and telescopes to make the display attractive.

Overall it was a successful effort, well attended and a good time was had by all.

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MASON-DIXON STAR PARTY

The sixth annual Mason-Dixon Star Party will be held on June 23 -25, 1995 at the Spring Valley County Park, York County, PA. This telescope star party in one of the most remote areas in southern York County. Weather permitting, there will be dark skies for observing on Friday and Saturday evening. Most attendees camp in the park, but nearby motels are available. This is a fun time for amateur astronomers and their families with activities for the children, food available at all times, swap tables, telescope judging and speakers.

If you have never been to a star party, this is a good one to start with as it is nearby, well organized and well attended. Cost: \$10/person, includes camping. It would be nice to have CCAS well represented at this annual gathering of astronomy enthusiasts.

Contact Ed Lurcott(436-0387) for registration forms. If you do not obtain a registration form, you may register at the park entrance for \$15/person. *Spring Valley County Park is located 2.1 miles east of I-83, exit #2 on Pottosi Road. (follow 'Mason-Dixson Star Party' signs)

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SUMMER MEETINGS

Please note the schedule of our summer meetings which are combined with observing sessions at the BrandywineValley Assoc.(BVA).

Primary Date	Rain Date
Fri., June 2	Sat., June 3
Fri., July 21	Sat., July 22
Fri., Aug., 18 * * *	Sat., Aug. 19 ★ ★

MEMBERSHIP RENEWALS

Many members have already renewed their membership, but there are some who have not. Now is a good time to check the date printed on the address label of this issue. If you are due to renew, you may send your renewal check made out to our new Treasurer. Pete LaFrance.

Mail to: **Pete LaFrance**

413 Church Rd. Avondale, PA 19311.

WELCOME TO OUR NEW MEMBERS

CCAS would like to welcome George and Sarah MacNeill to our society. We hope you enjoy being a part of our activities.

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<u>CHESTER COUNTY ASTRONOMICAL</u> <u>SOCIETY'S PURPOSES</u>

The Chester County Astronomical Society was formed in September 1993, with the cooperation of West Chester University, as a nonprofit organization dedicated to the education and enjoyment of astronomy for the general public. The society holds meetings with speakers and observing sessions once a month. Anyone who is interested in astronomy or would like to learn about astronomy is welcome to attend meetings and become a member of the society.

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MEMBERSHIP INFORMATION

The present membership rates are as follows:		
REGULAR MEMBER		
(18 years or older)	\$20/year	
SENIOR MEMBER		
(65 years or older)	\$10/year	
STUDENT MEMBER		
(full-time college student) \$ 5/year		
JUNIOR MEMBER		
(under 18 years old)\$ 5/year		
For further information on membership or society		
activities you may call:		
President: Edwin Lurcott	(610) 436-0387	
Vice Pres: Jim Sylvester	(610) 696-1102	
Treasurer: Pete LaFrance	(610) 268-2616	
Secretary: Nancy Armstrong	(610) 873-7531	
Pubic Rel: Kathy Cseke	(610) 644-9543	
Obs Chm: Mike Tucker	(610) 584-8236	
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