

OBSERVATIONS

MAY 2003
(VOLUME 11, NO. 5)

A MONTHLY PUBLICATION OF THE
Chester County Astronomical Society

<http://www.ccasastro.org>

CCAS May Meeting

DATE: **Tuesday May 13, 2003**
TIME: 7:30 p.m. EDT
PLACE: Department of Geology and
Astronomy Lecture Room
(Room 113 – Boucher Building)
West Chester University
LOCATION: South Church Street
West Chester, PA

Election Reminder: May is election month. Ballots were mailed out to all members in good standing in early April with a return envelope. If you will not be bringing your ballot with you to the May meeting, please remember to mail it back in time for the meeting. Thanks!

The presentation for May will be by CCAS member Dr. Jeff Goldader. Jeff will talk with us about the recent space shuttle Columbia disaster. Jeff has had two articles on the Columbia loss published by techcentralstation.com (use the search form at the bottom of the page to find him in the "authors" list).

Jeff received his B.S. in Physics and Astronomy from the University of Washington in Seattle in 1989. He earned his Ph.D. in Astronomy in 1995 from the University of Hawaii at Manoa. From 1995-1998, he was a postdoctoral fellow at the Space Telescope Science Institute. Since 1998, he has been a Lecturer in Astronomy at the University of Pennsylvania. He is leaving Penn after 5 years and looking for gainful employment.

His research interests run from asteroids and comets, to galaxy collisions. His current work is in finding ways to optimize the recovery of Kuiper Belt objects with poorly determined orbits. Additional interests include science and technology policy, from which his interest in the Columbia accident grew, and public education and outreach.



Membership Renewals

You can renew your CCAS membership by writing a check payable to "Chester County Astronomical Society" and sending it to our Treasurer:

Pete LaFrance
413 Church Rd.
Avondale, PA 19311-9785



National Astronomy Day is May 10

National Astronomy Day is Saturday May 10 this year. The CCAS will have our usual display at the Exton Square Mall that day. We will set up in the North Court, which is outside one of the entrances to Strawbridge's opposite one of the Mall entrances, near Au Bon Pain. It is midway between Sears and the Food Court. Setup starts between 9:00 and 10:00 a.m., and we usually shut down for the day at around 5:00 or 6:00 p.m. All Society members are asked to come out and spend an hour or two at the display, talking with passers-by and chatting about astronomy. Bring telescopes, books, posters, and other suitable items for display (small valuables, like maybe rare meteorite samples, are not a good idea). Even if you can only stop by for an hour, that can make it possible for someone else to take a meal break. Thanks.



CCAS May Observing Session

The next CCAS Observing Session will be on Friday May 23, 2003 starting at sunset; or earlier, if you can get there earlier. If it's too cloudy on Friday, then the Observing Session will be on Saturday May 24, 2003. At the observing sessions, there will be help available to set up and use your telescopes. If you're having trouble using your telescope, or finding your way around the sky, come on out and get some assistance. All members are invited whether they have a telescope or not. Telescope owners are always glad to share the view through their telescope. CCAS Observing Sessions are always free of charge.



CCAS Beginning Astronomy Class

The Education Committee of the CCAS is finishing this class intended to introduce people to basic astronomy. These are the dates on which the remaining classes will be held, starting at 7:00 p.m. and ending at 8:00 p.m.:

May 6 Planetarium Field Trip (WCU)
May 20 Telescopes, Binoculars and Mounts

The planetarium show on May 6 is at West Chester University. The last class will be held at the Flower and Cook Observatory in Willistown Township. It is located on Providence Road, just west of the intersection with Warren Avenue.



May Skies

Moon Phases

New Moon	5/1
First Quarter	5/9
Full Moon	5/15 "Full Flower Moon"
Last Quarter	5/22
New Moon	5/31

The Native American name for this month's Full Moon was obtained from the *Farmer's Almanac* website. In most areas, flowers are abundant in May; hence the name for this month's Full Moon. This Full Moon was also sometimes called Full Corn Planting Moon or the Full Milk Moon.

Total Lunar Eclipse: Thursday May 15

On the night of May 15-16, the Moon will pass completely through the Earth's shadow, producing a lunar eclipse. This eclipse will be completely visible from our area, with the Moon well above the horizon when the eclipse starts. These are the times for this event (all are Eastern Daylight Time):

Eclipse starts:	10:03 p.m.
Totality starts:	11:14 p.m.
Mid-eclipse:	11:40 p.m.
Totality ends:	12:06 a.m.
Eclipse ends:	1:17 a.m.

The Planets

Mercury transits the Sun (passes across in front of the Sun's face) on the morning of May 7. This event can be seen with a telescope **using a proper solar filter**; do not attempt to see it without a filter! The transit will already be in progress when the Sun rises here at about 5:57 a.m. that morning. Mercury will be a small inky black circle on the face of the Sun. In late May, Mercury appears low in the morning sky near Venus before sunrise.

Venus remains in the morning sky this month, but is now very low in the east at morning twilight.

Mars is getting dramatically brighter and rising earlier in May; as early as 1:00 a.m. by Memorial Day. It is high in the southeast at dawn. In August Mars will be at its closest to us in a lifetime! This month Mars gets close enough that you should be able to start seeing surface markings in a telescope. The south pole is tilted toward us, so the bright ice cap you see is the South Polar cap.

Jupiter is the brightest "star" in our evening skies, blazing away in the west. Seeing Jupiter in a telescope is always an impressive experience!

Saturn is in the western sky as soon as night falls in May, but is now getting too low for good telescopic viewing.

Uranus is in the morning sky in May, in Capricornus.

Neptune is also in the morning sky this month, in Capricornus. On May 13 and 14 much brighter Mars will be only about 2° from Neptune, so that may help you find Neptune.

Pluto is higher in the southeast in the evening, in Ophiuchus. You need good dark skies, at least an 8" telescope, good star charts, and lots of patience to find Pluto.

Eta Aquarid Meteor Shower: May 6

This meteor shower, comprised of fragments from Halley's Comet, will peak on the morning of May 6 in the early morning hours when our part of Earth is facing most directly into the stream of debris.



Calendar Notes

June 27/28, 2003 (Friday/Saturday)	CCAS Meeting & Observing Session Location: BVA sunset
July 25/26, 2003 (Friday/Saturday)	CCAS Meeting & Observing Session Location: BVA sunset
August 22/23, 2003 (Friday/Saturday)	CCAS Meeting & Observing Session Location: BVA sunset
September 9, 2003 (Tuesday)	CCAS Meeting Location: West Chester University 7:30 p.m. EDT
October 14, 2003 (Tuesday)	CCAS Meeting Location: West Chester University 7:30 p.m. EDT
November 11, 2003 (Tuesday)	CCAS Meeting Location: West Chester University 7:30 p.m. EST
December 9, 2003 (Tuesday)	CCAS Meeting Location: TBD 7:30 p.m. EST



Newsletter Deadlines

These are the deadlines for submitting material for publication in the newsletter, through the September 2003 issue.

<u>Issue</u>	<u>Deadline</u>
June 2003	05/23/2003
July 2003	06/27/2003
August 2003	07/25/2003
September 2003	08/29/2003



Help Needed with Neighborhood Star Party

Help is needed at a neighborhood star party, Saturday, June 7, 2003. The location of this event is in the Westtown/West Goshen area. Directions will be available later. Contact Kathy Buczynski at 610-436-0821 if available to help. No cloud date has been set at this time.



Mason-Dixon Star Party: May 30 to June 1

The 14th Annual Mason-Dixon Star Party, hosted by the York County Astronomical Society, has been moved to a new and improved site: Codorus State Park outside Hanover PA. This new site offers some amenities not available at the old York County Park previously used: restrooms, showers, drinking water, and other facilities. It also has darker skies at night! Parking and camping are available at this fine family-type event. Several motels are nearby for those who don't want to "rough it" camping on-site, although no one can say Pete LaFrance is roughing it in his new camper! Pete, Ed Lurcott, and Steve Limeburner are three Society members who have attended this fine star party before and can attest to how much fun it is (when the weather cooperates...). There will be guest speakers on a variety of astronomical topics, a telescope construction contest, an on-site food vendor (open 24 hours a day!) who will even provide a surf'n'turf dinner on Saturday night (steak and shrimp) for only \$6.00, door prizes and more. See the website at www.MasonDixonStarParty.org for more information, maps, and registration details.



Black Forest Star Party: August 29 to 31

The Annual Black Forest Star Party, hosted by the Central Pennsylvania Observers, is being held at Cherry Springs State Park in Potter County in northern Pennsylvania on the weekend of August 29 through 31, 2003. Cherry Springs is Pennsylvania's first official Dark-Sky Park. Seeing at this site is, to put it mildly, superb: probably the best astronomical seeing anywhere in the northeastern United States. Previous BFSP attendees from the CCAS have included Pete LaFrance, Ed Lurcott, and Steve Limeburner. More details, including registration information, can be found at the website www.bfsp.org.



Is your astronomy club smarter than the rest?

From Terry N. Trees, Vice President of the Amateur Astronomers Association of Pittsburgh

Is your astronomy club smarter than the rest? Then come and prove it at the Laurel Highlands Star Cruise in Hazelton, WV on June 23 - 29, 2003. The star party's website is at <http://www.LHStarCruise.org>. Here's an item from the WebSite:

Come test your 'astro' wits against your fellow attendees and possibly win a prize! The "Astronomy Team Challenge!" game is based upon the old "College Bowl" TV game show and also the current Pittsburgh TV game show "High Q", where local high school teams compete. Questions are presented one at a time, and the team that is the quickest at 'buzzing in' with the correct answer receives points. The more difficult questions are worth more points. There will be at least three rounds with three teams in each. A team will consist of three people, either

from the same astronomy club, or comprised of campground friends and neighbors. The winners of each of the three semi-final rounds will face off in the final 'prize' round. The first and second place teams (with the most points) win prizes. If there's a tie, a coin toss will decide the winner. Please pre-register your team (club or team name and 3 players' names) if at all possible so we know how many questions to prepare. Each astronomy club may register more than one team. You may pre-register by e-mailing TNTrees@BellAtlantic.net.

Registration is also possible on-site at Star Cruise.

Also:

4 days of guest speaker presentations culminating in S&T Contributing Editor Tom Dobbins explaining how we amateurs can possibly view the Martian shield volcanoes this August.

One of the east's better dark sky observing locations.

MANY children's activities, scheduled Wednesday thru Saturday.

Star Cruise (FM 91.1 stereo) radio - Music and announcements - New, much improved signal.

On-site caterer.

It looks like we'll have electricity on the observing field supplied by a QUIET generator. Stay tuned to the WebSite for updates on this possibility.

Extensive beginner's classes.

Observing contests.

Non-astronomy tours and activities.

Model rocket building and launching.

Vendors and swap table.

Please check-out the WebSite <http://www.LHStarCruise.org> for all the details.

We hope to see you there!



Join the Fight for Dark Skies!

You can help fight light pollution, conserve energy, and save the night sky for everyone to use and enjoy. Join the nonprofit International Dark-Sky Association (IDA) today. Individual memberships start at \$30.00 for one year. Send to:

International Dark-Sky Association
3225 N. First Avenue
Tucson, AZ 85719-2103

Dark-Sky Website for PA

The Pennsylvania Outdoor Lighting Council has lots of good information on safe, efficient outdoor security lights at their Website:

<http://home.epix.net/~ghonis/index.htm>



Astronomus

A Journal for Younger Astronomers

By Bob Popovich

“Field Trip!”

A society is a group of individuals who are drawn together by some common interest or purpose. In the case of CCAS, it's astronomy. But a society also has a social aspect to it. In fact, it would seem that if we did not enjoy each other's company, CCAS could hardly exist, let alone grow.

On Sunday, March 23 we came together and beautifully demonstrated what is best in a society. For on that lovely early spring day a motor coach departed from West Chester at 8:00 AM carrying three-dozen society members, friends and family. We were bound for New York City. Specifically, for that part of the American Museum of Natural History known as the Rose Center for Earth and Space, or more commonly, the Hayden Planetarium.

In the 2 hours and 10 minutes it took to travel to the museum (can you believe that travel time to Uptown Manhattan!?) the bus was filled with the chatter of multiple conversations, numerous jokes, the sharing of vacation photos and introductions amongst people who were, up until then, strangers.

Upon our arrival we all found ourselves with a wide-open museum and a full 6 hours at our disposal. Though drifting in different groups as we leisurely strolled by an outstanding collection of exhibits, we frequently found our orbits crossing paths. How delightful it was to be able to stop and, in the company of friends and family, ponder the text that accompanied each exhibit and think about the infinite splendor of the universe. And how equally wonderful it was to revel at the amazing achievements of those scientists who discovered that which we were viewing and those who created the exhibits that so beautifully portrayed it all.



The Frederick Phineas & Sandra Priest Rose Center for Earth and Space



On the bus
Photo by Mike Turco



Arrival in New York
Photo by Mike Turco

Making our way around the suspension ramp that encircles the planetarium like Saturn's rings, we got the strong sense of not just viewing space, but of being *in space*. This may be the Rose Center's greatest feature. And seeing fellow society members along the way just made it feel so familiar and homey.

Of all the Rose Center's exhibits, I found the scale of the universe to be the most engaging. Moving through the spectrum of existence from the entire universe down to the smallest sub-atomic particle in leaps of powers of ten was outstanding. And it was exceptionally informative as each successive exhibit compared itself to the previous exhibit while at the same time comparing itself to the Hayden sphere looming in the middle of the glass cube that housed the entire Rose Center. The effect was to make the macro universe astoundingly large and the micro universe astounding small. It was, in a word, astounding. Other exhibits included the sky show (a virtual reality spectacular), a big-bang audio-visual presentation, a black hole film and numerous exhibits, photographs, models and demonstrations. Oh, and of course, a gift shop.



Steve Limeburner in the Gift Shop
Photo by Mike Turco



Time to leave
Photo by Mike Turco

And once thoroughly satisfied with the Rose Center, CCAS members and friends were free to visit the American Museum of Natural History or step out the door where, on your right, was a sunny, lovely Central Park, with the restaurants of the Upper West Side on your left.

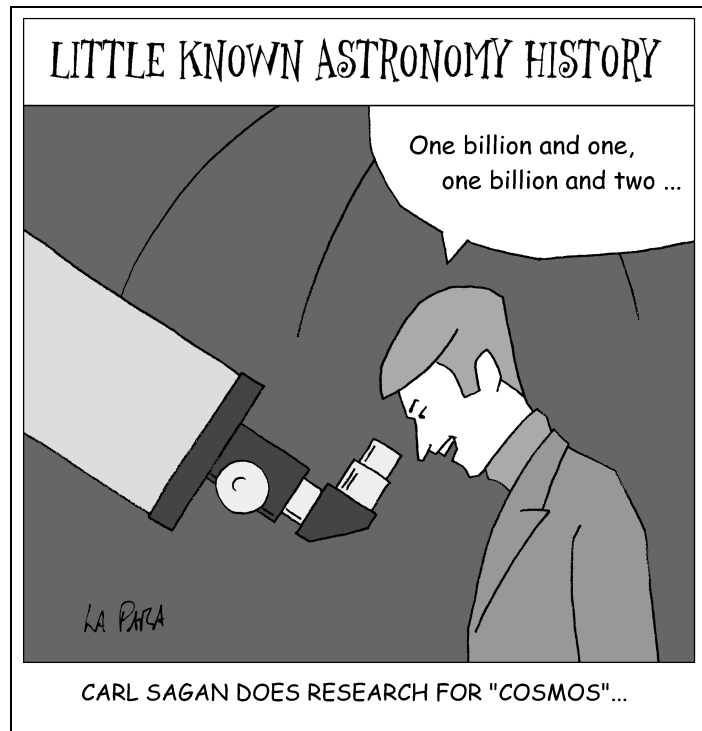
We turned homeward at 5:30 PM and once the quiz game and conversations had faded, it seemed that many of us just wanted to take a catnap and savor the events of the day.

Arriving in West Chester at 8:00 PM, I would venture to say that everyone was relaxed, a little bit smarter about astronomy and very glad to have come along on our field trip.

My thanks to Kathy Buczynski for pushing the idea and to Mike Turco for making all the arrangements. The day strengthened us as a group and as individuals. A society can aspire to no higher goals.

And our next field trip...?

Next time: "Finding my way in the dark"



Cartoon by Nicholas La Para

CCAS Information Directory

CCAS Lending Telescopes

Contact Kathy Buczynski to make arrangements to borrow one of the Society's lending telescopes. CCAS members can borrow a lending telescope for a month at a time; longer if no one else wants to borrow it after you. Kathy's phone number is 610-436-0821.

CCAS Lending Library

Contact our Librarian, Bill O'Hara, to make arrangements to borrow one of the books in the CCAS lending library. Copies of the catalog are available at CCAS meetings. Bill's phone number is 610-696-1422.

Contributing to *Observations*

Contributions of articles relating to astronomy and space exploration are always welcome. If you have a computer, and an Internet connection, you can attach the file to an e-mail message and send it to jim.anderson@mckesson.com

Or mail the contribution, typed or handwritten, to:

Jim Anderson
1249 West Kings Highway
Coatesville, PA 19320-1133

Get CCAS Newsletters via E-mail

You can receive the monthly newsletter by e-mail. All you need is a PC or Mac with an Internet e-mail connection. To get more information about how this works, send an e-mail request to Jim Anderson, the newsletter editor, at:

jim.anderson@mckesson.com

CCAS A.L. Award Coordinators

These are the members to contact when you have completed your observing log for the Messier, Binocular Messier, Lunar, or Double Star Awards:

Messier (both): Frank Angelini
(610-873-7929)

Lunar: Ed Lurcott
(610-436-0387)

Double Star: Jim Anderson
(610-857-4751)

CCAS Purpose

The Chester County Astronomical Society was formed in September 1993, with the cooperation of West Chester University, as a non-profit 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. The Society also provides telescopes and expertise for "star nights" for school, scout, and other civic groups.

CCAS Officers

For further information on membership or society activities you may call:

President: Mike Turco
(610) 399-3423

Vice Pres: Steve Limeburner
(610) 353-3986

Treasurer: Pete LaFrance
(610) 268-2616

Secretary: Doug Liberati
(610) 827-2149

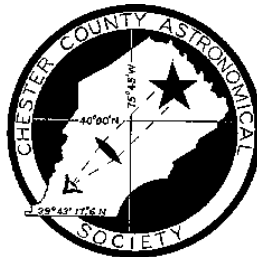
**ALCor and
Newsletter:** Jim Anderson
(610) 857-4751

Librarian: William O'Hara
(610) 696-1422

Observing: Ed Lurcott
(610) 436-0387

Education: Kathy Buczynski
(610) 436-0821

Public Relations: Vic Carlucci
(610) 458-7457



CCAS Membership Information

The present membership rates are as follows:

REGULAR MEMBER.....\$25/year
SENIOR MEMBER.....\$10/year
STUDENT MEMBER.....\$ 5/year
JUNIOR MEMBER.....\$ 5/year
FAMILY MEMBER.....\$ 35/year

Membership Renewals

Check the date printed on the address label of this issue of *Observations*; "exp." appears in front of it, just after your name. If you are due to renew, you may send your renewal check made out to our Treasurer, Pete LaFrance. Mail to:

Pete LaFrance
413 Church Rd.
Avondale, PA 19311-9785

Sky & Telescope Magazine Group Rates

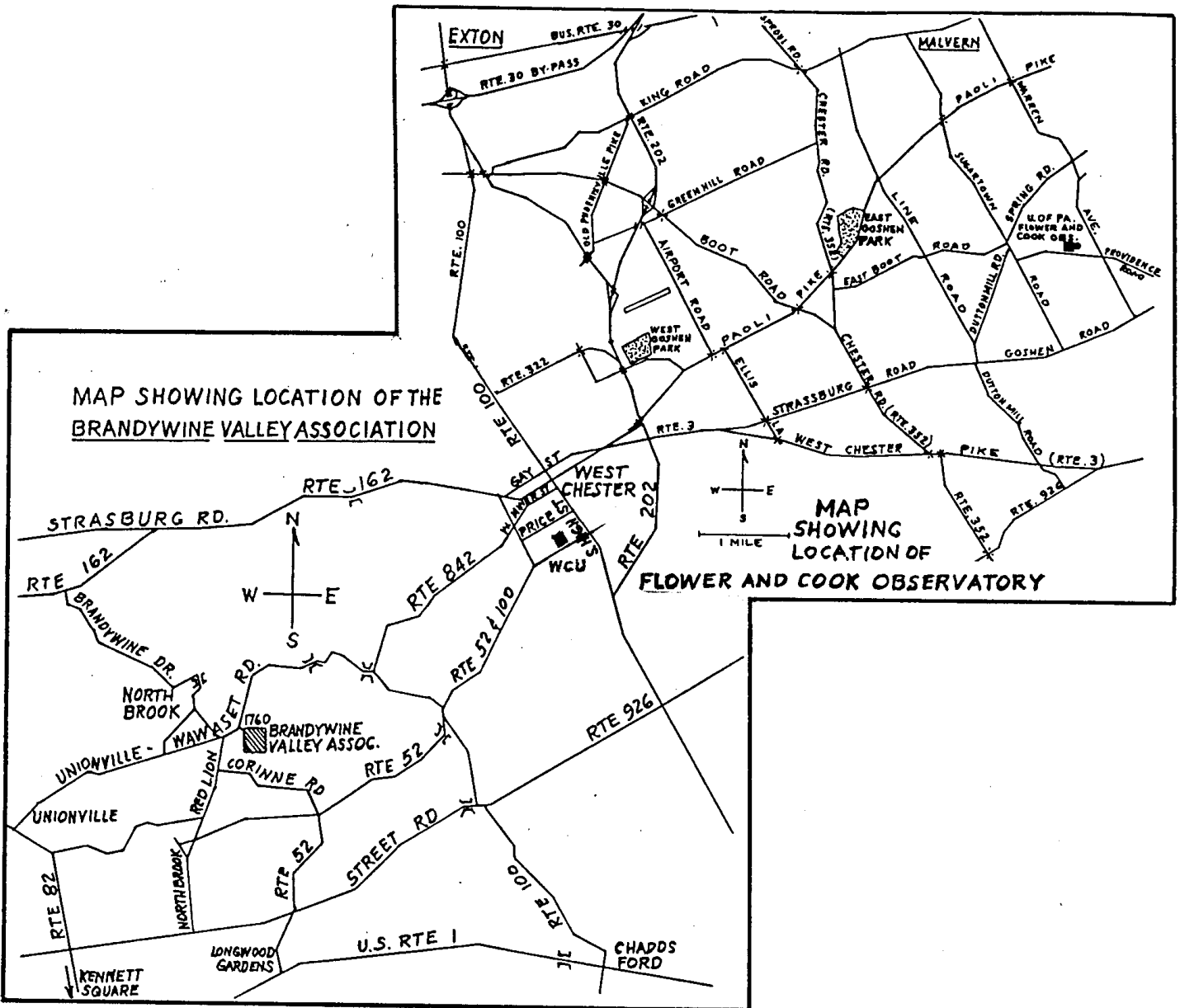
Subscriptions to this excellent periodical are available through the CCAS at a reduced price of **\$29.95** which is much less than the newsstand price of \$54.00, and also cheaper than individual subscriptions (\$39.95)! Make out a check to the Chester County Astronomical Society, note that it's for *Sky & Telescope*, and mail to Pete LaFrance. Or you can bring it to the next Society meeting and give it to Pete there. Buying a subscription this way also gets you a 10% discount on other Sky Publishing merchandise.

CCAS Website

Pete LaFrance is the Society's Webmaster. You can check our Website at:

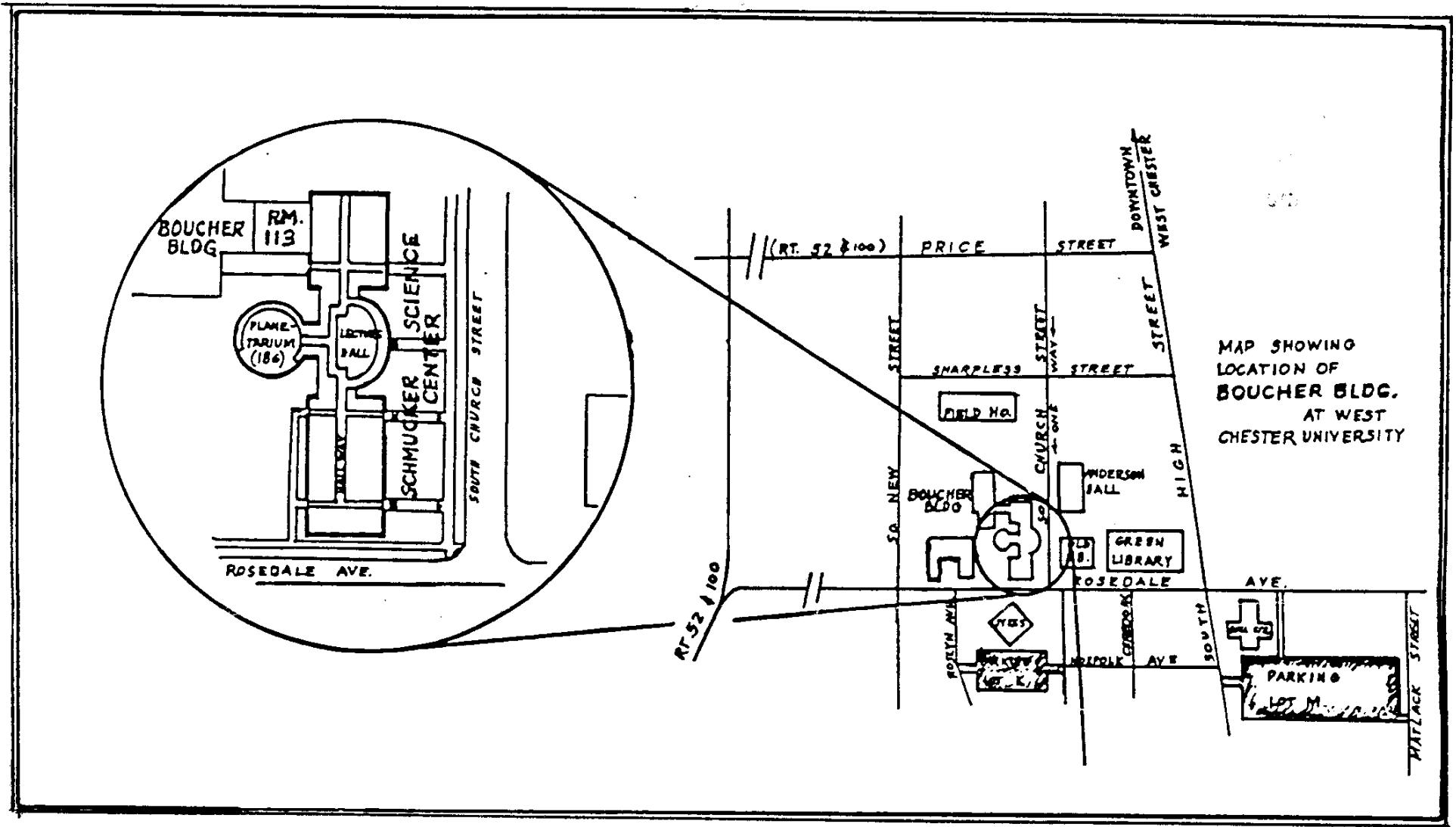
<http://www.ccasastro.org/>

Pete welcomes any additions to the site by Society members. The contributions can be of any astronomy subject or object, or can be related to space exploration. The only requirement is that it is your own work; no copying copyrighted material! Give your contributions to Pete LaFrance (610-268-2616) or e-mail to lafrance@kennett.net



To get to the Myrick Conservation Center of the Brandywine Valley Association from West Chester, go south on High Street in West Chester past the Courthouse. At the next traffic light, turn right on Miner Street, which is also PA Rt. 842. Follow Rt. 842 for about 6 miles.

To get to the observing site at the BVA property, turn off Route 842 into the parking lot by the office: look for the signs to the office along Route 842. From that parking lot, go up the farm lane to the left; it's about 800 feet or so to the top of the hill. If you arrive after dark, please turn off your headlights and just use parking lights as you come up the hill (so you don't ruin other observers' night vision).



Parking is available behind Sykes Student Center on the south side of Rosedale Avenue (Parking Lot K), and behind the Bull Center at the corner of Rosedale Avenue and South High Street (Parking Lot M). If you arrive early enough, you may be able to get an on-street parking space along South Church Street, or along Rosedale Avenue. You can take the Matlack Street exit from Rt. 202 South; Matlack Street is shown on the map at the lower right corner with Rt. 202 off the map. If approaching West Chester from the south, using Rt. 202 North, you would continue straight on South High Street where Rt. 202 branches off to the right. This would bring you onto the map on South High Street near Parking Lot M, also in the lower right corner.