



Observations

A Monthly Publication Of The
CHESTER COUNTY ASTRONOMICAL SOCIETY

OCTOBER 2005

(VOLUME 13, NO. 10)

Visit our website at www.ccas.us

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Newsletter Deadline

November 2005 issue..... October 26

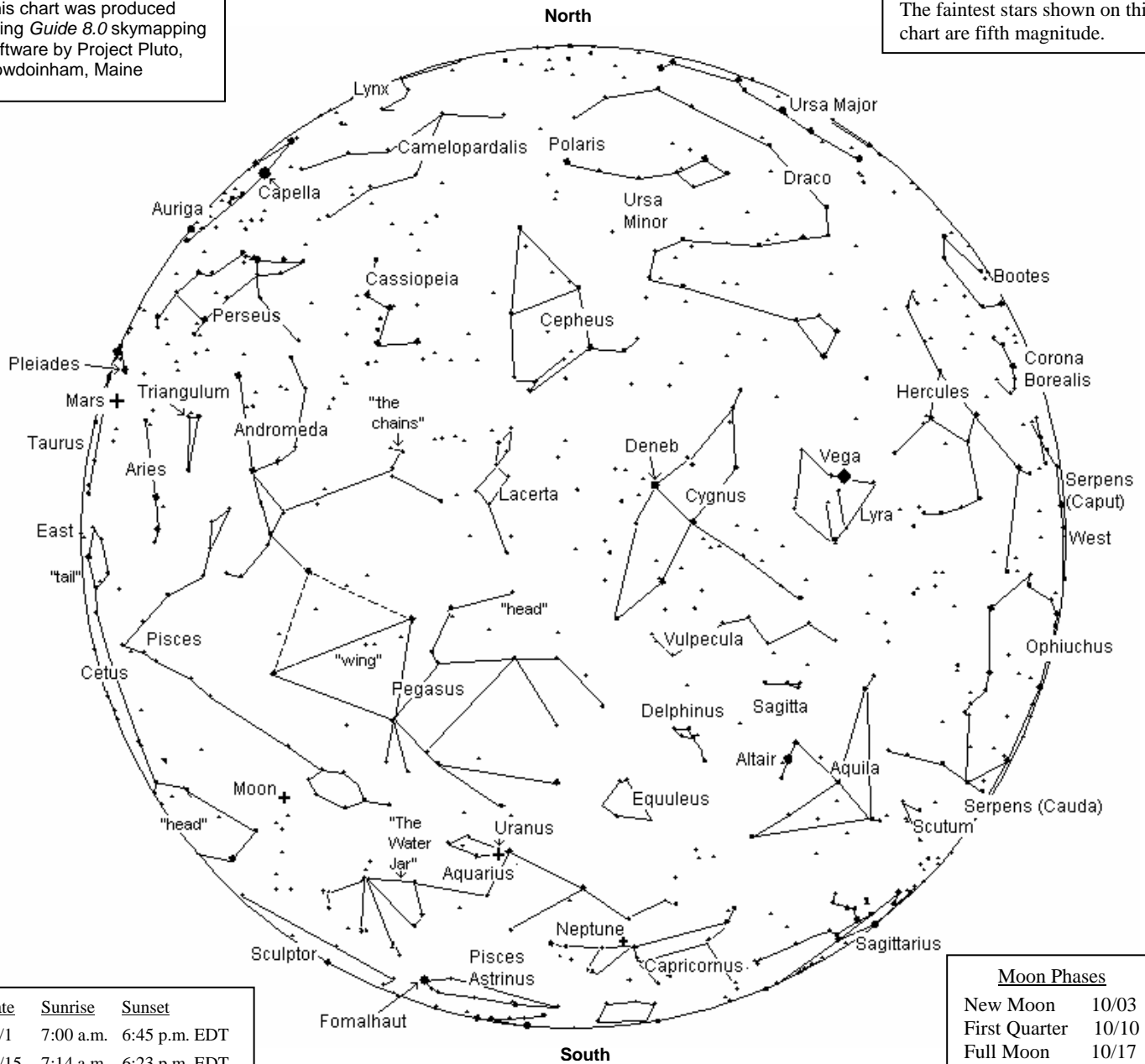
Important October 2005 Dates

- 3 New Moon
- 4 Hercules Observing Cluster meets.
Call Kathy Buczynski at 610-436-0821 for details.
- 9 Sally Ride Science Festival at West Chester University. See page 3 for details.
- 10 First Quarter Moon
- 11 **CCAS Meeting** 7:30 p.m. EDT
Location: Room 113, Boucher Building, West Chester University
COM: Pegasus
Presentation: Eyepieces (see page 3)
- 11 Hercules Observing Cluster meets.
Call Kathy Buczynski at 610-436-0821 for details.
- 17 Full Moon
- 18 Hercules Observing Cluster meets.
Call Kathy Buczynski at 610-436-0821 for details.
- 21/ **CCAS Observing Session**
- 22 Location: Brandywine Valley Association
Time: sunset, or earlier (see page 3)
- 24 Last Quarter Moon.
- 25 Hercules Observing Cluster meets.
Call Kathy Buczynski at 610-436-0821 for details.
- 29 **Mars** is the closest it will get to Earth this year,
at 69,422,823 km (43,137,342 miles).
- 30 **End of Daylight Savings Time** for 2005 at 2:00
a.m. EDT: turn clocks **back** one hour.



This chart was produced using *Guide 8.0* skymapping software by Project Pluto, Bowdoinham, Maine

The faintest stars shown on this chart are fifth magnitude.



Date	Sunrise	Sunset
10/1	7:00 a.m.	6:45 p.m. EDT
10/15	7:14 a.m.	6:23 p.m. EDT
10/30	6:30 a.m.	5:03 p.m. EST

Moon Phases	
New Moon	10/03
First Quarter	10/10
Full Moon	10/17
Last Quarter	10/24

The sky over Chester County October 15, 2005 at 9:00 p.m. EDT

The Planets

Mercury is in the evening sky in October, pretty low and hard to spot.

Venus is in the evening sky all month, setting about 90 minutes after the Sun. How soon after sunset can you pick out Venus?

Mars: it's "Mars Month"! This month Mars is rising in the east around 8:00, but the best views will be after 10:00 when Mars is higher in the sky. Mars will not be this close to us again until 2018!

Jupiter is getting lower in the evening sky this month, disappearing in the Sun's glare by month's end.

Saturn is in the morning sky in October, with the best viewing an hour or two before sunrise.

Uranus is well placed for observation as darkness falls.

Neptune is also well placed for observation as darkness falls.

Pluto is now out of reach for this year, disappearing behind the Sun. You'll have to wait for next spring to try for Pluto again.

CCAS October Meeting

DATE: **Tuesday October 11, 2005**
TIME: 7:30 p.m. EDT
PLACE: Room 113 – Boucher Building
West Chester University
LOCATION: South Church Street
West Chester, PA

A map of the campus showing the location is on page 11.

This month's constellation will be Pegasus, presented by Nicholas La Para.

Jim Anderson will lead a discussion about "Eyepieces." We will start with an explanation of the key characteristics to consider when selecting eyepieces for purchase and use. After that, the floor will be open for members to add comments, talk about the eyepieces they have, what they like or dislike about different eyepieces, are two-inch eyepieces better than 1.25-inchers, are bino-viewers worth the extra cost, which eyepieces are good for people with glasses, what's a good range of focal lengths to have, which ones do you use and which ones sit on the shelf, etc.

We encourage all members to attend and share their experiences with the eyepieces they have owned.



CCAS October Observing Session

The next CCAS Observing Session will be at the Brandywine Valley Association's Myrick Conservancy Center (see map on page 12) on Friday October 21, 2005 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 October 22, 2005. 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 free of charge and open to the public.



CCAS Invited to Sally Ride Science Festival

We have been invited to participate in the Sally Ride Science Festival at West Chester University on Sunday October 9, 2005. The event flyer and registration form is reproduced in this month's newsletter after page 12. Please encourage any fifth to eight grade girls you know to attend, and feel free to copy the flyer and registration form for them.

Since the CCAS will be there as "exhibitors", with a display booth, we don't pay a registration fee. We're planning to do solar observing, if it's not cloudy that day. We can also use help from members to man the booth and help with the display. If you can help out, please contact Kathy Buczynski at president@ccas.us or 610-436-0821.

This is a big event, and the University is also our sponsor, so we really want to have a strong presence there that day. Please make an extra effort to help out with this event. Thanks.



Treasurer's Report by Bob Popovich

August 2005 Financial Summary

Beginning Balance	\$1,315
Deposits	25
Disbursements	<u>179</u>
Ending Balance	\$1,161

Membership Renewals Due

10/2005	Anderson Freeburg Fusco Jain Padgett Smith Stoltzfus
11/2005:	Athens Buczynski Eaves Heck Hepler Okpaku Streib
12/2005:	Henderson Limeburner



Membership Renewals

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

Bob Popovich
416 Fairfax Drive
Exton, PA 19341-1814

The current dues amounts are listed in the *CCAS Information Directory* on a later page in this newsletter.



CCAS Polo Shirts Available

You can purchase a classy polo shirt with the CCAS logo embroidered on the left breast. Price is \$30.00 per shirt. Adult sizes S, M, L, XL only. Contact our Treasurer Bob Popovich to purchase yours!



Welcome!

We extend a warm welcome to our new members this month, Sam Massarella of West Chester, and Victor Vely of West Chester. We also extend a special warm welcome back to our "long-lost" friend Frank Angelini of Downingtown!



CCAS Trip to U.S. Naval Observatory

The final deadline for making your reservation with Linda is October 7, 2005! Call now!

The CCAS is making plans for a trip to Washington D.C. in December to visit the U.S. Naval Observatory and the National Air and Space Museum.

The Naval Observatory is open for tours on Monday evenings (except national holidays) from 8:30 to 10:00 p.m. We will tour

the Observatory and be able to observe (weather permitting). We can reserve a date for up to twenty people. We're considering December 5th and/or 12th. We must reserve 4-6 weeks in advance (around 10/1) and they will confirm via e-mail or phone, no later than the Friday prior to requested date. We will have to send them a list of names and birthdates of those attending. Upon arrival (gates open at 8 p.m.) we must each show a valid photo ID and go through a security procedure. The security is required because the home of the Vice President is also located on the Naval Observatory grounds.

We will travel to Washington on Monday evening, arriving in time for the tour at the USNO. After that, we will stay overnight and visit the National Air and Space Museum on Tuesday before traveling home Tuesday evening. If you are interested in going, please **contact Linda Fragale at 610 269-1737**. The price depends on how many of us go (you will not have to commit to the trip until we can give you a final cost). Thanks.

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Help Wanted (and Needed)

Your Executive Committee is looking for help in promoting the Society to the community. In the past, opportunities have just slipped by because we didn't have a person handling the situation. It will probably require about 10 hours/month, but you will set the limit. This position includes such tasks as making phone calls, writing and distributing (email, snail mail and faxing) flyers for special events, contacting newspapers, and maintaining contact lists for such flyers.

The Executive Committee has several ideas to get you started; you will decide which ones you feel best promote the CCAS.

This position, which we are calling the PR Chair, will be a part of the Executive Committee. If you feel that you'd like to help promote astronomy to the community through the CCAS, we'd like to hear from you. Contact Kathy at president@ccas.us or 610-436-0821.

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CCD Camera For Sale

by Pete LaFrance

I have a SBIG ST7-ME with a class 1 chip, a TC-211 autoguider chip and is nabg. Parallel hookup. Comes with all included software and cables. Before I bought this camera it was sent into SBIG for general cleanup and I have now owned it for about 10 months.

You can see images on my website that were acquired with this camera over that time. As I learned more about imaging, the pictures became better with each outing. And I don't live under ideal dark skies! www.plafrance.org is my website and 98% of the images were taken with the ST7-ME.

I am upgrading to a ST8 and need to sell the ST7 to offset the cost. I'm asking \$1150.00 for the ST7.

Also I have a wide field Optec f3.3 reducer for sale that will attach directly to the ST7 and a 2" focuser. Ask me about it if you are interested.

Phone: 610-268-2616

Email: plafrance@verizon.net

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Calendar Notes

- October 4, 2005 (Tuesday) Hercules Observing Cluster meets
- October 9, 2005 (Sunday) Sally Ride Science Festival
Location: West Chester University
11:00 a.m. – 5:00 p.m. EDT
- October 11, 2005 (Tuesday) CCAS Meeting
Location: West Chester University
7:30 p.m. EDT
COM: Pegasus
Presentation: Eyepieces
- October 11, 2005 (Tuesday) Hercules Observing Cluster meets
- October 18, 2005 (Tuesday) Hercules Observing Cluster meets
- October 21/22, 2005 (Friday/Saturday) CCAS Observing Session
Location: BVA
sunset
- October 25, 2005 (Tuesday) Hercules Observing Cluster meets
- November 1, 2005 (Tuesday) Hercules Observing Cluster meets
- November 8, 2005 (Tuesday) CCAS Meeting
Location: West Chester University
7:30 p.m. EST
COM: Cassiopeia
- November 8, 2005 (Tuesday) Hercules Observing Cluster meets
- November 15, 2005 (Tuesday) Hercules Observing Cluster meets
- November 22, 2005 (Tuesday) Hercules Observing Cluster meets
- November 25/26, 2005 (Friday/Saturday) CCAS Observing Session
Location: BVA
sunset
- November 29, 2005 (Tuesday) Hercules Observing Cluster meets
- December 6, 2005 (Tuesday) Hercules Observing Cluster meets
- December 9/10, 2005 (Friday/Saturday) CCAS Observing Session
Location: BVA
sunset (moon gazing night)
- December 13, 2005 (Tuesday) CCAS Meeting
Location: TBA
7:30 p.m. EST
- December 13, 2005 (Tuesday) Hercules Observing Cluster meets
- December 20, 2005 (Tuesday) Hercules Observing Cluster meets
- December 27, 2005 (Tuesday) Hercules Observing Cluster meets

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Report on the Black Forest Star Party

By Steve Limeburner

Once again I attended the Central Pennsylvania Observer's annual "Black Forest Star Party" on Sept 2-4, at Cherry Springs State Park (CSSP) in Potter County, Pennsylvania. I departed on the morning of Thursday, Sept. 1, after the remnants of Katrina passed over us. I was concerned that the storm would drench the observing field in north central PA, but after checking online for Wednesday's rainfall totals (<2 inches in Potter County), I did not anticipate a problem.

CSSP is probably the darkest observing site in Pennsylvania, which is why it is about a 250 mile drive from this area. I have decided the best way to travel to the park is to head up to the Poconos via the Northeast Extension/I-476, go west on I-80, north on US-15 towards Wellsboro, and west on scenic Rt. 6. (This is the same Rt. 6 that Governor Rendell mentions on TV commercials promoting PA tourism). Using these roads, travel is usually fast and easy, and the trip can take about 4 1/2 hours if you don't encounter traffic jams.

My fully loaded Ford Taurus station wagon included a 10" dobsonian mounted telescope, which rested on a twin mattress for the journey. Although I only camped out for 3 nights, the mattress was essential; if you park on the observing field, you are not supposed to leave until daybreak. There is a brand new gravel parking area across the street which is used for vehicles leaving during the night, but it is not convenient if you are carrying equipment.

The observing field was pretty crowded when I arrived Thursday afternoon; registration was limited to about 400. The first thing I did when I arrived was to set up a sun shelter. It was the first time I had ever set one up, and consequently the first time I saw the wind almost blow one away. Fortunately, my "neighbors" were very sympathetic campers; they helped me grab the windswept shelter (!!) and stake the poles down properly.

Weather was excellent during the event. Thursday night was not the clearest night, but it certainly was better than observing in the suburbs. Friday and Saturday nights were much better. The Milky Way was astonishing, with its rifts and dark clouds obvious to the naked eye, especially towards the southern horizon above the "teapot" in Sagittarius. I was so fascinated with the naked eye and binocular viewing that I did not actually use my scope until Saturday night, when those who were not registered for the event were invited to attend for "Public Night at BFSP." The several people who looked through my scope were treated to great views of the night sky showpieces, including the best late summertime Messier clusters, nebulae, and the Andromeda galaxy (M31). I also "threw in" a few double and multiple stars for good measure.

The event was catered by "May's Munchables," who provided round-the-clock food service to hundreds of amateur

astronomers. I particularly enjoyed waking up to hot coffee and egg, ham, and cheese sandwiches. It was also nice to grab a burger, hot chicken sandwich, or roast pork sandwich for \$2.50 whenever I got hungry. In addition to May's, "Fox's Pizza" was catering on Saturday; I bought a tasty 9" pie with green peppers and mushrooms for about \$6 and devoured all of it to prepare for an all night observing session.

Vendors were set up during the day selling all types of astronomical merchandise. I purchased a Ray-O-Vac red LED light with a head strap for \$20. Although the "miner's light" is extremely bright, I have since found that a more practical brightness level can be attained by lowering the voltage. In my case, that means using drained AAA batteries and/or "closing the circuit" with a (conductive) nail!

With the price of gasoline "astronomical" and in the process of skyrocketing higher (both puns intended), I was not the only one who found it hard to justify staying for the weekend only. With knowledge of a fantastic weather forecast, many star party attendees, including myself, made a vacation out of it, staying a good part of the following week as well.

Observing at CSSP is not free anymore. It costs \$4 a night, but unlimited electric use is included, and there are plenty of recently installed outlets on the observing field. Astrophotographers must enjoy that. An electric space heater or an electric blanket is an astronomer's idea of "living large"!! The electric was also handy for making hot caffeinated beverages at 2AM. There is potable water available on the field, as well as permanent restrooms. Although cell phone reception is very limited, there is a payphone across the street. I lost my tolerance for camping, however, and checked into a motel about 11 miles away.

I doubt any stargazer was disappointed with the weather. During the ten days I was in Potter County, I saw no rainfall at all! I spent nine nights at CSSP and there was only one night that was "bad." Yet, even on that "bad" night there were more stars visible than on a perfect night in the suburbs. Recently a TV meteorologist said that this year could hold the driest September ever recorded in our area. Not so good if you are a farmer, but if you like the stars, take advantage...

On the night of Saturday, September 10, there were only about five vehicles left on the field. However, we were fortunate to be treated to a vivid display of the Aurora Borealis. I once saw a similar display at our club's observing site, the Brandywine Valley Association. In the absence of light pollution at CSSP, however, the spectacle is breathtaking. I have since read that September is the beginning of "aurora season," when the Northern Lights become visible more often in North America.

With the grand finale of the Aurora Borealis impressed in my memory, I finally left CSSP on Sunday, September 11 and headed home—but not for lack of clear skies!





Where No Spacecraft Has Gone Before

By Dr. Tony Phillips

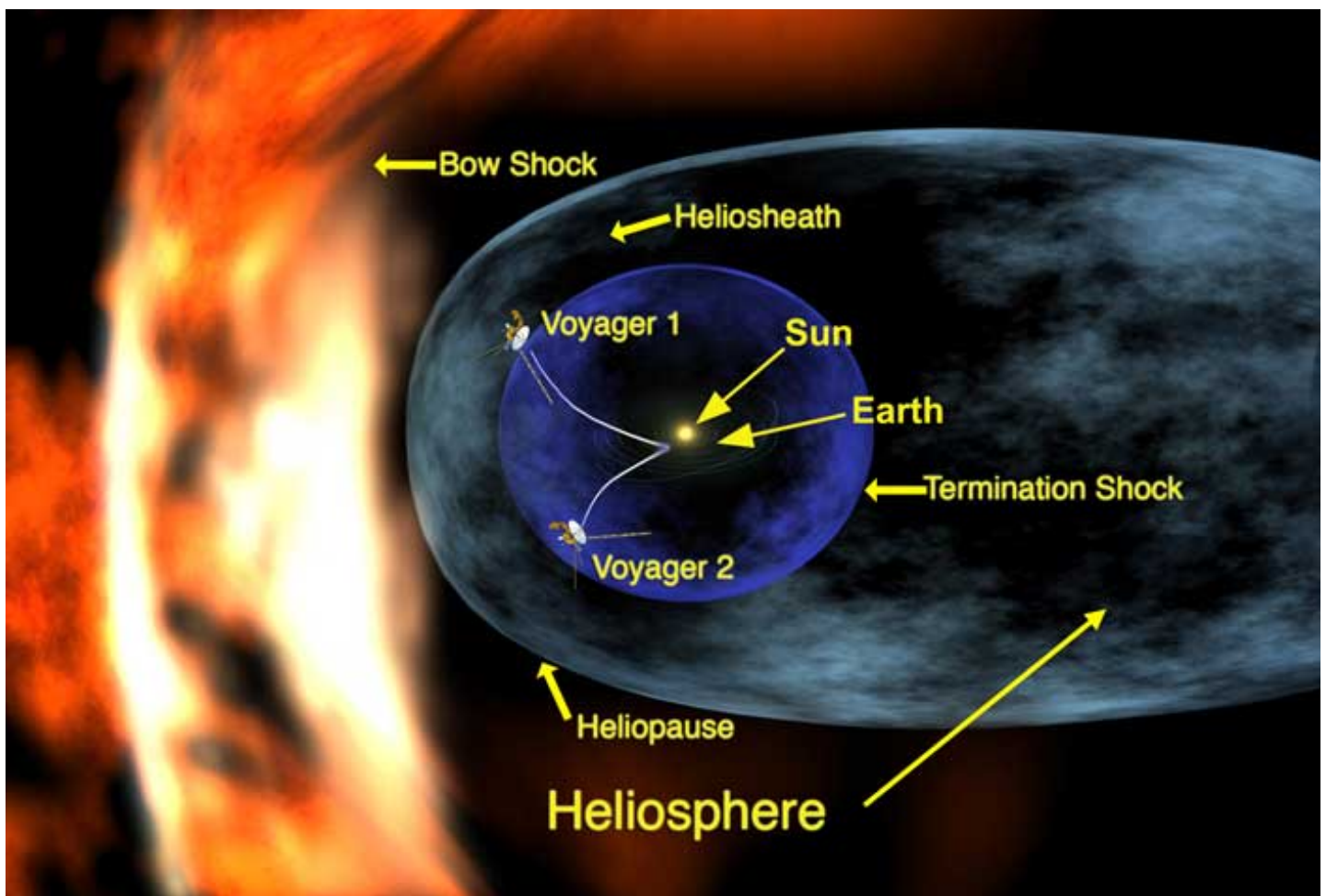
In 1977, *Voyager 1* left our planet. Its mission: to visit Jupiter and Saturn and to study their moons. The flybys were an enormous success. *Voyager 1* discovered active volcanoes on Io, found evidence for submerged oceans on Europa, and photographed dark rings around Jupiter itself. Later, the spacecraft buzzed Saturn's moon Titan—alerting astronomers that it was a very strange place indeed!—and flew behind Saturn's rings, seeing what was hidden from Earth.

Beyond Saturn, Neptune and Uranus beckoned, but *Voyager 1*'s planet-tour ended there. Saturn's gravity seized *Voyager 1* and slingshot it into deep space. *Voyager 1* was heading for the stars—just as NASA had planned.

Now, in 2005, the spacecraft is nine billion miles (96 astronomical units) from the Sun, and it has entered a strange region of space no ship has ever visited before.

"We call this region 'the heliosheath.' It's where the solar wind piles up against the interstellar medium at the outer edge of our solar system," says Ed Stone, project scientist for the *Voyager* mission at the Jet Propulsion Laboratory.

Out in the Milky Way, where *Voyager 1* is trying to go, the "empty space" between stars is not really empty. It's filled with clouds of gas and dust. The wind from the Sun blows a gigantic bubble in this cloudy "interstellar medium." All nine planets from Mercury to Pluto fit comfortably inside. The heliosheath is, essentially, the bubble's skin.



Voyager 1, after 28 years of travel, has reached the heliosheath of our solar system.

“The heliosheath is different from any other place we’ve been,” says Stone. Near the Sun, the solar wind moves at a million miles per hour. At the heliosheath, the solar wind slows eventually to a dead stop. The slowing wind becomes denser, more turbulent, and its magnetic field—a remnant of the sun’s own magnetism—grows stronger.

So far from Earth, this turbulent magnetic gas is curiously important to human life. “The heliosheath is a shield against galactic cosmic rays,” explains Stone. Subatomic particles blasted in our direction by distant supernovas and black holes are deflected by the heliosheath, protecting the inner solar system from much deadly radiation.

Voyager 1 is exploring this shield for the first time. “We’ll remain inside the heliosheath for 8 to 10 years,” predicts Stone, “then we’ll break through, finally reaching interstellar space.”

What’s out there? Stay tuned...

For more about the twin *Voyager* spacecraft, visit voyager.jpl.nasa.gov. Kids can learn about *Voyager 1* and *2* and their grand tour of the outer planets at spaceplace.nasa.gov/en/kids/vgr_fact3.shtml.

The preceding article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.



Astronomus

“Untitled”

By Bob Popovich

As I completed my previous *Astronomus* installment, I had intended to tackle an expanded view of the Summer Triangle this month. However, I am compelled to set that aside in favor of a more important focus.

The cool nights and impatient sunsets signal the arrival of autumn. The plasma that has enveloped us most of the summer is finally starting to abate, returning the stars, nebulae and galaxies to their rightful nighttime places. We happily walk outside to a favorite observation spot, set up our equipment, and, turning to the south, silently begin our pursuit. For most of us here at 40° north latitude, the view would look something like this:



A slightly different view is to be had at 20° north latitude:



The latter of these two views is the view from Gulf Coast of these United States, but I doubt if many of our Southern compatriots are in the mood to do much star gazing these days.

Still reeling from the incredible devastation of Hurricane Katrina, many residents have had to endure yet another fury, this one named Rita. So many Gulf Coast residents, both east and the west of the Crescent City have their gaze fixed firmly at ground level. Their gaze is no doubt intense, and I fear, painful. Envisioning it evades my intellect. Feeling solidarity with the people, however, does not.

Life in the Big Easy is anything but these days. So in intellectual communion with our fellow amateur astronomers of New Orleans and the surrounding Gulf Coast, I am calling my fellow CCAS members to plan an observing session this month dedicated to those perished and to those who stand battered.

As they are to our south, let's devote an evening to observing the southern sky. As it happens, there are a number of globular clusters in the southern sky containing unique characteristics. Along the way of our globular observing session, ponder a prayerful thought for their recovery and healing.

Here are some suggested targets:

Capricorn—A zodiacal constellation lacking any really bright stars but containing an interesting globular cluster—M30. A small core is surrounded by a fuzzy halo that appears to have a pair of antennae protruding. What some of you Messier marathoners know is that this may well be the toughest Messier object to see because it rises with the dawn at the end of the marathon night. But this time of year, that's no concern. As you gaze upon #30, consider that this cluster has more blue stragglers than any other globular cluster. Blue stragglers are hot, blue stars that are much younger than the cluster itself. Current thought is that gravitational attraction may explain this chronological anomaly.

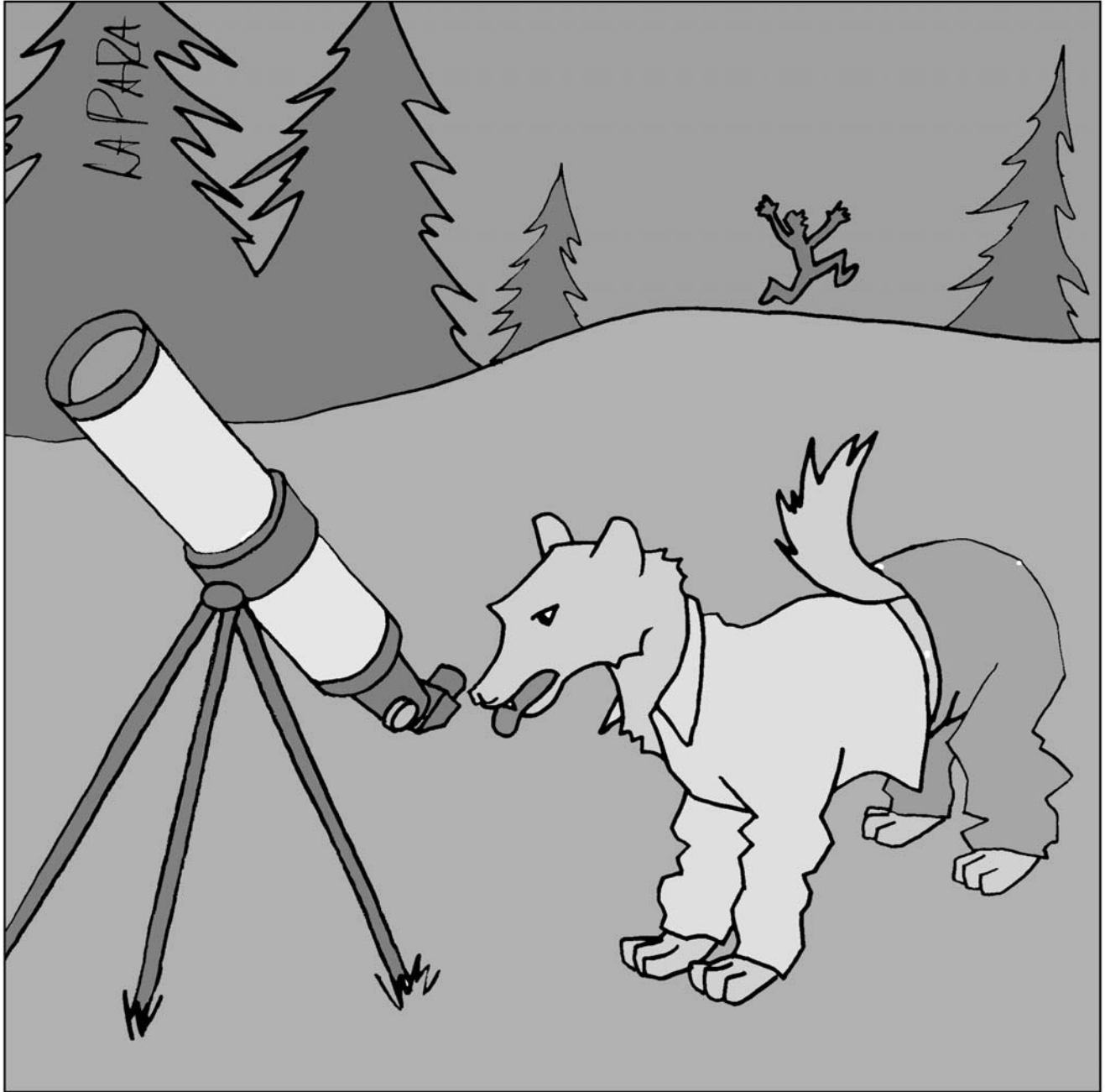
To the west of M30, and just within the border of Sagittarius, lies another globular cluster, M75. Believed to be the Milky Way's most distant globular cluster (61,000 LY from Earth), this target also represents an observing challenge as there are no bright guide stars nearby. But tracking down this distant neighbor is worth the effort as a telescope will reveal both a bright core and a smattering of stars around the edge.

Lying to the southwest of M75, also within the boundary of Sagittarius, is M54. Of the globulars catalogued in Monsieur Messier's catalogue, this is the only one not part of the Milky Way. At a distance of some 90,000 LY, it is a member of the Sagittarius Dwarf galaxy. Though it's bright enough to be seen with binoculars, most amateur telescopes cannot resolve any of its stars. But this is due to its distance, not its brightness, for, aside from Omega Centauri, this is intrinsically the brightest globular in the heavens.

I've always found globulars a nice spice to an evening's observing. Maybe just this time, let's imagine them as steaming bowls of gumbo...

Next Time: Now You See, Now You Don't





WERE-ASTRONOMERS OBSERVE THE MOON

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, Linda Lurcott Fragale, to make arrangements to borrow one of the books in the CCAS lending library. Copies of the catalog are available at CCAS meetings, and on the CCAS website. Linda's phone number is 610-269-1737.

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 stargazer1956@comcast.net

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 (in full color!) via 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:

stargazer1956@comcast.net

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): Jim Anderson
(610-857-4751)

Lunar: Ed Lurcott
(610-436-0387)

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

Constellation Hunters: 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 Executive Committee

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

President: Kathy Buczynski
(610) 436-0821

Vice Pres: Jim Anderson
(610) 857-4751

**ALCor and
Treasurer:** Bob Popovich
(610) 363-8242

Secretary: Vic Long
(610) 399-0149

Newsletter: Jim Anderson
(610) 857-4751

Librarian: Linda Lurcott Fragale
(610) 269-1737

Observing: Ed Lurcott
(610) 436-0387

Education: Kathy Buczynski
(610) 436-0821

Webmaster: John Hepler
(610) 363-0811



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 Treasurer's Report in each issue of *Observations* to see if it is time to renew your membership. If you are due to renew, you can mail in your renewal check made out to "Chester County Astronomical Society." Mail to:

Bob Popovich
416 Fairfax Drive
Exton, PA 19341-1814

Sky & Telescope Magazine Group Rates

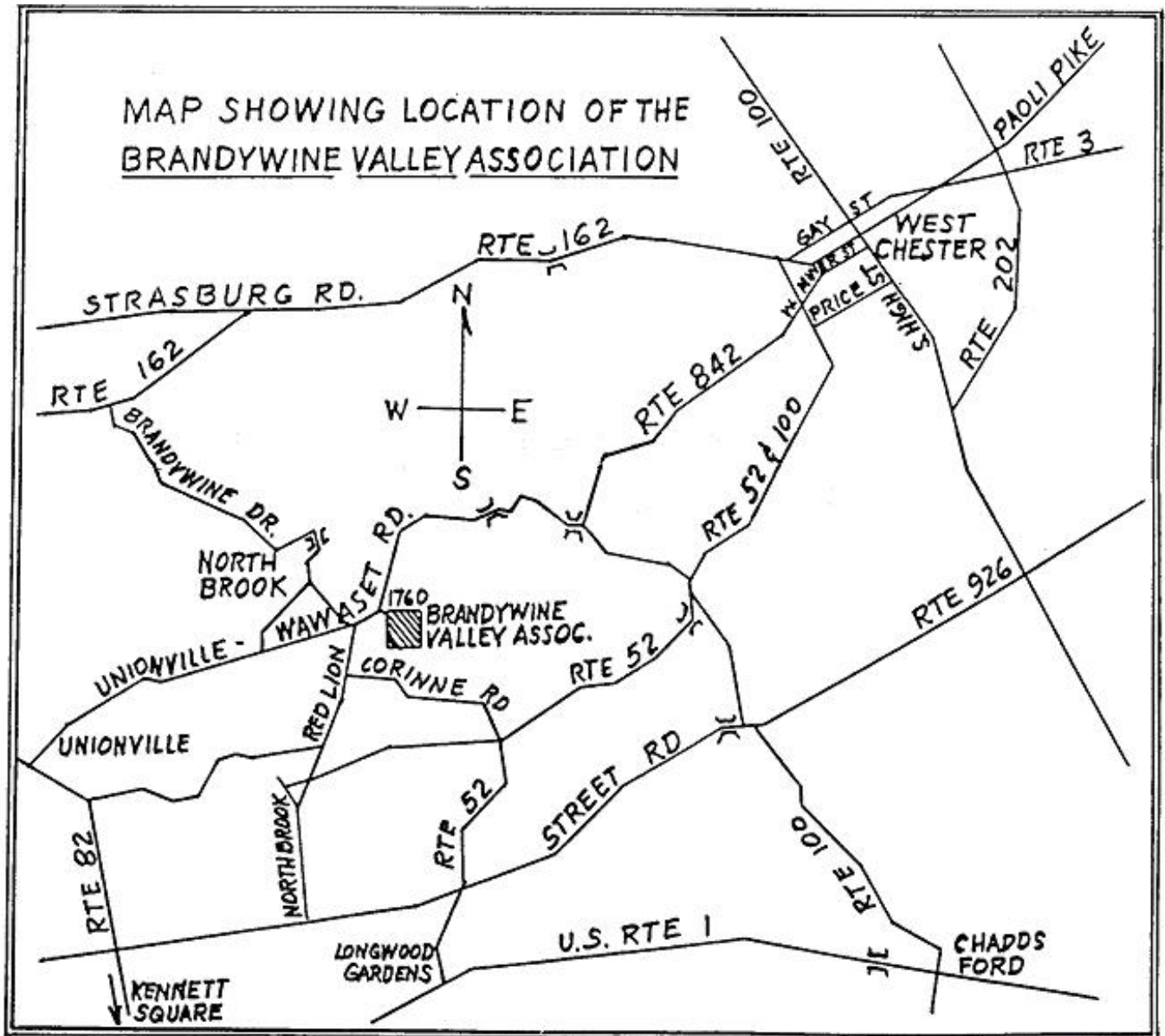
Subscriptions to this excellent periodical are available through the CCAS at a reduced price of **\$32.95** which is much less than the newsstand price of \$66.00, and also cheaper than individual subscriptions (\$42.95)! Make **sure** you make out the check to the **Chester County Astronomical Society** (do **not** make the check out to Sky Publishing, this messes things all up big time), note that it's for *Sky & Telescope*, and mail to Bob Popovich. Or you can bring it to the next Society meeting and give it to Bob there. **If you have any questions by all means call Bob first (610-363-8242).** Buying a subscription this way also gets you a 10% discount on other Sky Publishing merchandise.

CCAS Website

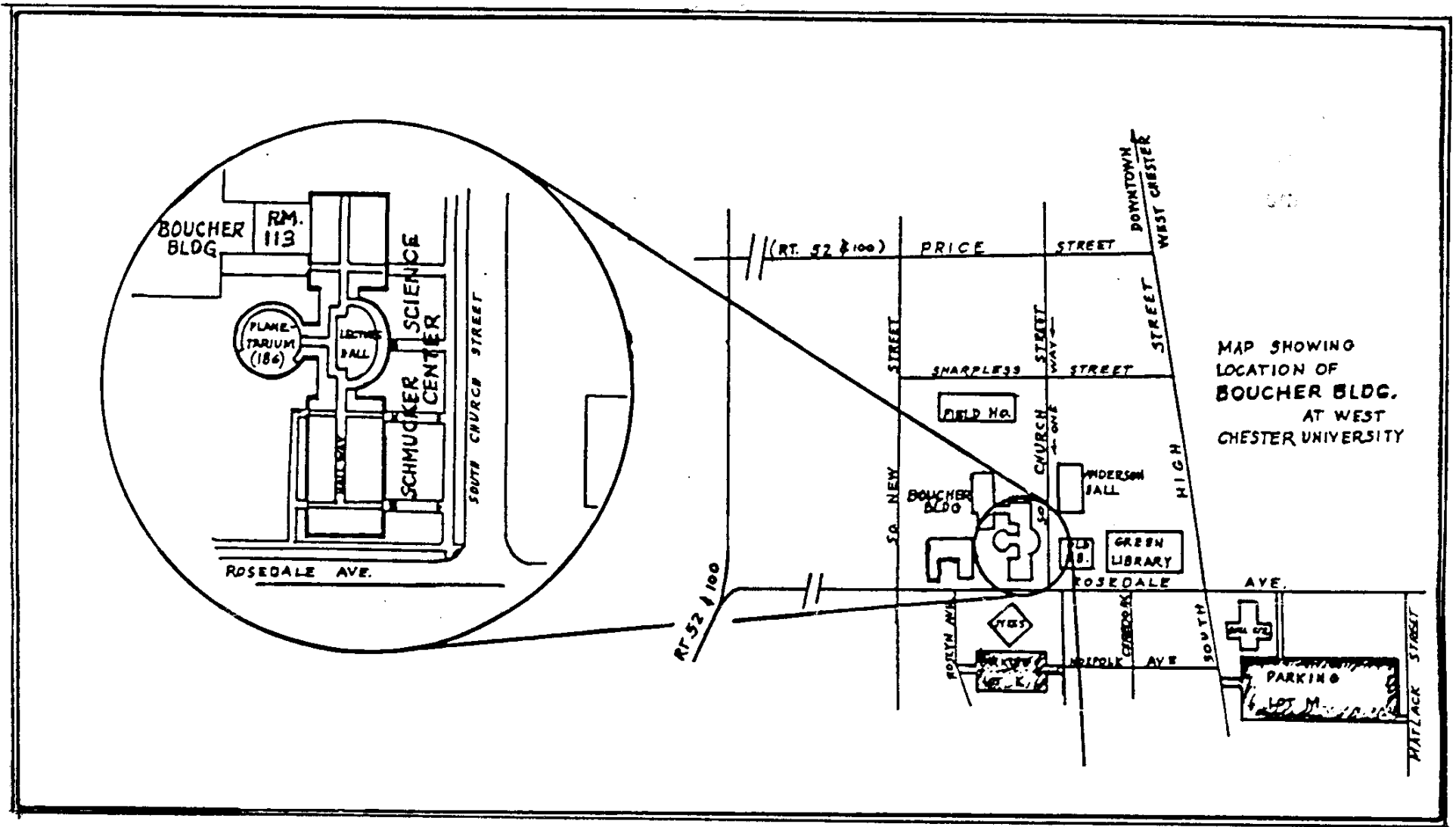
John Hepler is the Society's Webmaster. You can check our Website at:

<http://www.ccas.us/>

John 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 John Hepler (610-363-0811) or e-mail to JohnHepler@comcast.net

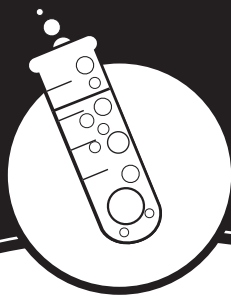


To get to the Myrick Conservation Center of the Brandywine Valley Association from West Chester, go south on High Street in West Chester past the Courthouse. At the next traffic light, turn right on Miner Street, which is also PA Rt. 842. Follow Rt. 842 for about 6 miles. To get to the observing site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

Reach for the Stars!



Sally Ride Science™ and GlaxoSmithKline Present...

Delaware Valley Science Festival

at West Chester University

for 5th - 8th Grade Girls

festival schedule

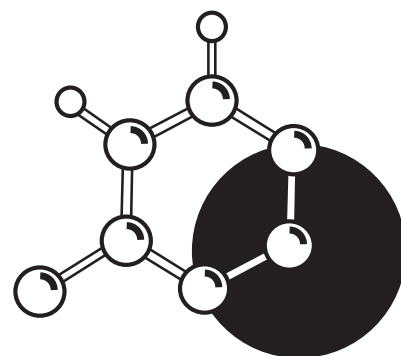
11:00am-1:00pm Check-in, Lunch, Street Fair

1:00pm-4:15pm Keynote, Discovery Workshops, Street Fair, Free Drawing

Advance registration required, \$18

- Hear an inspiring talk by astronaut Sally Ride
- Enjoy the Street Fair, music, food and exhibits
- Dig into hands-on science activities
- Bring your friends and make new friends

Register online at www.SallyRideFestivals.com
or call 1.800.561.5161



NORTHROP GRUMMAN

OCTOBER 9, 2005 11:00 am - 4:15 pm at WEST CHESTER UNIVERSITY, WEST CHESTER, PA



Delaware Valley Science Festival at West Chester University
October 9, 2005 West Chester, Pennsylvania

Register online at www.SallyRideFestivals.com or use the form below.

student registration Space is limited, register early!

NAME _____ PHONE () _____

ADDRESS _____ CITY _____

STATE _____ ZIP _____ EMAIL _____ GRADE _____

STUDENT WORKSHOP CHOICES: 1ST _____ 2ND _____ 3RD _____ 4TH _____ 5TH _____ 6TH _____

LIST OF WORKSHOPS IS ONLINE AT WWW.SALLYRIDEFESTIVALS.COM



adult registration To register for the adult track of the festival, please complete the registration below.

NAME _____ PHONE () _____

ADDRESS _____ CITY _____

STATE _____ ZIP _____ EMAIL _____

ADULT WORKSHOP CHOICES: 1ST _____ 2ND _____ 3RD _____ 4TH _____ 5TH _____

ARE YOU AN EDUCATOR? YES _____

for office use only

check _____

credit card _____

cash _____

spnd _____

total amount paid:
\$ _____

payment (for students and adults)

Registration fee includes attendance at the keynote address, participation in workshops, materials, souvenirs, lunch, snacks, and fun! We regret that this fee is not refundable.

\$18 Registration for each attendee. Number of attendees: _____

Payment is acceptable as check or money order made out to Sally Ride Science. We accept Visa and MasterCard.

CREDIT CARD NUMBER _____ EXP. DATE _____ CARDHOLDER PHONE () _____

NAME AS IT APPEARS ON CARD (PRINT) _____ SIGNATURE _____

CREDIT CARD BILLING ADDRESS _____

HOW DID YOU FIND OUT ABOUT THE FESTIVAL? _____

parental consent Required for student festival attendance

By registering for the festival, I, _____, the parent or guardian of the child listed above, grant permission for my child to attend the Sally Ride Science Festival. If my child should require emergency medical care at the festival, I grant permission for such treatment. I also grant permission for my child to be photographed/filmed at the festival for promotional purposes related to Sally Ride Science.

PARENT/GUARDIAN SIGNATURE _____ PARENT/GUARDIAN NAME _____

DATE _____ EMERGENCY CONTACT NAME _____ PHONE () _____

mail this form and payment to:

Delaware Valley Science Festival at West Chester University, c/o Sally Ride Science, 9191 Towne Centre Drive, Suite L101, San Diego, CA 92122
Phone: 800-561-5161 or Fax: 858-638-1419
 To ensure we receive your registration, please do not register via mail after October 3, but rather via fax, phone or online at www.SallyRideFestivals.com. Registration will be closed at 5pm (PDT) Saturday, October 8.

