

# OBSERVATIONS

A MONTHLY PUBLICATION OF THE  
CHESTER COUNTY ASTRONOMICAL SOCIETY

★President: Edwin Lurcott  
★Treasurer: Pete LaFrance

**OCTOBER 1995**

(VOLUME 3, NO. 10)

★Vice President: Jim Sylvester  
★Secretary: Nancy Armstrong

## CCAS October Meeting

DATE: **Tuesday, October 10, 1995**  
TIME: 7:30 PM EDT  
PLACE: Planetarium (room 186)  
Schmucker Science Center  
West Chester University  
LOCATION: South Church St. & Rosedale Ave.  
West Chester, PA (see maps)

Although it's usually crowded, parking is now available again in the lot southeast of the intersection of Rosedale Ave. and South High Street, behind the Sykes Student Center.

Before manufactured telescopes were readily available, most amateur astronomers made their own telescopes, even grinding their own mirrors and lenses. Much of their hobby time went into these activities.

Some CCAS members have recently expressed an interest in making their own telescopes. Several members have already made telescopes. Among them is Roger Taylor, who will give a talk entitled *A \$200 Hole* at the October meeting. It includes some of his experiences while making his telescope. Those of you interested in making your own telescope will surely want to hear Roger's talk. His presentation will also be fascinating to telescope users today, just to hear how things were in the days before "Meades" and "C-8s".

Refreshments are available after the meeting. If time and weather permits, we can go up to the observatory on the roof of the Science Center and "look around" with WCU's 12" telescope.

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## October Observing Session

The date and site of the October observing session will be announced at the October meeting. Ed mumbled something about Mauna Kea... (just kidding! But don't we wish!)

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## September CCAS Meeting

Those Society members and visitors at the September meeting were treated to an illustrated talk by our own Observing Chairman, Mike Tucker. Mike showed slides he took this summer while visiting Kitt Peak National Observatory, Lowell Observatory, and Meteor Crater, all in Arizona.

Discussions continued over coffee and doughnuts for quite a while after Mike's presentation.

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## September Observing Session

Rained out Friday night (9/22), clouded out Saturday (again!!). Of course, we are all grateful for the rain we got; but why does it have to happen on observing night? One of the great unsolved mysteries of the universe! We wish to thank Pete LaFrance for volunteering his back yard for the session.

Of course, the predicted occultation of a star by Minor Planet 387 (asteroid Aquitania) on Friday night was also rained out.

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## Important Club Business

Proposed changes to the Society's Constitution were distributed in September. Please read it carefully, ask Ed any questions you have, and follow the directions for casting your vote on these matters. To be counted, all ballots must be postmarked by October 15, 1995. Please return ballots to the Society's Secretary:

Nancy Armstrong  
200 Westbury Court  
Downingtown, PA 19335

The Society still has an urgent need for a Program Chairperson.

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## NEW OBSERVATIONS EDITOR

The members of the Executive Committee would like to express their appreciation to Nancy Armstrong, who, in addition to her duties as CCAS Secretary, has been typing the Society's newsletter for the past fifteen months. Thanks are also given to her husband David, whose computer and printer were used by Nancy to make the original copies that then were taken to a commercial copier for printing. It was a good job well done. Many thanks to both David and Nancy!

The new editor of *Observations* is Jim Anderson. Jim brings to the job writing skills which are needed to make the newsletter more easily read and appealing. Jim also has access to publishing programs which we hope to use to reproduce maps, graphs, charts, etc., directly from the computer to the newsletter. Until now this type of work has been done manually by "cutting and pasting". It is anticipated that *Observations* will become more attractive. We thank Jim for taking on this responsibility.

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## October's Skies

### Moon Phases

First Quarter	10/01
Full Moon	10/08
Last Quarter	10/16
New Moon	10/24
First Quarter	10/30

## The Planets

Saturn rises in the Southeast after sunset.

Uranus and Neptune are near the Sagittarius/Capricornus border, due south in the evening hours, well-placed for observation.

Pluto sets too soon after the Sun to be seen.

Mercury rises in the morning just before the Sun.

Jupiter, Mars, and Venus are now congregating in the Southwest right after sunset. On October 25, they will form a remarkable grouping with the crescent Moon. The moon will be in the middle, with Jupiter, Mars, and Antares to its left (east). Venus is to the right (west) of the moon, and below it. An even more impressive grouping will occur in the third week of November, when all three planets will be within 2 degrees of each other. It will be the most impressive grouping of planets this year.

## Meteor Shower

The Orionid meteor shower peaks on October 22, when the Moon is a waning crescent. The dim Moon should make for good observing of this meteor shower. The Orionids generally last from October 20 to 26. The peak rate is often about 20 swift meteors per hour. These meteors are called the Orionids because they all seem to originate from a point in Orion, near Betelgeuse.

## Comets

There are 2 comets now appearing in the morning sky, both of them moving into the constellation Leo. They are about 20 degrees above the horizon when morning twilight begins (one observer saw them from 4:45 - 5:45 AM EDT). On October 5, they will be only 5 degrees apart: you can see them both in the same field of view in binoculars! Comet de Vico is about 5th magnitude (on 9/28), with a tail of 1.5-2.0 degrees long. It's near Regulus, the bright star at the "handle" end of the "sickle" of Leo. I don't have a magnitude estimate on the other comet, Comet Bradfield. But both are supposed to be visible in binoculars. Coordinates follow; I haven't tracked down coordinates for all of October for Comet deVico.

Comet deVico (epoch 2000.0)

<u>Date</u>	<u>R.A.</u>	<u>Dec.</u>
9/30/95	9 h 58 m	+10.7 d
10/2/95	10 h 10 m	+13.1 d
10/4/95	10 h 23 m	+15.3 d

Comet Bradfield (epoch 2000.0)

<u>Date</u>	<u>R.A.</u>	<u>Dec.</u>
10/2/95	11 h 11 m	+20.9 d
10/4/95	11 h 10 m	+23.4 d
10/10/95	11 h 10 m	+27.3 d
10/20/95	11 h 09 m	+34.4 d
10/30/95	11 h 06 m	+43.0 d

## Total Solar Eclipse

There's a total eclipse of the Sun on October 24, but it will be visible only in Southern Asia. You might see it on the TV news that evening, though.

## Daylight Savings Time Ends

We return to Eastern Standard Time on Saturday October 29 at 2:00 AM. "Spring forward, fall back!"

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## CCAS FALL SCHEDULE

Meeting dates for the remainder of this year are:

November 14	7:30 PM EST
December 12	7:30 PM EST

Mark your calendars now as to not miss a meeting!

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## Telescope Vendor News Bulletin

Coulter Optical, Inc., has filed for bankruptcy. This news was posted just recently in the Astronomy Club bulletin boards on America On-Line, a nationwide computer network. One person, who said he was a bankruptcy lawyer, checked to confirm the news. He posted another note the next day saying that he had confirmed it. He also cautioned against sending Coulter any orders, and especially money, saying "you may well never see it again." If you had an order placed with Coulter, you should contact the company to find out what's going on.

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### First Light by Jim Anderson

"First Light" is a term used by astronomers in reference to the first time a new telescope is used. That first night looking at the stars with a new telescope is the first time that telescope has seen starlight; hence, "first light".

For our newsletter, I'm thinking that would be a good title for a regular column for beginners. I'm hoping that other experienced Society members will contribute to this column. Newer members can contribute as well, sharing experiences of what worked for you, or didn't work. Astronomy can be a overwhelming hobby, but with some good guidance at the beginning it can provide enjoyment for a lifetime. And no one person has all "the right answers," so let's all help each other out. If you have some thoughts or hints, but don't feel comfortable about writing, give me a call and tell me about it. You can provide the idea, and I'll write it up.

For this month, I'll just say that the key to getting started is not buying a telescope! You can see an awful lot with just the naked eye. The key to getting started is really learning your way around the nighttime sky. That means learning the constellations, and learning how to get your bearings at night.

To start, which way is north? Most people know the key to the answer is the Big Dipper. To find the Big Dipper this month, look around the sky not far above the horizon. Once you've found it, use the two stars at the end of the bowl to draw a straight line out to a bright star (Polaris, the Pole Star). The distance to Polaris from the pointer stars is about 5 times the distance between the two pointers. There are no other bright stars between Polaris and the Pointers.

Now you know where north is. By turning your back to Polaris, then, east will be to your left, west to your right, and south is straight ahead. With the aid of a monthly star chart (such as those published in *Astronomy* and *Sky & Telescope* magazines), you can now find your way around easier. A good book to learn the constellations is *The Stars: A New Way to See Them*, by H.A. Rey. Or you can use a planisphere, which has two pieces of cardboard hooked together, usually circular in shape. The front piece has a hole cut in it, to represent the horizon, with directions on it. The other piece has the constellations drawn on it, and you turn it to match a date to a mark on the edge. The stars in the circle then show what the sky looks like for that date. Most people have probably seen a planisphere. They're available for sale at several local bookstores, and at some nature-oriented stores as well.

Now that you've got your bearings, and are learning the constellations, you're on your way. Now when you read in *Observations* (or elsewhere) that Saturn is in Capricornus, you'll know where to look. And when you see a bright "star" in Capricornus that isn't on your star chart or planisphere, you'll know it's Saturn.

Or maybe it's a supernova...but that's another story for another time. Until next month, clear skies!

### Also Available

A free brief overview on getting started in astronomy called *Getting Started In Astronomy* is also available from the CCAS. It can be picked up at Society functions. Or you can call the newsletter editor to get a copy mailed to you.

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### Contributing to the Newsletter

Contributions of articles relating to astronomy and space exploration, sketches of observations, maybe observing "challenge lists," etc. are always welcome. This is **your** club newsletter; contribute as often as you like. Such contributions can be handwritten, typed, or be on computer diskettes (I use Microsoft Word for Windows). If you don't feel too confident about your writing skills, but have an idea or info you'd like to share with the club, call Jim Anderson (993-0261) and we'll work something out. Please don't let good ideas or knowledge get lonely! Share them with the club!

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## 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 Treasurer, Pete LaFrance. Mail to:

**Pete LaFrance**  
**413 Church Rd.**  
**Avondale, PA 19311**

## CCAS's Purposes

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.

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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:

<b>President:</b>	Edwin Lurcott	(610) 436-0387
<b>Vice Pres:</b>	Jim Sylvester	(610) 696-1102
<b>Treasurer:</b>	Pete LaFrance	(610) 268-2616
<b>Secretary:</b>	Nancy Armstrong	(610) 873-7531
<b>Public Rel:</b>	Kathy Cseke	(610) 644-9543
<b>Obs Chm:</b>	Mike Tucker	(610) 584-8236
<b>Newsletter:</b>	Jim Anderson	(610) 993-0261

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