

WESTMINSTER ASTRONOMICAL SOCIETY
of Carroll County, Maryland

Newsletter for June 1985, Vol 2 No 5

June Meeting: 20th at WMC

This month's meeting features a film entitled "The Ascent of Man, #5". (Ed. note: the film originally scheduled, "The Race For Space", a 25 year old (1960) movie with Sputnik and Exploror footage, narrated by Mike Wallace, has been removed from circulation by the Pratt Library.) Notice that the meeting date has changed...

The June meeting will be Thursday, June 20, at 7:30 p.m. The location will be Rm. 111, Lewis Hall of Science, Western Maryland College.

President's Message

I want to thank everyone who helped with our first Astronomy Day exhibition, held at the Carroll County Library in Westminster. It was a big success, and could never have been possible without the help of those members who gave their time, and who brought exhibits and telescopes for display. Full details are included with this newsletter. Again, many thanks.

Other news includes a star party which was unbelievably clear and one which was not. We also greet the two newest WAS members.

Curt Roelle

Westminster Welcome Wagon

WAS welcomes aboard the two newest members: Lyndon Gibbes of Westminster, and Dennis Mischler of Sykesville. A current membership list is in this issue.

July Star Party

There will be a July star party. Date, place, and time will be announced at the June meeting. July 13, 14, 19, and 20 are good candidates to keep in mind.

Astronomy Day Success Story

WAS held its first annual Astronomy Day Exhibition on Saturday, June 8, in the Dixon Room of the Carroll County Public Library in Westminster. Although planned for the courtyard, it rained during the morning forcing the exhibits to be displayed indoors. Among the exhibits were telescopes, scale models of space vehicles, microcomputers, Comet Halley information, videotapes, and a Moon rock. Thanks go to Todd Bonner, Steve Rice, Curt Roelle, Bob Sier Jr., and Eugene Sternier for their help in setting up, manning, and dismantling the display materials.

Lunar Sample 60016.116
(201) was loaned to WAS
by the NASA Goddard Space
Flight Center, in Green-
belt. This rock was
collected by John Young
on the Apollo 16 mission,
15 meters SW of the land-
ing site. This sample is
a Polymict Breccia from
the Lunar highland and
weighs 129 grams. Its
age is 3.9 billion years
old, older than 99.99% of
all surface rocks found
on earth.

(Photo by C. Roelle)



The lunar sample, or moon rock, attracted quite a number of people (see photograph this page), but was not the only item of interest. To go along with the Lunar theme, Eugene brought scale models of the Saturn V moon vehicle and Apollo lunar base (1/96 scale).

Two computers were present. Todd Bonner's Commodore 64 was programmed to display color graphic representations of Jupiter, Mars, and the Moon. Guests could key in requests in response to menu prompts that would allow them to do such things as find out how much they weigh on each world. Curt Roelle's Columbia Data Systems PC continuously ran a Civil/Universal/Sidereal clock. With an accompanying star chart, visitors could determine what stars were overhead during the day.

Steve Rice brought several interesting videotapes which captured the attention of many visitors, including "Universe", and the new PBS series "Spaceflight". The library was gracious in lending us a VCR and color television.

Comet Halley information was displayed and sold. This display may eventually work its way into this newsletter in future months in one-page features. All of the "Mr. Halley's Comet" books on hand were sold, and some had to be back ordered.

Steve Rice brought his new Celestron 8 which made a handsome centerpiece. On the smaller side, Curt Roelle displayed his new 11x80 binoculars, which guests used to watch grave diggers working in a nearby cemetery. Eugene Sterner brought his 3" refractor and when the sun finally came out, set it up in the courtyard for solar projection viewing. This diverted many a passerby into the exhibit hall.

A good time was had by all and many contacts were made. People came from neighboring counties and appeared to be pleased that an organized group of amateurs exists in this area. The

experience gained from this year will help make Astronomy Day next year even better.

Definition

The following definition is from the "Prairie Astronomer", newsletter of the Prairie Astronomy Club, Lincoln, Nebraska:

SIDEREAL TIME: A time system based on the rotation of the Earth measured relative to the background

stars, which for this purpose are regarded as fixed in position. Relative to the stars, the Earth rotates on its axis in a period of 23 hours 56 minutes 04.1 seconds of mean time (ordinary civil time), and this period is called the sidereal day, which is, in turn, divided into 24 sidereal hours.

For an observer located at a particular longitude on the Earth, the sidereal day is equivalent to the apparent rotation period of the celestial sphere. This period may be determined by measuring the interval between two successive upper transits of a given star across his meridian. The value of sidereal time at any instant is defined to be the hour angle, i.e. the angle measured clockwise from the meridian, of the vernal equinox (a fixed point on the celestial sphere). Thus when the vernal equinox is on the meridian, its hour angle is zero, and the sidereal time is zero hours.

May and June Star Party Report

After a day of showers on May 18, the evening brought beautiful clear skies to the monthly star party. It was the clearest sky ever at a WAS star party, and participants observed the Spring galaxies, and the Summer Milky Way until 3:30 a.m.

Four members and two guests traveled to the Gettysburg College Observatory for a star party Friday, June 14. Although clouded out, a tour of the college observatory was given by Bob Wolpert. Bob is a founding member of the International Amateur Professional Photoelectric Photometry (IAPPP) Association, and designer of the Starlight photometer, sold by THORN EMI Gencom. He now teaches physics at the college while attending the Lutheran Seminary. We will arrange a star party there again sometime, preferably on a clear night!

Summary of May's Lecture

The meeting on May 29 was held at the Davis Library in Westminster. The speaker, Blaine Roelke gave a talk on the subject of photometry. Photometry was explained as the measurement of light from stars. At the meeting, we learned that even a bright star such as Vega has very little light energy by the time it is absorbed and scattered. There are two devices commonly used to measure this energy. They are the photodiode and the photomultiplier tube. Blaine hopes to use the new 17.5" telescope for photometry to observe asteroids, variable stars, and other objects.

-- Tom Prall

Westminster Astronomical Society Membership List

<u>NAME</u>	<u>P/S ADDRESS</u>	<u>TELEPHONE</u>
Tom & John Apper	F 737 Lees Mill Road, Hamstead 21074	239-8272
Todd Bonner	S 518 Geneva Drive, Westminster 21157	843-7839
Lyndon Gibbes	S 318 Royer Road, Westminster 21157	876-7649
Dennis Mishler	S 606 Roundtree Court, Sykesville 21784	795-6330
Dave Pessagno	S 45 Franklin Valley Circle, Reisterstown 21136 526-5138	
Mike Potter	S 2809 St. Paul Street, Baltimore 21218	(301)235-2217
Tom Prall	S 440 Lees Mill Road, Hamstead 21074	374-5523
Steve Rice	S 8328 A Walter Martz Road, Frederick 21701	(301)563-6254
Clifton A. Richards	F 338 Leyton Road, Reisterstown 21136	(301)233-8247
Blaine & Frank Roelke	F 5700 Keysville Road, Keymar 21757	755-2886
Curt & Cheryl Roelle	F 3481 Salem Bottom Road, Westminster 21157	846-6384
Robert Sier Jr.	S 10219 Liberty-Daysville Rd, Walkersville 21733 (301)638-5349	
W. Eugene Sterner	S 4625 Old Harover Road, Westminster 21074	346-7725

Westminster Astronomical Society

3481 Salem Bottom Road
Westminster, Maryland 21157



Curtis & Cheryl Roelle
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Westminster, MD 21157

ENJOY AMATEUR ASTRONOMY

with the

Westminster Astronomical Society

Astronomy is a hobby enjoyed by thousands nationwide. It is a hobby that allows the enthusiast to become directly involved in, and the chance to make a significant contribution to, the study of our universe. By amateur we mean pastime engagement, not lack of experience or competence.

Every year a few amateurs earn themselves a place in history through the discovery of a comet or nova, but this is rare. Others participate in observing programs and share their data with professional researchers. Although anonymous, these dedicated individuals feel personal satisfaction in knowing that their observations may one day help reveal some elusive mystery.

The greater percentage of amateur astronomers do it for the sheer joy one gets from admiring nature at its grandest scale. From observing craters on the moon, to the golden rings of Saturn, to distant galaxies millions of light years away, there is so much to see and learn. And much of it is still unexplained. You can share in the experience of increasing awareness of the universe around us by being an amateur.

Amateur astronomy is composed of a broad cross-section of interests: From the stargazer attempting to pick out a constellation, to the dedicated comet searcher who spends hundreds of hours a year in the hope that it will someday pay off. Amateur astronomy has something for everyone.

If you are interested in astronomy, then you have come to the right place. Go ahead and ask us questions! That is why we are here today.

Halley's Comet

When can I see it?

From North America (and elsewhere at mid-northern latitudes), here's how Halley's comet will look:

Pre-August, 1985 — Still far away, Comet Halley is extremely faint. The world's largest telescopes will photograph it as a vague smudge of light.

August-September, 1985 — By now the comet is just bright enough for experienced amateur astronomers with large telescopes to find it.

October, 1985 — Late this month, when moonlight is no longer a problem, the comet should be widely spotted by those looking with small telescopes.

November, 1985 — Growing steadily brighter, Halley can now be seen in binoculars. It will be in the eastern sky just after darkness. On Nov. 15 and 16, it passes just south of the Pleiades.

December, 1985 — Halley becomes barely visible to the naked eye under ideal (very dark) conditions. Binoculars give a better view. The comet is high in the southern part of the sky.

January, 1986 — The comet brightens slowly, but each night after dusk it is lower in the western sky. By the 25th it sets before dark.

February, 1986 — Halley can't be seen most of this month. But during the last week of February it reappears in the morning twilight sky in the east.

March, 1986 — The view gets better. Near the end of the month, and just before morning twilight begins, Halley sports an excellent long tail in the southeastern sky.

April, 1986 — Halley is at its best! Toward the end of the first week of April, as moonlight ceases to be a problem, the comet will appear at its brightest. Unfortunately, it's very low in the southern sky before dawn and descending rapidly toward the horizon.

May, 1986, and after — Halley departs into deep space once again. High in the night sky, it can be followed with binoculars through May and with telescopes until early August. No one will set eyes on the comet again until around 2061.

THE SOCIETY

WAS held its first meeting in May, 1984. Membership is open to anyone interested in astronomy. The following are the most commonly asked questions:

"When and where does WAS meet?"

Meetings are held monthly on the last Wednesday, usually at Western Maryland College. Guest speakers address the group about 50% of the time. Meetings are always free and open to the public.

"Do I have to buy a telescope before I can join?"

No. Astronomy is much more than just telescopes. Your eyes are the basic equipment, a telescope could come later if you wish.

"Will I get the chance to look through a telescope?"

Yes. One of the benefits of joining are the monthly "star parties" where members get together at a dark site to observe with our telescopes. This is a good chance for those who don't own them to get to see through one.

"What else will I get for joining?"

You get to meet others with a similar interest -- that is the biggest benefit of belonging to the WAS. There is also an informative newsletter that tells of events in the club and around the world of astronomy.

"Are dues expensive?"

There are two classes of members:

Single Membership	\$11 per year
Family Membership	\$13 per year

Paid members enjoy all of the above benefits plus voting privileges at the yearly business meeting.

"Where can I get more information about WAS?"

The mailing address is:

Westminster Astronomical Society
3481 Salem Bottom Road
Westminster, Maryland 21157

A self-addressed stamped envelope would be appreciated.

Dear Visitor:

Thank you for stopping at our Astronomy Day display. We hope to see you again sometime.

Sincerely,

Curtis W. Roelle

Curtis W. Roelle
President