LUNAR OCCULTATIONS FOR JANUARY

Date	Star	Mag.	Age	Phase	E.S.T.
Dec. 31	BD 7 3°4900	6.7	<u>Age</u> 6.7	D -	8:55.6 P.M.
Jan. 2	101 Pse	6.2	8.7	T) D	7:18.5 P.M.
3-4	Mu Ari	5.7	9.9	D ·	12:16.0 A.M.
74	BD + 22° 523	6.6	10.8	, D	9:00.5 P.M.
.4-5	.BD / 220 572	6.9	11.0	D	2:41.2 A.M.
5 ·	95 Tau	6.2	3.11	\mathbf{D}	8:47.7 P.M.
56	99 Tau	6.0	12.0	D	3:47.9 A.M.
6-7	1 Gem .	4.3	13.0	Ð	4:22.2 A.M.
12:13	e Leo	5.1	19.1	\mathbf{R}	4:30.7 A.M.
26	BD - 3 ⁰ 5505	7.5	2.9	D .	7:01.4 P.M.
31	BD + 21° 447	6.9	8.1	, D	11:30.5 P.M.

SPRING PROGRAM FOR THE NCA promises to be one of the most interesting we have had in years. Bob Rhynsburger tells us that we have coming up on March 5 a "Fanel of Experts" in place of our regular lecture. He will announce the names of the participants at the January meeting and February STAR DUST will carry details of the program. It sounds like a meeting no NCA'er will want to miss.

Bob has also given us some advance information on the April program. NCA is going to be exceedingly fortunate in having Dr. Cecilia Payne-Gaposchkin, who is the Phillips Astronomer and Chairman of the Department of Astronomy at Harvard University, lecture to us. The topic of her lecture has not yet been announced. Dr. Payne-Gaposchkin's specific field in astronomy has been variable star work and of late has been concerned with the evolution of stars and galaxies. She has written a number of books, the two latest being STARS IN THE MAKING and INTRODUCTION TO ASTRONOMY.

 STAR DUST National Capital Astronomers

JANUARY CALENDAR

Jan. 8 "THE MOUSE - A MINIMUM INSTRUMENTAL SATELLITE (Sat.) FOR ASTROPHYSICAL OBSERVATION", Dr. S. F. Singer, Professor of Astronomy, University of Maryland, Commerce Auditorium, 8:15 P. M.

Jan. 15 DISCUSSION GROUP with Dr. James Q. Gant, Jr., (Sat.) moderating a discussion on "THE MOON - OUR NEIGHBOR, LET'S GET ACQUAINTED." Commerce Foyer, 8:00 P. M.

Each Saturday Morning, Telescope making class with Irene Warthen at Chevy Chase Community Center, 5600 block of Connecticut Avenue, 9-12 A. M. Miss Warthen's phone is LOckwood 5-4058.

IN JANUARY PROFESSOR SINGER will present the first practical proposal for the next advance into space. Besides being reasonable in cost. Dr. Singer's "MCUSE," (MINIMUM ORBITAL SATELLITE OF THE EARTH), is entirely feasible and could be constructed and flown within the near future. A three-stage rocket would hurl MOUSE, a three-foot hollow ball containing instruments and a power supply, into an orbit circling the world at an altitude of 190 miles. The little satellite would whirl around the globe in 90 minutes crossing both the North and South Poles. MOUSE could soar through the outer atmosphere for five to seven days. Even the record breaking rockets spend only three to. five minutes there so the data radioed back from just one flight of a MOUSE would enormously increase our knowledge of the extremely important frontier between the lower atmosphere and interplanetary space.

TRIP TO FT. BELVOIR PLANETARIUM starts from Department of Commerce, 6:30 P. M., Tuesday, January 25. The program (not yet selected) will last from 45 to 60 minutes and there will also be exhibits. To insure rides for all, let's discuss this further at the January meeting. TAKE ROUTE 1 through Alexandria to Ft. Belvoir (about 15 miles). At Ft. Belvoir turn left and enter gate. Continue straight ahead on Belvoir Road about 2 miles to end of parade grounds where cannon are on left. Make a right turn into 21st Street. Planetarium is second or third building on left, No. 215.

---Thelma Cressy HO 2-2993

THE MOON — OUR NEIGHBOR will be the general subject the January 15 discussion group to be moderated by Dr. James Gant. Dr. Gant has made a specialty of studying the noon at his observatory in Boyds, Maryland and would like to share his knowledge and interest in the moon with us. Dr. Gant will have slides of his and other moon pictures. Dr. Gant would like anyone with moon pictures to show to shone him at EM 3-0744. If you are interested in the MOON we will plan on seeing you at this discussion group.

PURCHASE OF FUBLIC ADDRESS EQUIPMENT. The trustees nave unanimously voted to purchase the public address system we used on a trial basis at the December 4 meeting. The microphone was the source of some noise so we are trying out some different microphones. The set is costing is about \$120. Bob Dellar, Bob Wright, and Hoy Walls selected the set. Bob Dellar has custody of the equipment.

TELESCOPES NEEDED FOR CUB SCOUT OBSERVATION JANUARY
L4 or 15. Please bring your portable telescopes to Carter Barron Amphitheater parking lot in Rock Creek Park
7 p.m., Friday, January 14 (or Saturday, January 15 if
the 14th is not clear - not both nights) to help the
Cub Scouts learn about astronomy.

----William L. Isherwood

ABOUT 35 ENTHUSIASTS enjoyed Mabel Sterns' December 18 Discussion Group on Observatories. Nine people gave material. NCA members' observatories were featured. Dr. Gant, Philip Lichtman, Lyle Johnson, and Bob Wright gave these reports. Institutional observatories and their work were described by NCA members as follows: Georgetown Observatory, Jeff McAnally; Naval Research Laboratory, Bradley Bennett; International Latitude Observatory, Robert Misner; Carnegie Institution of Derwood, Maryland, Ellis Marshall. Mr. Benjamin King gave slides on the Lowell Observatory area, including slides taken from his own airplane.

NEW MEMBERS

Francis L. Hiett, 1400 S. Barton Street, Apt. 407, Arlington, Virginia. JA 5-0334

Miss Ida Hill, 3722 Harrison St., N.W., Washington 15. D. C. EM 3-9115

Dr. E. F. Mostek, Route I. Vienna, Virginia JE 2-9478
*Karl Cohen, 3214 38th St., N.W., Washington 16, D. C.
WO 6-4892

*Carol Rose, 504 N. West Street, Falls Church, Virginia JE 2-4070

CORRECTIONS IN TELEPHONE NUMBERS

Miss Ruth Heisey

Roger K. Smith

GA 4-8882

Miss Irene Warthen

LO 5-4058

1955 ASTRONOMICAL LEAGUE CONVENTION

July 1 through July 4, 1955 are the dates for the next annual conference of the Astronomical League which will be held at the University of Washington in Seattle. Six hundred acres between the shores of Lake Washington and Lake Union provide the picturesque site for the University of Washington "Halls of Ivy" and the conference site. The University's sprawling green campus, one of the most beautiful in the United States — is dominated by Mt. Ranier and is within six miles of downtown Seattle.

Renowned campus theaters, the Washington State Museum, canoe house, cyclotron, art gallery, and the Arboretum are among the dozens of points of interest to the visitor. The architecture remaining from the Alaska-Yukon-Pacific Exposition of 1909 is in itself an attraction of great interest. The University, young in years, old in tradition, is the Northwest beacon in higher education. A conference ... highlight will be a trip to the Dominion Astrophysical Observatory, the fourth in line of four large and worldfamous observatories that stretch along the Pacific sea-It rests on the summit of Little Saanich Mountain, 730 feet above the sea, and 7 miles north of the quaint and "British" city of Victoria in British Columbia. and recreation attractions are virtually unlimited in the Pacific Northwest. The fisherman has his choice of saltwater fishing in the Pacific Ocean and Puget Sound, fresh water fishing in the many excellent lakes and rivers. can relax in the scenic wonders of the San Juan Islands, the Cascade and Olympic Mountains, Mts. Ranier and Baker; or enjoy the 193 miles of scenic waterfront of Seattle, the Woodland Park Zoological Gardens, the parks and golf courses.

If desired, accommodations for board and room at approximately \$5.00 per day per person will be available for delegates and their families at the new Men's Residence Hall—three blocks from the University campus. For further details write to the Office of Short Courses and Conferences University of Washington, Seattle 5, Washington.

OBSERVATIONAL DATA

Mercury is an evening star in January and reaches greatest eastern elongation on the 27th. Uranus is a morning star visible for three hours before sunrise. Greatest western elongation occurs on the 25th. Mars is low in the southwest and sets over an hour before midnight. Jupiter is well placed for observation this month, opposition occurring on the 15th. Saturn is a morning star rising several hours after midnight. Uranus is in Gemini and will be at opposition on the 16th. A conjunction with Jupiter occurs January 6 and the planet may be seen by searching the area around Jupiter with a telescope.

The date of maximum intensity for the QUADRANTID meteor shower is January 3. This shower averages 20 meteors per hour and the position of the radiant is Alpha 232°; delta, plus 52°. On the 15th at 11:00 P.M. (E.S.T.), the Milky Way spans the heavens from north to south passing through Cassiopeia, Perseus, Auriga, and Monaceros.

OBSERVATION OF A HALO

On December 2 at 7:10 A.M., I saw a solar pillar. When first seen there was a faint, pink, vertical band of light over the position of the sun. Its width was less than the sun's diameter and the band extended from about five degrees above the horizon to the base of some cumulus clouds at a height of ten degrees. The sun was below the horizon and the area below the cumulus clouds seemed clear but must have contained thin cirrus clouds. The pillar brightened after the sun cleared the horizon. The sun soon rose higher joining the light pillar which had changed to a brilliant white. This halo was formed by light which came by reflection from the lower surfaces of tabular ice crystals floating above the sun. Pillars may also extend below the sun, light being reflected to an observer by the upper surface of crystals below the sun.

---A. L. White ..