

Spica, is past the meridian at sunset and sets before mid-night. A partial eclipse of the moon occurs on July 15. The moon will enter the umbra at 6:09 P.M., E.S.T. and leave the umbra at 8:31. The date of maximum intensity for the DELTA AQUARID meteor shower is July 28. This shower averages 20 meteors per hour.

LUNAR OCCULTATIONS FOR JULY

Date	Star	Mag.	Age	Phase	E. S. T.
3	BD 7 90 2239	6.7	3.5	D	8:21.3 P.M.
19-20	22B Pisc.	6.5	19.8	R	1:59.9 A.M.
23-24	47 Arie.	5.8	23.6	R	12:44.0 A.M.

FOUR DAY ECLIPSE BUS TOUR, June 28 to July 1, from Milwaukee to Copper Harbor, Michigan, to Madison, Wisconsin, will be \$20.00 per person or less. Lodging and meal reservations, except at Milwaukee and Madison, will be made for the party by the Convention Committee, but the members will pay for their own accommodations which should not cost over \$30.00. The tour will start Monday, June 28, and will make sightseeing, inspection, meal and overnight stops at such cities as Oshkosh (Buckstaff Observatory), Green Bay, Marinette (Carferries), Escanaba (Ore docks), Marquette at Copper Harbor, Michigan, out near the center of Lake Superior, in time for supper, June 29. Our buses will take us to the top of a nearby mountain, 1370 feet elevation, where we can view the ECLIPSE (weather permitting) before breakfast, June 30. The next two days will involve several stops through the beautiful North Woods hunting and fishing country. We will arrive in Madison Thursday evening, July 1, with time for a full day of sightseeing, July 2, before the convention starts on July 3. Madison reservations should be arranged directly with the Convention Committee at Madison for this July 1st arrival. Please send reservations and deposits to Roy L. Dodd, Tour Committee Chairman, 7918 Milwaukee Avenue, Milwaukee, Wisconsin.

CONGRATULATIONS, PHILIP LICHTMAN, on being named one of the five top prize winners at the Fifth National Science Fair. We were pretty sure your telescope exhibit would win and had our fingers crossed that there would be no bad luck about your exhibit getting there on time this year.

Jewell Boling, Editor, 1717 P St., N.W. (6) NO 7-9621

STAR DUST
National Capital Astronomers

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JUNE-JULY CALENDAR

- June 5 (Sat.) "THE HISTORY OF OPTICAL GLASS," E. W. Glaze, National Bureau of Standards. Commerce Auditorium, 8:15 P. M.
- June 11 (Fri.) OBSERVING AT THE 5". Naval Observatory. 9-11 P. M.
- June 19 (Sat.) EXPLORING THE SKY. Joint Program of NCA and National Capital Parks. Fort Reno Park, 40th and Chesapeake Sts., N. W. 9-11 P. M. Please bring telescopes.
- June 30 (Wed.) Eclipse of the sun--shortly after sunrise. 73% partial in this area.
- July 2-5 Convention of the Astronomical League in Madison, Wisconsin.
- July 15 (Thurs.) EVENING ADVENTURE. Joint program of NCA and National Capital Parks. Barnard Hill Park. Follow the Naturevan signs along the park road which intersects Randolph Street, approximately 1/2 block west of the intersection of Randolph Street and Eastern Avenue, N. E. Please bring telescopes. 7:15-9:30 P. M.
- July 31 (Sat.) EXPLORING THE SKY. Joint program of NCA and National Capital Parks. Fort Reno Park, 40th and Chesapeake Sts., N. W. 9-11 P. M. Please bring telescopes.

Tuesday and Friday, 7-10 P. M. through June, Telescope Making Class, Roosevelt High School, Room 319, 13th and Upshur Sts., N.W. Miss Irene Warthen, Instructor. Telephone LO 5-1237. Miss Warthen is present on Fridays.

NOTE: See item inside.

PROGRESS IN OPTICS depends on the development of new kinds of optical glass for optical glass is the essential part of all our optical instruments such as telescopes, microscopes, spectrosopes, range finders, cameras, to mention a few. Ever since the invention of spectacles six hundred years ago, the advance of many sciences has been dependent to a large extent on the inventiveness of the glass worker. The interesting story of the progress made by the United States in optical glass will be related by Mr. Francis W. Glaze, Assistant Chief of the Glass Section of the National Bureau of Standards. He will also describe the new glasses developed by the Bureau such as glasses that transmit infrared and ultraviolet light.

--Benjamin Adelman

NEW OFFICERS

The following are the new officers of the NCA who will assume their duties in September.

PRESIDENT: Dana K. Law, 712-26th Place, South Arlington, Va.

VICE-PRESIDENT: Robert W. Rhynsburger, 404 S. Garfield St., Arlington, Va.

SECRETARY: Elizabeth L. Goerner, 20 Plattsburg Court, N. W. Washington 16, D. C.

TREASURER: John C. Lund, 2014 Drexel Street, Apt. 103, Hyattsville, Maryland

TRUSTEE (for three-year term): Grace Scholz, 166 Mason Hall Apartments, Alexandria, Va.

Grace Scholz' new telephone number is Overlook 3-3037.

TELESCOPE MAKING CLASS will be closed during July and August, unless there is strong desire on the part of a number of those enrolled to keep it open. If it is held during these months an instructor will have to be found. It should be remembered that it is too light during class hours in the summer months to test mirrors.

TELESCOPE FOR SALE. Miss Elizabeth M. Fazekas, 2621 Garfield Street, N.W., North 7-7253 has for sale a 3-inch refractor equipped with equatorial mount, 3 eyepieces, right angle prism, and a Herschel wedge. The wedge needs to be placed in a cell, but otherwise the telescope is in good working order. Price 100.00.

NEW MEMBERS

Davis, Mrs. Joan E., 1631 Madison St., N. W., Washington 11, D. C. RA 6-2142

Gregor, Mrs. Lillian R., 3937 S Street, S.E. (20) Apt. 306 LU 2-4956

Battershell, C. C., 1110 New York Ave., N. W., ME 8-1512

OBSERVATIONAL DATA FOR JUNE

Mercury is at greatest eastern elongation on June 9 and may be seen as an evening star in Gemini about 15 degrees above the western horizon just after sunset. Venus is an evening star dominating the western sky for about two hours after sunset. Mars is in Sagittarius and rises shortly after sunset. It is now at its brightest and is prominent in the southern sky all night. On the 24th it is in opposition. Jupiter is too near the sun for easy observation and is in conjunction with the sun on the 30th. Saturn is just east of Spica on the 15th and just east of the meridian at sunset. An eclipse of the sun occurs on June 30th between 5:05 and 6:55 A.M., E.S.T. It will be 73% of total as seen in Washington.

LUNAR OCCULTATIONS FOR JUNE

Date	Star	Mag.	Age	Phase	E.S.T.
14	Sigma Scor.	3.1	13.9	R	7:53.3 P. M.
22-23	BD / 1° 47'44"	5.6	22.2	R	2:50.9 A. M.

OBSERVATIONAL DATA FOR JULY

Mercury is in inferior conjunction on July 6 and at greatest western elongation on the 26th. A conjunction with Jupiter occurs at approximately 3:28 A.M., E.S.T. on the 27th. At the end of the month the planet is a morning star being visible ten to fifteen degrees above the eastern horizon in Gemini just before sunrise. Venus remains an evening star visible in the west for about two hours after sunset. Mars is still in Sagittarius, well up in the south-east at sunset and visible most of the night. It is nearest the earth on the 2nd and on the 29th resumes direct (eastward) motion among the stars. Jupiter is too close to the sun for easy observation. Saturn is near