## OBSERVATIONAL DATA FOR JULY

Mercury is in superior conjunction July 4th and is poorly placed for observation this month. Venus is a brilliant object low in the western sky for about an hour after sunset. Venus and Mars will set together on the llth at 9:03 P. M., E. S. T. Mars is moving through Cancer into Leo and may still be seen low in the west after sunset. Jupiter is well down in the west at sunset and sets a few hours later. Saturn is near Antares, well up in the southeast at sunset and is visible until after midnight. The date of maximum intensity for the DELTA AQUARID meteor shower is July 29. This shower averages 20 meteors per hour. On the 15th at 11:00 P. M. (E.S.T.) the Milky Way spans the heaven from north to south passing through Perseus, Cassiopeia, Cygnus, Aquila, and Sagittarius.

----A. L. White

MR. MARC IMLAY submits the following item of humor for STAR DUST:

An enthusiastic astronomer was entering his dome of the mountain observatory late one clear, brilliant evening when the departing janitor greeted him: "Good Heavens!"

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# LUNAR OCCULTATIONS FOR JULY

Date	Star	<u>Mag</u> . 6.9	Age.	Phase	E. S. T.
4	478 B. Vir	6.9	7.2	Ð	10:30.2 P. M.
21-22	26 B Tau	6.4	24.4	R	1:41.5 A. M.

### ----A. L. White

# STAR DUST National Capital Astronomers

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# July-August 1957 Vol. 14, No. 11

### JULY-AUGUST CALENDAR

July 27 EXPLORING THE SKY, Joint program of the NCA and

(Sat.) the National Capital Parks. Fort Reno Park, 40th and Chesapeake Streets, N. W. 9:00 P. M.

Aug. 17 EXPLORING THE SKY, Joint program of the NCA and

(Sat.) the National Capital Parks. Fort Reno Park, 40th and Chesapeake Streets, N. W. 8:30 P. M.

> Everyone please come and don't forget your telescopes. Let's make this a good summer program.

#### PRESIDENT'S ANNUAL REPORT

At the close of the 1956-57 season the NCA appears to have had a full year comprised of its regular activities plus several new and exciting ones which promise to continue into the future. Our monthly lectures, which probably have the widest appeal to the membership, have covered everything from the IGY in the Antarctic to the furthest reaches of our galaxy. Ben Adelman, Thelma Cressy, Bill Isherwood, Lyle Johnson, Dana Law, Bob McCracken, Bob Rhynsburger, Grace Scholz, Leo Scott, Mabel Sterns, Hoy Walls, Larry White, and Bob Wright who served on the program committee deserve much credit for making these lectures possible. I would like to thank them all personally and on behalf of the membership for doing a fine job.

The program committee also planned the séason's discussion groups which were well attended. I would like to thank Bob Brown, Betty Lipscomb, Mr. Lyons, and Roger Smith in addition to the program committee members for leading discussion groups. The special events arranged by Mrs. Neville have been enjoyed by a considerable number of our members. The NCA was indeed fortunate to have the cooperation of Mars, the weatherman, and the National Parks for the Mars picnic which was attended by 78 members and guests. Our good fortune continued when Armand Spitz invited us to his laboratories to see the new Air Force planetarium. The trip to Spitz Labs was enjoyed by all of the 58 from the NCA in spite of the wet weather. I think we should all thank Armand for the fine show and the luncheon and supper arrangements which he provided for the NCA group.

I would like to thank John and Sarah Lund for writing up the publicity on the lectures since November. The NCA owes a special thank you to Jewell Boling who has done a fine job as Editor of STAR DUST. Also many thanks to Marion Marshall for handling distribution which is an ever increasing job with our growing membership.

A part of this growth may be attributed to our expanding junior program. Dana Law has taken over the chairmanship of the committee for the juniors under 12 and the neighborhood groups from last season have continued. The juniors over 12 now have two meeting places, one in D. C. under the direction of Leith Holloway, the other in Arlington led by Bob Brown.

This expansion has kept Elsa Dimick, Elizabeth Goerner, and Mr. Lyons on the membership committee, and Trudy Dellar, our treasurer, busy accepting and processing applications. Of course Elsa Dimick was involved again in this matter as part of her many duties as secretary. Trudy Dellar has also ably handled our financial affairs as can be attested by Mr. Andrews and Leith Holloway who are auditing our books this summer.

The NCA's other principal source of income is the telescope-making class which was conducted by Hoy Walls with the assistance of Bob McCracken. Hoy certainly deserves considerable praise for his able flashes which would differentiate it from a star-like image. Dr. Spitz indicated his intention of carrying on his empirical studies on which he has been working for more than a year, in the hope that the basic brightness of the object can be materially increased.

--Grace C. Scholz

# NEW MEMBERS ADMITTED TO N. C. A. JUNE 1, 1957

### Regular

Miss Arlene Gager 4809 Chevy Chase Drive Washington 15, D. C. OL 2-8471

#### Juniors

Robert H. A. Bruner, 9404 Byeford Road, Kensington, Maryland OL 9-9080

Jay James Hutton, 1205 Allan Avenue, Falls Church, Va. JE 3-8977

Michael Mattingly, 4320 Fessenden Street, N. W. Washington, D. C. EM 2-7894

\*Danny Morris, 716 - 26th Place, S., Arlington, Va. OT 4-8997

\* Admission free. Prize award.

As of June 1957 we now have a total of 166 Regular Members and 74 Junior Members.

The next report will be submitted by our new secretary, Phyllis Seips. Have enjoyed doing my bit and want to wish all the new officers "smooth sailing."

> --Elsa Dimick, Secretary

### SATELLITE SIDELIGHTS

# by Armand N. Spitz

The "ease" of seeing the satellite was the underlying theme of Armand Spitz's "Satellite Sidelights" lecture before the NCA on June 1.

"Imagine a silvery Christmas tree ornament the size of a washbasket," he suggested. "Imagine yourself at the top of Washington Monument... in your imagination place the washbasket-sized mirror over the Empire State Building in New York. The reflection of the sun will look like the satellite at perigee. The apogee of the satellite might be thought of as the distance to San Juan, Puerto Rico. The image of the sun in its mirrored surface as seen from Washington must be followed at comparable distances by MOONWATCH teams throughout the country and throughout the world."

Paying tribute to the various members of NCA who cooperated with him in the development of observing techniques and instrumental equipment, Dr. Spitz, Coordinator of Visual Satellite Observations for the Smithsonian Astrophysical Observatory, outlined some of the observing problems which face his MOONWATCH teams, and explained the way in which the United States Air Force and the Civil Air Patrol are cooperating in the nation-wide program of training and testing stations and observers. He outlined the problems of flying the make-believe satellites which make satellite alerts valuable exercises.

"If the satellite only could be brighter everybody would be happier," he pointed out. He demonstrated optically the relative brightness of a simulated sun as reflected in a common, garden-variety silvered sphere, and in a spherical polyhedron made up of plane-mirrored surfaces. This, he said, has been suggested in theory to the satellite committee, but has been rejected. The actual demonstration, as seen by the members of the audience, seemed to indicate that the satellite, if so constructed, might well be brighter by two or more magnitudes than presently expected, and, in addition, would be far more easily recognized because of the attention-attracting handling of the class and the numerous other jobs he has undertaken for the NCA.

Bill Isherwood, observing chairman, has been making some much needed repairs on the NCA 5" in addition to leading our group observing sessions. Bill has also been one of the regulars at our outings with the National Capital Parks along with Bill Doying, Leith Holloway, Dana Law, Mr. Lyons, Bob McCracken, Ellis and Marion Marshall, and Leo Scott. I would also like to thank all of the many others of our members who have come out and supported this fine public service program.

The IGY has brought us many interesting and challenging new ideas. Following our decision last year to organize a satellite observing team, Bob Dellar was appointed at the September trustees' meeting to head the group. Bob has done an excellent job in organizing the team which now has some 34 observers signed up. Under his leadership our Moonwatch station is now virtually complete and has been in operation for two flybys and one test alert. The station was built entirely by volunteers among whom were Jose Garcia, Roger Harvey, Lyle Johnson, Bill Lipscomb, Bob McCracken, Roger Smith, Hoy Walls, Bob Wright, and myself. We were cheered on from the kitchen by Betty Lipscomb, Tove Neville, and Grace Scholz under the direction of Trudy Dellar who served up astronomical quantities of coffee and other refreshments which were certainly welcome after we had been out literally hacking the station out of the frozen ground last winter. In addition to those mentioned, several others from the NCA and some of Bob's neighbors also gave a hand in the construction. All of the 15 telescopes needed were donated by various members of the NCA. The pipe for the meridian and mast and the telescope mountings were donated by the Noland Company and much of the remaining material and equipment was given or loaned by team members. Altogether only some \$19,00 has been spent from the NCA treasury on the entire project. This is indeed a small price for the station that we now have. The station has been built and is being manned through our cooperative efforts and the NCA can be justly proud of it.

To conclude this report I want to say that it has been a pleasure and a privilege to serve as your president during the past year. I also want to congratulate the new officers Mr. McCracken, Mr. Smith, Miss Seips, and Mrs.Gregor. ---Everette Neville

### TO THE REGIONAL CONVENTION WE DID GO

Twenty-three NCA'ers drove to Harrisburg to join 80 other amateurs from Pennsylvania, West Virginia, Maryland, Delaware, New Jersey, and Virginia. The enthusiasts from NCA were:

The Wrights, Bob, Perky, and Tutti Mrs. Walthers Hoy Walls Grace Scholz Morty Schiff Phyllis Seips Leo Scott The Nevilles, Everette & Tove The McCrackens, Bob, Helen & Jean Bob McClellan The Lipscombs, Bill & Betty The Laws, Dana, Hilda, Dana, Jr., & Larry Thelma Cressy Salome Betts

Historic Paxton Church (about 250 years old) provided a perfect setting and even compensated for the all-day rain. Morning papers on planetary and comet observing were presented by enthusiasts who admitted they stayed up all night observing. A round table discussion on programming, chaired by Dana Law agreed that active program participation by all members best serves those members and that the public appetite for the parties is insatiable. After lunch Bob Wright conducted a session on satellite tracking and with a most ingenious device Everette Neville enabled everyone to individually attempt to spot the satellite under unbelievably realistic conditions. An afternoon highlight was a discussion of League activities by Grace Scholz, followed by a round table instrument session chaired by Hoy Walls. (P. S. Have you made a telescope?)

The chicken dinner was followed by a talk on cosmology by Dr. Ripley of Dickenson college.

The convention voted to accept an invitation from the Fairmont, West Virginia, club for next year's regional convention, probably the second Saturday of May.

### --Dana Law

WILL YOU SEE SATURN OCCULTED by the moon on August 31? Weather permitting, you will if you come to the Kansas City Convention of the Astronomical League, August 30 through September 2.

Help celebrate the tenth anniversary of the Association of Lunar and Planetary Observers. Hear Dr. Richard N. Thomas of the National Bureau of Standards, Boulder, Colorado, discuss "Current Problems of the Solar Chromosphere." Steadman Thompson will tell "Who Knows What About the Russian Satellites." There will be a Panel of Experts with Charles A. Federer, Jr., as moderator.

A special star party will feature a group of experts who will teach observing techniques in the following areas: lunar and planetary, variable stars, deep sky objects, meteor observing, constellations and star colors.

Housing will be in the University of Kansas City's new, air-conditioned dormitory. Cost: \$2.50 per night, per person. Registration fee: \$1 per person through July 31, thereafter \$2 per person or \$3.50 per family. --Grace C. Scholz