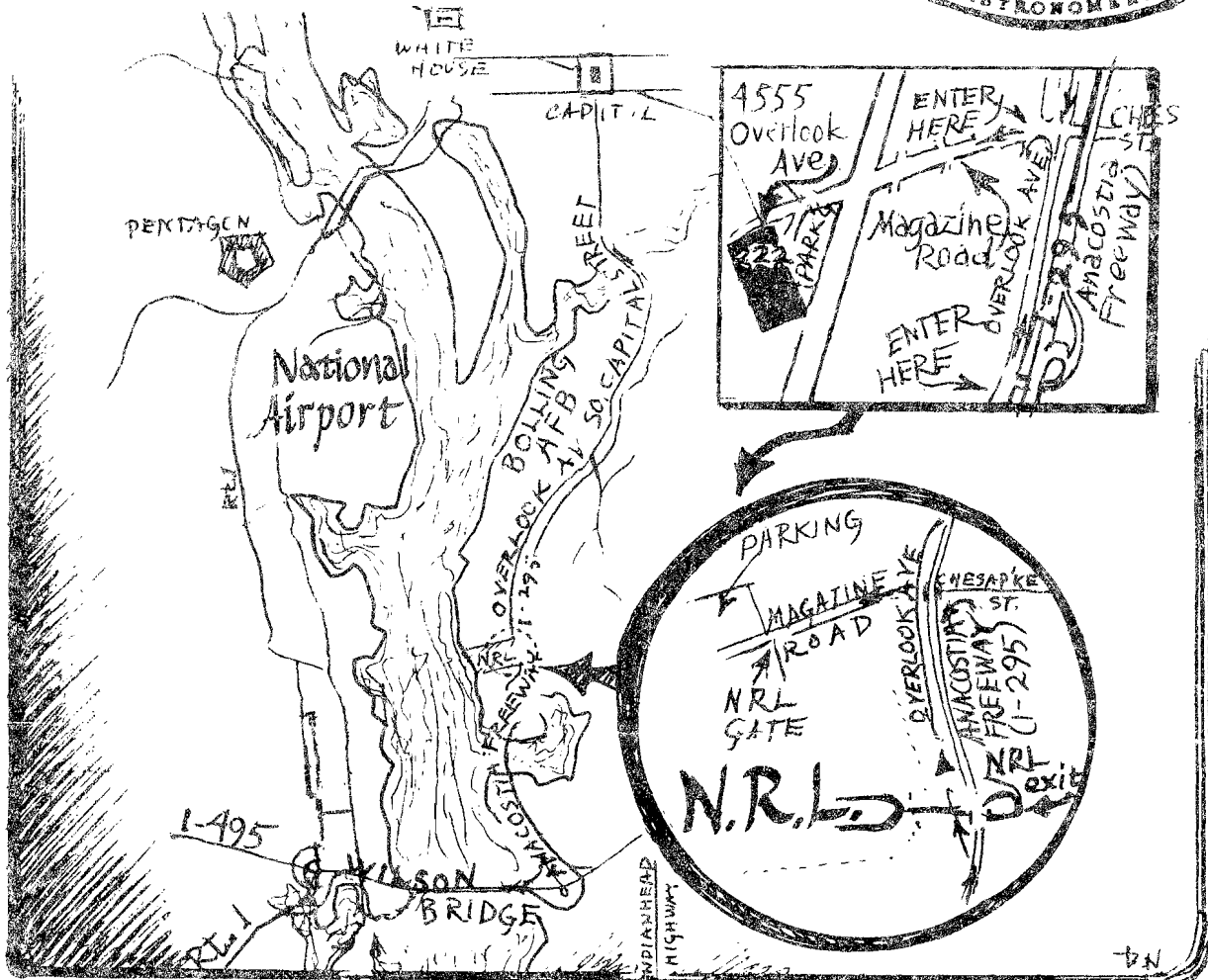
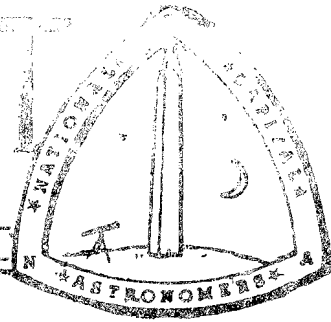


STAR DUST

Oct. 1, 1970 : VOL XXVII : NO. 2



Special Meeting Planned

The next meeting of the National Capital Astronomers will be at the Naval Research Laboratory, 4555 Overlook Avenue, S.W. A lecture on solar and stellar satellite astronomy and a demonstration of these satellites and their component parts will follow. This is an unusual and unique chance to become personally acquainted with some very unusual as well as expensive aerospace equipment. Before the meeting, members are welcome to visit the NRL space museum and display room to see the other areas in which the laboratory is now engaged. Coffee and doughnuts will be served. Because of the location of the lecture, there will be no dinner meeting at Bassin's restaurant this month. Unfortunately, we will not be allowed to take photos or to carry cameras into the laboratory.

The discussion will be conducted by Dr. John Eisele and Jerry Phillips of the Naval Research Laboratory. Jerry Phillips joined the NRL in 1966 as a technician and engineer in the Satellite Techniques Branch. He is coordinator of satellite systems and has received several awards for his work in communication and digital systems. John Eisele joined the NRL in 1965 and is presently a consultant in the Satellite Techniques Branch.

John Eisele, v.p.

Two items concerning radio astronomy appeared in Science, in September, which are particularly noteworthy. The September 4th issue, page 975, has a detailed radar map of the low-latitude surface features of Venus; this is pretty much raw data at present. The September 11th issue has a letter by Edward McClain, noting that the United States is rapidly falling behind in major radio astronomy and radio telescope instrumentation, because of selfish institutionalism on the part of radio astronomers as a whole. Lack of unified thinking on what major instruments are needed prevents serious organization in the acquisition of adequate funding.

The NCA picnic will be held on October 24th this year (rain-date, October 31st) at Manassas Battlefield Park. The picnic area (100 acres of open fields) has moved: The site is just left of Virginia Route 234, one-half mile north of its intersection with route 29-211, and about three miles north of the intersection of Routes 66 and 234. Bring your telescopes, charts and food. Let's meet by 5:30 PM on that Saturday afternoon.

The September Speaker

Doctor George Carruthers of the Naval Research Laboratory spoke to the NCA on his far-ultraviolet spectroscopy of the interstellar medium, using rocket-borne instruments from White Sands Proving Grounds. The talk skillfully tied in the results with those from ground-based observatories. He showed that instruments could gather information in a few minutes, which could not be obtained from any ground-based optical or radio telescope. He showed that the value of the rocket-borne experiments over those carried by satellite is the much shorter lead time, larger feed-back and the greater flexibility of rocket instruments (which can not only be retrieved but updated). He showed evidence that confirmed that molecular hydrogen is a part of the interstellar medium by observation of its lines in the far-ultraviolet spectra of "O" and "B" stars.

William Winkler

Editor's Notes



During the last month, Elizabeth Ostaggi of the Washington Academy of Sciences sent me a copy of the bylaws. I will have copies of this available at the October meeting for those who would like to see them. I also will have copies at the discussion group.

In his letter noting the price and availability of the aurora slides, Russell Blake enclosed a copy of a term paper on this phenomenon which might be of interest to some. I'll have a copy with me at the meeting also.

The current issue of The Strolling Astronomer has several very interesting articles on planetary observing. These include descriptions of lunar observations, a photovisual chart of Mars (1967), photos and drawings of comet Honda 1958c, an excellent article on planetary photography by Tom Pope, the 1969 Mars apparition A.L.P.O. Report 1 and descriptive discussion of lunar craters, ring dikes and calderas. Subscription to this journal of observational astronomy and the official publication of the Association of Lunar and Planetary Observers can be had for \$4.00 a year. Send to The Strolling Astronomer, c/o Walter H. Haas, Editor, Box 3AZ, University Park, New Mexico, 88001.

The New York Academy of Sciences, section of Engineering and of Physical Sciences, is sponsoring a Third Conference on Planetology and Space-Mission Planning in the Waldorf-Astoria, Park Avenue at 50th St., New York, N.Y. 10022, on the 28th through the 30th of October, 1970. The program is extremely interesting, covering subjects of solar-system astrophysics and space applications of technology. An extensive session on the last day is concerned with stellar cosmology. An art exhibit is also included, titled, "Man in the Cosmos". Registration fee is \$10.00 for non-members. Registration should be sent to: The Executive Director, The New York Academy of Sciences, 2 East Sixty-third Street, New York, New York, 10021.

Continued



I would appreciate copies of astrophotos, equipment set-ups or the like before the 20th of the month to include in the next issue of Star Dust. Though I realize that it is difficult for many of you to goad yourself into participating in your own organization, it would be appreciated by the junior members and some of the new members who still do not know all there is to amateur astronomy and could benefit by discussion of proven techniques, short-cuts and other techniques that our senior members have already mastered. For an organization as large as ours it would seem that there should be a few more Bill Winklers, Jerry Schnalls, Jerry Hudsons and Larry Whites - who are so willing to help the unlearned learn.

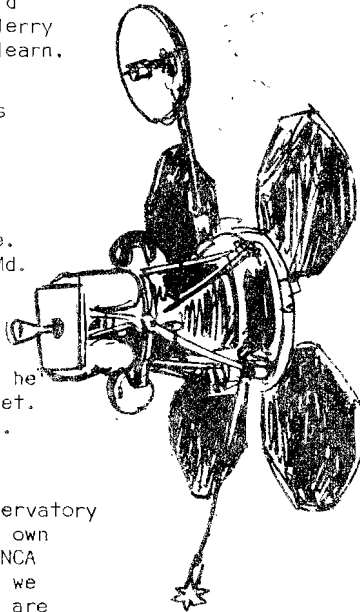
(If any of the membership feels that any comments made by the editors need a rebuttal - such will be published in succeeding issues of Star Dust.)

The new directory will be out within the next thirty days. Any last-minute changes, such as address, phone or name-spelling alterations, should be phoned or sent to me (JTL) as soon as possible. Phone 946-8996, Address: J. Legowik, 3513 Randolph Road, Wheaton, Md. 20902. Coincident with this will be the transient effect and alert schedule distribution. To be on this list, you must contact me before the 15th of October (if your name is not already on it).

Russell Blake has offered copies of the fine aurora photos that he showed at the spring meeting, to the members, at a cost of \$10.00 per set. If anyone is interested, send to: W. Russell Blake, Director, Alice G. Wallace Planetarium, 1000 John Fitch Highway, Fitchburg, Mass. 01420.

It would be well for those who are still thinking of our own observatory at a place removed from city lights to think hard and longer. In my own mind I wonder how many gifts, bequests, etc. might have gone to the NCA had we a decent place to put them and to use them. As it stands now, we have no central rallying point that we can call our own. Though we are a non-profit organization, the non-profit idea should not spill over into the profit gained from education of ourselves, new members and the youthful community at large. Unfortunately it has. Admittedly, those of us who do own fine observatories of our own have no need for such facilities but what about those who live in the city?

John Legowik



Memorial to Dr. E.C. Johnson *****

Mrs. E.C. Johnson, Alexandria, Virginia, has given two of her late husband's telescopes to the University of Arkansas, in his memory. One is a ten-inch refractor and the other is an eight-inch reflector, both made by John E. Mellish. The short focal length of the refractor makes it especially suitable for work on faint clusters and nebulae. Attachments for both instruments were included in the gift. About three hundred books from Dr. Johnson's library on astronomy and related subjects were also presented to the University.

Dr. Johnson joined the NCA in 1947 and continued his membership until his death in 1969. He was an examiner for the Boy Scout Merit Badge in Astronomy. Throughout the years he encouraged young neighbors and students to see the sky through his telescope. Doctor Johnson retired from the Department of Agriculture where he had been an economist, Assistant Deputy Director of the Land Bank Service and executive Vice President of the Federal Farm Mortgage Commission and also consultant to several foreign countries. He travelled extensively to establish the farm credit system. In addition to this he was an organizer and secretary of the National Agricultural Credit Committee.

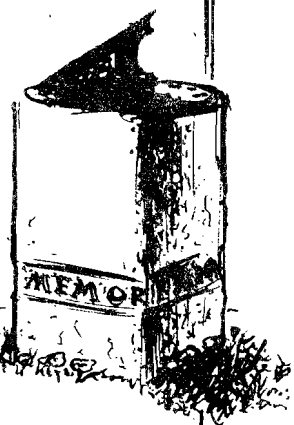
Memorial to William G. Lipscomb, Jr. *****

As a memorial to the late William G. Lipscomb, Jr., Mrs. Claude Hasson, formerly Betty Lipscomb, bestowed one hundred dollars upon the Astronomical League Trust Fund at the National Convention of the League in July. Bill Lipscomb was treasurer of NCA from 1959 through 1961. He was an active member until his death in 1964. His wife, Betty, worked diligently in NCA, the Middle East Region and the Astronomical League for many years.

In Memoriam *****

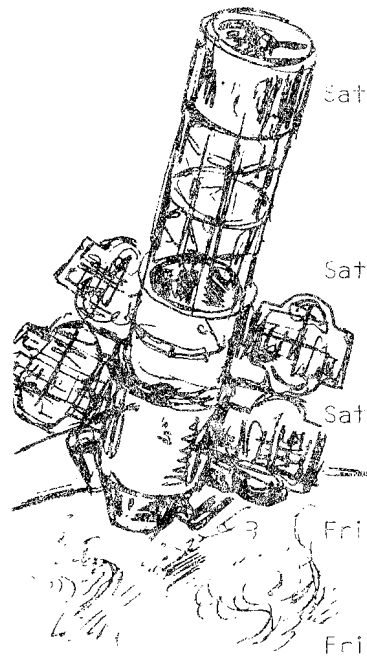
David Rothbart, a long standing member of the NCA, was buried Sunday, September 27th, in the District of Columbia. We, the members of the National Capital Astronomers, extend our sympathy to his wife and family.

Mabel Stern



CALENDAR

- Saturday, October 10th, 8:15 PM
NCA October meeting at the Naval Research Laboratory, 4555 Overlook Avenue, S.W. (see map). Dr. Eisele and Jerry Phillips will speak and conduct a tour of the NRL satellite technology.
- Saturday, October 17th, 8:15 PM
Discussion group at Bob Wright's home, 202 Piping Rock Road, about one and one-half miles north of Randolph Road on New Hampshire. The discussion will center about the design of solar eclipse photography by James Trexler and will be followed, if the weather is good, by an observing session in Bob's observatory.
- Saturday, October 17th, 2:00 PM
Maryland - District of Columbia Junior meeting, Chevy Chase Public Library. A discussion led by Jerry Hudson on the plans of the Juniors for the coming year. For information, call Jean Radoane: phone 434-0443
- Saturday, October 24th, 5:30 PM
NCA picnic and star party at Manassas Battlefield National Park, North of Route 29-211 on route 234. Bring food and telescopes. For additional information contact Bill Winkler.
- Friday, October 23rd and 30th,
Observation through the Five-Inch at the Naval Observatory. Larry White will conduct the session on the 23rd and John Alexio on the 30th.
- Friday, October, each week
Telescope-making classes at the Palisade Community Center by Jerry Schnall. Classes begin at 7:30 PM.

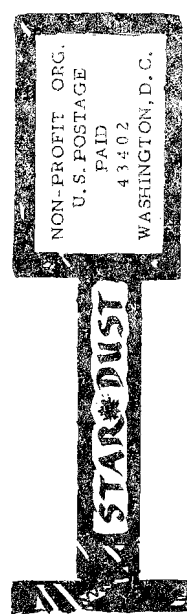


Astronomy Manuscripts

An exhibit of old manuscripts relating to astronomy from 1482 to 1690 will continue through mid-November at the Folger Shakespeare Library, 201 E. Capital St. Included by the reference staff are photos of the 1970 solar eclipse, with material showing scientific and superstitious beliefs of the period, mathematical tables for eclipse prediction, etc. Monday through Saturday, 10-4:30.

Assistant Editor Sought

David Nordin, assisting Dr. Legowik since his two-month vacancy in the spring of 1969, regrets that urgency of other concerns forces resignation. He urges anyone with journalistic or artistic leanings to apply; good experience, interesting work. Good spellers desired (with patience and speed, if possible). Call J.L., 946-8996 or D.N., 483-0470.



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