

## MD. - D.C. Juniors for June

The Junior Division enjoyed a very interesting tour of the Georgetown University Observatory on Friday night, April 27. Twenty-two people attended and heard Mr. W. Willauer, a Graduate Research Fellow at the Observatory, explain and demonstrate the 5-inch refractor, the fascinating photographic plate measuring equipment, and the complicated desk-size electronic computer. We also saw the 12-inch refractor outfitted with a photoelectric photometer for studying variable stars, the spectroscopic laboratory with a 30,000 line per inch diffraction grating, the dark room, and the long focal length telescope used for obtaining spectra of planetary atmospheres. We are greatly indebted to Father Hayden for arranging this tour for us.

We failed to mention last month that Steve Klein won second prize in astronomy in the Junior High class at the D.C. Science Fair. In addition, three NCA Juniors (June Loguirato, Alan Creutz and Chris Walker) have been named Regional Winners (top 225 in the country) in the 11-12 grade division of the 11th FSA Awards Program. The projects were the same that won these same persons honors in the 21st Annual Science Talent Search.

Three Juniors gave papers at the Middle East Regional Convention of the Astronomical League on May 12. Chris Walker discussed various types of astrophotography, and Ed Cragg described a catalog of astronomical objects suitable for viewing with different sizes of small telescopes based on a statistical analysis of reports from a number of observers. Ed Lusby explained his research into the structure and motion of Jovian surface features.

Many other Juniors attended the activities of the 1962 Middle East Regional Convention. Perhaps a record gathering toured the Naval Observatory on Friday night. (On behalf of the Juniors I wish to express our grateful thanks to those who made this fascinating tour possible.) Large numbers also attended the Convention speeches and the tour on Saturday.

Finally a Junior Convention will be held at 7:30 P.M. at the Dept. of Commerce just before the June NCA meeting on the 2nd for the purpose of electing officers and making plans for next year. All juniors are urged to come to the June meeting a few minutes early in order to take part in this important meeting. The NCA business meeting after the lecture will also be of great interest to Juniors because of the presentation of the Science Fair awards. There will be no other scheduled meeting of the MD-DC Juniors in June.

Chris Walker MD-D.C. Junior Editor

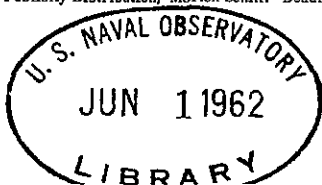
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★ STAR DUST



Published monthly except August by and for members of the NATIONAL CAPITAL ASTRONOMERS, INCORPORATED, a non-profit, public-service organization promoting interest and education in astronomy and the related sciences. President, James J. Krebs, LU 2-1247; Vice President, Adm. Alvin I. Malstrom, Ret.; Secretary, Mrs. John Stolarik; Treasurer, Duane A. Baugher.

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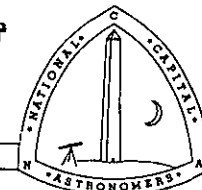


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Vol. XIX, No. 10



## CALENDAR FOR JUNE

- June 2 The Universe, a film on a night at the David Dunlap Observatory. FREEDOM 7, a Convair film on John Glenn's historic flight. Showing to be in the Department of Commerce Auditorium beginning at 8:00 P.M. Regular business meeting of NCA to follow.
- June 2 Junior Convention to be held at 7:20 P.M. at the Dept. of Commerce Auditorium. See Junior Report for details.
- June 8 OBSERVING AT THE FIVE INCH at the Naval Observatory with Larry White 8:00 to 10:30 P.M.

## NCA AWARD WINNERS IN SCIENCE FAIRS

- Arlington - Falls Church  
Jr. Travis Taylor "How the Revolving Moon Phases Us."  
Sr. Patricia D. Evans "Satellite Orbits."
- Fairfax County  
Jr. None  
Sr. Robert C. Price "Astrophotography and Observations with a 6 inch Reflector."
- Prince Georges County  
Jr. Patricia Rossi  
Sr. Stuart Starr "Optical vs. Radio Telescopes."
- D. C.  
Jr. Harry Barnes "Astrophotography"  
Sr. Christopher W. Walker "Amateur Astrophotography"

## Special Commendation

Richard Falwell "Atmosphere of Jupiter and Saturn"  
First place in the Montgomery County Science Fair and First place in Physical Sciences at the National Fair in Seattle, Washington.

Judging these Science Fairs for NCA were Bob McCracken, Betty and Bill Lipscomb, Ben Adelman, Ted Noble, Bob Wright, and Jim Krebs.

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## NEW MEMBERS

Regular Bruce W. Plomasen, 7610 Kedron St., Springfield, Va. Phone 451-2109

Junior John Greenlen, 815 Dolphin Lane, Alexandria, Va. SO 8-0269

## ELECTION RESULTS

At the May meeting the following were elected to office for 1962-63.

President	Mrs. John D. Stolarik
Vice President	Mr. Ellis Marshall
Secretary	Morton Schiff
Treasurer	Roger Harvey
Trustee	Jim Krebs

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## PROPOSED CHANGES IN THE BY-LAWS

At the April meeting of NCA Leo Scott, Trustee, brought to the attention of the group that we appeared to be heading for financial trouble. The President then appointed a committee composed of Leo Scott, Ellen Stolarick, and Duane Baugher to look into this matter and report their findings to the Executive Board and the Trustees. As a result the following changes in the By-laws are proposed and will be voted on at the regular June meeting, at which time the committee will give a full report and propose other corrective measures.

## Article 1. Membership, Dues, and Voting

Section 1. Membership in this corporation shall be composed of two grades:

- (a) Junior membership - Annual dues, (\$1.50) \$2.00, maximum 18 years. . . . . Junior members may elect the privilege of SKY AND TELESCOPE in which case the annual dues shall be (\$1.50) \$2.00 plus the contract subscription price.
- (c) An initiation fee of \$1.00 shall be assessed against all Members at the time of their joining the association and against former members requesting reinstatement after having been dropped for non-payment of dues.

Section 2. Applications for membership shall be in written form properly endorsed by one full member and accompanied by the initiation fee and dues for one year, and shall be submitted to the Membership Committee by the applicant in person, . . . . .  
The motion was made that these changes take effect Sept. 1, 1962.

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## MERAL Convention in Washington

Friday evening, May 11th, marked the first event of the convention of the Mid-East Region of the Astronomical League which was hosted this year by the National Capital Astronomers. Registration and meetings of old friends occurred in the lobby of Naval Observatory. Bob Rhynsburger of the observatory staff arranged a complete tour of the facilities. We visited the Simon Newcomb laboratory which contains the cesium beam clock - the primary time standard for all naval operations, the time monitoring service, the new satellite camera and a model of the 60-inch astrometric camera now being built for the Observatory's site at Flagstaff, Arizona. Other points of interest of the tour were the 26-inch refractor, the photographic zenith tube, the transit telescope, and the computing machines which produce the Ephemeris and Nautical Almanac. Unfortunately cloudy skies prevented most attendees from viewing the first-quarter moon through the 26-inch or NCA'S own 5-inch refractor.

After a busy hour of setting up exhibits and registering newcomers, the convention was officially called to order at 10 AM sharp by the general chairman Bob Wright at the Dept. of Commerce auditorium. The visiting amateurs were welcomed by the NCA president and Anthon Doucek, the regional president, extended his thanks to the NCA for their invitation and efforts in setting up the convention.

The remainder of the morning was taken up with a technical session chaired by Bob Wright. The first three papers were concerned with the measurement of satellite positions and the possible collision of satellites (remote). Most interest, however, centered around a talk by Robert Hires on the design and construction of Maksutov telescopes. Mr. Hires originated the design used by the NCA Maksutov club. The "Mak" enthusiasts continued the forum long after the regular session had broken up for lunch. Ten lucky visitors got a chance to run a Spitz planetarium on their own after a briefing by the regular operator, Mrs. Margaret Noble.

In the afternoon, the observing session was chaired by Ed Bailey of Philadelphia, society activities by Mrs. Grace Spitz, and the final paper session on specialized observing by Bob Wright. Mrs. Spitz reviewed fifteen years of MERAL activity and introduced the League secretary, Wilma Cherup for a report on the national convention of the Astronomical League at Albuquerque, N. M. The last session included papers by four NCA juniors reporting on their own special projects.

There was a short break during which the convention-goers got an opportunity to view the many fine exhibits assembled by Hoy Walls. Among others were a beautiful 7-inch refractor built by Hoy for the Richmond, Va. society and a pair of unusual telescopes built by Dr. G. C. Blevins, and NCA member.

The assembled throng then climbed aboard waiting buses for a quick trip to the observatory of Georgetown University. After touring the facilities all moved out to the lawn for a buffet dinner. Then back to the Commerce auditorium for the regular lecture of the NCA, highlighted by Dr. Peter van de Kamp of Sproul Observatory.

Jim Krebs

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## THE IMPORTANCE OF SIRIUS B

Dr. Peter van de Kamp of Sproul Observatory addressed the Middle East Regional Convention on the search for dwarf companions of nearby stars. This year marks the one hundredth anniversary of the visual discovery of Sirius B by Alvan Clark in 1862. Eighteen years earlier in 1844 Bessel had mathematically predicted the existence and location of this dwarf star by analyzing perturbations in the path of Sirius through the sky. The companion of Procyon was discovered in the same way later in the last century. Within the last 25 years the work of Dr. van de Kamp and his associates has led to the discovery of six more such companion dwarf stars in the sun's neighborhood. One of these dwarfs, Ross 614, has a mass less than ten times that of Jupiter.

The next decade will be a good time for amateurs to attempt observing Sirius B because the greatest elongation of Sirius and its dim companion (recurring only every 50 years) will take place in 1970 with a separation of about eleven seconds of arc. Dr. van de Kamp gave us a tip on how to split the pair with a moderate-sized telescope with aperture perhaps as small as only 8 inches. He suggest making a hexagonal diaphragm for the front of the telescope. This produces a stellar diffraction image with six cusps and six concavities or foils, and the close dim double star can be made to appear in one of the latter by rotating the diaphragm.

Dr. van de Kamp ended his talk by playing a composition of his own on the piano.

..... Leith Holloway.....