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STAR DUST



MD -DC JUNIORS

FEBRUARY 1962

Vol XIX, No. 6

Three active NCA JUNIORS have entered the Westinghouse Science Talent Search; June LoGuirato, Ed Lusby, and Chris Walker. These same persons, along with several others also plan to enter the Regional Science Fair this April -- which, while being conducted by the same institution (Science Service), has an emphasis quite different from that of the Science Talent Search. Perhaps out of this the NCA JUNIORS will garner another prize to add to the already impressive list of scientific honors accorded members of our organization. Two more science competitions have come to my attention. First is the Junior Science and Humanities Symposium, which presents to qualified researchers an opportunity to communicate their findings in a two day science gathering. In this seniors alone are eligible. Second is the better publicized Science Writing and Technical Writing contest, open to all area high school students except freshmen. A total of twenty-eight prizes are offered in this competition, which stresses non-technical exposition of scientific principles (which need not be original). Anyone interested in obtaining more information about these activities is welcome to call me at OL 4-3572. Let us hope that this year turns out to be a banner one for the NCA Juniors in these area science competitions.

In the next three months I will attempt to present a picture of the Junior Division in a manner which will prove interesting to the majority of NCA Seniors. In March we will have brief biographies of the principals of our organization, the four officers and our tireless director, Leith Holloway. In April the Junior page will present brief descriptions of research projects now being carried on by members. In May will appear an elaboration of Junior activities, complete with a short history of the club, as far back as your present Junior Editor can remember. These three issues promise to be extremely interesting, and I hope many NCA'ers will take this opportunity to acquaint themselves with our junior organization.

Chris Walker, MD - DC Junior Ed.

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DEADLINE

Material for STARDUST must be received by the tenth of the month, if you can not make this deadline please call the editor to make other arrangements.

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Washington, D. C.



FEB 1 1962

ASTRO-NAVIGATION



Our Feb. Speaker, Captain Philip Van Horn Weems, U.S.N. Ret. comes with impressive credentials to recommend him as a lecturer on Astro-Navigation.

During his career which spans a half century Capt. Weems has distinguished himself as a practitioner, author, and inventor in the art and science of Celestial Navigation.

The speaker is a graduate of the U. S. Naval Academy, class of 1912, with a B.S. degree. He holds a Masters and Chief Engineers License, Oceans Unlimited. His published contributions to Air and Marine Navigation include in part: Air Navigation (Gold Medal), Star Altitude Curves, Marine Navigation, Line of Position Book, Navigation Note Book. He designed the first AIR ALMANAC in 1933 and has written approximately 400 technical articles, etc.. He also co-authored Instrument Flying, (Weems & Zweng), Learning to Navigate, (Weems & Eberle), Simplified Celestial Navigation, (Weems & Link). He also conceived and designed the SPACE ALMANAC. Among his inventions are: The Second-Setting Navigation Watch; Star Altitude Curves; and Mark II Aircraft Plotter.

Captain Weems is a strong protagonist for "accentuating the positive" and he stresses the reliance on basic features, the human eye---the simplest of instruments---as the foundation upon which to build. Simplification of methods has been his ambition. The heavens and man's observations provide these changeless elements.

Some of his awards are: The Gold Medal, Aero Club of France; Cash Award and Certificate, Royal Society of Arts for Second-Setting Watch; Magellanic Premium for 1954 from American Philosophical Society; Gold Medal, British Institute of Navigation, 1956; Thurlow Award, American Institute of Navigation, 1956.

Among his honors are: Bronze Star, World War II; Fellow, Institute of Aeronautical Sciences; Fellow, The American Geographical Society; President and Co-founder, Institute of Navigation, 1952.

A WORD OF THANKS

The NCA wishes to thank Dr. George Blevins for his work on the five-inch. The new clock drive is more accurate and more rigid than the previous one. This addition adds substantially to the usefulness of this instrument and it is hoped that in the future more members will avail themselves of the opportunity to use this telescope.

CALENDAR FOR FEBRUARY

- 2 OBSERVING AT THE FIVE INCH at the Naval Observatory 7:30 to 10:00 PM with Larry White.
- 3 ASTRO-NAVIGATION by Capt. Philip Van Horn Weems. Dept. of Commerce Auditorium, 8:15 P.M. Business meeting follows.
- 9 VIRGINIA JUNIORS MEETING at the Westover Baptist Church.
- 10 MD - DC JUNIORS MEETING Cedar Lane Unitarian Church at 2:15 PM. Lecture on the Origin of the Universe. Call Leith Holloway at 581-7870 or Chris Walker at OL 4-3572 for details or transportation.
- 17 DISCUSSION GROUP Bob Wright will present a program on Viewing Galaxies. Dept. of Commerce 8:15 PM. Meeting of the trustees and officers to follow.
- 23 MD - DC JUNIORS MEETING Cedar Lane Unitarian Church at 7:30 PM. Lecture on the origin of the Solar System.
- 23 VIRGINIA JUNIORS MEETING at the Westover Baptist Church. TELESCOPE MAKING CLASS every Tuesday evening at the Chevy Chase Community Center, 7:30 - 10:00 PM with Roy Walls.

MAKSUTOV CLUB

Friday night, January 12, eight members of the new Maksutov club met and decided to make six inch Maksutov telescopes. The optical glass has been ordered and is expected in about a month, after that the group will meet regularly.

New Members

- James Porter Straus 2714 Quebec Street, N. W., Washington 8, DC
Phone EM 3- 1556
- Robert Sohns 5207 Flanders Ave., Kensington, Md. Phone
WR 2- 5460

CHANGES IN DIRECTORY

The following omissions and errors have been found in the 1962 Directory. Please mark these changes in your Directory for future reference.

- John B. Lohman 671-8586
- Leland F. Ramsdale MA 2-0311
- Denis A. Whitaker WH 2-4927

If there are any errors or changes in your listing please notify the secretary at RE 6-4321.

JANUARY LECTURE

At the January meeting Rev. Martin F. Mc Carthy S. J., showed color slides of the instruments, staff, and present and former sites of the Vatican Observatory. Founded in 1578 by Pope Gregory XIII, the Vatican Observatory is now the oldest but still one of the most modern observatories in Europe. The first director, Fr. Christopher Clavius, made the observations and calculations needed for the calendar reform instituted by Pope Gregory. Much of the work of the Observatory during the next several centuries was in geodetic measurements. However, in 1861 Vatican astronomer, Fr. Secchi, initiated the Observatory's work in modern astrophysics with his pioneering work on spectral classification of stars. Important research on variable stars was carried on by Fr. John Hagen director of the Observatory from 1906 to 1930.

In 1935 the Observatory was moved from Vatican City to Castel Gandolfo, the Papal summer residence 15 miles south of Rome, in order to escape some of the lights and smog of this city. Since then the suburbs of Rome have gradually grown out toward the new site bringing mercury-vapor-lighted highways with them to harass the astronomers.

The telescopic equipment at Castel Gandolfo includes a Zeiss doublet consisting of a 24-inch reflector and a 16-inch refractor mounted on a single mounting, another 16-inch refractor, and a Schmidt camera added in 1957 with 24-inch aperture and 37-inch mirror. Because of its unique ability to be pointed all the way down to the western horizon over the Mediterranean Sea, the single 16-inch refractor was used by Br. Treusch to take the amazing pictures of the "green flash" published in Scientific American magazine.

Astronomers at the Vatican Observatory come from all parts of the world. The present director, Fr. O'Connell, is an Irishman. Present work conducted there includes research in photoelectric and photographic photometry, spectroscopy, and variable stars.

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CONVENTION PLANS

On the weekend of May 12th the Middle East Regional Convention will be held here in Washington. Bob Wright and his committee are hard at work making plans for this convention. Current plans include a Friday evening visit to the five-inch on the grounds of the Naval Observatory and a star party with members bringing portable telescopes. During the day on Saturday various papers will be presented. At 5:00 PM a bus will take people to Georgetown to visit the Observatory. After supper the group will return to the Dept. of Commerce for our regular NCA lecture and meeting. Sunday morning our guests will be taken sightseeing. Sunday afternoon Bob Wright is having an open house at his place.

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