

The Junior Convention for this fall was held the night of Friday the 13th at the Westover Baptist Church in Arlington, Virginia. Eighteen attended. The Convention decided: that the World Night project reports would not be published, on account of the meager observing done (due in turn to the bad weather); that correspondence with overseas amateurs should not be carried out as a group project; that field trips would be taken to the Spitz projector at the Naval Academy, and, if possible, to Wallops Island, Virginia, site of the NASA rocket firings; and that any intergrated Maryland Virginia telephone network would be set up to report transient astronomical events of unusual interest. In addition, the convention heard Rick Falwell and Ed Lusby, science fair winners, describe their endeavors to discover a system in the baffling movements of Jupiter's atmosphere. Publications available at the meeting included Tips, the excellent production of Ed Cragg; mimeographed copies of Sam Friedman's analysis of Saturn; and a record of the Perseid meteor watch of August 14 (which saw 104 meteors in less than two hours). I would like to personally thank those who attended for their participation in the worthwhile meeting.

Chris Walker, Md - DC Junior Editor

FOR SALE--REFLECTING TELESCOPE

Thomas Cave optics: six-inch, F 7.0 mirror and Newtonian diagonal. Roy J. Wells mount: enormous precision-machined. Ball bearings, clock drive, with setting circles, slow-motion controls, and locks in right ascension and declination. Rotating tube-mounting rings. Tube beautifully plastic finished. Finder: 12 power, 50 mm aperture. Mounted on heavy-duty steel pedestal. With two Brandon Orthoscopic oculars, 12mm and 25mm. C. Richard Ashwood, 5811 Old Chesterbrook road, McLean, Va. RL 6-2946

HELP NEEDED

Would you like to try your hand at reporting? We need someone to write a review of the monthly lectures. If you would like to do this phone Ellen Stolarik at RE 6-4321.

COMET SEKI

A bright Comet is visible in the morning sky in the Constellation Leo. Position for 24 Oct. R.A. 11 hour 15 min.; North Dec. 13°. For Nov. 1, R. A. 11 hours 5 min.; Dec. 10° North.

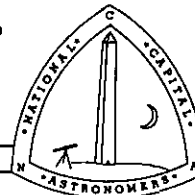
* S T A R D U S T



Washington, D.C.
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. Trustees: Glen E. Neville, Lee W. Scott, Sam C. Feild, Jr., G. Robert Wright. Editor, Mrs. John Stolarik, RE 6-4321. Assistant Editor, Mrs. Ellis Marshall; Junior Division Editors, D. C. and Md: Christopher W. Walker, OL 4-3572, Va: June LoGuirato, BR 8-907; Astronomy, Alexander L. White; Publicity, Mrs. William Lipscomb; Photography and production, Sam C. Feild, Jr.: Publicity Distribution, Morton Schiff. Deadline tenth of each month.

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NOVEMBER 1961

Vol. XIX No. 3

OBSERVATIONS OF THE PLANET EARTH FROM SPACE



Dr. David Q. Wark

Dr. David Q. Wark of the Meteorological Satellite Laboratory of the U. S. Weather Bureau will speak at the November 4th meeting on observations of the planet earth from space.

Three satellites of the TIROS series have been launched since April 1, 1960. These have each carried a pair of television cameras, producing many thousands of pictures of the Earth. The second and third TIROS have also carried radiometers to measure the reflected sunlight and the terrestrial infrared radiation. The Meteorological Satellite Laboratory analyzes the several hundred pictures obtained each day and distributes the

meteorological information to numerous agencies for purposes such as weather forecasting, hurricane tracking and meteorological research. From the radiation data, contour maps can be constructed to show views of the Earth in different parts of the spectrum; these maps indicate cloud conditions at night and the rate of heating and cooling of the Earth. The pictures and maps give a unique view of the Earth, providing an astronomical view of the planet from the standpoint of its appearance and the physical nature of the surface and the atmosphere. Continents, islands, rivers and lakes are often seen, and some geological features can sometimes be distinguished. An interesting oceanographic contribution is the ability of satellites to view the polar cap and to provide operational and research information on sea ice.

Our speaker is both a meteorologist and an astronomer, and he is thus well qualified to interpret these weather-satellite data for the astronomer. He obtained his Ph.D. in astronomy at the University of California, Berkeley in 1959. His principle professional activities have been in weather forecasting; research in airglow and physics of the upper atmosphere; infrared spectroscopy and radiative transfer in the Earth's atmosphere, with special application to satellite observations; and in sea ice observations from satellites. At present he is Chief of the Physical Meteorology Section of the Meteorological Satellite Laboratory.

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CALENDAR FOR NOVEMBER

- 4 OBSERVATIONS OF THE PLANET EARTH FROM SPACE by Dr. David G. Wark. Dept of Commerce Auditorium, 8:15 P. M. Business meeting follows.
- 7,14,21,28 TELESCOPE MAKING CLASS at the Chevy Chase Community Center 7:30 to 10:00 P.M. with Hoy Walls.
- 10 OBSERVING at the FIVE INCH--7:30 to 10:00 PM at Naval Observatory with Larry White. Your NCA card will admit you.
- 11 MD - IC JUNIORS MEETING at the Chevy Chase Community Center, 5601 Connecticut Avenue, N. W., 2:00 P. M. Leith Holloway will lead a discussion on the "The Upper Atmosphere - Gateway to Space." For additional information phone Leith at 681-7870.
- 18 DISCUSSION GROUP 8:15PM Dept. of Commerce, Room 1851 Hoy Walls will lead a discussion on Amateur Astronomical instruments. Those interested in the proposed Maksutov Club should attend. Meeting of the trustees and officers at 9:30.
- ?? TRIP TO PLANETARIUM at the Naval Academy, Annapolis. Date and time will be announced at the meeting.

PLANETARIUM

Bill Cronin has again invited NCA to visit the Planetarium at the Naval Academy in Annapolis. The trip will be on a Saturday afternoon, the exact date and time will be announced at the meeting. Route: East Capital Street, Alternate #50, follow Annapolis signs. (1) Go past sign "Annapolis Business District"; follow dual highway to city; pass (2) New State Office Building; continue around Church Circle (3); turn right on College Avenue to Naval Academy wall; right again to main gate at Maryland Avenue. There we will be met and conducted to parking lot and planetarium. For additional information phone Dr. Krebs at LU 2-1247. An attempt will be made to find rides for those who do not have a car.

OCTOBER LECTURE

At the October meeting Mr. Robert J. Hackman of the U. S. Geological Survey spoke on Photointerpretations of the Moon. Photographs of the Moon taken at different libration positions have an angular difference of perspective, and hence stereoscopic photo-interpretive methods may be applied to studies of the lunar surface. Mr. Hackman discussed various types of terrestrial craters and compared these to lunar craters, resulting in the conclusion that most lunar craters are the result of meteoroid impact.

THE NCA TELESCOPE AT THE NAVAL OBSERVATORY

Significant progress has been made during the last two years in improving the equipment and housing of the five-inch refractor. The building has been completely rewired and a number of new electrical sockets, switches, and lamps added. A wide field finder has been mounted on the telescope. Several colored filters have been made which fit present eyepieces and an adapter made so that standard size eyepieces may be used. Twenty-five new members have been instructed in the use of the telescope and have become acquainted with the Naval Observatory regulations.

Progress in observing is limited by the quality and location of the telescope. Increased effort is required in construction of observing equipment and instruments as a prerequisite to the establishment of satisfactory observing programs. A clock drive is needed and more far-reaching improvements are planned. It is thus necessary that additional members experience in telescope construction or machine work aid us. Anyone willing to help should call me at JE 2-5261.

Observing nights are scheduled every other month to allow people to become familiar with the telescope. Messier objects will be observed when possible and several bright asteroids reach opposition this fall.

***** Larry White *****

LOCAL "MAKSUTOV CLUB" PROPOSED

Consideration is being given to organizing a local "Maksutov Club" as an adjunct to the NCA Telescope Making Classes.

The "club" project would be the construction of Maksutov Type Telescopes similar to the Questar and those described by John Gregory in the March 1957 Sky and Telescope. For the time being at least the size of the telescope would be limited to about 4 1/2 inch aperture, f:20. Cast iron laps and grinding machines would be used. The cost of the necessary glass, etc. for making the necessary optics would not exceed about \$20.

"Club" membership would be limited to persons who have completed at least one telescope mirror or lens or who have other qualifying experience. Members would be expected to assist in making the grinding machines and in setting them up and getting the operation under way.

The "club" would function at the Chevy Chase Community Center, and would meet weekly 7:30 to 10:00 P.M. on some night to be selected (excepting Monday and Tuesday nights.)

Persons interested in the proposed club please call me at 012-5293 and/or attend the November discussion group.

***** Hoy Walls *****

NEW REGULAR MEMBERS

Ellsworth J. Johnson 2015 Cascade Road, Silver Spring, Md.
Telephone DU 8-4583

Michael Walker 646 C Street, N.E., Washington D. C.
Telephone LI 7-8497
