

PRINCE GEORGE'S JUNIORS

The Prince George's County Juniors met on the 11th and designed the mounting for their astro-camera. The write-up about the camera for the display at the Middle-East Region Convention in June was nearly completed and the paper about the photometer was worked on. Our observing program for the spring was worked out. Included were meteor count programs, position drawings of Jupiter's satellites and observations of selected lunar features.

Geoffrey Hornseth
PGC Coordinator.

MD-DC JUNIORS

"The Origin of the Asteroids" was the topic of Mr. Douglas O'Handley at the April MD-DC lecture. Mr. O'Handley's interpretations of the various phenomena associated with the minor planets did not agree exactly with those made by Dr. Opik the week before, but were well stated. The tape recording of his lecture will be available at the May meeting.

Mr. Carroll Lidback, also of the Naval Observatory staff, was forced to postpone his talk on "Variable Stars" from April to the May 8 meeting. His lecture will be presented at the Silver Spring Library at 2 P.M.

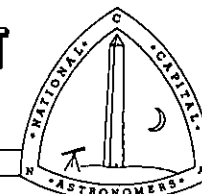
Due to a lack of response, plans for a Project World Night booklet on the December 18 lunar eclipse have been abandoned.

Papers and exhibits by MD-DC Juniors for the MERAL convention are currently in preparation. All NCA members planning to attend should make special efforts to hear the papers at the Junior session -- they just might surprise some people!!!

Norman Sperling
MD-DC Editor

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STAR DUST



May 1965

Vol. XXII No. 9

OPERATION MOON BLINK



J. J. Gilheany

The current amateur and professional interest in transient lunar phenomena makes the subject of our May lecture quite timely. Our guest lecturer is Prof. John J. Gilheany of the U. S. Naval Academy Science Department and Trident Engineering Associates Inc. His topic is "Operation Moonblink."

Professor Gilheany has been on the Physics faculty of the Naval Academy for 8 years. However his professional experience has not been confined to the classroom. His fields of specialized interest include weather satellites, vacuum systems, ultrasonics, optics, astronomy and nuclear physics. His work in these fields is impressive.

As an associate in Physics with Trident Engineering Associates, Mr. Gilheany has served as project manager on a feasibility study, including design specifications of the vacuum system for a launch phase simulator for NASA-Goddard; project manager for the evaluation of the vacuum requirements for an 80 inch ultraviolet coater; project manager of a feasibility study of a ship-to-ship facsimile system; project manager for a study concerning the documentation storage and retrieval problems of certain NASA-GODDARD divisions; weather satellite studies; survey of mercury-xenon arc life expectancy; project manager of "Operation Moonblink" for the investigation, design, and development of optical systems for observing, analyzing, and recording transient lunar phenomena. He has also been a research physicist in ultrasonics at the Catholic University of America.

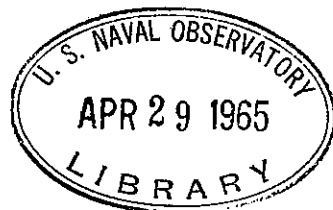
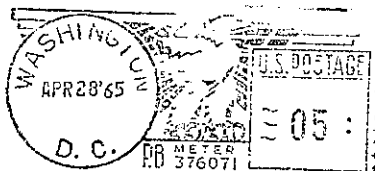
Continued on page 2.

CALENDAR

- May 1 OPERATION MOON BLINK by Professor John J. Gilheany at the Departmental Auditorium (between 12th & 14th St. on Const.Ave.) at 8:15 P.M. Business meeting and election of officers follows.
- 1 JUNIOR DIVISION General Meeting, 7 P.M. Departmental Auditorium. Election of Officers.
- 8 MD-DC Juniors meeting at 2 P.M. in Silver Spring Library. Mr. Carroll Lidback of the U. S. Naval Observatory will speak on Variable Stars. Elections.
- 14 VIRGINIA JUNIORS meeting at 7:30 P.M. at the Westover Baptist Church. Call John Geweke (KE 8-5148) for details.
- 15 DISCUSSION GROUP. Topic to be announced. Dept. of Commerce, Room 2062 at 8:15 P.M.
- 28 VIRGINIA JUNIORS meeting at 7:30 P.M. at the Westover Baptist Church.
- 4,11,18,25 TELESCOPE MAKING CLASS. Chevy Chase Community Center with Hoy Walls. 7:30-10:00 P.M.
- 7,14,21,28 ADVANCED TELESCOPE MAKING CLASS at the Chevy Chase Community Center with Hoy Walls. 7:30-10:00 P.M.

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, Mrs. Margaret K. Noble, 382-8721. Secretary, Theodore T. Noble, Treasurer, Frederick D. Coville, 382-8721. Assistant Secretary, Mrs. R. McCracken, and Mrs. John Sojarski; Editor, Mrs. John Sojarski; Assistant Editor, Mrs. Sam C. Feldt, Jr. Deadline: Tenth of preceding month.

* S T A R D U S T *



Library,
Naval Observatory
Washington 25, D.C.

Operation Moon Elink (continued from Page 1)

Our May speaker is a member of the American Association of Physics Teachers and the Association of Lunar and Planetary Observers. He is also a member of Sigma XI honor society.

Mr. Gilheany's academic background includes a B.A. from Villanova; M.S. in Physics, Catholic University, where he is currently a doctoral candidate.

On the personal side -- Professor Gilheany is married and the father of six children.

* * *



Geoffrey Hornseth, Patrick Moore, and William Pala

Serendipity; PATRICK MOORE OF England

The Discussion Group meeting was invited at the April NCA meeting to come to Mr. Bob Wright's house on April 17. Mr. Wright had planned for some sky observing and a general good time. All this was suddenly enhanced when Dr. Armand Spitz brought his guest from England, PATRICK MOORE. Everyone was more than happy to have a friendly visit with this eminent lecturer, author and astronomer. He told us that he was now the Director of the coming Irish Planetarium being constructed on the Armagh Observatory grounds in Ireland. He is a delightful person, friendly and personable just like his books. NCA was honored to have such a distinguished visitor.

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PLAN TO ATTEND MAY NCA BUSINESS MEETING

The very important business of revising the Constitution of NCA had to be postponed at the April Business meeting because there was not a quorum present. We need at least 40 interested members to be present to carry on the business of the NCA. Please try to stay for this part of the program in May. Remember that the meeting place is to be in the Departmental Auditorium on Constitution Ave. between 12th and 14th Streets.

The elections of NCA Officers for 1965-66 will also be held at the May meeting.

The following have been nominated for office:

- President.....Mrs. Margaret Noble
- Vice PresidentMr. Henry Hudson
- Secretary.....Mrs. Gertrude Dellar
- TreasurerMr. Frederick Cornelius
- Trustee (4 year term).....Mr. John Stolarik

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Notice of Middle-East Region Convention - June 25-26

Send in your registration now:

Mr. Bob Wright
202 Piping Rock Drive
Silver Spring, Maryland (Check for \$1.00)

PLEASE NOTE NEW MEETING PLACE FOR MAY MEETING

APRIL LECTURE.-- THE BUILDING MATERIAL OF THE PLANETS

Dr. Ernst Opik of the University of Maryland and Armagh Observatory spoke to the society on April 3, 1965. This report includes only his comments not covered in the excellent summary of his lecture appearing in the April issue of Star Dust.

Jupiter, its satellite Ganymede, and Pluto exhibit limb darkening. This once led astronomers to overestimate Pluto's density because the planet's disk appears smaller than it really is. Since the visibility of planets decreases inversely as the fourth power of distance from the sun, there may be undiscovered planets in the Solar System beyond Pluto.

Occultations of stars by Jupiter indicate that the scale height of its atmosphere is 8 km., the same as that of the earth. This suggests that Jupiter's atmosphere may be predominately helium when the strong gravity and low temperature on the planet is taken into account. (An atmosphere's scale height is vertical distance over which pressure changes by a factor of 2.7).

Comets formed in the region of Jupiter's orbit were tossed out into "cold storage" 10,000 to 100,000 A.U. from the sun by a physical process similar to the equipartition of energy in a gas whereby light gas molecules must have high velocity to possess energy equal to that of slow heavy molecules. The small comets were greatly accelerated by the much more massive Jupiter.

Thousands of extinct comets exist in the inner Solar System. Many of these are counted as asteroids. The sunward spike on Comet Arend-Roland consisted of meteoric dust ejected earlier from the comet but still remaining in the plane of the orbit.

--Leith Holloway

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JUNIOR BIOGRAPHIES



Doug Richstone

Doug Richstone was elected Junior Division Secretary-Treasurer in January to fill the unexpired term of Steve Camp who resigned last Fall. Doug is 15 and a sophomore at Wheaton High School. He joined the NCA in September 1960. He is also secretary of the Maryland-DC Region of the NCA Juniors. He built a 4-inch reflecting telescope in 1959 and is now polishing an 8-inch mirror in Hoy Walls' class. He has won several awards in Montgomery County Science fairs. His hobbies include chess, swimming, and sailing -- he also plays the flute.

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GEOFFREY HORNSETH, the PGC coordinator and editor for Project World Night is a new and active member in the NCA. He is currently engaged in PGC's astro-camera and photometer projects. A real TN, he has almost completed a 4" RFT and is working on an 8" Newtonian.

Some of Geoff's other interests are model rocketry, coins, model railroading, and photography. A junior at Crossland High School, he is Vice-President of the Photoclub and a member of the Science Club.



Geoffrey Hornseth