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MD-DC JUNIORS REPORT

The Md.-D.C. Juniors had their 10th Anniversary on October 9. We surprised Mr. Holloway with a short celebration, where we gift-wrapped his hub caps and presented them to him in honor of his ten years as Junior Director. After demonstrating his fine health by blowing out all ten candles on the cake. Mr. Holloway went on to give a talk on computers and their uses, and added a little history.

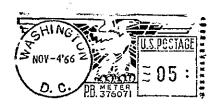
Beforehand, the problem of a membership drive was mentioned but not discussed, so it will be brought up in November, when we will have an important business meeting. All members and prospective members should plan to attend.

After the lecture a committee was appointed to replace Mr. Holloway's hub caps. - Mark S. Goldberg ******

MD-DC Junior Editor

TELESCOPE PROJECTS

In response to many inquiries on Maksutov-Cassegrain telescopes Hoy Walls has written an article describing several types of instruments constructed by NCA members in his classes. It is quite informative and also should be a source of encouragement to those who would like to tackle one of these instruments but are a bit apprehensive, perhaps only because of the name. The article was too long to include in STARDUST and therefore will be issued separately.



Library, Naval Observatory Washington 25, D.C.

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RADIO ASTRONOMY AT THE NAVAL RESEARCH LABORATORY



At the November meeting, Dr. Robert W. Hobbs will present a program describing some of the current research efforts at MRL. Dr. Hobbs is presently the head of the Millimeter Wave Astronomy Section at the Naval Research Laboratory and is engaged in radio-astronomical studies at 9.5 and 4.3 mm. wavelengths.

Dr. Hobbs first joined NRL in Sept. 1964. At that time he pursued studies at 3.6 cm. for which he designed and constructed a low-noise maser radiometer which was used with the 50-foot and 85foot antennas to study cosmic radio sources. Prior to that time, Dr. Hobbs was engaged in 3.75 cm. work as a graduate research assistant at the University of Michigan and as a summer employee at

Dr. Robert W. Hobbs

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the National Radio Astronomy Observatory, Green Bank, West Va. (Continued p.2)

CALENDAR

NOVEMBER 5 RADIO ASTRONOMY AT THE NAVAL RESEARCH LABORATORY by Dr. Robert W. Hobbs in the Department of Interior Auditorium at 8:15 P.M. (The Interior Department is located on D. St. between 18th and 19th Sts.) Business following the lecture.

> DINNER WITH THE SPEAKER at 6:15 P.M. For further information and reservations, please call Mr. Anderson at CL 6-6324.

- 12 MD-DC JUNIORS meet at 2:00 P.M. in the Chevy Chase Library. There will be a discussion of the October 29th Lunar Eclipse and an important business meeting.
- 12 OBSERVING NIGHT at the NCA Five Inch Telescope on the grounds of the U. S. Naval Observatory, with Larry White, from 7:30 to 10:30 P.M.
- 19 DISCUSSION GROUP ON VARIABLE STARS to be led by Mr. Sterling Anderson in Room 2062 of the Commerce Department at 8:15 P.M.
- 4,11,18,25 TELESCOPE MAKING CLASS at the Chevy Chase Community Center with Hoy Walls from 7:30 to 10:00 P.M.
 - 4.18 TELESCOPE MAKING CLASS at McLean H.S., McLean, Virginia. With Grady Whitney at 8:30 P.M. NAVAL OBSED

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Dr. Robert W. Hobbs-cont'd from p. 1.

His doctoral work was a study of 25 cosmic radio sources at 3.75 cm. wavelength employing a travelling-wave-tube radiometer with the 85-foot paraboloidal reflector at the University of Michigan.

Dr. Hobbs received his B.S. in Physics, 1960, from Case Institute of Technology, M.S., Astronomy, 1962, and Ph.D., Astronomy, 1964, from the University of Michigan at Ann Arbor, Michigan. He is a member of several professional societies and is a regular contributor to the scientific literature.

NOVEMBER LECTURE - THE NASA LUNAR ORBITER PROGRAM

Dr. Martin J. Swetnick, NASA Lunar Orbiter Program Scientist, presented a comprehensive and very exciting report on the history, objectives, and development of the Lunar Orbiter program and an up-to-date commentary on the results of the recent first mission, as inferred from preliminary post-flight analyses of a few of the many photographs transmitted by this artifical satellite of the moon. Dr. Swetnick showed slides and a film outlining the broad objectives of the program and describing how many of the complex scientific and engineering challenges were met to bring this first mission to a highly successful conclusion. He described how the photographs made during the overflights of the Surveyor I landing site complemented the T.V. coverage of the Surveyor spacecraft and how they will enable scientists to obtain a very fine description of the lunar topology in that region. The talk was climaxed by the showing of several large reproductions of photographs taken by the onboard cameras. The resolution and clarity of these photographs cannot be described. They must be seen. Outstanding among this set of photos was one of a region of the "dark" side which showed a new type of topographical feature and-the first photo of the earth's disc (at about quarter phase) with the lunar surface in the foreground. We look forward to the success of subsequent Lunar Orbiters and the return of Dr. Swetnick to report on them.

LEONID METEOR SHOWER

The first major Leonid shower since 1932 may occur this month. The date and time of Maximumrate (The Observers Handbook) is the lóth of November at 20h E.S.T. Leo rises about midnight on the lóth. The moon is at first quarter and sets at 20h 09m. Members may be interested in an article on the Leonids in the November 1966 issue of NATURAL HISTORY magazine.

NEW MEMBERS

New applications for membership --- all Junior

Jeremiah M. Kelleher 1124 Quebec St. Silver Spring, Md. 20903

Edward Kerns 12502 Eastbourne Dr. Silver Spring, Md. 20904 Mary Ann Moffett 9506 Monroe St. Silver Spring, Md. 20910

Patricia Puopolo 9309 Glenville Rd. Silver Spring, Md. 20901

Mark Mills 4318 39th St. N. Arlington, Virginia 22207

OUR NEW TREASURER



Mr. Robert Bolster

assists at the NCA park programs. Although astronomy is his principal hobby, Mr. Bolster is also an expert in target pistol competition and a life member of the NRA.

THE NEW VICE-PRESIDENT

STERLING R. ANDERSON (A !41-M '55) was born in Toledo, Ohio, on December 6, 1916. He received the B.S. degree in electrical engineering and the B.S. degree in engineering mathematics from the Univ. of Michigar, Ann Arbor, in 1940. From 1940 to 1942 he was employed by the Consulting Radio Engineer, Paul F. Godley, Upper Montclair, N.J., where he designed and adjusted directive antenna arrays for broadcasting stations. Serving as Chief of the Transmitter and Antenna Branch of the U.S. Civil Aeronautics Administration Technical Development Center, Indianapolis, Ind. from 1942-1959, he worked on antennas and associated equipment for air navigation radio aids. In January, 1960, he assumed his present position as Chief of the Continuous Wave Navigation Section in the Navigation Development Division, FAA, Washington, D. C. He helped develop the VHF Cunirange, the Doppler Omnirange, and a Loran (A&C) signal stimulator.

Betty Marie, his wife, and he have two boys, Sterling Paul and Robert Michael, ages 22 years and 19 years, respectively.

JUNIOR DIVISION NEWS

At the special meeting of the Junior Division held just prior to the October lecture, we discussed how we might encourage the interest in the Junior Division. We decided to set up a tri-regional committee to try to solve this problem. It was suggested that information concerning the Junior Division be sent to all area high schools along with a copy of "Project World Night."

Mr. Holloway is reorganizing the "Special Phenomenon Alerting Network." Interested persons should contact Mr. Holloway.

Reminder: All Juniors are urged to write a paper for the convention. Remember this is your chance to show the entire nation what the NCA Junior can do. So come on y'all -let's get to work.

All Juniors are urged to come to Junior Division meetings and to participate in the activities of their region. If you are a junior member and do not know which region you should be in or where and when your region meets, contact Mr. Holloway, Director of the Junior Division, at 362-1961.

- Sheila Buck, Sec .- Treas.

Robert Bolster is the new treasurer

of the NCA. After receiving a BS Degree in chemistry at the University of Va.

and serving with the Navy for three

years, he joined the Naval Research

Laboratory in 1951. He is a research

and a Lieutenant in Naval Reserve Research Co. 5-9. Mr. Bolster occasionally

Schmidt camera, a ć in. Maksutov, and a couple of flats. Currently, he and

Jerry Hudson are working on an astrograph and a microdensitometer for use

in stellar photographic photometry.

Mr. Bolster has participated in most

of the recent grazing lunar occulta-

tion expeditions, and frequently

chemist in the Surface Chemistry Branch,

turns his hand to telescope making, and has made a 6 in. Newtonian, a 5 in.