JUNIOR DIVISION REPORT

The Junior Division held its May meeting on May 1, immediately prior to the lecture. The principal order of business was election of officers. Carol Farlow and John Geweke were elected Secretary-Treasurer and Vice President respectively. Doug Richstone was elected President unanimously. Project World Night was discussed but due to a lack of information it was decided that the project would not be printed for the MERAL Convention this June.

Secy-Treasurer, Junior Division

MD-DC JUNIORS

Mr. Carroll Lidback of the Naval Observatory spoke to the MD-DC Juniors on time at their May meeting. Emphasizing the differences among Universal ephemera, and atomic times, Mr. Lidback described how each is determined, and their relative accuracies. The tape of his talk, and all our others, is available on request from Mr. Holloway.

The June meeting will be a discussion of the future plans of the club. All members planning to be active next year should attend. Elections will also be held.

Because of the popularity of the location the MD-DC Juniors have renewed their reservation of the large meeting room of the Silver Spring Library for the 1965-1966 lecture season.

In a surprise move, MD-DC, has reelected Norm Spelling as co-ordinator and president.

Norman Spelling
MD-DC Junior Editor

THE ATMOSPHERE OF MARS

The final NASA lecture for this season will be presented on June 5 by Mrs. Jaylee Burley. She will speak about theoretical investigations of the atmosphere of Mars, which is her principle current work at the Goddard Space Flight Center. Since joining the Goddard staff in 1959 she has analyzed the motion of stars in studies of galactic structure, calibrated the microwave system, done reduction and interpretation of 21-cm radio observations of a nearby galaxy, and made orbit calculations.

Before coming to Goddard Mrs. Burley was an engineering assistant at the Knolls Atomic Power Laboratory, taught mathematics and general science at Van Arsdell School in Schenectady, New York, was an instructor in mathematics at the New York State University, currently is an instructor in mathematics at the University of North Carolina, and worked as a mathematician in the Operations Research Office at John Hopkins University. Mrs. Burley graduated magna cum laude from the University of North Carolina, received her MA degree from Stanford University in California, and is currently working on a thesis for her Ph.D. from Georgetown University, Washington, D.C.

CALENDAR

June 5 THE ATMOSPHERE OF MARS by Mrs. Jaylee Burley in the Dept. of Commerce Auditorium, 8:15 P.M. Business meeting follows.
5 JUNIOR DIVISION SPECIAL MEETING, at 7:00 P.M., in room 2002 of the Department of Commerce, installation of officers.
12 MD-DC JUNIORS MEETING at 7:00 P.M., in the Silver Spring Library.
13 EXPLORING THE SKY — a special program of viewing and photographing the lunar eclipse at Fort Reno Park at 9:00 P.M.
18 JUNIOR DIVISION OBSERVING at Bob Wright's home at 202 Piping Rock Road, Silver Spring, Maryland; at 8:00 P.M. Call Doug Richstone (916-3706) for information.
25 OBSERVING AT THE FIVE INCH on the grounds of the U. S. Naval Observatory with Larry White from 9:00 to 11:00 P.M.
1,11,18 TELESCOPE MAKING CLASS at the Chevy Chase Community Center with Hoy Walls from 7:30 to 10:00 P.M.
ADVANCED TELESCOPE MAKING CLASS at the Chevy Chase Community Center with Hoy Walls will continue for the present from 7:30 to 10:00 P.M.
July 3 EXPLORING THE SKY at Fort Reno Park at 9:00 P.M. for additional information call Robert McCracken.
NEW MEMBERS

The following applications for membership were received at the May 1, 1965
meeting:

REGULAR: Charles Keenan
6005 7th Place
Cabin John, Maryland 20034

JUNIOR: Samuel J. Macassee
426 Ingraham St. W. W.
Washington, D.C. 20011

Sarah Lichtenemagers
7510 Gateway Blvd.
District Heights, Md.

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NEW OFFICERS

At the May meeting the following new officers were elected for the coming
year and will take office July 1:

President —- Mrs. Margaret K. Noble

Vice President —- Mrs. Henriick Hudson

Secretary —- Mrs. Gertrude Dollar

Treasurer —- Mr. Frederick Cornelius

Trustee —- Mr. Roy Wills

With such an excellent group of officers we can look forward to another
interesting and successful year for NOA.

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SCIENCE FAIR WINNERS

National Capital Astronomers has the pleasure to announce the names of
the students receiving recognition from NOA for outstanding projects in
astronomy.

These projects were chosen from both the junior and senior divisions of
the Washington Area Science Fairs.

Fairfax-Prince WILLIAM AREA

Junior Award —- William H. Burden Jr. —- Edgar Allen Lee Intermediate
School, Annandale, Virginia

Senior Award —- William P. Pala, Jr. —- George G. Marshall High School
Falls Church, Virginia

Alexandria-ARLINGTON-Falls Church Area

Junior Award —- Edison Engle —- Kaespere Jr. High School
Arlington, Virginia

Senior Award —- Commendations

John G. Eweske —- Yorktown High School —- N. Virginia, Virginia
Eleanor Ketter —- " " " " " 

These two winners both received an award in 1964 from NOA.

Prince Georges-CHARLES-CALVERT - St. Mary's Counties

Junior Award —- Samuel F. Trexler —- John Hanson Jr. High School

Senior Award —- James Williams —- Hyken High School

Montgomery County - Senior Division

Senior Award —- Lawrence E. Trom —- Our Lady of Good Counsel
High School, Wheaton, Md.

District of Columbia Area

Senior Award —- Alan E. Robertson —- Wilson High School, Wash., D.C.

The Junior Division winner of Montgomery County Fair will be announced at
a later date.

I wish to express my appreciation and thanks to the judges for their
cooperation and help.

Mr. Benjamin Adelman
Mrs. Mary Pala
Mrs. John Stokarik

Eleanor T. Smith

Award Chairman

MAY LECTURE—OPERATION MOON BLINK

Near midnight on the night of October 26-27, 1965, Eyle Johnson, an NOA mem-
ber for many years, saw a blinding patch of light near the base of the central
peak of the lunar crater Alphonsus while observing the screen of an image tube
attached to his 16-inch reflector at Fort Perico, Maryland. When the image-
tube apparatus was removed, a red spot was seen visually in this region of
the moon’s surface. This was the first successful observation of lunar volcanic
activity at Iyle’s observatory since it had been converted to a prototype of
what has now grown to six such stations around the country capable of detec-
ting hot spots on the moon. The other five so-called “Moon Blink” stations are
in Huntsville, Ala., Santa Monica, Calif., Kansas City, Mo., Tuscan, Ariz.,
and James, Col.

Our May speaker, Prof. John O. Gilkey, of the U. S. Naval Academy explains
how the moon-blink system works. A blue and red color wheel is slowly rotated
between the eyepiece and the photo-sensitive plate of the image tube. The re-
sulting image on the phosphorescent screen at the other end of the tube is
intensified and, of course, converted to black and white to remove the dis-
traction caused by periodic changes in color. The apparatus is adjusted so
that neutral colors appear the same on the output screen no matter which color
filter is in the optical train of the telescope. However, a red spot will
appear bright when the red filter rotated into the field with the blue filter.
Thus the turning two-color filter causes red spots to blink on the
image tube. Once discovered the spot can be observed directly in white light
and its spectrum can be taken to reveal any emission lines. A hot-line net-
work is being set up in the East to alert other observatories when a red spot is
detected at a Moon Blink station.

The landing site of Ranger 9 in the crater Alphonsus was selected because of
the October observation. We are very proud of his contribution to lunar
research.

Leith Holleyway

VIRGINIA JUNIORS WIN AWARDS

Four Virginia Juniors have been quite successful in astronomical ventures
recently. Jo Geweekt, vice-president and vice-president-elect of the Junior Divi-
sion, won first place and five special awards, including the N.C.A. award
and first alternate for the Navy cruise, at the Northern Virginia Science Fair.
In addition, John was a grand prize winner which allowed him to compete in
the National Science Fair International at St. Louis, Mo., May 2-8, where
he won fourth place in Earth and Astronomical Sciences.

Eillian Mather won first place and seven special awards, including the N.C.A.
award, at the Northern Virginia Science Fair. Eillian won an honorable mention
at the Virginia Junior Academy of Sciences competition in Richmond, Va., May 5-
7. She was also elected Secretary of the Virginia Junior Academy of Sciences,
the statewide organization of science clubs.

Travis Taylor, president of the Junior Division in 1965-66, was a winner in the
Virginia Science Talent Search and was one of three hundred students
chosen nationally for the Honors Group of the Washington Science Talent
Search. In addition, Travis was chosen recently as one of forty outstanding
seniors in the field of science in the metropolitan area by the Washington
Academy of Sciences.

Carol Parlow, secretary-treasurer-elect of the N.C.A. Junior Division, won
first place and a special award in the Northern Virginia Science Fair. She
received a third place award at the Virginia Junior Academy of Sciences
competition in Richmond, Virginia.