

## JUNIOR DIVISION NEWS

On Saturday evening, April 11, the second general convention of National Capital Junior Astronomers will be held in the foyer of the Commerce Building, 8 o'clock. The main object of the meeting is to nominate officers for the year 1959-60. Candidates will be chosen for the leadership of the whole Junior Division, as well as each of the two regions--Maryland-D.C. and Virginia. The elections will be held in late May or early June at which time the Junior Division will choose among the candidates nominated in April. This April convention is, of course, of the utmost importance to all Juniors really interested in the future of our recently reorganized and active Junior Division. In addition to the nominations, the present provisional officers and project leaders will present their bi-monthly reports and major plans for 1959. The provisional officers have announced their hope that the whole Junior Division--Virginia and Maryland-D.C. regions--will attend.

**Maryland-D.C. Region:** This region has been continuing work on the Mars and Venus drawing projects. On the weekend of February 20-21, the juniors met at the NCA 5-inch and observed and drew markings on the cloud surface of Venus. These drawings may be seen by inquiring through Michael Mattingly or Samuel Friedman.

**Virginia Region:** The newly organized Virginia Region held its fourth meeting in the current series on Friday, March 6. In the words of the provisional chairman, Barry Sperling, "We observed Sputnik III. Mr. Dellar was looking for it and couldn't find it; we weren't looking for it, but did." Observations and drawings of the lunar crater Alphonsus were to have been discussed at the last meeting. New members in Virginia are invited to call Barry Sperling, JE 2-1678, and join the group.

**Special note:** The whole NCA, in addition to the Junior Division, owes a debt of thanks to the provisional officers (Robert Milkey, Michael Mattingly, and Samuel Friedman) for their hard work in helping the Virginia Juniors make a start in regaining an active status.

**JUNIOR JUNIOR-ASTRONOMERS ORGANIZE.** About fifty fourth-to-sixth-graders ages 9 or so to 12, call themselves the "University Park Elementary School Astronomy Club" and meet twice a month in University Park, Maryland. Some of the parents tag along plus a few others who have no descendants in the Club.

In the first four meetings, they organized, held an observation, heard Ben Adelman talk about the stars, and had a question and answer session about planets conducted by their leader, Mrs. Nancy Biess, NCA. For further information call her at TO 9-6569.

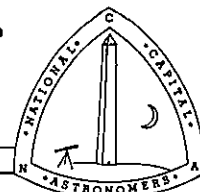
**ANOTHER GROUP IN VIRGINIA** has been revitalized. David Russell, 1558 North 17th Street, Arlington, rounded up his friends for informal evenings of astronomy in February and March with Mr. and Mrs. Everette Neville as leaders. The next monthly gathering will be April 29 at 7:30.

Editor: Mabel Sterns, 1833 New Hampshire Ave. N.W. Washington 9 DC  
Production: LtCol Russell C. White USMC, and Sam C. Feild, Jr.

## ★ STAR DUST

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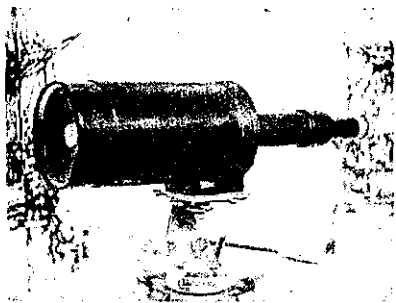
## APRIL ACTIVITIES

- 1, 8, 15, 22, 29 TELESCOPE MAKING, 7-9:30 p.m., Materials Center 4800 Webster St., Eladensburg, Md. Class formerly restricted to school students, now can admit a few outsiders. Bill Isherwood in charge.
- 3, 17 VIRGINIA JUNIORS, 8 p.m., 1003 Birch Street, Falls Church. Merits of refractors and reflectors to be compared April 3. Barry Sperling, JE 2-1678.
- 4 ASTRONOMICAL MOTION PICTURES, 8:15 p.m., Department of Commerce Auditorium.
- 6, 13, 20, 27 TELESCOPE MAKING, 7:30-10 p.m., Chevy Chase Community Center, Connecticut Ave. and McKinley Street, carpenter shop in basement. Hoy Walls and assistant instructors.
- 11 ALL NCA JUNIORS, 8 p.m. Commerce Department foyer. See page 4. Leith Holloway, Advisor.
- 18 DISCUSSION GROUP, 8 p.m. Commerce Department foyer. "Color: Objective and Subjective," led by Everette Neville.
- 25 OBSERVATION at the 5-inch, 8 p.m. Dimmer objects should be visible while moon is dark. Bill Isherwood, chief observer.

**DR. HARLOW SHAPLEY** drew a record attendance in March for the season so far. An audience of at least 400 persons, with a generous proportion of school children, listened to his rapid-fire discussion of developments in astronomy during the first half of this century. Dr. and Mrs. Shapley joined some of the NCA's at an informal dinner at the Occidental Restaurant, and made the traditional jaunt to the Hot Shoppe following the business meeting.

**MORTON SCHIFF** suffered severe injuries the night of February 20 while he was walking on the sidewalk along 16th Street. A car jumped the curb, ran down the sidewalk, passed two parked cars, and struck Schiff. The driver claimed he had a coughing spell. Mortie regained consciousness at Washington Hospital Center where he is recovering from a cracked hip, fracture of the skull, and internal injuries. Jack Leonard, our informant, reports that in spite of his calamity the victim is enjoying a voracious appetite.

**DAVID ROTBART BUILDS PROTOTYPE MODEL** of a "telefold lens" or catadioptric telescope for Atlantic Research Corporation. The distinguishing feature of a Maksutov-type scope, as it is called sometimes, is the long focal length in a short, light-weight package. Rotbart's instrument is 3.85 inches in diameter, 8 in. long, has effective focal length of 50 inches, weighs 2.5 pounds, and covers a field of .75 degrees at 75 X.



The lens-mirror system consists of a primary mirror 3.8 in. in diameter corrected to 1/64 wave length, and operates at F.2. The secondary mirror is supported by the correcting lens. The telescope is free of color aberration, has no astigmatism or coma, and will resolve detail to less than 1 second of arc. The instrument may be used as a telephoto lens also, and it has been adapted to television camera use.

Precise machining of the metal components within a tolerance of .0002 was executed by R. M. McLellan, one of the first telescope instructors of NCA.

#### NEW MEMBERS

David Emerson, HQ Co. U.S. Army, Ft. Myer (So. Area), Arlington 8 Virginia JA 8-9343  
 Donald J. Mary, 3801 Connecticut Ave. N.W., Apt. 239 EM 2-8000  
 Armand N. Spitz, Yorklyn, Delaware CE 9-7325

#### Juniors

Frank Feighery, Box 240, Route 1, Vienna, Va. PL 9-2796  
 Roger Gilkerson, Route 2, Herndon, Virginia PL 9-2218  
 Virginia Gilmer, 1705 Beverly Ave., McLean, Va. KE 8-5390

MIDDLE EAST REGIONAL CONVENTION will be held Saturday, May 9 at the Dupont Country Club, Wilmington, Delaware; host, Delaware Astronomical Society. Program will start at 9 a.m., star party at night. Registration fee is \$1. More details about program, accommodations, and transportation should be in our hands in time for the May bulletin. If you have a paper to give, limit it to 10 minutes' delivery time by actual practice, then check with Mr. Emil Volcheck, Jr., 21 Lowry Drive, Wilmington 5, Delaware, for a spot on the program. Notify him also if you have an exhibit. Dana Law of NCA is Regional Chairman.

#### LUNAR OCCULTATIONS FOR APRIL

Date	Star	Mag.	Phase	Age	Time (EST)	Position Angle
15	68 Gem	5.1	D	7.9	7:53.4 PM	137°
16-17	84 B. Cnc	6.4	D	9.0	12:29.0 AM	54°
20	31 B. Vir	6.4	D	12.9	7:16.4 PM	91°
27-28	Rho Sgr.	4.0	D	20.3	3:54.7 AM	122°

A. L. White, Astronomy Editor

TWENTY-TWO NCS'S will serve as judges of astronomical exhibits at science fairs this year. Ben Adelman, Chairman of Education and Schools Advisory Committee of NCA, is the liaison between astronomers and schools. The fairs are worth seeing so mark the one nearest you:

Montgomery County at Beth.-Chevy Chase High School, April 15-18.  
 Prince Georges County at University of Maryland Gym, April 11-12.  
 Arlington-Falls Church at Washington Lee High School, April 4-7.  
 Washington at Georgetown University Gym, April 18-21.

(cont.)

NCA will award junior memberships for one year to senior and junior winners in astronomy, as it did last year.

SIXTEEN POUNDS OF METEORITE fragments from a fall in Kentucky September 20, 1950, have just been acquired by the National Museum. Mr. Hugh Howard, a private collector, spent several months canvassing 60 square miles to recover these extraterrestrial, carbonaceous chondrites. The stone when it fell was visible from St. Louis to Louisville and from Memphis to Knoxville. Its explosion shook buildings from Paducah south as far as Memphis. Museum experts say that this meteorite, known as "Murray," is a rare type.

PROCEEDINGS of the Astronomical League Convention at Ithaca last July have been received and may be borrowed from NCA Secretary, Mrs. Faye Rotbart. Membership of the League last year comprised 110 regular societies, 21 junior societies, 33 members-at-large, 2 affiliate and 15 supporting members. Middle East Region has 13 regular societies and 2 members-at-large.

Orbit computers may find special interest in "The Calculation of the Orbit Satellite 1957," by Jane Shelby. The project, she says, won her \$5,000 and a "year of fascinating bedlam."

For telescope makers:

The Dall Null Test for Paraboloids - John E. Schlauch  
 Flotation for Telescope Mirrors - Joseph Raab  
 The Maksutov Telescope - A. Mackintosh  
 A New Equatorial Mounting for the Small Compound Telescope - D. W. Cogswell

Lunar and planetary observers took part:

Introduction to Selenomorphology - Ernest E. Both  
 Lunar Longitude: Why, What, How, and When - Walter H Haas  
 Drawing the Moon and Planets - William K. Hartmann  
 ALPO Comets Section - David D. Meisel  
 Report of the ALPO Mercury Section - Owen C. Ranck  
 Lunar and Planetary Investigations with Very Small Apertures - Tim Wyngaard

The juniors are represented by six papers including the one above by Tim Wyngaard. "Color Photography of Aurora" by Gould and Shurr, although less than a page in length, sparks ideas of what might be done with astronomical color photography.

PROPERTIES OF COLOR and colored objects in astronomy will be discussed on April 18th and explained with the aid of accessories to spectroscopy, such as gratings, prisms, and filters. Why we see color in stars, planets, nebulae, the corona, and the moon should arouse a stimulating discussion. Philosophical and psychological aspects of color may be resolved into our personal reactions to various wave lengths of light.

PARTICLES. Bob Wright needs more people on his team for the beta search in April. Call him at EV 4-6748....New Member Armand Spitz is the author of a new book, "Dictionary of Astronomy and Astronautics," a handy cyclopedic reference easy to read.