TWO BUSES TO PHILADELPHIA — MAKE YOUR RESERVATION NOW!

We are ready!

The second bus is filling fast, so please help by phoning Ted Noble at 152-6212 and confirming your intention to go with the group. For $7.50 you will enjoy a usual trip to Philadelphia via Edmund Scientific Co., at Barrington, N.J. and have your entrance fee paid into the Franklin Inst., Fels Planetarium, plus games and fun on the bus.

Of course, you have already been to Phila, but everybody enjoys an NCA trip in the spring. Come along with us — April 30 — support the Junior effort. The bus will leave the Commerce Department at 9:00 A.M. and return between 9:00 and 9:30 P.M. to the same place.

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MARION ROBSON and ERNEST ROBSON

At the April meeting, we will be visited by two fellow amateur astronomers, Mr. and Mrs. Ernest Robson. The Robsons are members of the Lehigh Valley Amateur Astronomy Society and will present a paper on "Composite eye piece images of globular clusters." The Robsons became interested in the globular clusters, first because of their spectacular images, and later because of the significance of their information when observed and recorded by self-corrective perceptual methods. — Continued p. 2

CALENDAR

APRIL

2 COMPOSITE EYE PIECE IMAGES OF GLOBULAR CLUSTERS by Ernest and Marion Robson at 8:15 P.M. in the Interior Department Auditorium. Business meeting follows.

9 MD-DC JUNIORS meeting at 2:00 P.M. in the Chevy Chase Library, 8005 Conn. Ave., Chevy Chase, Maryland. Program to be announced.

16 HOBBY SHOW at the Commerce Department on Fourteenth St., between Pennsylvania Ave. and Constitution Ave., from noon until 10:00 P.M. Come anytime, browsing and discussions going on all day. For further information, see Page 2.

22 GROUP OBSERVING AT THE FIVE INCH on the grounds of the U.S. Naval Observatory 8:00 P.M. with Larry White.

30 BUS TRIP TO PHILADELPHIA to visit the Franklin Inst. and the Fels Planetarium. For details see Page 4.

1,15,29 TELESCOPE MAKING CLASS at McLean High School, McLean, Va. with Grady Whitney at 8:30 P.M.

5,15,26 TELESCOPE MAKING CLASS at the Chevy Chase Community Center from 7:30 to 10:00 P.M. with Hoy Walls

1,8,15,22,29 ADVANCED TELESCOPE MAKING CLASS at the Chevy Chase Community Center from 7:30 to 10:00 P.M. with Hoy Walls.
Marion Reben and Ernest Reben—Cont'd. From Page 1—Ernest Reben's professional work has been in the field of detergent chemistry, and his interests have been in the acoustic patterns of poetry and observational amateur astronomy. An AB degree graduate from Amherst College 1924, he was a student of Robert Frost. As a detergent chemist, Reben was technical director of the New York Procter & Gamble Cleaning Association 1955. His chemical background included graduation from Pratt Institute School with supplementary work at New York University and The City College of New York. He has delivered papers on the globular clusters to the Lehigh Valley Amateur Astronomy Society, The Symposium of Amateur Astronomers of New Jersey and Eastern Pennsylvania, and to the Lebanon Pennsylvania Amateur Astronomy Society. His language publications include, "The Orchestras of the Languages" and poems in "The Wind Listens" an anthology of poetry; and technical papers to the Speech Association of America.

Marion Reben taught in the New York City School system and participated in the experimental work for the revision of the arithmetic curriculum. Her other interests have been the graphic arts and the graphic representations of astronomy. She drew the composite images for the globular cluster project. ***

NEW MEMBERS FOR NCA
The following persons have applied for junior membership in NCA; if you have any comments about these people please phone an NCA officer or Trustee:

Paul M. Powell, III
3123 1st Avenue
North Potomacville, Maryland

Peter M. Lawrentz
1315 Magowan Circle
McLean, Virginia

Hobby Show —— ——— APRIL 15

— Notes from Margaret Noble —
Are you ready? Don't delay another day. Get your favorite astronomical gadget ready to bring to the NCA Hobby Show at the S. S. Commerce Dept. These exhibits will be set-up at Noon, so please bring them around in the day and enjoy the show afternoon and discussing "Things Astronomical.

Look in March STAR BUST and contribute some information that is needed as was indicated on the comprehensive list. Mabel Sterns is compiling an exhibit that shows what is being done in Astronomy in the Washington, D. C. area. Let Mabel know what you have found as every bit of information will help to make this exhibit worthwhile.

NCA would like to hear from the nearby astronomical societies concerning some exhibits that are astronomical that they would like to see on the program. We would enjoy having NERL Societies participating. Let's make this HOBBY SHOW a memorable one. Mark your calendar Saturday, April 16,1966 at the Commerce Dept. at 5th Street, between Pennsylvania Ave. & 7th St., S. E. Come in the 7th Street entrance. ***

— Notes from Mabel Sterns —
This thing of finding out what's going on in astronomy around Washington could be the start of a long-range program. We have received material from the Predictions Section of the Coast and Geodetic Survey, Carnegie Inst., Nature Center in Rock Creek Park, and Dr. O'Keefe at Goddard Space Flight Center. More and more names of astronomy sources come up when it is apparent that we won't be able to represent them all at the hobby show unless we're put in phone calls and get the facts where, when, and how.

Mrs. Noble, President of NCA, has suggested that if the display is worthwhile, we take it to Harrisburg for the regional convention in June. Letting still further ahead, why not keep it current and growing? Even amateur astronomers should know what's going on around them in a city like ours.

Notes from Mabel Sterns — Continued
As a few suggestions to work on, what connection is there between the National Geographic Society and an amateur astronomy? (It's an important one and we have no material on it.) The National Museum has some good astronomical exhibits which could be listed, at least, for the show. We also need something from the Army Map Service.

We doubt you have some other ideas. Bring whatever you can (in addition to your own display, of course) to the hobby show. Any questions? Call: 285-5219 — Mabel Sterns.

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March Lecture — The Lunar Surface
Man will bring a piece of the lunar surface back to earth sometime around 1970, but our March speaker, Dr. John O'Keefe of the Goddard Space Flight Center says that we already have many samples of the moon's surface; namely, tektites. However, only about half of the authorities believes tektites have a lunar origin. The opposition headed by Brey think they are terrestrial.

There are three mutually exclusive theories on the origin of the lunar seas. One says that they are the product of erosion from the highlands, but without water on the moon it is difficult to visualize how this is possible. Kupper thinks the seas are flows of black lava. Finally O'Keefe believes them to be deposits of volcanic ash.

According to O'Keefe, meteorite striking the moon knock fragments off the lunar surface, and about half of these eventually reach the earth as tektites. Particles of meteoric iron in tektites prove to O'Keefe that they are extraterrestrial. However, they probably did not come from the asteroid belt but was from one of the two groups containing aluminum 26, a radioactive substance found in regular meteorites. Furthermore, Australian tektites have unmistakable markings showing that they passed through the earth's atmosphere at hyper-supersonic speeds subjected to ablation of 30 to 60 percent of their mass. They may have come from the moon for they could not have been that much ablated by burning from one part of the earth to another.

Tektites appear black, but on a thin edge they may show a green, brown or orange color. Chemically, tektites differ from terrestrial glass by having low water and salt content. They contain a high pressure form of silica which would be completely destroyed by the amount of heating required to convert sedimentary rock an earth to glass. Therefore, tektites must have been glass before impact with the earth. O'Keefe believes that the lunar seas are ash flows of baked glass (welded bits of glass) and that tektites are samples of this material.

— Leith Holloway

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George Borisen — Charter NCA Member
Mr. George Borisen passed away suddenly on February 22, 1966. The Officers and Members of the National Capital Astronomers wish to express their deepest sympathy to the family and friends of a fine gentleman. Mr. Borisen was an excellent lens maker and tool maker. Even in his last days, he spent time grinding an optical flat. His intense interest in astronomy helped to fill his life that was so affected by his loss of hearing. Many NCA members will miss this dedicated man.