

MD - DC JUNIORS

The month of December provides some of the best nebular observing of the entire year. The clear, transparent skies accompanying cold polar air favor the observations of the sky's most spectacular galaxies, which are now visible. Perhaps the first thing to look at is the great Andromeda nebula, M31. Walter Scott Houston notes that "Visually, it appears less than two degrees in length; but R. Jenckheere, with two-inch binoculars, finds it extends 5° 10'." M33 is next on the list. Its large angular size (it is over 30' of arc across) makes imperative the use of low powers. Last but not least comes the Great Nebula in Orion, M42. "Even the smallest telescopes show this to be a remarkable object its grandeur may keep you half the evening," writes Houston. "An impressive view with your lowest-power eyepiece can be obtained by first pointing the telescope a degree or two west of the bright center of the nebula. Then, with the instrument left stationary, watch the greenish nebulosity drift across the field. This procedure also helps while tracing faint outlying portions of M42."

The Maryland Juniors have a membership problem; we are not coming to the monthly meetings in large enough numbers. It should be realized that much time and effort is put into the monthly lectures, which are invariably challenging and stimulating, and that this is the only time that the following month can be planned to the satisfaction of all. Football games and extra-curricular activities notwithstanding, it is imperative that these sessions be well attended. The time and place can be arranged to accommodate everyone; perhaps Saturday afternoon is a bad time. Transportation can be arranged with either me or Leith Holloway. Please take notice and mark these dates on your calendar; this junior organization simply cannot function without the continued support of its members at the monthly meetings.

Chris Walker, MD - DC Junior Editor

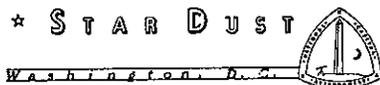
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A member's car parked in the south court for the November lecture meeting was broken into and some items stolen.

Bladensburg, Maryland \*\*\*\*\* Bill Isherwood, Inst.

The Bladensburg class for Prince Georges County School children has not yet started but will be underway soon. Facilities are available for twelve persons and a full class is expected.

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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, James J. Krebs, LU 2-1247; Vice President, Adm. Alvin I. Malstrom, Ret.; Secretary, Mrs. John Stolarik; Treasurer, Duane A. Baugher.

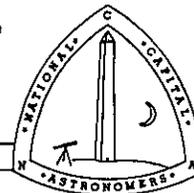
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# ★ STAR DUST



December 1961

Vol. XIX, No. 4

## THE MOST INTERESTING STAR

The December lecture will be given by James S. Pickering, Assistant Astronomer and Supervisor of Guest Relations at the American Museum - Hayden Planetarium in New York City.

Mr. Pickering will discuss the sun as our sample star, for it is the only star whose surface we can see in detail. Fortunately it is also one of the most common types of stars. By all systems of measurement and classification the sun represents the average of all the stars we know. The processes that give light and energy to the sun have become the most important processes for good or evil, of which the world now knows. Mr. Pickering will discuss these processes, the physical properties of the sun, the various forms of activity that are taking place on and in it, how we gained our present knowledge, how we discovered the possible evolution, and the extreme importance of solar energy to our lives.

Mr. Pickering is one of the most widely recognized interpreters of astronomy in the United States. In addition to his lectures at the American Museum - Hayden Planetarium, he has conducted many radio and television programs, including the award-winning, popular series "Astronomy for You" which was produced in 1960. His books: "The Stars are Yours", "One Thousand and One Questions Answered about Astronomy", and "Captives of the Sun" have had wide circulation throughout the world. He is the editor of the astronomical section of the World Almanac.

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### CALENDAR FOR DECEMBER

- 2 THE MOST INTERESTING STAR by James S. Pickering, Dept. of Commerce Auditorium, 8:15 P.M. Business Meeting follows.
- 5,12 TELESCOPE MAKING CLASS at the Chevy Chase Community Center, 5601 Conn. Ave., N. W., 7:00 to 10:00 P.M. with Hoy Walls
- 9 MD--DC JUNIORS MEETING at the Chevy Chase Community Center, 5601 Conn. Ave. N.W., 2:00 P.M. Lwith Howwoway will lecture on "Celestial Mechanics." For additional information phone Leith at 581-7870.

NO DISCUSSION GROUP in December because of the Holidays.

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NCA REGRETS THE PASSING OF DR. PAUL HEYL, HONORARY LIFE MEMBER.

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## OBSERVING AT THE FIVE-INCH

Friday evening, Nov. 10, found six NCA members including two juniors and observing chairman, Larry White at the NCA five inch hut on the Naval Observatory grounds. The evening was clear but chilly. Messier objects were the target for the evening and with several atlases as well as TIPS in hand we easily found the Dumb-bell nebula M27 with its characteristic shape faintly visible. M71 showed up as a slight smudge but M39 and M29 presented fine open clusters in Cygnus. The last mentioned cluster somewhat resembled the lighted vertices of a cube.

Since the asteroids Vesta and Ceres were nearing opposition they were also sought out. Both asteroids were between 7th and 8th magnitude and were located in Taurus. Due to the small angular distance between Ceres and a fainter star it was possible to detect the motion of this minor planet during an observation period of less than an hour.

The five inch refractor is open for use by any qualified NCA member. This instrument and the many homemade reflectors in the area provide the means for a much more active observing program than has been evident in the recent past. Anyone interested in forming an M-CLUB for observing Messier objects can contact me at LU 2-1247.

\*\*\*\*\* Jim Krebs \*\*\*\*\*

As evidence by the many inquiries at the Oct. business meeting, the dingbats separating major subjects in the Oct. 1961 issue of STARDUST stirred the curiosity of the NCA membership as anticipated. For those who were not present at that meeting, these beautifully flowing inscriptions are quotations in the native tongue of modern Iran (Farsi) and were contributed by our fellow member Ellis Marshall, by avocation a student of the antiquities as well as of astronomy.

Farsi (or Pharsi) derives from "Fars"--an Iranian province--which is also the root, through the Greek, of the Anglicized name for Iran, i.e. Persia. Mr. Marshall provides the following free translations and commentary for the subject quotations from the region of the ancient birthplace of astronomy.

1. Motto of the Ministry of Education of Iran, "Knowledge is Power." Attributed originally to Firdause, author of the Shah-nameh, longest epic poem of the world.
2. "A problem solved becomes easy". Anonymous; from a collection of Persian Proverbs by Saleiman Haim, Teheran 1956.

3. The opening lines of one of the most famous poems of Khwajeh Shams ud-Din Muhammad Hafez Shirazi, better known as Hafez. It has been translated by the well known orientalist Dr. A. J. Arberry as follows:

"Sweet maid, if thou would'st charm my sight,  
And bid these arms thy neck infold;  
That rosy cheek, that lily hand,  
Would give thy poet more delight,  
Than all Bocara's vaunted gold,  
Than all the gems of Samarcand.

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## TELESCOPE MAKING NEWS

The following persons are build telescopes in NCA Telescope Making Classes.

Chevy Chase Recreation Center Hoy Walls, Instructor.

John Scarlis	6"	Newtonian	Joan Dunn	6"	Newtonian
Murray Stein	6"	"	Mike Mahoney	6"	"
William Soper	6"	"	Lloyd Embry	4 $\frac{1}{2}$ "	"
Johnny Reed	6"	"	Eli Mantel	4 $\frac{1}{2}$ "	"
Colin Rae	6"	"	Moe Saleh	8"	"
Bob Houston	6"	"	Thomas Watson	6"	"
Chris Kawakame	4 $\frac{1}{2}$ "	"	Chas. Sanger	6"	"
Richard Stanger	4 $\frac{1}{2}$ "	"	Eugene Davis	4 $\frac{1}{2}$ "	"
Hertzal Brown	4 $\frac{1}{2}$ "	"	Larry Shotland	6"	"
Tommy Lindquist	4 $\frac{1}{2}$ "	"	Michael Shotland	4 $\frac{1}{2}$ "	"
Ernest Goodwin	8"	Cassegrainian			

Fairfax, Virginia High School Grady Whitney, Instructor

Paisley Rockwell	6"	Newtonian	Bill Ristow	6"	Newtonian
Gary Minor	6"	"	Andy Oliver	6"	"
Philip Hodge	6"	"	Guy Blair	6"	"
Fred Boland	6"	"			
Edward Lusby	10"	Cassegrainian			
L. K. MacMillan	6"	Newtonian	Richard Field		
Gary Cohen and Dave McLean	12"	Newtonian	Richard Field		
Chris Harvel	10"	Newtonian	for McLean High School Astronomy Club		

The McLean High School Astronomy Club has been planning for several years to build an Observatory and permission has been obtained from the school officials to erect a small structure, on school property. Over \$500 has been raised by the club in various ways and the telescope is well under way. The 10" mirror has been ground and polished and is now being figured. This club has been quite active and is to be congratulated on the excellent progress it has made.

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TELESCOPE for SALE

This is an unusual telescope: a 12 $\frac{1}{2}$ " Cassegrainian with a F/2 perforated primary. Effective focal length is 66". Included with the telescope are; a Fecker 16mm orthoscopic eyepiece, a Goodwin barlow, a camera attachment that will take 2 $\frac{1}{4}$ " X 3 $\frac{1}{4}$ " cut film or plates (two holders included), and a finder with a 1 $\frac{3}{8}$ " aperture objective. The stand is an undriven, equatorial, and quite heavy. The whole works is in a sliding roof observatory. Price: \$300 for the telescope and associated equipment; \$350 for telescope and equatorial mount. (For the \$350 the buyer is also entitled to the observatory, but he must help me disassemble it.)

Harold R. Wilkinson, WH 2-2971