

## JUNIOR DIVISION

The Junior Division, in addition to the two-year correspondence with the Junior Astronomical Society of Great Britain, is embarking on several new projects. Through the World Night Program of last summer, the group has been in frequent contact with a Seattle, Washington group. In response to a request which was printed on page 29 of the November issue of SKY AND TELESCOPE, for country-wide assistance on the Mars Project, the group has received replies from Philadelphia and Milwaukee.

In foreign correspondence, perhaps the most exciting development is an exchange made by the NCA Junior Division and the Young Astronomy Society affiliated with the Moscow Planetarium. This was initiated by the director of the Junior group, Mr. Leith Holloway, who wrote to this group and received a reply from Mr. Boris Maksimacgeb, Director of the Beginners Circle. Also, a new exchange of letters will be shortly begun with a group in Queensland, Australia.

The purpose of this correspondence is to exchange ideas and viewpoints on many questions, astronomical and otherwise. Through exchanges of this kind, the Junior Division believes it can give others a better understanding of American youth.

Robert Milkey, Chairman of the Junior Division wishes to extend his thanks to everyone who supported the Junior stand on the reform of the NCA Observatory privileges at the November business meeting.

--- Stephen Klinglenofer.

## VIRGINIA JUNIORS

Recently, Fred Sumner, as chairman of the Solar Committee, presented four photographs of the sun to our group. They were taken at the NCA 5-inch telescope with the assistance of a member of the Naval Observatory staff. Swirls, sunspots and lines were distinctly visible in each solar photograph.

Our next meeting will be a joint meeting of the Maryland - D.C. and Virginia groups. We anticipate the presence of a speaker from the Navy Department at this meeting which will be held on December 11 at 8 P.M. at the Westover Baptist Church, 1125 North Patrick Henry Drive, Arlington, Va. in room 234. For further directions call Barry Sperling, JE 2-1678. We invite all juniors in Virginia and elsewhere who are interested in astronomy, to attend our meetings.

--- June LoGuirato.

## \* STAR DUST



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## DR. CHARLOTTE SITTERLY TO ADDRESS NCA



Rocket astronomy has made it possible to study the solar spectrum in a region that is inaccessible to terrestrial observers, namely, the short-wave vacuum ultraviolet region. In the spectral range short of 3000 Å the solar spectrum is masked by a band of ozone in the earth's atmosphere. By means of rocket-borne spectrographs, observations have been made at 200km that open a new vista in astrophysics. The identifications of the ultraviolet solar lines and their importance in determining the abundances of chemical elements in the sun are of very great interest in themselves. More significant, however, is the light they cast on the conditions in the outer envelopes surrounding the sun and other stars, and on the larger problem of the course of evolution of the stars.

Dr. Charlotte Sitterly is an old friend of the NCA and has often spoken for our lecture series in the past. She is best known for her work on the identification of solar lines and the more general topic of elements in the sun. At present she is engaged in the preparation of a current edition of "Solar Spectrum Wavelengths", in collaboration with Professor M. Minnaert at Utrecht, Holland. This will include revised identifications of the lines, together with excitation energies.

At the Bureau of Standards, her most widely-known activity is that on "Atomic Energy Levels". She is now engaged in preparing the fourth and most difficult volume, the one on spectra of the elements known as rare earths. Her undergraduate work was done at Swarthmore, and she obtained her PhD at U. of California.

## DECEMBER DOINGS

- 2,9,16,23,30 - TELESCOPE MAKING CLASS - 7-9:30 PM, Bladensburg Material Center, 4600 Varnum St., for students and teachers of Prince Georges County. Bill Isherwood, Instructor
- 4,11,18 - TELESCOPE MAKING CLASS - 7:30 PM, Fairfax High School, Grady Whitney, Instructor
- 4 - OBSERVING AT THE 5" - 7:30 PM at the Naval Observatory with Larry White. NCA card will admit you.
- 5 - "SOLAR SPECTRUM WAVELENGTHS"- Dr. Charlotte Sitterly. Meeting follows at Dept. of Comm. Aud. 8:15 PM.
- 7,14,21,28 - TELESCOPE MAKING CLASS - 7:30-10PM, Chevy Chase Community Bldg., 5601 Conn. Av. Hoy Walls, Instr.
- 11 - VA-MD-DC JRS JOINT MEETING - Westover Baptist Church, 1125 N. Patrick Henry Dr., Arl., Va. Rm. 234, 8 PM.
- 12 - MD-DC JUNIORS MEETING - 2:30PM Chevy Chase Comm. Bldg., 5601 Conn. Av. Leith Holloway, Director.

WELCOME ----

Members of the NCA will be interested to hear of a new astronomy club formed by the Recreation and Welfare Organization of the NIH. This is a non-profit making group composed of most of the 7500 employees who work there. Many of them are professional scientists and naturally interested in Astronomy. They are hoping eventually to have the patients take part in their activities.

The club is just getting organized with James Monahan as temporary chairman and James Nichols as program chairman. Our own Bob McCracken lent his usual helping hand to this group by way of Robert D. Murrill, an active member and Bob also gave the group their first address, "An Introduction to the Sky".

We are happy to welcome them as "Fellow Amateurs" and wish them success in their venture.

NEW MEMBERS

The following new members were admitted at the November meeting and the NCA is happy to welcome them to our group.

REGULAR

Ermilinda M. Desmond 1607 Burris Rd., Rockville, Md. GA 4-9569  
Joseph M. Sherfey 2017 N. Oakland St., Arl., Va. JA 8-5126

JUNIOR

Tommy Herman 5932 N. Fourth St., Arl., Va. JA 8-9215  
Robert Dunford 311 Van Buren, Falls Church, Va. JE 2-5493

Have you remembered to renew your membership? If not, send your dues to Bill Lipscomb, 906 Waterford Road, Alexandria, Virginia.

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"The most beautiful and most profound emotion we can experience is the sensation of the mystical. It is the power of all true science. He to whom this emotion is a stranger, who can no longer wonder and stand wrapt in awe, is as good as dead. To know that what is impenetrable to us really exists, manifesting itself as the highest wisdom and the most radiant beauty which our dull faculties can comprehend only in their most primitive forms ---- this knowledge, this feeling is at the center of true religiousness."  
----- Albert Einstein

To each of you a very Merry Christmas and a New Year filled with Stardust and Moonglow and clear, clear nights.

OLD BUSINESS

During preparation for last month's STARDUST which was dedicated to the Juniors, I had the opportunity to meet a good cross-section of these young people and frankly, was sincerely impressed by every one of them. The MD. - D.C. group was already known to me and I knew that they were an enthusiastic, responsive group of young diplomats, politicians, philosophers and astronomers. I do want to say, however, that the young people in Virginia were another delight. Going around for months begging for aid from any willing senior member, I had only been vaguely amused by their threats of violence, which Salome Betts kindly appeased. Meeting them, I discovered them to be eager and extremely enthusiastic about astronomy. I do apologize to them for ignoring one of their most vital members. It was purely a matter of geography and a state of complete confusion on my part.

A Junior at Washington-Lee H.S., Fred Sumner joined the NCA in 1957. In 1958, he helped the Va. Jrs. reorganize and became coordinator. While in the fifth grade, his class attended a lecture of the NCA. During the talk, the lecturer showed a color film of the heavens by which he was particularly awed. He has studied astronomy and become more interested ever since. He is now interested in everything --- astronomy, medicine, philosophy, and rocketry. The writing of science-fiction (one story has been accepted) and the playing of space chess are his "most pleasurable pastime passions". He hopes to attend Georgetown U. in two years and obtain his Doctorate in Arts Medicine.



Fred Sumner

PLAIN AND FANCY

In spite of gloomy weather, a most pleasant atmosphere pervaded the Willows Motel on October 24th when about 50-60 NCAers visited the North Museum and Planetarium at Franklin Marshall College in Lancaster, Pa. A very sophisticated Sky Show greeted our members at one of the most delightful small museums in the country. The show itself featured such new devices as rockets leaving Canaveral with man-made satellites even taking their place among their heavenly Brethren. The Hayden, itself, could not have matched such a show. Our hosts, Mr. Cavanagh, Dr. Pierce and their wives were so charming we insisted that they join us as our 14 car caravan maneuvered over 15 miles of the most beautiful uncluttered countryside in these United States. The Amish-style food served in the one-room school house occupied us too long for us to do any more than say "Goodnight" and prepare for a glorious Sunday full of covered bridges, autumn leaves, Amish buggies, and the cleanest, purest countryside on the most beautiful day imaginable.

LUNAR OCCULTATIONS

DATE	STAR	MAG	PHASE	AGE	TIME (E.S.T.)	ANGLE
Dec. 11-12						
	12 147 B.Ari	5.8	D	11.9	1:51.7 A.M.	119°
	17 1 Cnc	6.0	R	17.8	9:08.5 P.M.	271°