

The recent picnic was well attended. About forty persons, nine telescopes and numerous binoculars. The weather was a bit chilly, but there was little or no wind. The sky was generally clear but drifting clouds and some upper atmosphere turbulence hampered planetary and lunar observation. The majority of persons, however concentrated on Messier Objects and instructed the tyros present (the editor amongst them) as to their locations. Two satellites were seen, one circumpolar, travelling North to South and the other West-south-west to East-north-east. A single yellowish meteor was seen out of Perseus, traveling northward. A good time was had by all. It's a shame that the club can't have more of these informal get-to-gethers, especially for the new members benefit.

NOTICE!!! To all whom it may concern. As you now know the Hot Shoppes which we have been frequenting after the meetings has taken to closing at 9 PM. We should start thinking of a new site for our after meeting meetings - happy hunting!!!

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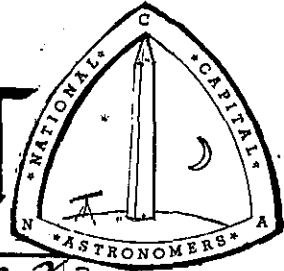
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Galaxies by Computer

Dr. Hohl has recently used one of the largest generally available computers, the CDC 6600, to study the dynamics of galaxies. He will present a computer model valid for disc galaxies and show how their evolution is simulated from an initial state of balanced rotation by following large numbers of stars in their evolution. The role of galactic instability and the velocity dispersion of stars will be discussed. Finally, the model is expanded to the study of spiral galaxies. Dr. Hohl will show an unusual "computer movie" as part of his talk.

The German - born Dr. Frank Hohl, has been a resident of the U.S. since 1953. He holds degrees in Electrical Engineering from the University of Florida and N.Y.U. and a Ph.D. from the College of William and Mary. Doctor Hohl joined Langley in 1963 after working on Plasma Physics at Bell Telephone Laboratories for some years.

Bill Winkler

Treasury

INCOME

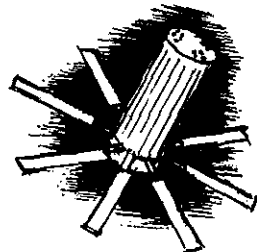
Dues.....	\$1056.47
Observers Handbooks.....	4.00
Time Tables.....	4.75
Book Sales.....	23.50
Total Income	\$1088.72
Less Outgo	- 775.49
Net Income.....	\$ 313.23
Balance July 1 '69	547.82
Balance Sept.30 '69	\$ 861.05

OUTGO

Sky and Telescope....	\$626.00
Star Dust.....	60.29
Speaker's Dinner.....	3.45
Observing Committee....	46.98
Books (to be sold)....	4.87
Treasurer's Supplies....	23.90

Total Outgo \$775.49

J. Schnell, Treasurer N.C.A.



*Advanced Orbiting Astronomical Observatory
From Astronomy in Space - NASA SP-127*

With much luck and a fair amount of work, we hope to begin assembling the current Directory for the NCA within the next month. It is vital that all data be current and correct - including things like telephone numbers, zip codes and especially your addresses. The new members should also let Mr. Schnell or Mr. Gould know how many and what kind of equipment they have and use as well as what areas they are particularly interested in. Seeing as how this will be the first edition in the past four years - PLEASE - PLEASE - cooperate so you can get a directory before Christmas.

JL

The following article was brought to the attention of the editor by Bob Wright. The original article was by Roger W. Gordon in the August issue of the Lehigh Valley Amateur Astronomers Society in 1969. Several other newsletters of various other societies have already copied it as we do now.

"It's not enough that the amateur or professional astronomer must put up with bad weather, bad seeing or mercury vapor lights, now there is a new obstacle which is potentially more threatening than all of these. I refer to the Super-Sonic Transport (SST) which are intended to fly a t 70 to 90,000 feet and go into service by 1972. These giant planes will pour thousands of gallons of burned waste and water vapor into the most stable part of our atmosphere. As a result, these warmed products hitting the colder air will form ice crystals that can cause cloud cover over wide areas of the country. Meteorologists are already alarmed at what devastating effects this may produce on weather and climate and some have warned that a year round, high altitude cover will be the result. For the astronomer this will be disastrous. Even currently, the jets now in use have spoiled many observations at the Lunar and Planetary Laboratory in Arizona. Just a few jets passing over that terrain can produce a cloud cover in minutes. Astronomers at the IPL estimate that they lose 20 to 30% of the usable night hours as a result of jet traffic over head. Yet this is nothing compared to the huge monsters now in testing. The airlines want to place 1,000 of these SST's in service. With several million tons of water vapor being poured into the stratosphere (and remember that all the earth's present water vapor is in the troposphere) such plans paint a grim picture for the future of earth-based observatories. We are thus in danger of losing the night sky forever in a matter of a few years hence. The loss in research in astronomy will be incalculable and the threat to our total environment will be measured in the billions of dollars. All this for the sake of faster air travel. And of course, the money hungry airlines who see profit as their only goal. With such continued growth of air pollution and high intensity lights, we may be the last generation to remember what a black, star-studded sky looks like."

I am tempted to add a bit to this. It would seem, in surveying man's use of his natural resources as well as his inconsiderate use of people when a profit is to be made (short term though it may be) that this will continue. If we are really quite efficient we may not even need an Atomic holocaust to suitably sterilize our fair planet. It is also unfortunate that those who realize the problems most acutely are those who may exercise least control over the individuals who dispoil our environment.

J. Logan

Colonel Darrel J. Freund has been appointed the co-ordinator for Solar Eclipse Activity. Col. Freund is a member of the Astronomical League Site Location Committee. Phone 423-6259

Membership

** REGULAR **

Gary J. Garwood, 13807 Briarwood Drive, Apt. 161h, Laurel, Md. 20810
498-5118

** JUNIOR **

Bruce Farnham, 5023 Americana Drive, Annandale, Va. 22003, 256-4382

Russell Thomas, 10003 Glendale Road Apt. 101, Lanham, Md. 20801
794-7893

** ADDRESS CHANGES **

G. Kenley Mays, 10609 Maple Street, Fairfax, Virginia 22030

Jerome J. Kurkowski, 3007 Rosemary Lane, Falls Church, Va. 22042

Mike Pique, Box 857 Florida Presbyterian College, St. Petersburg,
Florida 33733

For those who are interested in photography and the photography of the coming eclipse a new film may be of some interest. Actually the film is not new, having been available since 1963. A film discription has been published in the January 1964 issue of Sky and Telescope. The film is an extended range emulsion. The uppermost layer has an ASA of 400, the next layer an ASA of 4 and the bottom an ASA of 0.004. The layers form coupled dye images and so, when developed, look like a color negative. As might be expected the resolution leaves something to be desired when compared to high resolution film being 70, 50 and 30 lines per mm. going from the slowest to the fastest emulsion. The material may be processed using the usual C-22 process used for Kodacolor developing or may be developed by the supplier. The local supplier is located in Boston. The charge in the scedule which is several years old, is \$3.00 / cassette for 35mm film, 20 exposures. Unfortunately the minimum order for cassettes is 10 so that an individual would have a considerable outlay for film. If someone is interested I would like to arrange to send an order for some. If anyone would be interested in self loaded cartridges, the going rate is about 54.00 for a 100 foot roll of 35mm film.

J.L.



Circumzenithal Arc

There was a rare halo visible October 6th at 5:45 P.M. E.D.T. It lay at an arc of 90° with the center at zenith seen about 46° above the sun. The halos are caused by the refraction of light by ice crystals floating with the e axis vertical. The halo seen was of moderate brightness, rather broad and had red, green and blue colors. The left 22° parhelia was present at the same time. After the arc disappeared, both parhelia, with short sections of the 22° circle, extended above them.

Larry White

We never did receive any replies to the query about the true position of the vernal point, which -- as you recall -- is usually placed at 0° in Aries, for convenience; and some astrologers, using an old tradition say we are living in the Aquarian age. But the point has now moved to Pisces, according to G.W. Washmuth, in Evolution of Mankind; so perhaps it could be said we're living in the "Piscean Age".

If anyone is still interested in UFOs, another book adding fuel to the controversy, from the scientists' point of view, is "UFOs, Yes" by a former member of the Condon Committee who, partly through disillusionment with the inquiry procedures, found himself at odds with Dr. Condon: David R. Saunders, with R. Roger Harkins. In paperback; Signet, 95¢

David Nordin



For those amongst us who do not consider themselves expert observers or those who would appreciate assistance in developing methods of observation, several programs are available. The Association of Lunar and Planetary Observers offer several aids and training programs so that if one wishes, assistance from other sources can be had. If you would like to apply for "training", write to:

A.L.P.O. Training Programs
Mr. Clark R. Chapman
1 Chauncy Street, Apt. 7
Cambridge, Mass. 02138

J. Legowik

Juniors

An observing session was held on Friday, October 10th, at Travilah Elementary School, near Gaithersburgh. Nine persons, including five Md.-D.C. Juniors attended. Five telescopes were used - four 6" reflectors and one 60 mm. refractor. It was a splendid night, so clear that parts of the Big Dipper were visible on the northern horizon. The Milky Way was beautiful. The double cluster in Perseus and the Andromeda Nebula were visible to the naked eye. We observed approximately fifteen of the Messier Objects that we had not seen before. A spectacular green and red flash was evident in Capella until the star was approximately thirty degrees above the horizon. Cassini's division in Saturn's rings were easily seen in the six inch reflectors. About fifteen meteors were observed and a circumpolar satellite was seen by naked-eye and with the six-inch reflector.

The Maryland - D.C. juniors held their first meeting of the year on Saturday the 11th of October. We discussed astrophotography, our solar eclipse plans and the observing that we had done during the summer. Our next meeting will be on Saturday, November 8th, at the Chevy Chase Public Library, 8004 Connecticut Ave., Chevy Chase, Md. We plan to devote the meeting to astrophotography and hopefully will have an expert present to give us some hints. Meeting time is 2:00 P.M. Bring photographs. For more information contact Raymond Finkleman at 933-0945.

Raymond Finkleman



All Juniors will have a meeting at 7:30 P.M. on November 1st prior to the regular meeting to elect officers according to their constitution. William Pala has been appointed to be acting director of the Junior Division and his assistants will be Sheila Duck and Jeffery Hornseth. Alan Breitler, who is director of the Montgomery Junior College Planetarium and a recent speaker at our meeting, has agreed to become an educational consultant to the Juniors. Mr. Breitler has several questions and would like to take the Juniors out for observing sessions. John Alexio has been appointed chairman of the educational committee.

The planetarium at Edgewood, Maryland, has invited any and all NGA members to visit Edgewood for formal or informal programs. The Planetarium Coordinator is Norm Sperling, a long time N.C.A. member. Mr. Sperling can be contacted at 301-679-7517 or by mail at 1072 Plaza Circle, Joppatowne, Maryland 21085. Planetarium equipment includes a Spitz A-3-P projector and a 24-foot-diameter perforated aluminum dome. If you are thinking of a research project that could use the planetarium facilities, please contact Mr. Sperling.

Hartford County will soon begin testing a number of sites for its projected observatory soon. If any NGA members have experience or other aids in evaluating sites, please contact Norm Sperling at the Edgewood Junior High School Planetarium.

Norm Sperling

Calendar

8:00 P.M. - Friday, October 31st

Russell Maag of the Astronomical League will meet with members of the N.C.A. and the Baltimore Astronomical Society concerning plans for the expeditions to view the 1970 Eclipse of the Sun. At the Commerce Auditorium, 14th and E Street, N.W..

6:15 P.M. - Saturday, November 1st

Dinner with Dr. Frank Hohl of Langley Research Center at Bassin's Restaurant, 14th and Pa. Ave., N.W. Serious amateurs may become personally acquainted with professional astronomers at these informal (and low priced) dinners - All are welcome and no reservations are required.

8:15 P.M. - Saturday, November 1st

November meeting of N.C.A. at the Department of Commerce Auditorium, 14th and E Street, N.W. Dr. Frank Hohl will speak on "Computer Models of Galaxies".

2:00 P.M. Saturday, November 8th

Discussion of Astrophotography - Maryland - D.C. Juniors will meet at the Chevy Chase Public Library, 8004 Connecticut Ave., Chevy Chase, Md. For more information please contact Raymond Finkleman at 933-0945.

8:15 P.M. - Saturday, November 15th

Discussion group of N.C.A. meets at the Dept. of Commerce Auditorium, 14th and E Street, N.W. The Subject to be announced at the meeting. These informal discussions are centered about an important problem in astronomy each month. They are a fun way to build your scientific knowledge of the field. The October discussion dealt with Astrophysical Spectroscopy.

* * TELESCOPE MAKING CLASSES * *

Friday - Each Friday of the month of November, Jerry Schnall will conduct a class in telescope and mirror construction at the Palisades Recreation Center. Mr. Schnall can be reached at EM 2-8872

* * OBSERVING AT THE FIVE INCH * *

Observing at the Five Inch at the Naval Observatory

Friday, November 7th with Larry White at 8:00 P.M.
Thursday, November 13th with Al Krebs at 8:00 P.M.