

Parliamentarian Notes from the President: The Chair will rule that our March 1st meeting be an organizational meeting and Roberts Rules of Order will take precedence. A check of records for the District of Columbia failed to reveal the registration of our organization as the National Capital Astronomers but instead, a National Capital Amateur Astronomers Association is on file. We think it is necessary that the proper title be filed. The Trustees have had a meeting and agreed to file a Trustee's report with the proper name change. This must be approved by the membership at the March 1st meeting. According to the August 1956 By-Laws, a quorum is defined as "one quarter of the number of members in good standing..."

NEW MEMBERS: JUNIOR DIVISION - Steve Ballou, 6520 Engel Drive, Mc Lean Virginia, 22101.

Editor's note: In the future we hope to devote more space to items of interest to those observing. In order to do this we need an idea of what is wanted as well as material in the form of articles, reports, etc.. We hope to be able to publish summary articles of the material covered in discussion groups and other areas of general interest. I would appreciate any suggestions as to the content, arrangement, or comments about Star Dust.

We would like to call your attention to a mistake in the Maryland Academy Graphic Tables relating to the setting time of Mars. The correction can be found on page 86 of the February Sky and Telescope. For those interested in occultations, a major occultation of the Pleiades will occur during the latter part of March. The exact time table can be found in the November '68 Sky and Telescope.

J. Legowik

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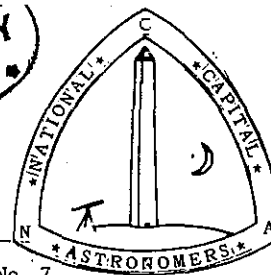
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Star Dust



MARCH 1969

Vol. XXVI No. 7

OUR CURRENT KNOWLEDGE OF THE MAGNETOSPHERE

Dr. Donald H. Fairfield will discuss the magnetosphere and the inter-relationship with the solar winds in the March meeting. Dr. Fairfield was born in Geneva, Illinois on July 24, 1938. He attended the Glenbard High School in Glen Ellyn, Illinois, graduating in 1956. After completing undergraduate training in Beloit College in Wisconsin, receiving a B.A. in Physics and Mathematics in 1960, he undertook graduate studies at the Pennsylvania State University, receiving his M.S. and Ph.D. in Physics in 1962 and 1965 respectively.

Dr. Fairfield has worked at the Goddard Space Flight Center since 1965 with satellite magnetic field experiments. He has authored papers concerning geomagnetic field perturbations and the magnetic fields of the magnetosphere and interplanetary space. Presently he is associated with the Extra-terrestrial Physics Branch at Goddard. His most recent publication is "Average Magnetic Field Configuration of the Outer Magnetosphere" in the Journal of Geophysical Research, Vol. 73, pages 7329-7333. Dr. Fairfield holds membership in the American Geophysical Union and in Sigma Xi.

The discussion presented by Dr. Fairfield will include: 1) the formation and the nature of the bow shock in the upstream region of the solar wind from the magnetosphere; 2) The magnetic field observed in the region between the bow shock and the magnetosphere; 3) The boundary between the solar wind plasma and the magnetosphere; 4) The geomagnetic field as distorted by the solar wind; 5) The extended geomagnetic tail of the earth; 6) The particle population of the Magnetosphere including the plasmopause and the auroral particles.

CALENDAR OF EVENTS

Saturday, March 1, 1969

6:15 P.M. Dinner with the speaker at Bassin's Restaurant, 14th and Pa. Ave. N.W.. For reservations call George Gould at 423-8777 or Bill Winkler at 736-3553.

8:15 P.M. Monthly meeting at the Dept. of Commerce Auditorium at 14th and E Street, N.W.. "Our Current Knowledge of the Magnetosphere" by Dr. Donald H. Fairfield.

Saturday, March 15, 1969

8:15 P.M. Discussion Group: "Problems of Amateur Observatories" Room 2062, Department of Commerce Auditorium. The discussion will center about an informal sharing of experiences with set-ups, the best use of yard space, lining up true north and other problems. All members are urged to attend who are interested in serious observing.

TELESCOPE MAKING CLASSES

March 4th, 11th, 18th, 25th; At Materials Center, Bladensburg, Maryland  
Instructor: Ted Noble

March 7th, 14th, 21st, 28th; At Palisades Community Center, Washington, D. C.  
Instructor: Jerry Schnell, EM 2-8872 (Home), 557-3144 (Office)

February 28th, March 14th, 28th; At McLean High School, Mc Lean, Virginia  
Instructor: Grady Whitney, 273-2538

JUNIOR MEETINGS

March 8, 1969 Maryland - D. C. Juniors
March 16, 1969 Prince Georges County Juniors
Virginia Juniors, for information contact Tom O'Brien, RE 5-1267

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OUR CURRENT KNOWLEDGE OF QUASI-STELLAR OBJECTS

This topic was discussed at the February meeting by Dr. Thomas Matthews of the University of Maryland. Noting that the nature of these objects are not well known, Dr. Matthews proceeded to give a lucid discription of their known properties. After reviewing possible sources for their apparently enormous expenditure of energy, he discussed the "Inverse Compton Effect" and the theories of gravitational collapse in some detail. In concluding he indicated that research in this feild is slowing as greater emphasis is placed on understanding the more recently discovered "Pulsars".

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OBSERVING AT THE FIVE INCH

Two sessions are planned in March. Larry White will conduct the first on March 14th from 8 to 10 P.M.. The second will be conducted by John Alexio on March 21st from 8 to 10 P.M..

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TREASURER'S REPORT - JANUARY 1969

Table with 2 columns: INCOME and EXPENSES. Rows include Dues, Observers Hdbk., Timetables, Tot. Jan. Income, Balance Dec. '68., Total, Less Expenses Jan., Balance Jan. 1969, Sky and Telescope, Star Dust, Publicity, Astron. League Mail, List, Bulk Mail. Fee for 1969, Total Expenses Jan. 1969, and Jerry Schnall, Treasurer.

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President's Notes:

During the most recent Trustees meeting a third class of membership was approved. This membership is designed to appeal to those who would benefit by being listed as Patrons of our society or as sustaining members. Those groups or individuals contributing \$100.00 or more would be listed in Star Dust as Patrons. The funds so obtained would be placed in a special Trustee's Fund which would be used primarily for construction or implementation of observational facilities in the immediate area.

We would like to use the monies obtained through this means to equip a precision optical shop and machine shop so that facilities for construction of mounts, setting circles and the repair of equipment such as mirror grinding machines could be available to the membership. In conjunction with this we would like to design an educational program in the use of machine tools so that full use could be made of the equipment. We also hope that this would enable us to construct observatories in a convenient location adjacent to the Beltways.

Larry White has requested that the Trustees approve the purchase of a Norton's Atlas, a Skalnate Pleso Atlas, a 24 hour, sidereal clock, an American Ephemeris, a Short wave receiver to obtain WWV time signals and a stop watch for timing occultations. It is felt that these items would allow better use of the instrument as well as being used as instructional aids for those learning observation.

We would also like to consider the development of an educational program with our organization as its focus. The group would be formed from volunteer members conducting symposia at local business establishments with the proceeds being turned back into our organization to serve as a building and development fund. Our members would serve without a fee but be recognized as a consultant and an expert in his feild. We would hope that by offering symposia on Astronomy and related subjects at a high technical level, that we could induce corporate memberships and enrich our building fund. Those interested are asked to call Bill Winkler at either his home or office.

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NEW BUSINESS

At the February 1st meeting the following motion was made by George E. Gould and seconded to be carried over to the March meeting. The Motion: "That a change in the constitution be made and Art. IV, Sect. 1 to read: 'The officers of this corporation shall consist of a President, four(4) Vice Presidents (V. P.), Secretary, Treasurer and a Sargeant at Arms. That the Vice Presidents will be further delegated with the following order of precedence V. P. of Education, V. P. of Property Management, V. P. of Junior Division, and V. P. of Membership.' " And that a change be made "In Article V, Sect. 2, the words, 'reincorporation or'."

That a change be made in the By-Laws as ammended:

Article 1. Membership dues and voting. Change section 1 to read: 'Membership in this corporation shall be composed of three grades, Junior Membership, Full Membership and Full Membership Special Designation.' Add new item (c) 'Full Membership Special Designation.' Add new item (c) 1. Patron: this is a Full membership as in (b) above, wherein a minimum yearly membership fee of \$100.00 has been paid. A special gold certificate and card will identify such memberships and each such patron will be listed in the Star Dust.'

Article 2. Endowment: this is a full membership as in (b) above, wherein the minimum yearly membership fee of \$1000.00 has been paid. A special gold certificate and card will identify such memberships and each such person and or corporation will have a suitably engraved plaque.'

Article 3. 'Sustaining: this is a full membership as in (b) above, wherein a minimum yearly membership fee of \$25.00 has been paid. This applies to individuals only. A list of sustaining members will be published in the Star Dust. A special membership certificate will be issued.

Article 4. A Membership in items 1 and 2 above refers to corporate, business, community, Funds, Technical or Scientific or Professional Societies that wish to contribute to the building and maintenance of regional observatories, optical workshops and educational programs of the National Capital Astronomers. Each such contributor organization may designate one individual to become a full member of NCA subject to the regular membership procedures of the NCA.

Article II, Duties of Officers: Change to read: 'The duties of the President, V. P. of Education, V. P. of Property Management, V. P. of the Junior Division, V. P. of Membership, Secretary, Treasurer, and Sargeant at Arms shall be those usually devolving upon such officers and such other duties as may be delegated to them by the Board of Trustees.'

Section 2. To read: ' The officers shall serve for one year and should any office become vacant, it may be filled by election at a regularly sceduled meeting provided that all members have been notified by mail at least 5 days before such elections be held. Notice may be made by insertion in Star Dust or any other joint membership mailing or individual notices.