

THE PRAIRIE ASTRONOMER

Volume 16, Number 4

February 24, 1976

JANUARY MEETING PACKS OLIN: CONSTITUTION, TELESCOPE PROJECT DISCUSSED

The January meeting resulted in a nearly-packed Olin Hall of Science auditorium.

Before the program, a NASA Apollo-Soyuz film, there was a period of discussion on a number of business items.

The club Constitution and Bylaws were referred to a committee consisting of President Earl Moser, Vice President Larry Stepp, Secretary Jess Williams, Treasurer Lee Thomas, and Recording Secretary Merton Sprengel for study and revision.

Larry Stepp gave a report on the status of the club's Bicentennial Community Observatory telescope project. The eight-inch mirror was in the first stages of grinding. Walt Baumann and Jeff Mallott brought the mirror to the meeting so members could see the progress first hand.

Larry explained the two options of tubes available for the telescope. He had ordered a Parks fiberglass tube, the cost of which would be approximately \$45 including shipping. Norm Frerichs suggested the alternative of an aluminum eight-inch tube such as the one he had used in his reflector. For comparison purposes, Norm brought his telescope to the meeting, along with an unfinished tube. It was estimated that the cost of the aluminum tube, including finishing, would be about \$25. Discussion probed the relative advantages and disadvantages of the two tube

materials. In a vote, it was decided to proceed with the fiberglass tube.

In addition to Norm's beautifully finished eight-inch telescope, Brad Binder had on display the 6-inch reflector which he completed recently. Members have had the opportunity to follow construction of Brad's scope, because he has reported on

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NEXT MEETING FEBRUARY 24TH

The next meeting of the Prairie Astronomy Club will be Tuesday, February 24, at 7:30 p.m., Olin Hall of Science, Nebraska Wesleyan University.

The program will be "The Martian Visitor", a planetarium show which Jack Dunn says he "borrowed" from a colleague at another planetarium.

The 1976 Observer's Handbooks have arrived from Canada, and will be on sale at the February meeting for \$2.50 each. We ordered only fifteen copies, so the supply is limited. It is doubtful that we will have any left over for subsequent meetings, so if you want one, be sure to attend.

Bound into the center of this issue of the newsletter is a proposed revision of the club Constitution, which will be formally submitted to the membership at the

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JANUARY MEETING PACKS OLIN: NOW 68 MEMBERS IN CLUB (From Page 1)

his progress at past meetings.

Members and potential members are reminded of the excellent facilities and expertise we have to draw upon in the club. The club now owns a complete mirror grinding set, and Larry Stepp has access to virtually any kind of machining equipment that might be required to fashion telescope hardware. If you've ever had the hankering to try your hand at telescope building these last few winter months would be a good time... and your scope would be ready for summer viewing!

At the last meeting, the club

gained two new members:

Brian Cooper, 5930 LaSalle Drive, Lincoln 68516.

Allan Logan, 7920 Cherrywood Drive, Lincoln 68510.

Active membership is now at 68, which explains why Olin Hall looks a little crowded when we meet.

THE MISSING "REFLECTORS"

Secretary Jess Williams reports that he has received an inquiry from the new editor of the Astronomy League publication, "The Reflector", concerning an up-to-date club roster. Last meeting, a number of members reported that they had not been receiving The Reflector.

Jess has mailed in an updated list of members, current as of February 15. With luck, all club members should begin receiving the Reflector with its next issue.

NEXT MEETING (From Page 1)

February meeting. Please read it carefully. A discussion will precede voting, which will take place if at least 50 percent of the current membership list attends the meeting, as provided in Article IX. The committee decided to submit a totally new Constitution, since revisions in the original document would require a considerable complex of amendments. For those wishing to compare the proposed revised Constitution with the original, a copy of the latter will be available for inspection prior to the February meeting.

WANT AD:

Would like to buy a 6-inch Criterion Telescope.

Have for sale a 3-inch Edmunds Reflector. See Jess Williams.

THE PRAIRIE ASTRONOMER is published monthly by the Prairie Astronomy Club, and is free to club members. Yearly subscription to the newsletter only is \$3. Regular membership (including one-year subscription to Sky & Telescope, club newsletter, and four quarterly issues of the Astronomical League publication, The Reflector) is \$9, family membership is \$11. Editor: Lee Thomas (489-3855), Assistant Editor, Merton Sprengel (489-3177).

PRESIDENT'S MESSAGE NOTES OBSERVATORY PROBLEMS, REGIONAL CONVENTION

The Bicentennial Observatory Committee had a meeting February 10. We heard the news that, while over \$17,000 has been pledged to the fund so far, it appears that most of the possible big donors have either given, or decided against supporting the project. So, we are looking for ways to raise the remaining funds. If you have any ideas, bring them to the next meeting.

The regional convention of the Astronomy League will be held June 18-19-20 at Rolla, Missouri. The St. Louis club will host. The Prairie Astronomy club has not been represented by many of its members at rec-

ent conventions--I attended the last two alone. So, we should try to plan ahead this time, and have a few different faces from the club at this convention.

Comet West is coming, and it looks like it may put on a pretty good show starting February 26 or 27 just before dawn. It might be cause for a pre-dawn star party for hearty club members who would like to spot West as it emerges from the solar glare, weatherman willing.

We'll be talking about all these things at the meeting February 24. See you there.

-- Earl Moser

 ASTEROID AND EARTH ARE PLAYING TAG...AND RESULT MIGHT BE COLLISION

Astronomer Eleanor Helin, working with an 18-inch telescope at Mount Palomar, has discovered an asteroid whose orbit carries it back and forth across the Earth's orbit. The asteroid, temporarily designated "Fast-Moving Object Helin", was found on photographic plates January 7. Its photovisual magnitude was between 13 and 14.

FMO Helin is one to two miles in diameter, and, according to its discoverer, has about a 75 percent chance of colliding with the Earth within 24 million years. The impact would create a 20-mile-wide crater.

The asteroid's orbit is almost identical to Earth's, but it loops around us once a year, each time crossing our path. Its year is 348 days.

"Because it is the closest thing to us besides the moon, it makes an ideal space mission", said Mrs. Helin. "We feel that if we can land on it, we will be looking at the most primitive material we can find in the solar system, the building blocks of the system."

(--From AP & UPI Reports)

 WANT TO BUY OR SELL?

One of the services your Prairie Astronomer offers is free want ads. If you're looking for a telescope or astronomy equipment, your newsletter is a good way of letting fellow club members know it. Just contact the editor. Deadline for the next issue is March 22.

PROPOSED REVISED CLUB CONSTITUTION, Submitted February 4, 1976

Article I

Name

The name of this organization shall be the Prairie Astronomy Club of Lincoln, Nebraska in accordance with the Articles of Incorporation filed with the Secretary of State of the State of Nebraska on December 20, 1965.

Article II

Purpose

The purpose of the corporation shall be to participate in and encourage the study of Astronomy and related subjects for the benefit of its members and of the general public.

Article III

Membership

Individual or Family Memberships are available upon payment of annual dues.

Article IV

Elected Officers

Five officers shall be elected from the membership: President, Vice President, Secretary, Treasurer and Program Chairman. Each elected officer shall serve for a term of one year or until his successor is elected.

Only one individual of a family holding a family membership may hold elected office at any one time.

Article V

Board of Directors

Section 1. In compliance with the Articles of Incorporation, the corporation shall be managed by a Board of Directors. The Board of Directors shall consist of the five elected officers.

Each decision of the Board of Directors shall require a quorum of three officers and the affirmative vote of three Board members.

Section 2. The Board of Directors is granted the authority to spend funds from the club treasury for activities and projects falling within

the scope of the purpose of the corporation as stated in Article II above, and Article III of the Articles of Incorporation.

No decision or action of any officer or of the Board of Directors can bind the corporation in any monetary amount exceeding the amount in the club treasury, after payment of liabilities, at the time of proposed action without prior permission granted by a two-thirds vote of the members present at a regular meeting.

Article VI

Debts and Obligations

The property of members, directors and officers shall not be liable for payment of the debts or obligations of the corporation.

Article VII

Bylaws

The Board of Directors shall adopt the Bylaws of the corporation, and may amend, revoke, or add to the same as they deem proper, but no provision of the Bylaws shall be inconsistent with any provision of the Articles of Incorporation.

When conducting business within the guidelines stated in the Bylaws, procedural disputes shall be decided by consulting Roberts Rules of Order.

Article VIII

Dissolution

The corporation shall be dissolved only by action in accordance with the Articles of Incorporation, Article VIII and the Bylaws. If it is dissolved, its assets at the time of dissolution, after payment of liabilities, shall be distributed to Nebraska Wesleyan University.

Article IX

Ratification and Amendments

This constitution shall be ratified or amended by a two-thirds vote of a quorum of the members present at a regular meeting of the Prairie Astronomy Club. A quorum shall be defined as fifty percent of the current membership list. All proposed amendments must be approved by the Board of Directors before being submitted to the club for consideration.

MORE ON COMET WEST--STILL COMING ON STRONG, PREDICTIONS ARE FAVORABLE

Latest reports by Southern hemisphere observers of Comet West (1975n) show it to be running 1-2 magnitudes brighter than original predictions. Brian G. Marsden of the Smithsonian Astrophysical Observatory cautions, however, that this does not necessarily mean that the comet will maintain this trend through perihelion passage.

Most recent reports at press time showed the following magnitudes:

January 20.36 (UT), magnitude 6.5 (B. Nikolau, Palmerston North, New Zealand). Reported a stubby tail 2'

long in position angle 90 degrees;

February 1.37, magnitude 6.8 (A. C. Gilmore, Wellington, New Zealand);

February 4.37, magnitude 5.7 (Gilmore).

Marsden reports that measurements of 1975n in the infrared suggest that it is very similar to comet 1973 XII (Kohoutek) before perihelion, comet 1975n being intrinsically perhaps .2 magnitude fainter. Recalculations of the comet's orbit indicate, however, that unlike Kohoutek, 1975n cannot be a "new" comet, i.e., recently dislodged from the Oort Cloud.

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The chart below continues the ephemerides for 1975n through March. It should not vary in position more

than one arc minute from the stated values. (See January issue for the positions March 1-10)

	RA (1950)	DEC (1950)	Earth-Comet Distance-AU	Sun-Comet Distance-AU	Tail Length (mil mi/deg)	Visual Magnitude
Mar. 11	21h25.22	8°56.3'	.914	.535	1.5	4.1
12	21 22.21	9 17.4	.927	.561	1.5	4.3
13	21 19.43	9 36.8	.941	.587	1.6	4.5
14	21 16.88	9 54.8	.954	.613	1.6	4.7
15	21 14.53	10 11.6	.966	.639	1.6	4.9
16	21 12.34	10 27.3	.979	.664	1.7	5.1
17	21 10.32	10 42.2	.991	.689	1.7	5.3
18	21 8.42	10 56.4	1.003	.713	1.7	5.5
19	21 6.64	11 9.8	1.014	.738	1.8	5.7
20	21 4.96	11 22.8	1.025	.762	1.8	5.8
21	21 3.38	11 35.2	1.036	.786	1.9	6.0
22	21 1.87	11 47.2	1.046	.809	1.9	6.1
23	21 .43	11 58.9	1.056	.833	1.9	6.3
24	20 59.05	12 10.2	1.065	.856	2.0	6.4
25	20 57.72	12 21.2	1.075	.879	2.0	6.6
26	20 56.43	12 32.0	1.083	.902	2.0	6.7
27	20 55.17	12 42.6	1.092	.924	2.1	6.8
28	20 53.95	12 52.9	1.100	.947	2.1	6.9
29	20 52.76	13 3.1	1.108	.969	2.1	7.1
30	20 51.58	13 13.1	1.116	.991	2.2	7.2

REPORT FROM THE OBSERVING CHAIRMAN ON MARCH SKYSIGHTS

Note: Behlen Observatory is having a public open house on Friday, February 20 from 7 to 10 p.m. Go out and have a look at, and through, the 30-inch telescope. The observatory is located north of Lincoln at the University of Nebraska Field Laboratory, which is about 19 miles north of I-80 Highway 77 junction and about seven miles east of the junction of 77 and highway 63, one mile north of Swedeburg, Nebraska. For more detailed directions call the UNL Physics Department.

This month train your telescopes on the star Iota Cancri. It is a most interesting double having components of magnitudes +4.4 and +6.6, one being orange and the other being almost green in color. The separation here is about 31 seconds of arc so it should make a fine sight in about any telescope.

While in Cancer, don't forget to have a quick look at M44, the Beehive cluster near Delta Cancri. The central portion looks like a miniature constellation Cepheus.

The lone galaxy in this area is NGC 2683, a faint spiral about a degree north and a bit west of Sigma 1 Cancri, or about five degrees north and a bit east of the double Iota Cancri. And, if you liked that one, you'll love a series of four galaxies in the mane of Leo. NGC 2903 is a small spiral of about 10th or 11th magnitude and shows some possible structure with an eight inch telescope. The other objects are not so bright and not as interesting, although there are more of them.

two degrees south of Zeta Leonis. You should see a trio of galaxies directly between Zeta and Gamma, perhaps a bit closer to Zeta. They are very faint, so now you have a good excuse

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A NOTE ABOUT PAYING DUES

To be certain you do not miss any issues of Sky & Telescope, your subscription to which is one of the privileges of club membership, please:

1. Bring your renewal card, or enclose it with your payment to the club.

2. Renew your membership as soon after receipt of the renewal card as possible--preferably at the very next meeting. (It takes from four to six weeks to process renewals, so if you wait, you may miss an issue.)

3. Make out your check directly to the Prairie Astronomy Club, not to any individual officer of the club, and not to Sky & Telescope. The club has its own bank account, and checks made out to persons other than the club require time-consuming endorsements, or worse, that the check must be returned to you. That, of course, slows things down.

4. And, be sure to let us know immediately when you change address. For your convenience, simply notifying Jess Williams or Lee Thomas of an address change will automatically change both your newsletter and Sky & Telescope mailing labels.

MORE ON COMET WEST (from page 6)

As you may recall, one of the theories developed to explain why Kohoutek failed to reach predicted brightness levels was that it might have been a comet which, never having passed close to the sun, had a mantle or crust of dust which produced a relatively unimpressive dust tail. Several solar passages, so the theory went, would ultimately ablate the dust shell and produce more spectacular gas tails. If West has come fairly close to the sun in its travels, perhaps it stands a better chance of developing to its predicted brightness.

OBSERVING CHAIRMAN'S REPORT
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to use the club's telescope.
To break from observing for a moment, I think that the club needs some form of emblem to identify our organization. If anyone has any ideas on this subject, bring them up at the next meeting.

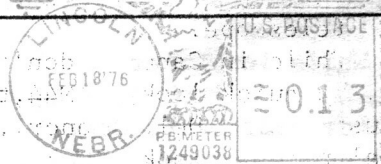
-- Dave Knisely

HELP! WE NEED A MARCH PROGRAM!

Program Chairman Jack Dunn will not be able to attend the March meeting, and he needs someone to present a program. It has been quite some time since we have asked any member help in preparing a program. We've been leaning heavily on Jack's resources. But we need you now. Let Jack know at the February meeting if you can do a March program.

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