7-80

THE PRAIRIE ASTRONOMER

Volume 20, Number 8 July 29, 1980

Some People Give To Observatory...and Others Take Away

On Saturday, July 5,a hardy band of volunteers arrived at Hyde Observatory with paint brushes in hand and, under the guidance of Carroll Moore, gave parts of the exterior a new coat of paint. Those who donated their time and efforts were:

Budd Duvall
Roger Grant
Dan Neville
Boyd Thompson

A grateful Gold Star (Spectrum Class F3) goes to each of these friends of the observatory, without whose help it could not survive.

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Hyde Observatory Chairman Carroll Moore reports that the observatory suffered a burglary sometime between 11:00 p.m. the night of Friday, July 18 and about 4:00 p.m. Saturday,July 19. Apparently three items were stolen: the Sony amplifier which the observatory acquired about a year ago for its sound system, a Telex tape/slide synchronizer, and a pair of binoculars belonging to the Junior League.

Police theorize that entry was gained by kicking in the drain panel on the south side of the observing deck. An unsuccessful attempt may also have been made to enter through the solar panels,since a section of the plastic covering on one of them had been sliced open.

Total amount of the loss is in excess of $500. The city of Lincoln does not insure items of less than $5,000 value, and thus our loss is not covered. The observatory receives no replacement funds from the city, only maintenance, and the Hyde Observatory Trust Fund from donations and poster sales presently has less than $100. It is anticipated that some major donation will have to be solicited to cover the loss.

JULY MEETING DATE IS SET

The July meeting of the Prairie Astronomy Club will be held at Hyde Observatory Tuesday night, July 29 at 7:30 p.m. (The regular meeting of the Hyde Observatory Committee will precede the club meeting at 6:30 p.m.)

Lee Thomas,who took an astronomy vacation through the southwest, visiting Mount Hopkins (the Multiple Mirror Telescope), Kitt Peak, Lowell Observatory, and the Very Large Array radio telescope near Socorro, N.M.,will have some slides to show. He also attended the WAA-ALPO-ASP joint convention in Tucson, and will report on the highlights.

PRESIDENT'S REPORT:

Hyde Observatory has been open almost three years now, over 20,000 people have visited the facility, and, up until two months ago, we had never experienced any vandalism or theft. But apparently the honeymoon is over. Last month, two of the large metal letters disappeared off the front of the building. And, worse yet, last week someone broke into the observatory and stole our audio amplifier and our tape synchronizing machine (see separate story on front page.) The metal letters will cost $35 each to replace, and the audio equipment was valued at over $500.

But now for the really bad news...the city's insurance policy has a $5,000 deductible clause, so insurance will not pay for any of these losses. And with the city's budget for this year being cut 5%, and since the city's funding of the observatory is for janitorial service and utilities only, there will be no money from the city to help replace these items. So, unless some money is received from an unexpected source, we will have to depend on individual donations to help. At the present rate at which the observatory's donations box is acquiring funds, it will take about 2½ years to replace the items which were stolen (with no other improvements to the observatory during that time).

There are other answers to the problem. The observatory could begin charging admission. But the volunteers who run the observatory have resisted this idea from the beginning, believing it to be contrary to the purpose of a public observatory, and they will continue to resist this suggestion. The city could provide more police patrols and could lock the park entrance gate at night. We could install more theft-resistant devices at the observatory and provide tighter security when the building is open to the public. But all of these ideas mean more effort, more stringent rules to follow, a more restrictive atmosphere, and, of course, more money. And none of them are guaranteed to prevent vandalism or theft.

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THE PRAIRIE ASTRONOMER is published monthly by the Prairie Astronomy Club, and is free to club members. Yearly subscription without club membership is $5.00. Regular membership (includes one-year subscription to Sky & Telescope, club newsletter, and four quarterly issues of the Astronomical League newsletter), is $14.00. Family membership (includes all regular privileges, plus one additional vote in club elections) is $16.00. Newsletter editor, Lee Thomas, 489-3855. Address all correspondence to PRAIRIE ASTRONOMY CLUB, INC., P.O. Box 80553, Lincoln, Nebraska 68501.

STEPP REPLIES TO SPERLING LETTER ON NEWTONIAN COMA ARTICLE

(Editor's Note: In the May 27, 1980 issue of the PRAIRIE ASTRONOMER, Norman Sperling, an Assistant Editor of SKY & TELESCOPE, commented on some of the opinions expressed by PAC member Larry Stepp in a four-part article on "Coma In Newtonian Telescopes", which appeared in this newsletter earlier this year. The following letter is Larry's reply.)

Thank you for your letter concerning my article in the PRAIRIE ASTRONOMER. I am pleased to see that the PRAIRIE ASTRONOMER is being read outside Nebraska.

The points you made in your letter are we-l taken-- let me respond to them individually. First, I have to agree that a longer tube is a handicap, particularly in larger sizes of telescope. A longer tube is harder to transport, heavier,and may require a more substantial mounting. However, the difference is not too significant in smaller telescopes commonly used by amateurs as RFTs , such as a 6- or 8-inch. Often the reason that an amateur with a 6- inch f/4 buys a less substantial mounting than an amateur with a 6-inch f/8 is that the f/4 is to be used only for low power work, and the f/8 is intended for high power observing, the magnification being more the issue than the weight.

Second, the cost of an f/7 need not be appreciably more than the cost of an f/4 of the same size. Looking in the June SKY & TELESCOPE, selecting parts which could be used to construct 8-inch tube assemblies of comparable magnification, angular field, and quality, I find that an 8-inch f/7 reflector can be built for approximately $7 less than the cost of an 8-inch f/4. The additional cost of the eyepiece holder and eyepiece is more than compensated by the cost of the primary mirror,while the mirror cell,tube, spider and diagonal are the same for either.

Regarding the problems of large eyepieces, I agree that many suffer from a loss of contrast and a loss of sharpness at the edge of the field, particularly war surplus Erfles, but there are some large eyepieces available now that produce a very good image. The weight of the "monsters" can be a nuisance, but the long eye relief they provide is very convenient to people who wear glasses.

Frankly,I am interested that you did not raise the argument which many would feel is the primary reason for buying an f/4 instead of an f/7-- that is the photographic speed. For extended objects the f/4 is more than 3 times as fast as the f/7. This is a real consideration when lying on your back on a cold winter night guiding an exposure. However, as you know there are other reasons why the f/4 may not actually be the choice for photography,at least not for objects which cover very much of the field of view. One reason is the co-

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PRAIRIE ASTRONOMY CLUB
MEMBERSHIP ROSTER, July 15, 1980

	Name	Address	City-State-Zip	Class	Exp.	Telephon
1.	Donn Baker	2610 No. 59th St.	Lincoln, NE 68507	R	8/81	466-4309
2.	Walter Baumann	2305 Marilynn Ave.	Lincoln, NE 68502	R	4/81	423-5740
3.	Janet Beason	7230 Eastborough Ln.	-Lincoln, NE 68508	R	2/81	464-1950
4.	Michael Benes	722 Hill St.	Lincoln, NE 68502	R	12/80	432-9179
5.	Roger Besch	1030 No. 78th St.	Lincoln, NE 68505	R	5/81	467-1532
6.	Felix Cavosie	911 Division St.	Hurley, WI 54534	R	2/81	--------
7.	Marc Cherry	654 E. 2nd St.	Hickman, NE 68372	R	8/81	792-2906
8.	Dr. John Clothier	355 So. Cotner Blvd.	-Lincoln, NE 68510	R	9/81	488-5609
9.	Norma Coufal	1921 Beatrice St.	Lincoln, NE 68506	R	6/81	483-5685
10.	Budd Duvall*	1015 So. 40th St.	Lincoln, NE 68510	R	12/80	489-7933
11.	Ed C. Epp	Goshen College	Goshen, IN 46526	R	2/81	--------
12.	Harlan Franey	1734 So. Cotner Blvd.	-Lincoln,NE 68506	R	1/81	488-0085
13.	Norman Frerichs	1423 Lincoln St.	Beatrice, NE 68310	R	8/81	--------
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15.	Marvin Garber	2818 Everett St.	Lincoln, NE 68502	R	10/80	435-8657
16.	Russ Genzmer	2824 N.W. 6th St.	Lincoln, NE 68521	R	1/81	475-0608
17.	Karl Gramann	628 9th St.	Adams, NE 68301	R	10/80	988-4855
18.	Roger Grant	3333 So. 44th St.	Lincoln, NE 68506	R	10/80	--------
19.	Dick Hartley	320 Wedgewood Dr.	Lincoln, NE 68510	R	10/80	489-4105
20.	Duane Hutchinson	3445 Touzalin Ave.	Lincoln, NE 68507	R	1/81	466-4988
21.	Richard Johnson*	1360 Pawnee St.	Lincoln, NE 68502	R	9/81	423-6726
22.	Steve Kell	RFD #8	Lincoln, NE 68506	R	8/81	423-4114
23.	Werner Klammer	1648 Columbia St.	Seward, NE 68434	R	9/80	--------
24.	David Knisely	1616 No. 14th St.	Beatrice, NE 68310	R	12/80	472-0424
25.	Kenneth Kopta	1544 Crestline Dr.	Lincoln, NE 68506	R	3/81	489-3005
26.	Jerry Kroeger	RFD #8	Lincoln, NE 68506	R	4/81	489-8168
27.	John Lammers*	1007 8th St.	Fairbury, NE 68352	R	12/80	472-8939
28.	Allan Logan	5577 Rice Dr.#98007	Colony, TX 75056	R	6/81	--------
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30. Dr. R. A. Manthey	61st & O-Gateway	Lincoln, NE 68505	F	9/80	489-3237
31. George E. Martin	1039 So. 26th St.	Lincoln, NE 68510	F	10/80	475-9065
32. Kris Miller	1149 So. 17th St.	Lincoln, NE 68502	R	5/81	435-4051
33. Mike Miller	4021 Linden St.	Lincoln, NE 68516	R	10/80	489-5378
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35. C. L. Moore	1140 No. 79th St.	Lincoln, NE 68505	R	9/81	466-1886
36. Earl Moser	----------	Hickman, NE 68372	R	9/81	792-2260
37. Daniel Neville	410 So. 23th St.	Lincoln, NE 68510	R	11/80	432-7772
38. William F. Norris	2832 Manse Ave.	Lincoln, NE 68502	R	1/81	435-0267
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40. Mark L. Powell	3310 Cooper St.	Lincoln, NE 68506	R	8/81	489-6114
41. Carroll Reinert	3895 Sheridan Blvd.	Lincoln, NE 68506	R	1/81	483-1093
42. Curtis Roelle	6831 Bethany Park Dr.	-Lincoln, NE 68505	R	3/81	464-2340
43. Rev. Zygmund S. Rydz	St. Mary's Church	Ashland, NE 68003	R	9/81	944-3554
44. Ed Schmidt	2710 Ryons St.	Lincoln, NE 68502	R	9/81	435-8676
45. Terry Smith	1900 So. 49th St.	Lincoln, NE 68506	R	6/81	488-2561
46. Craig Sosin	3401 Hillside St.	Lincoln, NE 68506	R	11/80	488-0737
47. Merton E. Sprengel	4522 Hillside St.	Lincoln, NE 68506	F	9/81	489-3177
48. Larry Stepp	3122 Oak Hill Rd.	Carrollton, TX 75007	R	5/81	245-7647
49. Lee Thomas *	5827 LaSalle St.	Lincoln, NE 68510	R	9/81	483-5639
50. Boyd E. Thompson	1201 No. 67th St.	Lincoln, NE 68505	R	6/81	467-1087
51. Steve Traudt	2726 Washington St.	Lincoln, NE 68502	R	2/81	435-7617
52. Scott Underwood	1525 So. 25th St.	Lincoln, NE 68502	R	1/81	477-6315
53. Ronald B. Veys*	940 Colony Lane	Lincoln, NE 68505	R	1/81	464-1449
54. Dr. Morris J. Weiss	P.O. Box 2801	Pamona, CA 91766	R	10/80	--------
55. Dean White	1417 No. 32nd St.	Lincoln, NE 68503	R	1/81	474-0503
56. Ed Woerner	419 So. 43th St.	Lincoln, NE 68510	R	8/81	489-4458

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*- indicates club officer

STEPP REPLIES TO SPERLING
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ma mentioned in my article. The star images formed by the f/4 at the edge of the field will have 3 times the apparent size of the images formed at the same relative points in the field of the f/7. While this effect is not really bothersome when the telescope is used visually, it can be very annoying in a photograph. Also, since the photographic limiting magnitude of a telescope is determined by focal length rather than f/ratio, the f/7 will be able to photograph fainter stars before the film is saturated by sky fog.

In writing the comparison of telescopes in the article I had no intention of implying that an f/4 telescope is not a worthwhile instrument to own. You may be interested to know that I have an 8-inch f/4 which I enjoy using very much. The point I was trying to make is that most people automatically think of an f/4 when they consider buying or building an RFT, when they could have an f/7 RFT, which not only allows the same low magnification, but also will provide much better high power views with less coma at all magnifications. Perhaps I should have concluded the article by saying that for RFT's, relative to f/4 reflectors, f/7 telescopes do not enjoy the popularity they deserve.

Once again, thank you for taking the time to comment on the article. I hope you will continue to read the PRAIRIE ASTRONOMER to see what we are doing out here on the prairie.

Sincerely,
LARRY STEPP

A Face, A Pyramid, And Water on Mars

Astronomers listened with interest and some skepticism to a description of Martian rock formations that resemble a human face and a pyramid.

However, whether the formations were the work of intelligent beings or merely the result of natural erosion on Mars has not been settled.

The description of the rock structures was presented to a meeting of the American Astronomical Society last month by Vicent F. DiPietro and Gregory R. Molenaar, who have been studying the face-like formation and the pyramid in pictures of the Martian surface recorded by a spacecraft orbiting the planet.

Neither DiPietro nor Molenaar have claimed that the formations were the work of intelligent beings, but they have contended that the structures are unusual enough to warrant expert review.

Scientists have also reported that analyses of radar data from Mars seem to reveal patches of water just below the surface of the red planet, according to the LOS ANGELES TIMES.

The radar information was taken in 1971 and 1973 from the 210-foot Goldstone dish facility in the Mojave Desert in California.

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A Short History of the Prairie Astronomy Club (Part 2)

(Editor's Note: The first installment of this "History" was published in the March 25, 1980 PRAIRIE ASTRONOMER. Owing to space limitations, we have not been able to continue the series until this month.)

Chronologically, here are some other highlights of the club's first two decades:

June 30, 1962 -- First private star party held at home of Dick Hartley.

August 9, 1962 -- First Gateway show.

July, 1965 -- Club observatory plans first discussed.

December 20, 1965-- Prairie Astronomy Club formally incorporated as a non-profit corporation, thanks to Phillip and Richard Johnson.

June 9, 1967--Club members first attnded a Mid-States Region Astronomical League Convention.

August, 1967 -- The club bought a 12½-inch f/6 reflector telescope.

In late 1967 the club joined the Astronomical League and changed eastern Nebraska from North Central to the Mid-States Region.

August, 1968 -- First club family picnic and star party.

June 5, 6, 7, 1970-- Our club is host to the Mid- States convention. The convention was held at Olin Hall at Nebraska Wesleyan, where the club was meeting regularly at the time.

In the summer of 1973, the Lincoln and Omaha clubs co-hosted the national convention of the Astronomical League in Omaha.

Born in 1961, the club is now 19 years old. Thanks to its early guardians, it has spent very little time in infancy, but it has developed fast and strong.

In cooperation with the Lincoln City Parks & Recreation Department, the observatory and meeting place of the Astronomy Club was opened in November of 1977. Money for the building was donated by Mrs. Hyde in memory of her husband, A.Leicester Hyde. The property is owned by the City in Holmes Park, in southeast Lincoln. The Federal Government helped set up a solar heating system for the building. The Observatory is open to the public each Saturday evening and three telescopes are manned by the volunteers of the Prairie Astronomy Club. Groups may make special arrangements with the City for other evenings.

Regular meetings of the club are held on the last Tuesday of the month at 7:30 p.m.

Special projects include monthly "Star Parties" at the home of Earl Moser at Hickman, south of Lincoln, where the club telescope is mounted outdoors.

THE PRESIDENT'S REPORT (Continued from Page 2)

Hundreds of dedicated people have given of their money, time and energy to build and operate this public observatory -- one of very few in the nation. Let's hope that the ignorant actions of a few miscreants do not discourage these people and destroy what they have built for the other 20,000 good citizens of Lincoln.

-- RON VEYS

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Water on Mars? Maybe!

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The echoes were bounced off a region of Mars known as Solis Lacus, and were characteristic of a surface that is both highly reflective and smooth. The radar interpretations termed speculative by the project scientists, were indicative that the water may be 20-40 inches down.

NEWS NOTES:

STAR PARTY-PICNIC Saturday, August 9. Location, to be decided at this month's meeting--Wagon Train Lake (as usual), or the Omaha Astronomical Society's Dark Sky Site near Weeping Water. Come to the meeting prepared to debate the location. If you can't come, call an officer for location.

THE PRAIRIE ASTRONOMER
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9/81

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