

2-71

February 23, 1971

Phone: 489-7651

* * T H E P R A I R I E A S T R O N O M E R * *

Our meeting this month will be held in the Olin Hall of Science at Nebraska Wesleyan University at 7:30 p.m. The program will be a demonstration of planetaria built by amateurs. Consequently, there will not be a regular planetarium show for this month.

--The President's Report--

There seem to be as many variations of interest in the different divisions of astronomy as there are members in our club. This creates a real problem in providing programs and special events that will appeal to everyone. You can be sure that a program that is interesting to many members would, on the other hand, be quite dull or overtechnical to the rest of the club.

It is for this reason that the club officers try very hard to present a program that will have something in it that will satisfy everyone's interests.

It is quite obvious that a classroom lecture type of program is just the thing for some people, but far over the heads of others. on the other hand, a social gathering type meeting with a pot-luck supper and individual group discussions would be ideal for some and dreary for others.

So, the best we can do is to have a variety of all types of meetings and hope that we please part of the people most of the time.

Bear with us during those highly technical or social gathering type meetings and sooner or later we will present something that's right up your alley, but not if you fail to attend the meetings of the club you sponsor.

---Earl Moser

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--Gateway Sky Show Schedule for 1971--

April 1	Thursday	The column to the left is the listing of the regular sky shows; naturally any special shows are not listed here at this time.
May 6	"	
June 3	"	
July 1	"	
July 29	"	
Aug 30	Monday	Also, note that all these shows are on a Thursday except the one for August 30th.
Sept 30	Thursday	
Oct 28	"	
Nov 25	"	

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Anyone needing or wanting back issues of Sky & Telescope, contact Jess Williams or Brian Dodson. As a late entry, here is a list of some things Jess has for sale, and if you don't see what you might be wanting, give him a call; he has a lot of stuff not listed here:

- One Jaegers clock drive \$25
- One 6" f-7.5 mirror, good condition \$20
- One Herschel Wedge \$10

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Observatory Project

I would first like to thank and congratulate those members and guests who were present at the January club meeting. Thanks to their generosity, the "passing of the hat" resulted in an intake of \$21.72, an unprecedented total. Apparently the members of the club wish to finance their observatory, which is as it should be. The hat will be passed again at the next meeting and at all future meetings, until we are finished with financing the observatory. Let's try to outdo ourselves.

The total in the observatory fund at the present time (Feb. 1) is \$212.21, of which \$62.21 is from donations since the end of December, and \$150.00 is from a restructuring of the treasury. I have separated the Treasury into two parts, one of which is to be drawn from for club expenses, which are nominal, and the other which is designated the Observatory fund, and its funds are reserved for club projects, particularly for the club observatory. For this restructuring, I drew up a budget for the next year, and determined that normal operating costs and a large excess would exist if we put about \$80.00 into the segment for club expenses, and the remaining club funds into the observatory funds. The actual amount is \$81.29. I feel that this procedure will be a great help in the bookkeeping involved with extensive donations, and it will give us a more or less precise figure for the amount which our club has amassed toward projects such as the observatory.

I have also contacted Olson Construction Company, a prominent construction firm based in Lincoln, and they have promised that they will put in a foundation for the club observatory. The only provisos in this agreement are that we have legal title to the land or a long-term lease, and that we have everything that we are going to put on the foundation planned and confirmed and ready to put on it. I think that this is a small price for a job which would cost us, to do it properly, between \$200 and \$300. Oh yes. We also have to do the digging. Since we were planning to do this anyway, this is no obstacle.

If anyone has any questions on any of these points, please see me at the next meeting and I'll try to clear them up.

FREE! Brian Dodson, 511 Cottonwood, Lincoln 68510 488-1250

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The Skies This Month

New moon is on the 26th, a week either side will be good for deep-sky viewing. There are no exceptional conjunctions this month.

Mercury- During the last week of the month the planet closest to the sun will be visible low in the west just after sunset.

Venus- Is a morning star rising about two hours before the sun. On the 23rd, the moon will be very close to Venus, with an occultation occurring on some parts of the earth. This will not be visible from North America.

Mars- At magnitude +0.8, it rises about five hours before the sun, in Sagittarius.

Jupiter- At Magnitude -1.8, it rises about midnight, in Scorpius.

Saturn- In Aries, it shines at Mag. +0.4, it is well past the meridian at sunset, and sets about 11:00 P.M.

Uranus- is at position RA 12h 46m, Dec 4°12'S. on the 15th

Neptune- is at position RA 16h05m, Dec 19° 07'S. on the 15th

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As most of you know by now, the Russian space probe, Venus 7, made it to the surface of Venus, our sister planet, and continued for some time to send data to the Earth. The fact that it failed is rendered less mysterious by the data it sent back: Temperature there is 900°, with an atmospheric pressure of 90 atmospheres. Goodbye visions of Venus as a world-wide ocean, or as a giant swamp, or for that matter, as a hot, dry desert on which men could live. Venus, it seems, more closely approximates a blast furnace. I don't think we'll be sending any manned probes to Venus for a while. At least I won't be on one.

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Although this page of the newsletter is being written before the finish of the Apollo 14 mission to the moon, which will be gone into detail later, I just lived through the tension of their docking failure. If I could find a movie that would do this, I wouldnt hesitate to pay the \$1.75 admission charge. Maybe we can handle this, after all.

2-71

Notes on the Observatory

At the present time, we are planning on making a roll-off roof type of observatory. There are two possible types of building that could be put up. One possibility is that we could build a cement-block building with a track on top for the sliding roof, or that we could obtain a generous sized metal building, and modify it to be a sliding roof. This last would be the less expensive method, but would call for someingenuity on our parts.

As far as the dimensions go, we are considering a building with an internal floor size of from about 12'x12' to 15'x15'. The final size will depend on many factors, probably the most important of which will be finances. If we decide on using the metal building, however, the choice will be limited to what is available and these general sizes would be considered merely as guidelines.

Incidentally, we are now planning, for some time in the future, a dedication ceremony for the observatory, at which point of time a plaque will be put up, with names of people who have been especially helpful towards the completion of the telescope and observatory project. No names have as yet been decided on, but I think that the following list of names are obvious choices.

- Richard Hartley
- Earl Moser
- Carl Olsen, of Olsen Construction
- Mrs. Fred Seacrest
- Jess Williams

I realize that this must be an incomplete list, and think that such a list must always slight some people. However, start thinking about this. If you think of people who belong on this list, Please submit these names to the Treasurer. I will compile a master list from which the final choices will be made. I would like to emphasize that the final selection will be some time in the future, but the time to start working on it is right now.

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Late News

Both the Omaha Astronomical Society and the Midland Empire Astronomy Club (St. Joe) are planning large programs of study for the lunar eclipse of Feb 9th. Perhaps they will get good results. At least, we hope so. For the next time, maybe we should plan something like these observing programs. Who knows, it might just pay off. Also, seeing people is more than half the fun in this sort of work.

According to the St. Joe newsletter, the 1971 Mid-States Convention will be held in Fayette, Mo. by the Kansas City club, on JULY 16, 17, 18. This is a change in time from that determined by the planning meeting. This was probably done to free the mid-states region to go to the Apollo Rendezvous, which will be held in Dayton Ohio on the weekend of June 19th, which was right during the scheduled time for our convention. This is a type of midwest Stellafane, which is being started this year by the club in Dayton. It should be worth going to. Incidentally, their club scope and observatory will be dedicated at this meeting. They have a 19-inch Buchroeder type catadioptric telescope. This would be worth the trip.

Once again, the national convention will be held in Memphis, Tenn., by the Memphis Astronomical Society. This is on the 12th, 13th, 14th, and 15th of August. It will be a dual meeting, both of the Astronomical League and of the Association of Lunar and Planetary Observers. With the opposition of Mars occurring on these dates. This should be a short journey well worth making.

The Smithsonian finally got in touch with me, and the circulars are ordered. The information contained in them which is pertinent to amateur astronomers will be printed monthly in the newsletter. In other words, 19th magnitude comets will be ignored. I guess that Cave is still the slowest, but the Smithsonian takes second place.

In a letter I received from Kansas City recently, Bob Sandy tells us that he has been made manager of a contact-lens lab. Congratulations, Bob, and we hope that you still have time for occultations. The best of luck to you!

Things to Do

Try taking some photos of the night skies with your camera just mounted on a tripod. With an exposure of 20 seconds, a 2" f/2 lens gets images of mag 8½ stars on Tri-X. The amount of trailing here is not noticable until an 8 to 10 times enlargement is made, and some very faint objects will show up. I don't want to spoil the surprise, but on a recent attempt of mine, with the aforementioned equipment, I obtained a faint, but recognizable image of the Merope nebulosity. Just a trace, but it's very presence was amazing to me. This is really worth trying. It is also an exciting entry into the field of astrophotography. Several club members can develop your film and aid in making enlargements, especially Jess Williams and Monte Cole. If you want to try it yourself, I would suggest developing about 1½ times the suggested time in Microdol, which is good for star fields, but not so good for extended objects. For this purpose it works well.

Try obtaining an old eight millimeter camera lens, of about 6mm focal length, and use it as a high power eyepiece. If it works well, you can obtain an adapter for it to 1¼" OD from Bob Allen, 2326½ South 15th Street, Omaha, Neb. 68108. These cost \$5.00 @, and from the results I have seen, the combination of a good camera lens and one of these adapters cannot be beat for a high-power eyepiece.

If you have, (or a relative, if that is the appropriate choice) any talents, abilities, or connections which you would be willing to use towards the completion of the observatory, please contact Jess Williams, at 488-2112. These talents are what we need to make this project a success.

Bring your loose change to the next meeting. We've got to beat last month's total. If you want to make a larger, or known donation, contact the treasurer, Brian Dodson, at 488-1250. This is a necessity if you expect to count this as a tax deduction.

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I just heard on the radio that there are 2, 187 unmanned satellites in orbit around the Earth. How long will it be before one of them hits a manned satellite?

Does anyone know what happened to the rest of the club lenses? If so, please contact someone! We could use another lens auction.

We have no reply from the Smithsonian yet concerning the card which the club voted to buy at the December meeting. I have sent a follow-up letter, but so far, no response. If this keeps up, they will tie Cave Optical as the slowest movers in the astronomical community.

\$212.21!!! That's a pretty good start towards the observatory. With your help, this could become a reality sooner than we think. It's about time, too, after all these years of inaction and uncertainty. Next, however, comes the question of plans for the observatory. If you have ideas along these lines, please incorporate them into a sketch, and give them to the Treasurer.

For University students: If you want three hours of easy A, take Physics 10, the introductory astronomy course. If, however, you want to learn something, don't take it. It would be a waste of your time.

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For Sale_Wanted

A 500mm f/8 Catadioptric lens, with Exacta adapter. This is a fine, compact lens with many uses. It also makes a good telescope. Contact Monte Cole. 800 Eldon Drive Lincoln, Nb. 488-1652

A six-inch mirror kit. Complete. Contact Ed Woerner, 4530 Adams Lincoln, Nb.

A six-inch scope, for a fellow outside the club. Contact the newsletter editor. 1836 So. 58th Lincoln, 68506 489-7651

Pocket change, for the club observatory. Come to the meeting and give it yourself. Also see a bunch of fine people, and hear a good program. February 23, 1971, at Olin Science Hall. Bring a friend. (Even if he's broke)

Incidentally, this item is wanted!