

4-69

PAC

Our next meeting, though held at the same place, will be somewhat different than past meetings. The program will begin at 7:30 with "planetarium talk" by Prof. Moore. These talks, while designed for the younger members of the club, will be open to all members. At 8:00 a speaker will present a program on meteors and meteor patrol cameras. After the fine program presented by Prof. Moore's last speaker, I'm sure we can expect another interesting evening. About 9:00 the meeting will break up and younger members may go home at this time if they wish. This is also the time when refreshments will be served. Afterwards the regular procedural meeting will be held until about 10:00.

Remember-April 29, 7:30 P.M.

The President's Report

A caravan of three cars with 8 club members and equipment for three graze-occultation sites trailed to Tobias, Nebr. on March 22. We decided to go ahead and be at the location in spite of the gloomy weather. We figured that there might be a break in the clouds at the last minute. It just so happened that the moon did appear briefly at 8:15. We had waited in Tobias' only grocery store about an hour before the rain stopped. When we saw the moon we immediately headed for the site, hoping to catch the graze at 8:55. I will let someone else tell of the disaster that followed!

We were privileged to have Dr. Athay of the High Altitude Observatory at Climax, Colo. as our guest speaker at our last meeting. It was first feared that a professional astronomer might give a lecture on the "Spectrum of the Solar Chromosphere" or some other highly technical talk. But Dr. Athay knew he was talking to amateurs and he gave a fine talk on some of his experiences and "misadventures" on solar eclipse expeditions. It was even more interesting to learn that even the pro's have equipment failures, travel mishaps, and human errors on the well planned and highly technical trips that they take. I regret that not all of our own club members were on hand to hear this fine talk.

I have been following the progress of Venus as it reaches inferior conjunction. It has been interesting to watch the crescent grow thinner each day. Since the first day of April I've had to do my observing in the day time. I especially wanted to see Venus on the day of the conjunction. Venus was to be 80° north of the sun on that day. In order to locate Venus in the Day Sky, I made an atlas with grid times for R.A. and Decl. from information from Sky and Telescope and the Observer's Handbook. At noon on April 8, the crescent was very thin and had the sky been more transparent, I could have seen the crescent extend well over 180° around the disk of the planet. I also had trouble with "dancing images" due to the high wind. I will continue to try and if conditions are better I will photograph it as it passes on to the west.

I'm happy to announce that another member of our Club has reached the goal sought by many Amateur Astronomers. Rick Johnson has completed his catalog of the Messier Objects. Welcome to the club Rick, small though it may be!

Earl Moser,
President

The following letter from Larry Stepp also accurately reflects the views of the editorial staff.

During the last few months several arguments have, on more than one occasion, disrupted meetings and caused hurt feelings among club members. In addition, there have been secondary misunderstandings, in the meetings and out, about the procedure for settling the original disputes. All-together, it has become painfully apparent that there is, and for a long time has been, a need in our club for some rules of order and procedure, to eliminate the tensions and hurt feelings which arise from these disputes.

Those of us who are relative newcomers to the club had our first look at the club Constitution in the last newsletter (thanks to Jess), but it is obvious that the Constitution was never intended to be a guide to procedure, but merely a description of the existence, intent, and nature of the club. The papers of incorporation, which I have also seen recently, shed no real light on the subject except to say that the Board of Directors is expected to establish and maintain club bylaws to prescribe proper behavior in particular situations. A further search, this time in the minutes of past meetings, confirms that this has never actually been done in any orderly manner.

The recent misunderstandings have emphasized the need for a system of rules of conduct and procedure by raising many questions: What powers and duties are assigned to each club officer; What is the Board of Directors and which club officers are on the Board; Who is in charge of publishing the club newsletter; Who has the power to commit the club to appear at a regional meeting, or local star-party; How are officers elected; How are motions passed; etc.

It is time that someone find out exactly who is on the Board of Directors, call them together, and help them organize first, rules governing their own actions, and then rules of procedure for the club as a whole. We have seen that this sort of action cannot be postponed any longer.

A house without a framework is called a shack. A club without a framework is called the
Prairie Astronomy Club
of
Lincoln, Nebraska

The Sky for April, 1969

- Mercury On the 1st. is in R.A. 0h 14m, Decl. $0^{\circ} 28' S$, and on the 15th. is in R.A. 1h 57m, Decl. $12^{\circ} 11' N$. During the latter half of the month Mercury will be increasingly visible as an evening star low in the west at sunset, having an altitude of 18° .
- Venus On the 1st. is in R.A. 1h 13m, Decl. $16^{\circ} 20' N$. and on the 15th. is in R.A. 0h 45m, Decl. $11^{\circ} 35' N$., mag. -3.3, and transits shortly before noon, therefore being poorly placed for observation, but visible 13° above the horizon as a morning star.
- Moon Full-April 2; 3d.-April 9; New Moon-April 16; 1st.-April 24. Occultation of Pleiades; see special report.
- Mars On the 15th. is in R.A. 16h 59m, Decl. $22^{\circ} 27' S$., mag. -0.6, and transits at 3h 26m, rising before midnight. On the 26th. it is stationary in R.A. and begins its retrograde motion in Ophiucus.
- Jupiter On the 15th. is in R.A. 11h 56m, Decl. $2^{\circ} 08' N$., mag. -2.0, and transits at 10h 19m, being well up in the east at sunset, in Virgo.
- Saturn On the 15th. is in R.A. 1h 48m. Decl. $8^{\circ} 43' S$., mag. 2, but too near the sun for observation.
- Uranus On the 15th. is in R.A. 12h 05m, Decl. $0^{\circ} 19' N$., mag. 5.9, and transits at 10h 28m. With a disk of 3.9", Uranus is located in Virgo.
- Neptune On the 15th. is in R.A. 15h 45m, Decl. $18^{\circ} 03' S$., mag. 8.0, in Libra, and transits at 2h 12m.

April will certainly be the last time to glimpse most of the winter-time showpieces until next year. So if you have any "old friends" in the winter sky, now is the time to say good-bye for another year.

With the passing of the winter milky way, you have the choice of being satisfied with viewing the moon and planets for a few months, or delving into the fascinating area of galaxy hunting. In the region of Virgo, Coma Berenices, and Leo, literally hundreds of these faint wisps of light are to be found. And while it is naturally advantageous to have a telescope of large aperture, it is surprising just what can be seen with a 'scope as small as a 2.4" refractor. Using just such an instrument I have located a nebula as faint as magnitude 11.4, under favorable conditions. But whatever the case may be, the important thing is to be out there looking.

The Sky for May, 1969

- Mercury On the first is in R.A. 3h 51m, Decl. $22^{\circ} 42'N$. And on the 15th. is in R.A. 4h 40m, Decl. $23^{\circ} 54'N$. During the first half of the month this small but bright planet will be easily visible in the evening sky just after sunset. Inferior conjunction May 29.
- Venus On the first is in R.A. 0h 35m, Decl. $6^{\circ} 34'N$. And on the 15th. is in R.A. 0h 54m, Decl. $5^{\circ} 42'N$., mag. -4.2, and transits at 3h 22m rising two hours before the sun. Greatest brilliancy on May 14th.
- Mars On the 15th. is in R.A. 16h 45m, Decl. $23^{\circ} 40'S$., mag. -1.5, and transits at 7h 23m near sunrise. In Ophiuchus, it rises two hours after sunset and dominates the southern half of the sky all the rest of the night coming to opposition on the 31st.
- Jupiter On the 15th. is in R.A. 11h 48m, Decl. $20^{\circ} 51'N$., mag. -1.8, and sets in Virgo about two hours after midnight.
- Saturn On the 15th. is in R.A. 2h 02m, Decl. $10^{\circ} 01'N$. Visible low in the east before sunrise in Pices.
- Uranus On the 15th. is in R.A. 12h 2m, Decl. $0^{\circ} 39'N$. During this month Uranus' 5.7 magnitude disk will be in the same finder field as Jupiter and should not be missed.
- Neptune On the 15th. is in R.A. 15h 42m, Decl. $17^{\circ} 53'S$., mag. 7.7, transiting at 6h 11m, and comes to opposition May 18th. in Libra.

The Prairie Astronomy Club will hold its first star party of 1969, on May 9, at Hickman, Nebraska. As usual, this star party has been well planned and well publicized, but also, as usual, the attendance will be poor. It is always the same five or six club members who plan these events and the same five or six who attend them.

This is an unfortunate situation because the most obviously educational thing done by the club is the teaching of the sky and how to use a telescope to its more inexperienced members. Younger members need this sort of encouragement if their interest in astronomy is to grow and become stronger.

But the problem is not limited to the younger members of the club alone. The older men, the founders of the club, the ones who have made the club what it is today are noticeably absent from most-if not all-star parties. They need to find out just what has been happening in the last few years and exactly what they have forgotten. Maybe in this way the interest which they once had in astronomy could be reborn at a time as important as this one when Lincoln has the opportunity to host the 1970 Mid-States Regional Convention of the Astronomical League and all help will be needed.

Once again, anyone who needs transportation to the star party should contact Monte Cole; 488-1652, or Ed Woerner; 466-9234.

Astronomy Through a 2.4" Refractor

Most of our membership does all of its observing through a six inch or larger telescope. But many objects can be seen very well with a telescope of around 2.4 inch aperture.

Planets can be well seen at between 90 and 120 magnifications. Jupiter can be seen with up to six belts and I have observed dark areas around the poles and a dark equatorial belt on Saturn. When at a good observing angle the ring system of Saturn is a grand sight and several of Saturn's satellites can be seen.

Observations of deep-sky objects can also be made. For most objects 50 power is about the maximum, although some open clusters are improved by increasing the magnification to near 100.

The following are descriptions of objects seen by me through a 2.4 inch refractor located in Hickman, Neb;

- M 6-45x beautiful open cluster; appeared to be a string of stars coming from a point to form a semi-circle.
 - M 11-90x large and bright, "V" shaped open cluster, well resolved.
 - M 27-45x large and bright, the "dumbbell" shape could be made out.
 - M 46-40x a beautiful, fine open cluster, partially resolved, small jewels.
 - M 81-40x large and bright oval shaped blob, brighter towards the center, fainter outer parts.
 - M 82-40x also a good galaxy, long and narrow, in the same field as M 81, impressive sight.
 - M 57-45x nice object, plainly visible as a ring at 45 power.
 - M 56-45x small and rather faint globular cluster, no resolution (found by Monte Cole).
 - M 76-45x very small and EXTREMELY faint planetary nebula, almost invisible, (found by Monte Cole).
-

The Lincoln Hobby and Sports Show, held April 19 & 20, was a great success. The Prairie Astronomy Club again took first prize in the amateur astronomy division! I would like to thank Earl Moser, Rick Johnson, and Monte Cole for helping with our club exhibit. Also, I would like to thank Miller and Paine for the use of a rear projection screen to show some of Earl's and Rick's astrophographic slides.

Ed Woerner,

1969 Sports and Hobby Show Coordinator