June 24, 1969

The June meeting will be held on the 24th. at Nebr. Wesleyan Uni., Olin Science Hall at 7:30 P.M. There will be a planetarium show as well as the regular business meeting which will follow. Refreshments

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President's Report

The 1969 Mid-States Convention was a huge success. Ten members of the club were on hand for the ceremonies. Eric Rudd received a 16.3 mm eyepiece for the best equipment display. Jess Williams gave a very interesting talk and demonstration of his rotating solar filter. Rick and I showed our slides again, although several of our own club members walked out when the show began. The majority of the audience stayed and greatly enjoyed the show.

The greatest honor came to our club when we were named hosts of the 1970 Mid-States Convention. I am Regional Chairman for the coming year and Bob Allen, of the Omaha club, is my Co-Chairman for the coming event.

This coming year will be a busy one. Committees will be formed for the many tasks before us and our club will be put to a severe challenge. Lets all work together and make the 1970 Mid-States Convention one of the best of all time:

Earl Moser

President-Prairie Astronomy Club
Chairman- Mid-States Region of the
Astronomical League
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Sky Show at Gateway Shopping Center, June 26, come out and enjoy the fun with us and the viewing public.

What I am about to write will be duplicated by Earl in his Presidents Report, but I can't resist going over some of it again.

SUBJECT-Our trip to Fayette, Mo. and the Mid-States Convention. We all came back enthused, at least I did. The following club members made the trip: Earl Moser, Monte Cole, Rick Johnson, Scott Coatsworth, Rick Ashler, Steve Kunkee, Eric Rudd, Roger Severns, Ed Woerner, and myself. We had a swell time, picked up a lot of pointers, and got to know some fine, dedicated amatuer astronomers and also some professionals. From here I think that I'll let someone else take over!

Jess Williams

Just one thing I want to know! Why do they make dormitory doors out of metal? SLAM SLAM SLAM

The Mid-States region of the Astronomical League held its 19th annual convention in Fayette, Missouri on June 6, 7, and 8. Ten members of our club attended. This was our best attendance record since we began going to the conventions three years ago. Those attending were: Earl Moser, Monte Cole, Jess Williams, Rick Johnson, Ed Woerner, Roger Severns, Steve Kunkee, Eric Rudd, and Rick Ashler. Other clubs attending were from Oklahoma, Wichita, St. Louis, Kansas City, St. Joseph, Omaha, and the host club which was the Central Missouri Amatuer Astronomers. The total attendance was nearly one hundred.

I believe that it is safe to say that our club "Stole the show." We presented three of the talks. One by Jess Williams on solar filters. Earl and I showed our slides again but with an interesting twist. Carolyn Hurless added to the slides by going up to the screen to identify numerous variable stars at maximum or minimum as well as the limiting magnitude of our slides! I think Earl and I learned more than anyone else.

But the third presentation by Eric Rudd ran off with the grand prize. Eric gave a talk on his planetarium and later a demonstration in the observatory dome. When this planetarium is projected on a dome the view is unbelievable, even to Eric! This became the talk of the convention and when the prize was given for best original project, Eric won by unanimous vote. His prize was a 16.3 mm erfle eyepiece worth over \$20.

Robert Cox presented another of his good talks. This time on trying to persuade us that dioptric (lens) and catoptric (mirror) telescopes were as old fashioned as the Model T. He insists that a combination of both lenses and mirrors, catadioptric, are far superior. He showed us various systems which have been invented including one that has continuous in focus zoom from 50 to 750 power!! Plus other systems which were defraction limited using only spherical optics.

The banquet speaker was Carolyn Hurless. She was the best banquet speaker the conventions have had since I started attending. Mrs. Hurless is one of the most active variable star observers in the country. She can find over 400 variable stars, then compare them against field stars of known magnitude (to the nearest tenth) to determine the brightness of the variable also to its nearest tenth magnitude. All of this from memory! While at the convention she used Bob Allen's 'scope to observe well over one hundred stars. When she gets home she will record these giving the date, time, star, and its magnitude. Again all from memory. She says that this is easy to do, "You can't forget what your friends looked like when you last saw them!"

Someone this dedicated usually makes a pretty dull speaker. True she was pretty but she was anything but dull. Her talk was on variable star observation; her introduction to it as well as her experiences with a neighbors gas light. Her talk was well illustrated with slides and her imaginative wit.

We were fortunate that the skys were good both nights for sky parties on the observatory grounds. The I6 foot dome homes a 12 inch Clark refractor which gave me the best view of M 13 as well as the little 13th magnitude galaxy beside it. Mars and Jupiter

showed much detail though there was a suprising amount of color around the edges of the planets. Also on the grounds is a 12.5 inch reflector in a slide off roof observatory. Many of those attending the convention brought their own telescopes both homemade and commercial. Only trouble was that lights from the swimming pool and ball park across the street greatly illuminated the sky. What a poor location for a 12 inch Clark refractor.

Some business was also conducted at the meeting which resulted in Earl being elected Chairman of the Mid-States region and Bob Allen, president of the Omaha club being elected Co-Chairman. What this means is that the next convention will be held right here in Lincoln next summer. Our club will have a lot of work to do between now and then to get ready.

Of course the Convention was not without its usual practical jokers. Towels had the habit of disappearing while you were taking a shower, rooms changed ownership without the knowledge of the owners, and sheets were tied up in knots.

All in all it was a fine time for all who attended.

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As after last years Mid-States convention, Bill Vaugn of Columbia, Mo. held open house of the Meridian Co which he operates from the basement of his house. Scott Coatsworth, Monte cole, Roger Severns, and Ed Woerner made the trip from Fayette to Columbia: There we saw the optical shop where he grinds, polishes, and tests telescope primaries and flats. For information concerning prices for new mirrors or refiguring of mirrors write:

The Meridian Company Sunrise Estates, Route 2 Columbia, Missouri 65201

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Two members of our club, Monte Cole and I, are presently building an 8-inch Buchroeder catadioptric telescope as described in the November Sky and Telescope. The primary mirror is currently in fine grinding. We have just begun work on the secondary mirror and the lenses. The lens blanks were purchased from Coulter Optical Co., and the diopter tools were bought from Simonds Machine Co. in Southbridge, Mass. We hope to have the optics completed by the end of this summer.

Advantages of this design include achromatism, compactness without resorting to a very fast system, spherical optical
surfaces for ease of figuring, and lack of detectable coma.
Furthermore, the usable image size of the 200-inch telescope
is the size of a penny. But if it was of this Buchroeder design, it would be two feet in diameter.

We have just purchased a mirror and lens grinding machine from Coulter Optical Co. and expect shipment by early July. This machine will grind and polish spherical surfaces up to 8-inches. For simple aspheric surfaces only slight final correction will be required.

The Sky For July, 1969

As Leo and Jupiter set in the west and the summer milky way rises slowly in the east, it becomes clear that it is time once again to uncover that unused telescope so carefully stored away during the winter months.

After the minor adjustments and readjustments which always seen necessary, the intrepid observer is ready to once again brave the insect-infested summer evenings in order to justify his owning a telescope.

Occassionally one finds an amateur astronomer whose telescope is more than an ornament. He is the amateur who has truly discovered the night sky. He is not content being an "Arm-chair" astronomer; he wants to go out and look for himself.

It is indeed unfortunate that there are only five such members in our club.

Mercury On the 15th at R.A. 6h 59m, Decl. 23° 29' N. Superior conjunction on July 22. To close to the sun for observation.

Venus On the 15th at R.A. 4h 29m, Decl. 190 07' N. Maginitude -3.7. Rises about 3 hours before the sun.

Mars On the 15th at R.A. 15h 57m, Decl. 230.52' S. Maginitude -1.3. Easily observed until about midnight.

Jupiter On the 15th at R.A. 12h 02m, Decl. 10 10' N. Magnitude -1.4. In Virgo sets about 3 hours after the sunset.

Saturn On the 15th at R.A. 2h 15n, Decl. 11° 50' N. Magnitude 0.6. Rises about midnight in Aries.

Uranus On the 15th at R.A. 12h 03n, Decl. 0° 28' N. On the 18th 0.6° south of Jupiter.

Neptune On the 15th at R.A. 15h 37m, Decl. 17° 36' S. In the constellation Libra.

Astronomy in Wyoming

As many of you may know, two years ago I packed up, mount, scope, and eyepieces, and headed for Wyoming. I have enjoyed working and going to school out there, but I welcomed the chance to come back here with my old buddies.

One thing I like about that country is that it is wide open. Out of town, the skies are excellent; I am tempted to boast that they are better than country skies here. I haven't done any critical observing, except from the University of Wyoming's observatory. Since it is in a very poor location to start with, about the only conclusion I could come to was that the seeing was very poor in twon. The one time I got out of town, conditions were not much better. One thing for sure--it's a lot drier out there.

From in and near Torrington, where I first lived, I logged nearly half the M-objects. But I lost my log, so I've started over here. Country skies here are very good, so I'm not complaining. More people should come out to Earl's more often. Too many of you are missing out on a lot of good sky.

So much for that. The disadvantage of Wyoming is that with people few and far between, amateur astronomers are really hard to come by. While living in Torrington, I found one lone telescope owner. He has a 3" Unitron, which I thought was surprisingly good. I found no other astronomers.

In Laramie, I found one owner of a 2.4" refractor and one owner of a $4\frac{1}{2}$ " reflector. I know of no other individual telescope owners. The University has a 5" refractor and a 10" Cassegrain by Cave. One fellow uses the 10" for lunar and planetary photography. (I have not seen any of his photographs.)

All told, there are less than a dozen people interested in astronomy. A few, perhaps, but enough.

Steve Kunkee

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Mars is getting in better position to observe in the evening as the days pass. The club's $12\frac{1}{2}$ " reflector (now stored at Earl Moser's house, provides good views of the ruddy planet. Come on out and name use of it; the sooner the better for Mars, and Friday or Saturday July 11 or 12 for deep-sky objects.