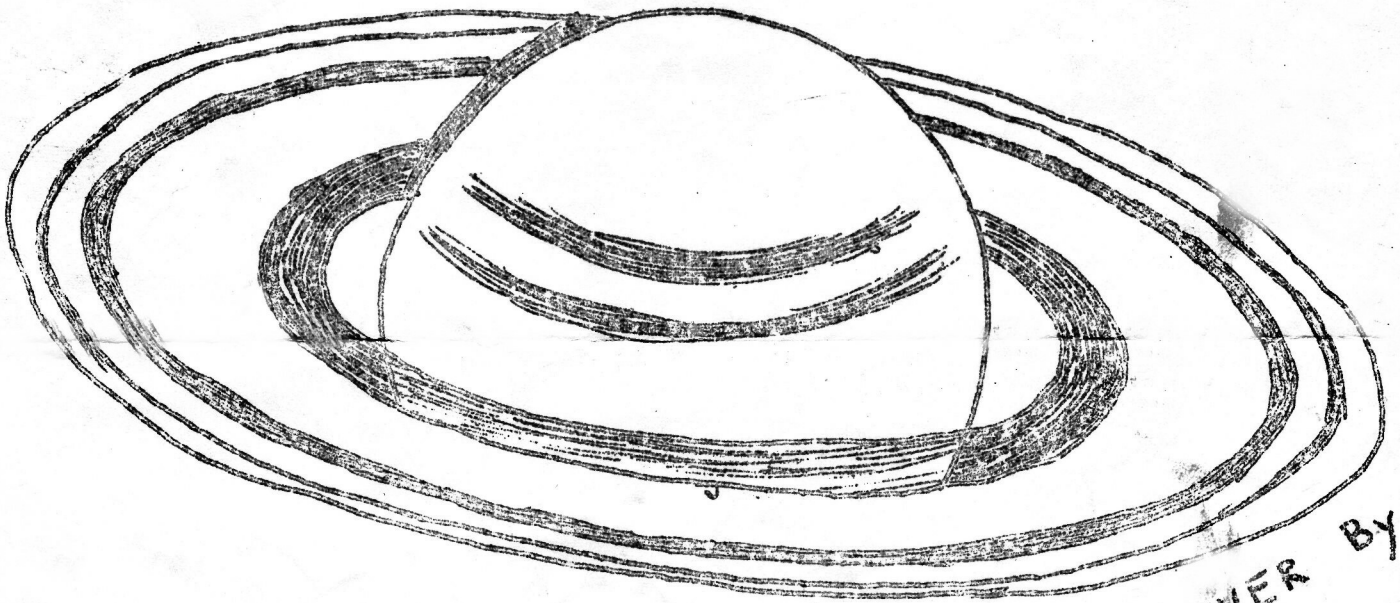


8-65

Bulletin of the

Prairie Astronomy Club



Saturn
October 7 1941
Meudon Observatory

COVER BY
Steve
Kunkle

ASTRONOMICAL ALMANAC

Our next meeting will be at Union Loan and Saving, at 56th and "O". The main topic of discussion will be our own observatory, but any subject a member wants to bring up will be discussed.

At our last meeting we decided to buy a 12 $\frac{1}{2}$ " telescope. Come to the next meeting for more details.

So bring a friend and come to the next meeting. There will be refreshments.

* * *

DID AMERICAN INDIANS SEE THE GUEST STAR? part 2

By William C. Miller

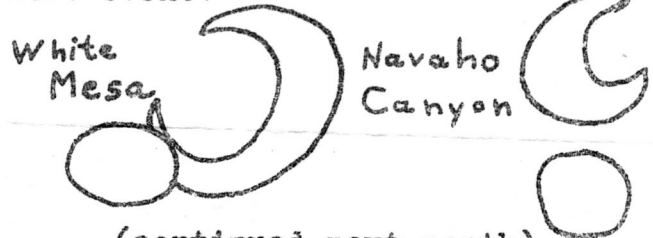
It is not at all uncommon to find the moon shown in the wrong orientation, even in modern illustrations and stage settings. Non-Astronomically trained people show a notorious lack of concern about the matter. It would make an interesting experiment to call the attention of a group of people some evening to the crescent moon close to some object such as a church spire, and later ask them to draw what they had seen. How many would draw the moon convex in the correct direction?

The situation is further complicated by the fact that the ancient artists made the two drawings on cave and cliff walls which necessitated that they face north while drawing, after having viewed the scene while facing east or west. One wonders what thought processes were involved in this transformation. Did one artist reproduce the scene as he had viewed it with the moon convex to his left, while the other reproduced it with drawing the moon convex in the same direction as

the moon itself, i.e. convex to the east regardless of its relation to his left or right hand? Either case seems equally plausible.

The problem posed by the relative location of the circle in the two drawings is also of interest. In the White Mesa drawing the circle is shown overlying the lower cusp of the moon, suggesting that the two objects were very close together in the line of sight. The Navaho Canyon drawing shows a reasonable separation between the moon and the circle. When one inspects prehistoric drawings in general in the area he is immediately struck by the grotesque distortions and the complete lack of any sense of proportion. Therefore little weight can be placed on the "scale" of the two drawings.

These general considerations, while leading to no definite conclusions, would suggest that it is possible for the two drawings to depict the same event. But what event?



(continued next month)

If a member has any announcement he would like to subscribe, we will gladly print it for him.

| | |
|--------|----------------------|
| Sept 2 | Moon first quarter |
| 6 | Saturn at opposition |
| 10 | Full moon |
| 18 | Moon third quarter |
| 23 | Equinox |
| 24 | New moon |

OUR MANNED SPACE PROGRAM

By Ed Woerner

Our space program can be divided into three distinct parts: Mercury Gemini, and Apollo.

Mercury was the first manned program. The Mercury space craft was designed to carry 1 man into orbit and keep him alive for 1 1/2 days. The Army's Redstone and the Air Force's Atlas were chosen to carry the 3000 lb. spacecraft into orbit.

Ham, the chimp started the program on January 31, 1965, making a suborbital flight. Soon afterwards the Freedom 7 and the Liberty Bell 7 made similar flights with Alan Shepard and Gus Grissom aboard.

Then Enos the chimp made a successful orbital mission. John Glenn and Scott Carpenter then became the first Americans to make orbital flights. Then, Walter Schirra made a 6 orbit flight and Gordon Cooper made 22 orbits.

The Gemini capsule is 7'6" wide and 11'6" long. The first two were unmanned, but the third took John Young and Gus Grissom up for three orbits. GT-4 was a four day mission for James McDivitt and Ed White. GT-5 is scheduled to last 8 days, but the sixth is only a two day mission designed to rendezvous with another orbiting object. GT-7 will last 14 days, but 8 through 12 will be more 2 day rendezvous missions.

The Apollo is 13 feet long plus 19 more in the Lunar Excursion Module. It can take three men up for as long as 45 days.

There are 2 phases of the Apollo program: The Saturn 1B, for orbital missions, and the Saturn V, which will soon be taking men to the moon.

What will men go to Mars and Venus in? What will those spacecrafts look like? Only time will tell what the crafts will look like when man is ready to really conquer the universe.

NATURAL SATELLITES

By Ed Woerner

Our solar system is much more than a star and nine planets. There are comets, meteors, asteroids, and 31 natural satellites.

Our moon is the first. It is 2,160 miles across and even to the unaided eye, it shows quite a bit of detail. Even a modest telescope will enable the amateur to see a lot of formations on it and with a six inch and a lot of ambition and patience, it is possible to do useful work studying the limb regions, the ray systems, the rille, and looking for features such as domed hills.

Mars has two midget moons, both of which are very hard to see. Both have been recorded in 8" refractors but a 10- or 12-inch is much better.

Jupiter's 4 main moons are a delight to watch, even in a very small telescope. It is a real joy to watch their transits and eclipses. The other 8 are small and few amateurs need bother looking for them.

Saturn has 9, of which 8 can be seen in amateur equipment. Titan, the solar system's largest moon can be seen in a 2", Iapetus, Tethys, Rhea, and Dione in a 4", Enceladus in an 8", Mimas in a 10" and Hyperion in a 12". Phoebe can be photographed in a 12" and seen in 100".

Uranus' 2 major satellites, and Neptune's largest can be seen in a 12" but most of the solar system's others are beyond all but the world's biggest. But there are enough others for the most enthusiastic amateurs.

* * *

Remember--Meeting on the 30th

Remember--Elections in Sept.

Remember--Dues in September

Prairie Astronomy Club
Lincoln, Nebraska
August 30

We are an amateur organization, formed in 1961 to promote the study of astronomy for the benefit of its members and the general public. We have had upwards as many as 60 members, composed of business men, retired persons, students, and junior members--both men and women.

The programs consist of sky shows, lectures, the study and construction of telescopes and how to use them. We try to assign a subject on stars, planets, nebula, comets, etc. to some member to report on at the meetings. The result of these reports have been outstanding, especially when given by some of our junior members.

Our club has had quite a struggle to keep going, but thanks to a group of about twenty hard core members we have been able to carry on. Our biggest need is not finance, but members. Anyone interested in astronomy is invited. Astronomy is open to everyone and don't forget the stars are yours. We have no regular dues, except you must subscribe to Sky and Telescope which is just \$6 per year and is a must for an amateur astronomer. So if you like astronomy and its related subjects, we, the prairie astronomy club can supply your needs--join us won't you, we need you.

Let me also appeal to those who are members to give us a little more of your efforts. A few of us can't do the job alone. Come to our meetings, join in the programs, and invite a prospective amateur astronomer.

The help we give to these junior members will pay big dividends. You'll be glad you had a part in amateur astronomy and our club.

Come--learn--help others and in so doing, you help yourself.

your Sec'y

J.L.W.