Lincoln, Nebraska September 28, 1965

PRAIRIE ASTRONOMY CLUB

ASTRONOMICAL ALMANAC

Our next meeting will be on Tuesday, September 28, at Union Loan and Savings, 56th and O, the main topic of discussion will be our own observatory, but any topic a member wishes to bring up will be discussed.

At our last meeting Earl Moser introduced a motion to incorporate our club with a $20 limiting factor. The motion was carried.

Also, at our last meeting a proposed slate of officers was made. The following proposals will be voted on at the next meeting:

President.....Earl Moser
V-pres.....Rick Johnson
Secretary.....Jess Williams
Recording Sec.....Steve Kunkee
Program Chairman.....George Lyberis
Ast. Pro. Chairman.....Ed Joerner
Treasurer.....Dick Hartley

Remember--Dues are due.

EXPLODING GALAXIES
part 2 Sir Bernard Lovell

If we convert the solar system distanced in this way, we find that the light from the sun takes eight minutes to cover the ninty-three million miles to us on earth and its distance is therefore eight light minutes. The light from Pluto takes six and a half hours on its journey to us, and it is therefor six and a half light hours away. From this, it is eggsier to visualize the incredible isolation of our planetary system in space, since, if we could travel through space with the speed of light, we would leave the confines of the solar system in six and a half hours, but it would be four and a half years before we reached another star.

If we continued this imaginary journey, we would pass the vicinity of other stars every few years, and we could continue in this way for nearly 100,000 years and still be within our own Milky Way. In fact, we know now that the stars of the Milky Way we see at night are arranged in the form of a huge flattened disk, across which a ray of light would take 100,000 years to travel. The sun is far from the center of our galaxie- -nearly 30,000 light-years from the central regions. The thickness of this disk of stars near the center is about 20,000 light-years but it thins rapidly and as we move out to the edge of the disk where the sun is situated, it is only a few thousand light-years across.

In this Milky Way galaxy of ours there are 100 billion stars arranged in arms which spiral away from The central hub like the tenticles of a giant octopus. To make the picture even more fantastic, we have to realuze that this spiral galaxy of ours is not stationary in space; it is rotating like a giant cartwheel with the arms trailing. On revolution of the galaxy takes 250 million years.

(Continued next month)

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DID AMERICAN INDIANS SEE THE GUEST STAR?
part 3 William C. Miller

Since the passage of a luminous body between the earth and the moon can be discarded as too improbable to warrant consideration, what other astronomical phenomenon might have inspired the drawings? To have merited special attention the event must have been exceedingly rare or highly spectacular, or both. During the

9-65 PAC

OOK

Next Meeting

Sept 28, Tues

~7 30 P.M.

Union Loan & Savings

56th & O St.

Think ---

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(Continued next month)

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centuries that the mesas and canyons of northern Arizona were occupied, the bright planets Venus and Jupiter appeared close to the moon often enough to call for no special attention; otherwise such drawings would be comonplace . The only other objects sufficiently unusual to attract attention, are novae. Such an object of sufficient brilliance could have presented a beautiful spectacle in conjunction with the crescent moon.

On the morning of July 5, A.D. 1054, Japanese and Chinese astronomers independently observed in the morning sky an extremely bright nova near the bright star Zeta

Tauri. It was so bright that it was easily visible in broad daylight. This was the fanous Supernova of 1054, believed to be the origin of the Crab Nebula. Recent Discussions of the available data indicate that this supernova was about six times as bright as Venus and was probably the brightest star-like object ever recorded. The known supernovae of our galaxy are:

Crab	AD 1054	-5
Tycho	1572	-4
Kepler	1604	-2

The possibility that the drawings found in northern Arizona depict an event which had been recorded nowhere else except in ancient oriental history was so intriguing that computations were undertaken to determine whether it might seem peasonable to associate the drawings with that event. The key to the problem lay in the fact that both drawings showed the crescent moon in close association with the circle assumed to represent the supernova. The first step consisted of establishing the location of the moon at the time the supernova flared to maximum brilliance. The requirements for a favorable answer were that the phase of the moon be only a few days before the new moon on or near July 4, 1054, and that it be located within a few degrees of the known position of the supernova which would have been a brilliant object near the eastern horizon about an hour before sunrise

(Continued next month)

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CREDITS

Guest Star.....Steve Kunkee
Exploding Galaxies.....Tom Journey
Typing.....Ed Woerner
Cover.....Ed Woerner