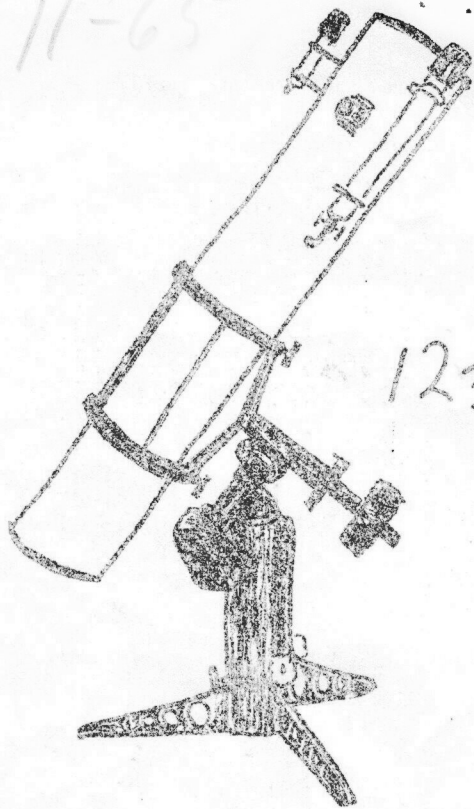


11-65



$12\frac{1}{2}$  f/7 Cave Astrola

A 10- or  $12\frac{1}{2}$  inch  
scope and observatory  
would look awful nice  
in the club's name

Prarie Astronomy Club

meeting... Nov. 30, 1965

Union Loan + Savings

Bldg. 56<sup>th</sup> + "0"

## PRAIRIE ASTRONOMY CLUB

## ASTRONOMICAL ALMANAC

Our next meeting will be on Tuesday, November 30, at 7:30. We will meet at the Union Loan and Savings Building, 56th and O. There is to be a report on amateur rocketry, on weather satellites, and any other topic a member wishes to bring up. Steve Kunke tells me he also has something he wants to bring up.

So come to our next meeting--reports, discussion, and refreshments.

Did American Indians  
See the Guest Star?

Conclusion

By William C. Miller

These computations were carried out with the aid of tables prepared by Paul V. Neugebauer, which facilitate the location of all major planets, the sun, and the moon at any date as far back as 4000 B.C., and into the future to A.D. 3000. Computations were made to determine the location of the moon with respect to the supernova for the months of July and August, 1054, the period of maximum brilliance. The results show that (1) the moon was at crescent phase in the morning sky on July 4 and 5, and (2) at about three o'clock on the morning of the 5th was directly north of the supernova and only two degrees distant. The rather stringent conditions for a favorable answer seem to be met and strongly suggest the possibility that the two

drawings actually depict the event of the apparition of the supernova of 1054.

There remains one point which must be settled, however. Were the two sites at which the drawings were found occupied in A.D. 1054? This question can be answered by a study of the fragments of pottery collected about the sites. Archaeologists have established the dates at which certain diagnostic types of pottery were made, by means of chronology based on the study of tree-rings.

The potsherds collected at the two sites were analyzed by Dr. Robert C. Euler, Curator of Anthropology at the Museum of Northern Arizona, Flagstaff. As a result of this analysis it was found that the majority of the sherds collected at the White Mesa dated latter than 1070, while only a trace of sherds dating around 1054. The later occupation would do much to dilute and

obscure evidences of earlier occupation. The situation at the Navaho Canyon site was much more fortunate. Although an analysis of the sherds collected from the surface of the ground surrounding the site again showed only slight evidence of occupation in 1054, a deep arroyo eroded into the canyon floor nearby and exposed deeper strata from which sherds were collected and correlated with their depth below the ground level. The lowest layer yielded sherds dating to A.D. 700, while the middle layer gave sherds dating to A.D. 1300, twenty-one percent of which dated between 900 and 1100.

The conditions encountered at the site in the Navaho Canyon may well indicate what would be found at the White Mesa were it possible to study the stratigraphy of that site in a similar manner. In the light of this evidence it appears quite probable that the two sites, or at least their immediate environs, were occupied at the time of the supernova.

In conclusion let us summarize the evidence. Oriental records show that the supernova of 1054 first became visible  
(Continued on next page)

(Guest Star)

ible in the morning sky of July 4; early on the morning of July 5, before dawn, the crescent moon stood just two degrees north of the supernova; this supernova was probably the brightest object other than the sun and the moon ever to appear in the sky in the memory of man and would certainly attract attention; the two prehistoric cliff sites at which the drawings were found both opened to the south and had an unobstructed view of the eastern sky; both sites, particularly that in Navaho Canyon, show evidence of occupation at the time of the supernova; although there are inconsistencies between the two drawings, both show the crescent moon at the same phase and both show the circle, assumed to represent the supernova, south of the center of the crescent which agrees with reality.

While this evidence is admittedly circumstantial, the unique character of the drawings and the possibilities they suggest seem adequate justification for this investigation. It is hoped that other examples of similar prehistoric drawings in the Southwest will come to attention and aid in resolving the problem.

In Leaflet No. 314-July, 1955. Astronomical Society of the Pacific

<u>For Sale</u>	5X 50 Binoculars	2.4" Refractor	3" Unitron
<u>&amp; Other</u>	\$15	4" RFT	Any offer consider
<u>Announcements</u>	Call Earl Moser	Jim or Marvin Garber	Roger Cook

EXPLODING GALAXIES

by Sir Bernard Lovell

Part 4

Now these galaxies are not all like the Milky Way and Andromeda, with their stars arranged in spirals in flattened disks. Others show no apparent structure, but seem to have their stars more or less uniformly distributed throughout a spheroidal or ellipsoidal volume. The spiral types and the ellipsoidal types are themselves found to show many variations. Some spirals have a large nucleus with most of the stars in the spiral arms which are open and loosely coiled. In some the arms are closely coiled around it. In the case of the elliptical galaxies, some are nearly spherical, but others are significantly flattened.

The eminent American astronomer, Edwin P. Hubble, who did so much of the early work with large telescopes, arranged these types of galaxies in a sequence which he believed to possess some evolutionary significance. His sequence began with the spherical form of the elliptical galaxies, proceed through elliptical galaxies with increasing flattening, and then into the spiral formation with two branches.

(continued)

Tom Journey, who now lives in Albuquerque, New Mexico, sent a letter of which part goes like this:

"I have looked into the clubs here, and found that there are two astronomy clubs in Albuquerque. One is called the 'Albuquerque Astronomy Club.' I can't think of the name of the other club right now. Incidentally, the former club has a 24-inch telescope with a fused quartz mirror. Up to last year, it was the largest 'scope of its type in the nation..."

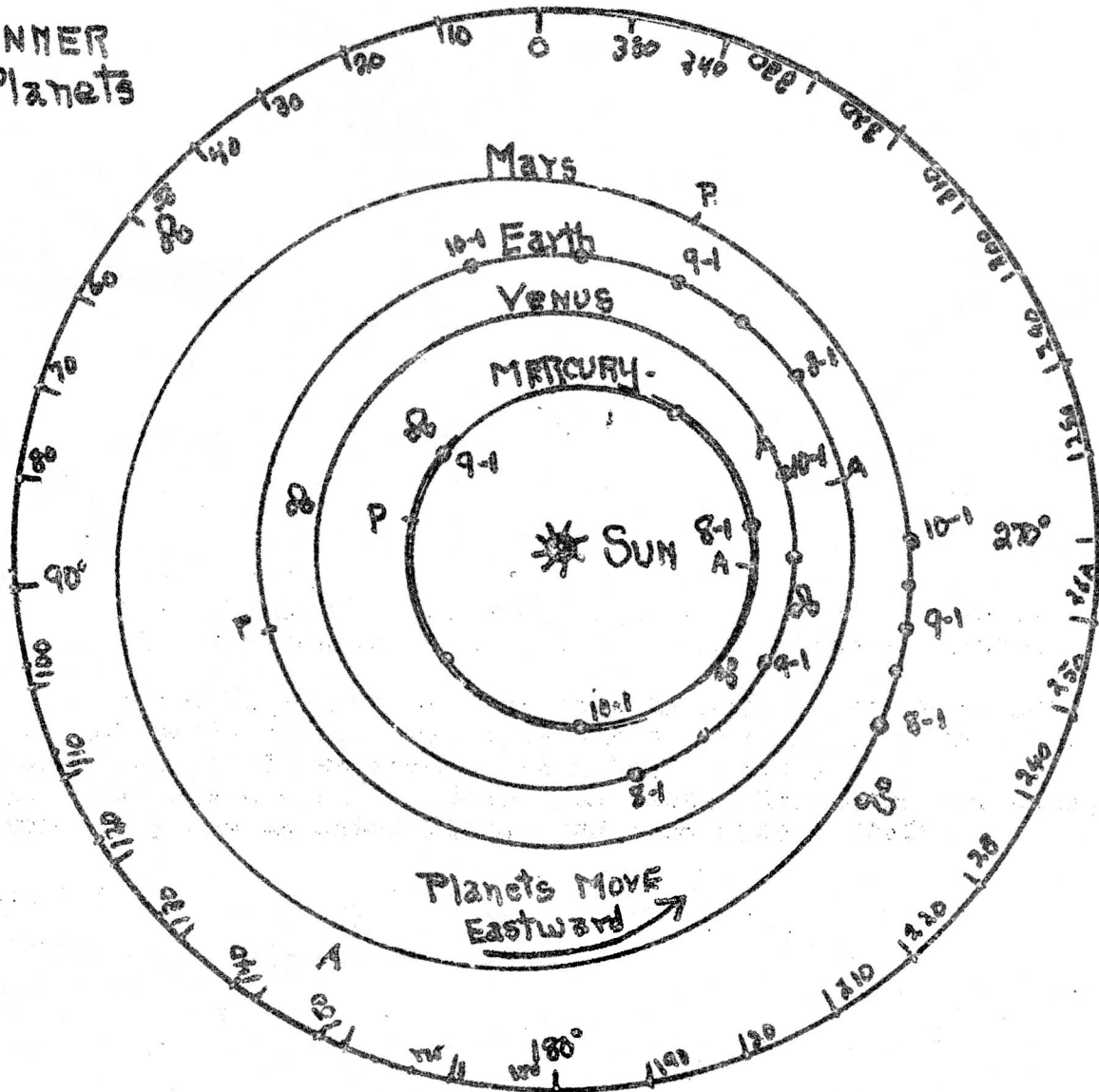
In a later letter, "It belongs to the Sandia Corp., a prime contractor of the Atomic Energy Commission."

Want to Buy or Sell ?

Mr Walter Behlan, 2555 Pershing Rd, Columbus Nebr would like to buy a pair of Binoculars (LARGE) at least 4 inch objective.

Some of you begginers will be able to make a good buy, SOON of a 6 inch reflector, in fact a couple of them as I think I know 2 Guys are itchin to move up to a larger size. Bill Noel Has a swell 4.5 Tried and tested Reflector For Sale. Your Sec,y has an extra Finder and Some Misc,l Stuff.

INNER Planets



Moon Phases

1st Qt      Dec 1st 5.25 PM

Venus is changing from gibbous to crescent- Nov

Mercury- To close to Sun

Mars In S.W.-Sky at Sunset Plus 1.4

Jupiter .Rising after Even Twilight H/E

Saturn in Aquarius.

Read about Asteroid "Vesta" In Sky and Tel-Nov.

From the "Review of Popular Astronomy"

The famous statement in Jonathan Swifts Gullivers Travels- that Mars has two satellites-was it-self anticipated by a similar utterance made a century earlier.

Many astronomical texts refer to Swift,s remarkable mention of the two moons about 150 years before their actual discovery by Asaph Hall at the U.S. Naval Observatory in 1877. These books have commented on the closeness of the satellites,periods and distance,as given by Swift, to the actual ones. Students of his works have attempted to ferret out how he came to fix upon his guess of two satellites.They have searched the literature of his age,without success,for hints that might have influenced him.

Kepler Himself ,who,in a letter to Galileo Wrote: I am so far from disbelieving in the existence of the four Jovian Satellites that I long for a telescope to anticipate you,if possible in discovering two around Mars as the proportion seems to Require.

\*\*\*\*\*  
The cluster of galaxies in the small constellation of Coma Berenices some 300 million light years distant,contains many type -50 galaxies which mark an intermediate stage between spiral and elliptical.Astronomers believe that these some 50 galaxies are the remainder of the spirals which lost their arms in encounters with other galaxies.  
\*\*\*\*\*

"Never Before have we come this way" As our Sun travels through Space in our GALAXY, and the Planets follow along, "STOP AND SMILE" Our Earth has never, during its existance, traveled this Road before. J L W  
\*\*\*\*\*

#### The Presidents Report

Since the first part of Oct,we have had a Comet as you all well know. Here is a summary of my sightings.On wed,Oct 16th I Received a letter from Jess giving the Comets Location.On Thurs,Morning I find it with Binoculars just where it was supposed to be.A small head and Very little tail.Friday I was at Jess Williams Home at 5 AM. Jess and I found it again.I found it again the next two days but after that it was cloudy.Then it got lost in the Sun Glare.

On the 21st,the day of perihelion I looked for it every Morning for a week after,but still no luck.Then we had a few more cloudy days. Monday Nov 1st I got up at 5.30 and there it was.Not much head but what a tail: It must have been nearly 50' in length .Tuesday Morning Rickey Johnson came out. He made a more carefull measurement of the tail,and the result was 30' in length. He took some pictures and then the Comet faded in the light of dawn. Rickey Came out Several times that week.Monte Cole and his Mother came out Too.By Sunday the full Moon started to bother.I Saw it once again about last quarter moon. It was very faint and had moved further south. We should be able to see it again after the 20th of Nov.I got a letter from Tom Journey He sent a picture which I will Bring to Our Meeting.

Sunday Nov 14th my wife and I had the pleasure of visiting Mr Walter Behlen of Columbus Nebr. After a tour of their Beautiful home Mr Behlen and I talked Astronomy while the ladies looked over Art and antiques. Mr Behlen has a 10in custom Dynascope,a uestar and a 4 in refractor.Before we left mr Behlen promised a very generous donation to our Club Observatory. I hope to have my Comet pictures by meeting Time  
See you then

HEARSH ROSEN PR 6.