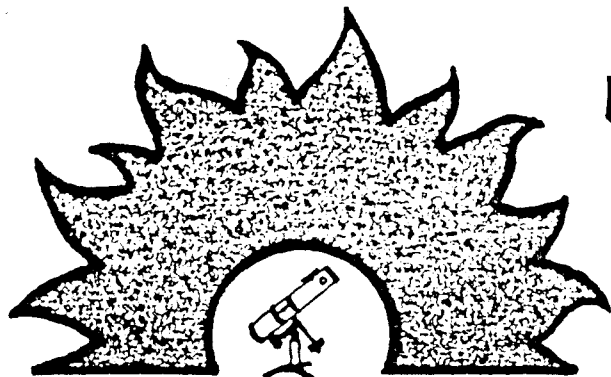




S E P T E M B E R

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PASTIMES

P H O E N I X A S T R O N O M I C A L S O C I E T Y -- F O U N D E D 1 9 4 8

*
* Our meeting this month will be held NOT at our usual meeting place *
* but at our NEW room, A-126, which we will occupy for the entirety of *
* this year. The meeting will begin at 7:45 p.m. on Friday, September *
* 23rd. Kai Staats will be giving a very brief verbal presentation on *
* Mars before entertaining us with an interesting video tape and slide *
* show. Refreshments will be served throughout the evening, helping us *
* begin this year with a super nova (BANG!)*!
*
* Wait! There's more- mark the 8th of October on your calendar. The 24" *
* at Lowell will be open for use. Contact a PAS officer for details. *
*

Join the Mars Watch
Saturday - September 17, 1988
at Reach 11 Park
(Union Hills & Tatum Blvd)
7:30 pm to 10:00 pm

Sponsored by the Parks Department
and Metro Phoenix Amateur Astronomers
Come see Mars as it nears opposition
and view other astronomical sights:
the moon, star clusters, and Saturn.

Park admission fee: \$1.00

On September 22nd, Mars will be closer to Earth than it has been for seventeen years. August, September and October are the prime observing months.

While the orbit of Earth is nearly circular, the orbit of Mars is not. This accounts for the varying distance between the two planets. At aphelion, the separation is 61 million miles. At perihelion, the distance is 34.6 million miles from Earth.

The "Red Planet" has a diameter of 4200 miles, roughly half of the Earth's, and orbits the sun at a distance which varies between 128 million miles and 158 million miles. Its orbital period is 686 days with a Martian day having a length of 24 hours, 37 minutes and 22.6 seconds.

The first telescopic observations of Mars were by Galileo in 1610. In 1877 Schiaparelli depicted numerous dark linear markings which he called "canali". Later Percival Lowell mapped hundreds of features. Only in 1971 was the matter of canals finally resolved. Mariner 9 approached the planet and showed clearly that the linear features did not exist as imagined.

Its atmosphere is a tenuous, tenuous, being only one-hundredth as dense as Earth's. 23% of it is carbon dioxide, 2.7% nitrogen, with larger and small amounts of oxygen, carbon monoxide and water vapor.

Its north polar cap is composed of water ice. Its southern polar cap is largely carbon dioxide, "dry ice".

The southern hemisphere is heavily cratered, the northern being less cratered. Of all the worlds in the solar system, Mars is the most like Earth. It has everchanging weather, seasonal thawing of polar ice caps, clouds, vast dust storms and four seasons. The Viking lander showed basaltic rocks where oxidation occurred, causing a deep reddish coloration.

Valles Marineris is an impressive canyon system about 2500 miles long. Olympus Mons is undoubtedly the most spectacular shield volcano in the solar system. It is 15 miles high and 430 miles in diameter. There are numerous lava flows, similar to those of Hawaii.

* * *

If there is intelligent life on Mars, I feel that the innabscents would like to attend our interesting PAS meetings.

by Harold Moonin

Lunar Laughs!

"Why don't sophisticated people go to the Moon for vacations?"
(Because it doesn't have the right atmosphere!)

"When is it impossible to land on the moon?"
(When it is full! "Aaahnnaaa-hhaa!")

NOTES FROM OUR (temporary) EDITOR

If ANYone, ANYwhere in ANY corner of the galaxy has something to say that will interest the members of the Phoenix Astronomical Society, well MY STARS! it had better be said. And that goes DOUBLE for astronomy related advertisements, jokes, or copies of photos that may be submitted to PASTINES. Just beam it on over to Kai Staats, the struggling temporary editor.

According to Richard Hill from Kitt Peak, who is the recorder for ALPO (Association of Lunar & Planetary Observers), activity of sun spot groups and solar flares is increasing dramatically. He urges that activity has come upon us and now is the time to get out and observe the sun. Groups 5060, 5062, and 5075 have produced some of the most complex visible structures in years. Pat McIntosh of NOAA thinks that 5060 is the largest group since the complex group in June & July of 1982 and among the three largest since 1951! He also said that group 5047, which recently returned as group 5075, is the group that produced the flares all all have heard about.

5075 was nearly as large as 5060 which is just coming around the limb so more activity is on tap. His prediction is that this rotation should be as active and interesting as the great cycle 19 of the "igy". The July level of activity should last for another three months and should rise rapidly to levels beyond what we have seen in the last 30 years! He said that this sort of activity should last until the second half of 1992!

As amateur astronomers we can make a valuable contribution to astronomy as well as having fun in observing the sun. You don't need reservations to make observations of this spectacular event. BE CAREFUL however, and never look directly at the sun without a filter of the proper kind. If you have any questions about observing the sun, feel free to contact any of the PAS officers.
"Get out there and observe!"

by Mark Johns



FOR SALE:

Observatory Ladder
3 step-hand hold bar on top
(see adjacent photo)

\$80

Elaine Fairfield
955-2598