

### Offered Title: Mars!

This week, on July 27<sup>th</sup>, Mars will arrive at opposition and coincidentally be just about as close to us as possible. It will actually hit its close point on the 31<sup>st</sup>, just a little past opposition. The last time this coincidence occurred, in 2003, it was even a bit closer and, well, it was spectacular! I was still working then and traveling a lot. No matter, I took my telescope with me on the road and set up in a Holiday Inn parking lot in Baton Rouge, LA. Had a mini star party...a Mars party, as hotel guests and others gathered to see what I was looking at.

So...what is opposition?

Opposition describes the position of an object in our sky, typically a planet beyond Earth's orbit, with reference to the Sun's position in our sky. Even though it is not a planet, the Moon can be used as an example. When the Moon is full it is at opposition, in the opposite side of the sky as the Sun. The Moon is rising in the east as the Sun is setting in the west. Yes, the Moon does get a little beyond Earth's orbit for part of its monthly trip around us. The inner planets Venus and Mercury do not reach opposition because they are always in the same side of the sky as the Sun.

Back to Mars, it will NOT appear as big as the full Moon in our sky. It would have to be much closer (about seventy-five times closer) to achieve that apparent size. So, during this opposition, a telescope at a magnification of 75x will make Mars appear as large in the eyepiece as we see the full Moon with our naked eyes.

We humans have had a keen interest in Mars from before the development of telescopes. It was treated as a god in both Greek and Roman cultures. The Greeks called it Ares and the Romans called it Mars, both gods of war but differing in their character. In Greek literature Ares was destructive and destabilizing, but the Romans presented Mars as a means of securing peace through warfare. For both the ruddy appearance of Mars represented bloodshed.

With the advent of telescopes Mars became a centerpiece for astronomers. Its enigmatic surface features that change seasonally, especially its north and south polar ice caps, became a source of speculation about the prospect of life there. We now have evidence that water probably flowed on Mars long ago but no smoking gun for life yet.

NASA and private space companies are planning a human trip to Mars. Any volunteers? Oh yeah, it might be a one-way trip.

### What's in the Sky?

Mars of course! At opposition on the 27<sup>th</sup> and at its largest on the 31<sup>st</sup>. Bright and bold rising in the southeast after sunset.

Bonus: There will be a full Moon accompanying Mars on the 27<sup>th</sup>. Two oppositions for the price of one.