



Presidents Message – September, 2012

In an article from the Associated Press on September 5th, journalist Alicia Change wrote:

"After spending a year gazing at a giant asteroid, NASA's Dawn spacecraft on Wednesday began the cruise toward an even bigger target — a voyage that will take nearly three years. Dawn is on track to become the first spacecraft to rendezvous with two celestial bodies in a bid to learn about the solar system's evolution.

Dawn slipped into orbit last year around Vesta, about 200 plus miles in diameter, and beamed back stunning close-ups of the lumpy surface. Its next destination is the 600 mile diameter Ceres. Vesta and Ceres are the largest bodies in the asteroid belt between Mars and Jupiter, which is littered with space rocks that never quite bloomed into full-fledged planets. As cosmic time capsules, they're ideal for scientists trying to piece together how Earth and the other planets formed and evolved.

During its yearlong stay at Vesta, Dawn used its cameras, infrared spectrometer, and gamma ray and neutron detector to explore the asteroid from varying altitudes, getting as close as 130 miles above the surface. Dawn uncovered a few surprises. Scientists have long known that Vesta sports an impressive scar at its south pole, likely carved by an impact with a smaller asteroid. A closer inspection revealed that Vesta hid a second scar in the same region — evidence that it had been whacked twice within the last 2 billion years.

The Dawn mission has a cost of \$466 Million, and will cover vast distances. After racking up 1.7 billion miles journeying to Vesta, Dawn has another 930 million miles to reach Ceres, where it will arrive in early 2015.

Such a trip is possible because of Dawn's futuristic ion propulsion engines, which provide gentle yet constant acceleration. Once confined to science fiction, the technology has been tested in space and is more efficient than conventional rocket fuel that powers most spacecraft. Scientists expect a different world at Ceres. Unlike the rocky, pockmarked Vesta, the nearly spherical Ceres has a dusty surface with an icy interior. Asteroids have received renewed attention of late. President Barack Obama canceled a return to the moon in favor of landing astronauts on a yet-to-be-selected asteroid as a stepping stone to Mars. A private company headed by space entrepreneurs wants to mine precious metals from near-Earth asteroids."

Sometimes we get so wrapped up with spectacular missions like the "Mars Space Laboratory, Curiosity Rover", that we don't pay a great deal of attention to the missions with lower budgets. Who would have thought that \$466 Million would be considered a low budget NASA mission? Anyway, in a couple years we will be greatly expanding our knowledge of the Asteroid Belt.

On another note; we have scheduled Saturday, September 22nd, as the Observatory clean-up day. The main focus will be on the telescope room. The area under the floor grates needs to be cleaned and there are other cleaning tasks we hope to complete as well.

The clean-up will start at 9:00 AM. We need as many volunteers as possible. We ask that you bring rags if you have some and perhaps some cleaning products like "Simple Green" or "Spick & Span" (partially full containers would be fine). Also, if you have a bucket, bring it along. The details will be discussed at our monthly meeting at 7:00 PM, this coming Tuesday, September 18th.

Mike Thomas

August, 2012

August 2012 Meeting Minutes

- Jim Bean gave a presentation on the activities of his Astronomy class, which will include visits to the Observatory.
- Mike gave a PowerPoint lecture on the Mars Space Laboratory.

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Monthly Membership Meeting 7:00PM, Tuesday, September 18, 2012 Guest Speaker: Mike Thomas

“Leonardo da Vinci”

The slide-show lecture by Mike Thomas covers the life and accomplishments of this great man. Leonardo was the acknowledged expert of his time in a wide variety of disciplines, from Science to the Arts. Learn about Leonardo's personal life, and his insatiable motivation to expand his mind. The presentation includes many images of Leonardo da Vinci's work.

Events Calendar

~ September 2012 ~						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1 Star Party
2	3	4	5	6	7	8 Star Party Moon Last Qtr 
9	10	11	12	13	14	15 Dark Skies Star Party Lecture 6:30 pm "Galileo"
16 New Moon 	17	18 <i>WNAS Meeting</i> <i>7pm JCDO</i>	19	20	21	22 Star Party Moon 1 st Qtr 
23	24	25	26	27	28	29 Star Party Uranus at opposition
30 Full Moon 	Notes: 9/22-Autumnal equinox occurs at 14:49 UTC 9/29-Uranus at Opposition; The blue-green planet will be at its closest approach to Earth					

~ October 2012 ~						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6 Star Party Open House
7	8 Moon Last Qtr 	9	10	11	12	13 Star Party Dark Skies Lecture @ 6:30pm
14	15 New Moon 	16 <i>WNAS Meeting</i> <i>7pm JCDO</i>	17	18	19	20 Star Party Dark Skies Open House
21 Orionids meteors →	22 Moon 1 st Qtr 	23	24	25	26	27 Star Party Lecture @ 6:30pm
28	29 Full Moon 	30	31	Notes: Lectures are TBA; Orionids meteors (21/22),		