

**Planetary Wonderings**  
**August Focus: Cassini/Huygens Anniversary and Tidbits**  
**by Mary-Frances R. Bartels, NASA Solar System Ambassador**

This month I will begin with a couple of tidbits on STEREO (discussed last month) and an important Viking Mars anniversary. I will then continue to discuss a significant Cassini/Huygens anniversary. Enjoy!

STEREO, the mission to bring us 3-dimensional pictures of the sun, was discussed last month. Its launch has been delayed to a second launch window. Due to fueling problems it will get underway no earlier than August 20.

Mars - The 30<sup>th</sup> anniversary of the Viking landing was July 20. Viking paved the way for all future Mars missions including the five currently there. A podcast featuring personnel involved with Viking is available at <http://www.jpl.nasa.gov/multimedia/>.

Cassini/Huygens – Saturn: Can you believe that it has been two years since the Saturn Orbit Insertion (SOI)? July 1 marked the second anniversary when Saturn fired its jets, crossed the ring plane, and allowed itself to be captured by the planet. The Jet Propulsion Laboratory of NASA is celebrating this anniversary August 2. While NASA had sent had sent three previous missions to Saturn (Pioneer 11 and the Voyagers), the Cassini spacecraft is the first to explore the Saturn system of rings and moons from orbit. The European Space Agency's Huygens Probe dove into Titan's thick atmosphere in January 2005. The sophisticated instruments on both spacecraft are providing scientists with vital data and the best views ever of this mysterious, vast region of our solar system.

My family had the opportunity to watch the SOI unfold on a large projection screen at the University of Colorado at Boulder's Laboratory for Atmospheric and Space Physics facility. Previously, in January of that year, we had visited to watch --- or more accurately, listen, to the Spirit Mars Exploration Rover's successful landing on Mars. LASP, in addition to being a university building of classrooms and labs, is also a mini-museum of sorts. Models and mockups of missions in which the students took part hang from the ceilings or are displayed on the floor. Wall displays explain missions in detail. Students and faculty were on hand to discuss some of their current and previous work and answer visitors' questions. The school subscribed to NASA-TV, so was able to provide Cassini pictures "live." Hundreds of people from the area gathered in a small auditorium as well as the atrium area to watch the spectacle. My family was in the auditorium where there was standing room only. People were jam packed, standing outside the door craning to hear what was being said on the TV. The atrium area was equally crowded with people standing on the open-air stairs to get a view of the screen. It was refreshing to see so many genuinely interested people, adults as well as children. The attention reminded me of the excitement of the early Apollo missions. This brought back happy memories of watching rocket launches, orbits or moon landings, and splashdowns on TV as a child. It was also a little bittersweet because we knew that soon we would be leaving longtime friends and a home we had known for almost 20 years. We would be taking our step of faith by moving to central Ohio from the Front Range of Colorado. We used the opportunity to say goodbye to some of the people we knew that we happened to see at the "SOI party." Since moving we have not found a local facility, such as LASP, that subscribes to NASA-TV and opens its doors to the public for major events like the SOI. Still, my family cherishes the opportunity we had to spend time with fellow space enthusiasts witnessing Cassini enter orbit around the "Jewel of the Solar System."

Here are some interesting facts about Saturn from the Cassini website (Saturn.jpl.nasa.gov).

- Saturn is huge. It is the second largest planet in our Solar System. Only Jupiter is bigger. If you could line them up, more than nine Earths would fit across Saturn.
- The rings are huge yet tiny: the main rings could cover almost the entire distance between Earth and the moon yet they are less than a kilometer (about half-a-mile) thick.
- We now know that other planets have rings, but Saturn's are the only ones that are visible from Earth.
- Because of its rapid spin and low-density interior, Saturn is noticeably flattened, top and bottom. Saturn is 10 percent fatter in the middle than at the poles.
- The planet is named after Saturn, the Roman god of agriculture. The day Saturday is also named after him.

The kids' section of the Cassini website includes several Saturn-related activities. These include building models of Saturn and the Cassini spacecraft, writing a news article complete with the latest pictures of Saturn and its moons, finding Saturn in the night sky, and enjoying an interactive activity book of puzzles, games, and pages to color.

Questions and comments on this column are welcomed and may be directed to [stargazer@KeepLookingUp.Net](mailto:stargazer@KeepLookingUp.Net). Until next month --- Keep Looking Up!