

The Springfield

News from the STARS

"Sharing the Wonders of the Night Sky"

SINCE 1934



January 2008



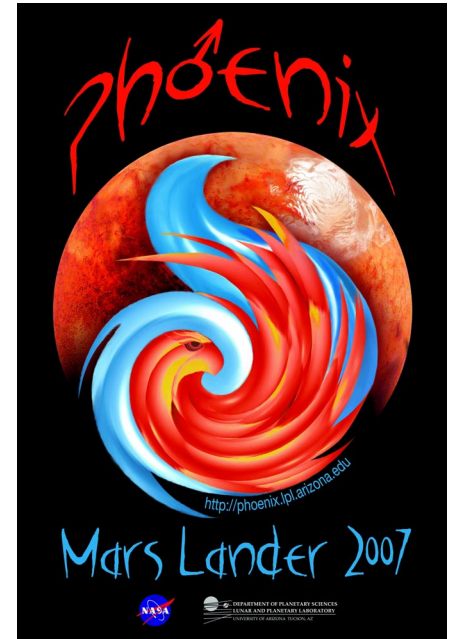
"On the Horizon"

Once every two years, the Earth and Mars draw close enough to each other in space to make sending a mission to the Red Planet feasible. On August 4, 2007 NASA launched another in a series of probes to Mars as the two planets were drawing closer together toward their closest approach last December 18th. This mission, called Phoenix, was named with the story of the mythical phoenix in mind. It has literally risen from the ashes of the Mars Polar Lander, a spacecraft that was lost as it reached the south polar region of Mars in 1999 and another lander mission that was cancelled in 2001. This time, scientists will turn their attention to the north polar region, with Phoenix scheduled to land there on Memorial Day, May 25, 2008.

Phoenix is following a number of past missions to Mars in the last decade, including Mars Pathfinder, Mars Global Surveyor, Mars Odyssey, Mars Express, the Mars Reconnaissance Orbiter and the Mars Exploration Rovers Spirit and Opportunity. Once on Mars, Phoenix will search for evidence of water and carbon in the Martian soil. It has been fitted with a nearly eight-foot-long arm that it will use to dig up to three feet deep into the soil. It will test soil samples for acidity, carbon, sulfur and other organic compounds.

No matter what Phoenix finds in the Martian soil, additional missions to the Red Planet are already being planned to look for more evidence of water, and possibly life, on Mars. The Mars Science Laboratory, due to launch in 2009, will place the largest rover yet on Mars. More than nine feet long, this "super rover" will be able to travel much farther each day than its predecessors. It too will conduct analysis of soil and rock samples in order to give scientists clues as to whether Mars has or ever had life. Of course, someday, Mars will receive human visitors who will follow their robotic creations to further explore the red planet that has so captivated us for so long.

Mission to Mars



Phoenix Mars Lander

- *Mike Kozicki*, Editor

Congratulations, Rif and Thank You Jack!

Congratulations to **Alan Rifkin**, the Stars Club's new president. "Rif" was elected to serve as the club's president at last November's club meeting. He replaces Jack Megas, who stepped down after serving as president for five years, from 2003-2007. Jack will continue to serve the club as a member of the Board of Directors. "Rif" brings to the job many years of commitment to the local astronomical community, having contributed greatly to Stellafane, the Springfield, VT Telescope Makers, Arunah Hill and the 5A's.

Lunar Eclipse Party

Be sure to mark Wednesday evening, February 20th on your calendar! That night, the Full Moon will undergo a total eclipse, and the Springfield Science Museum will host a Lunar Eclipse Party to help educate the public about the event. Stars Club volunteers will be needed in a variety of capacities to assist museum staff in order to make this a memorable night; contact Richard Sanderson if you'll be able to help out. Totality will last from 10:01-10:52p.m. More details will be announced at the January club meeting.

Astronomy Association Events

Dates have been announced for three annual Astronomy Association Events. Arunah Hill's Winter Star Party will be held on Friday & Saturday nights, January 4th & 5th and again on February 1st and 2nd. This year's Messier Marathon, also at Arunah Hill, will be held on April 4th and 5th. And, the 16th annual Astronomy Association Dinner will take place on Friday evening, April 11th, at the Holy Redeemer Church on Rt. 9 in Hadley. For more information about these and other Astronomy Association events, visit Arunah Hill's website at <http://www.arunah.org> or the 5A's website at <http://www.amherstastronomy.org>.

The Stars Club's Diamond Anniversary Celebration

Founded in 1934, the Stars Club will begin celebrating its 75th anniversary season this September. If you have any ideas or suggestions for speakers or events for the anniversary celebration, please contact one of the club officers or directors. The anniversary celebration is sure to be an occasion to remember as we look back at the Stars Club's remarkable history!

NOTICES

Executive Committee Meeting - The next Stars Club Executive Committee meeting will be held in late spring. If you have ideas for events or speakers, notices for the newsletter, or anything else you would like to bring to the club's attention, please contact one of the club officers or directors prior to April 30.

Website - For the latest club news, be sure to visit our website at <http://www.reflector.org>. The website is undergoing a major redesign and will soon be better than ever. If you have ideas for the website or would like to contribute material to it, please contact **Mike Kozicki**.

Membership Dues - Club dues for 2008 remain at \$20. If you have not yet paid your 2008 dues, please send a check for \$20, payable to the Springfield Stars Club, to **Rich Sanderson** at P.O. Box 2793, Springfield, MA 01101 as soon as possible. Your dues offset costs of running the club, mostly the museum room rental fee and mailings. PLEASE help to support your club!

Sky & Telescope - One of the benefits of membership in the Stars Club is a reduced-rate subscription to Sky & Telescope magazine for just \$32.95 per year. If you are already a club member and wish to renew your subscription, return the renewal card you'll receive in the mail and a check for the proper amount, payable to the Springfield Stars Club, to **Rich Sanderson** at P.O. Box 2793, Springfield, MA 01101.

Speakers Wanted - If you have an idea for a speaker or topic for one of our monthly meetings, or would like to volunteer to give a talk yourself, please contact one of the club officers or directors.

Telescopes Needed - The success of "Stars Over Springfield" depends upon the efforts of club members, especially those who can set up a small telescope outside the Tolman Auditorium for visitors to look through. If you have a small telescope, please consider volunteering at an upcoming event this year.

THE OBSERVING LOG

Saturn in Leo The ringed planet spends all of 2008 in Leo, the Lion, reaching opposition on February 24th, when it will be visible all night long. Through a telescope, the rings appear much narrower than they have in recent years, as they approach edge-on next year for the first time since 1996.

Venus and Jupiter at Dawn As the year opens, Venus remains prominent in the morning sky. During January, watch as Jupiter gains altitude each morning until these two brightest planets have a spectacular conjunction on the morning of February 1st.

Pleiades Occultations The Moon will occult the Pleiades star cluster on several occasions this year. The best events as seen from our area will occur on the evening of April 8th and the morning of June 30th, when the Moon will be in its crescent phase. For more information, see the January 2008 *Sky & Telescope*, pp. 76-78.

Full Moon Dates: January 22, February 20, March 21, April 20, May 19, June 18

New Moon Dates: January 8, February 6, March 7, April 5, May 5, June 3

Vernal Equinox (Start of Spring) - March 20, 2008 at 1:48a.m. EDT.

Summer Solstice - June 20, 2008 at 7:59p.m. EDT.