



# Link2Liftoff

Challenger Space Center In Association with the Smithsonian Institution

Our Mission is to inspire, excite and educate people of all ages about the mysteries and wonders of space, science and the universe in which we live

Winter 2004

## Encounters

### StarLab Indoor Planetarium

All shows are on Saturdays at 11:30 am and 12:30 pm.

- January 17
- February 7 and 21
- March 6 and 20
- April 10 and 17
- May 1 and 15

Admission is \$4 per person, which is in addition to admission to the Challenger Center. General admission is \$6 for adults; \$4 for seniors and children ages 6-18; free for children under age 6. Challenger members are free.

### Holiday Telescope Seminar

- January 20, 7 pm - 10 pm
- Free with general admission
- See page 4

### Family Fun Nights, Featuring Stargazing

Saturday evenings, activities start at 6:30 pm. Stargazing show begins at 7:30 pm.

- February 7
- March 6
- April 3
- May 29

Free with admission to the Center, which is \$6 for adults; \$4 for seniors and children ages 6-18; free for children under age 6. Challenger members are free. Hot dogs, chips and soda are an additional nominal fee.

Stargazing, StarLab and the Holiday Telescope Seminar are presented at the Challenger Space Center by Tony and Carole LaConte of Stargazing for Everyone.

### Space Place

- For ages 3-6
- First and third Mondays, 9:30 am - 11:30 am
- Reservations required
- Two-hour interactive program for little ones with big imaginations!
- See page 4

### Plan An Out-Of-This-World Birthday Party!

Challenger Space Center birthday parties are fun for ages 5 to 95! Each party package includes space-themed activities and games or flying a simulated space flight mission. Three separate packages are available, and feature space-themed decorations, party favors, cake and out-of-this-world activities.

For more information, visit [www.azchallenger.org](http://www.azchallenger.org), or call Anita at 623-322-2001.

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## Mars Family Event - January 17

January 17, 2004 is National Mars Day, and the Challenger Space Center will be actively participating in several Mars-related events.

Scheduled activities include speakers from the Mars Society and ASU, along with the StarLab Indoor Planetarium, which will feature a show highlighting the history and mystery of Mars. Activities scheduled throughout the day include Space Inventions, where kids of all ages will be provided with a variety of materials to enable them to creatively design spacecraft, habitats for other planets, etc.

At 9:00 am, the new Mars Passageway, built by CORE Construction, will be unveiled and the first public *Voyage to Mars* mission will be launched. During *Voyage to Mars*, participants collect and analyze planetary data and become part of the first colony of humans living on a permanent base on Mars, as well as the relief crew en route to the hauntingly barren Red Planet.

Please join us in celebrating the expected landing of the two NASA Mars rovers, Spirit and Opportunity! Visit [www.azchallenger.org](http://www.azchallenger.org) for more details.

## Educators Invited to Premier Smithsonian Conference

On February 6, 2004, the Challenger Space Center will host the third in an eight-year series of conferences, bringing Smithsonian scholars from each of the nation's sixteen national museums in Washington, D.C. to Arizona to work directly with educators. All educators are invited to attend this award-winning conference where scholars from the Smithsonian Institution will present and participate in workshops. This year's conference features scholars from the National Museum of American History and the Smithsonian Astrophysics Observatory. Participating local museums include the Lowell Observatory of Flagstaff, the Heard Museum, the Deer Valley Rock Art

Museum and the Phoenix Art Museum.

The theme of the 2004 conference is "Connecting Museums With Classrooms: The Definition of Literacy Isn't Reading; It is Application of Knowledge." At this award-winning conference, teachers will learn to use museums and science centers to promote literacy in the areas of reading, geography, history and science, while meeting critical state and national standards. Educators will earn 8 CEUs (Continuing Education Units) for attending. The Conference is limited to the first 200 educators who register. The registration fee of \$125 includes breakfast and lunch, and nearly \$200 in materials from the Challenger Space Center, other

participating local museums and the Smithsonian Institution.

The Challenger Space Center is the only institution in the nation to plan an all-inclusive, eight-year series of Smithsonian conferences, covering the entire spectrum of all sixteen national museums. The Smithsonian Education Conference at the Challenger Space Center won a First Place WESTMARC Best of the West Award in 2002 for Education, K-12/Higher Education.

For more information about the Conference or to register, please contact Gloria Warnick, Challenger Space Center Director of Community Affairs, at 623-322-2044, or (email preferred): [gwarnick@azchallenger.net](mailto:gwarnick@azchallenger.net).

# Giving

## Donor Honor Roll

The Challenger Space Center thanks the following for their financial gifts of support received since our last newsletter. Gifts made after December 1 will be recognized in our next newsletter.

3-G Construction Company, Inc.  
Thomas Ambrose  
American Express Philanthropic Program  
APS  
Connie Breker  
Ron Carmichael  
Mark Cohen and Paula Hubbs Cohen  
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Southwest Gas Company  
Thomas and Laurie Thompson  
Jane Triplett  
John and Kelsea Vescova  
Volunteer Nonprofit Service Association  
Esther Voorsanger  
Russ Weigand

## New Members

The following people have joined or renewed as members of the Challenger Space Center since our last newsletter. Welcome to our "family", and thank you!

Beth and Gary Lindenmier  
Charles Sands  
Chris Mahar  
Dr. Janet Seplow  
Herb Dougall  
James McCarthy  
Janez and Rob Bean  
Jim Hymes  
Ralph Stitzer  
Robert Brotemarkle  
Susan Fleishman  
Tina Johnson  
Debra Brown  
Herb Jacobson  
James and Carol Lillie  
Kathryn Ybarra  
Kim Sapp  
Laura Blank  
Mark Hubler  
Pamela Logan  
Patricia Houser  
Tania Marcinkowski  
Troy Ahlquist  
William Goodheart



Last year's Honeywell Fiesta Bowl Aerospace Challenge winners from Maricopa Unified School District

### The top five finalist teams are:

- **Valley-Wide Homeschoolers**, Phoenix. Teacher: Valerie Spink. Project Name: Titan Explorer.
- **St. Simon and Jude School**, Diocese of Phoenix. Teacher: Maureen Hill. Project Name: Caelum Cirtas (Sky City).
- **Maricopa Elementary School**, Maricopa Unified School District, Maricopa. Teacher: Nancy Rollins. Project Name: Half Moon.
- **Four Peaks Elementary School**, Fountain Hills Unified School District, Fountain Hills. Teacher: Jean Boatman. Project Name: New Age Space Station.
- **Westside Home Educators Homeschool Support Group**, Peoria. Teacher: Chris Mahar. Project Name: Prometheus.

## Honeywell Fiesta Bowl Aerospace Challenge

### "And the winner is..."

**O**n Friday, December 5, nearly 70 teams of 5th through 8th grade students competed in the fifth annual Honeywell Fiesta Bowl Aerospace Challenge, held annually at the Challenger Space Center. This contest, open to students across the state, is designed to enhance their knowledge of space and science technology through the development of a new generation of the International Space Station.

The students' design includes a physical scale model, scientific explanations about how they would construct and support habitation modules, waste management systems, adequate food and oxygen supplies and other life-sustaining habitats. Along with extending education content areas including math, science and technology, the contest also promotes teambuilding, communications, problem-solving and critical decision making skills.

The twenty-four judges for the competition are scientific and engineering experts from Honeywell. All five teams that made the final round received a free Challenger Space Center Simulated Space Mission for their classroom (value: \$700). These top five teams came back to the Challenger Space Center on December 30 for the finals of the event. The winning team and their teacher won a trip to the Kennedy Space Center to experience a behind-the-scenes look at a NASA launch facility. (The name of the winning team was not available at press time - visit [www.azchallenger.org](http://www.azchallenger.org) to see who the lucky winners are!)

## Patriotic Magazine Covers from 1942 Celebrated in Smithsonian Traveling Exhibition April 3 - June 13, 2004

**I**n July 1942, seven months after the attack on Pearl Harbor, magazines featuring the American flag appeared on newsstands nationwide. The "United We Stand in July 1942" campaign came about when Paul McNamara, a publicist for Hearst Corporation and an editor of *Cosmopolitan*, presented his vision of newsstands featuring a sea of American flags to the National Publishers Association (now the Magazine Publishers of America).

*July 1942: United We Stand* features 88 original magazine covers from 1942. This beautiful exhibition, developed by and originally on view at the Smithsonian's National Museum of American History, celebrates this patriotic endeavor of yesteryear and provides a rare glimpse of this campaign designed to boost morale on the home front and to demonstrate the power of magazines to inform the public. Participating magazines represented nearly every subject and class of publication, from *Ladies Home Journal* to *Walt Disney's Comics*. *Time*, *National Geographic* and *Reader's Digest* were among the publications that broke from their traditional cover designs to incorporate the flag. Most of the covers are from the collection of Katy and Peter Gwillim Kreitler, who have amassed more than 300 of the original July 1942 covers. This exhibit is sponsored in part by the City of Peoria.



**MEMBERS ONLY BENEFIT:** Attend a special breakfast and "Sneak Preview" of this beautiful exhibit before it opens to the general public. The "Members Only Sneak Preview" of *July 1942: United We Stand* is on Saturday, April 3, from 9:00 am - 10:00 am. Invitations will be mailed to all members in March.

# Sandi Hicks Named Non-Profit Executive Director of the Year

**O**n December 5, 2003, Challenger Space Center Executive Director Sandi Hicks was named the Non-Profit Executive Director of the Year for Medium Sized Organizations by ONE, the Organization for Non-Profit Executives. The award was presented during lunch at the ASU Center for Non-Profit Leadership and Management 11th Annual Non-Profit Day held at the Hyatt Regency in Phoenix.



**Sandi Hicks**  
Executive Director  
Challenger Space Center

Hicks was recognized for her leadership abilities within the organization and the community, including signing the first Smithsonian Institution affiliation agreement in greater Phoenix. She has been Executive Director of the Challenger Space

Center since it opened in July 2000, and has led the Center's growth from 6 employees to 29, and from a \$600,000 budget to a \$1.8 million dollar budget. In addition, she has been an involved participant in the formation of organizational policy and procedures, and has recruited a high quality staff deeply committed to excellence and to delivering on the Center's mission to provide quality public and educational programs that enhance knowledge in math, science and technology.

Before being named Executive Director of the Challenger Space Center, Hicks spent 24 years with the Peoria Unified School District, the last 17 years as the Director of Communications and Public Affairs. She was a driving force in the five-year effort to raise the private funds needed for the Center's construction, as well as to build community awareness for the Challenger Space Center, a world-class space science education facility.



## Board Spotlight Shines on Shannon Maurer, CORE Construction

Shannon Maurer has been in the construction industry for twenty-two years holding positions as Estimator, Project Manager and Vice President for CORE Construction, formerly Target General, Inc. His company is the builder of such city landmarks as the Bank One Ballpark, Dodge Theater and the Challenger Space Center. Shannon serves as the Treasurer of the Challenger Space Center Board of Directors.

Mr. Maurer arranged for the Challenger Space Center admissions area and gift shop to be relocated and reconstructed, so that we can provide for a better traffic flow for the hundreds of children and visitors who come to the Challenger Space Center every day. The relocation of the gift shop tripled the size of this retail space, providing us with additional revenue that supports our education programs. He also oversaw the construction of our e-Mission booth, to provide a quality distance learning experience for students and teachers throughout Arizona.



**Eagle Nebula** Dr. Jeff J. Hester, Dr. Paul A. Scowen, Arizona State University. These eerie, dark pillar-like structures are actually columns of cool interstellar hydrogen gas and dust that are also incubators for new stars. They are part of the "Eagle Nebula", a nearby star-forming region 7,000 light-years away in the constellation Serpens. The picture was taken on April 1, 1995 with the Hubble Space Telescope Wide Field and Planetary Camera 2.

## Coming in October 2004! Smithsonian Hubble Space Telescope Exhibit October 16 - December 26, 2004

**T**he Smithsonian Institution Traveling Exhibition Service (SITES) and the Space Telescope Science Institute present *Hubble Space Telescope: New Views of the Universe* at the Challenger Space Center. This extraordinary exhibition allows visitors to experience the universe through the eyes of the world's best known observatory - the Hubble Space Telescope. Featuring the best of Hubble's breathtakingly beautiful images, *Hubble Space Telescope* employs videos and interactive components to take visitors on a tour of the universe and to let them experience other planets, exploding stars, ancient galaxies and black holes. This exhibit is partially sponsored by Lockheed Martin Management Data Systems and Southwest Airlines.

Visit [www.azchallenger.org](http://www.azchallenger.org) frequently for updates about the *Hubble Space Telescope* exhibit.

## Jack and Marguerite Clifford Honored With Spirit of Philanthropy Award

**J**ack and Marguerite Clifford were honored by the Challenger Space Center with a 2003 "Spirit of Philanthropy Award" at the Valley's 19th Annual Philanthropy Awards Dinner. The event was held on November 13, 2003 at the Camelback Inn with more than 700 people attending. Forty-seven Valley non-profit organizations honored individuals and couples who have made generous contributions of time, talent and financial support to their institutions. Last year, the Challenger Space Center honored Kevin and Sydney Knight with the award. Thank you to both Jack and Marguerite for their incredible support for the Challenger Space Center and to the children that we serve.



**Jack Clifford**



**Marguerite Clifford**

## Give a Child a "Front Row Seat" To The Future!

**Y**ou, your company or someone you'd like to honor can be recognized through the Challenger Space Center's "Name-A-Chair" program by having your/their name permanently placed on one of our chairs for \$500 each in our Briefing Room or Theatre, or for \$1,000 each in Mission Control-the heartbeat of the Challenger Space Center! Your "Name-A-Chair" will not only help support the operation of the Center, but will also be a wonderful way to make a lasting gift or recognition for thousands to see each year. Contact the Development Office at 623-322-2041 for more details.



## Volunteer Spotlight

Two Honeywell retirees and Challenger Space Center volunteers, Ron Smith and Jim Walborn, designed and built a model of the island of Montserrat for use with the Center's new distance learning scenario, *e-Mission: Operation Montserrat*.

Ron and Jim did a tremendous amount of research into the island's landscape and terrain, as well as pinpointing the locations of hospitals, airports and evacuation routes. They worked for countless hours on this realistic model, which helps visualize the many aspects of the mission that students must process in order to be successful at evacuating the island's residents during a series of natural disasters. Thank you to Ron and Jim for their continued support!

## Challenger Space Center Board of Directors

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## New Interactive Web Site Launching!

Please take a moment to visit the new Challenger Space Center web site, designed by Graphique Communications Design. The site, launched on January 1, 2004, has our same web address ([www.azchallenger.org](http://www.azchallenger.org)) but features new technology that enables us to be an e-commerce site, including on-line registrations, donations and more. The site will also feature a kids' area and an educators' corner.

Visit the site to sign up to receive information on special gift shop offers, space events, exhibits and activities, through our "Emails From Space!" feature.

## Flying High With Southwest Airlines!

Southwest Airlines (SWA) is one of the original Challenger Space Center partners, and continues to be a great friend to the Center. Their most recent donation of plane tickets enabled staff members to travel to Miami, Florida to preview the Hubble Space Telescope exhibit, which will premiere in Arizona at the Challenger Space Center in October of 2004.

SWA has also donated tickets for use as awards for our volunteers, who are critically important to the Center's daily operations. Challenger volunteer Bill Wrentmore was a recent recipient of a pair of SWA tickets. Bill volunteered over 125 hours during the summer, and is a dedicated docent, as well as a more-than-able assistant in our field trip programs. Congratulations to Bill, and thank you again to Southwest Airlines.

## Looking For Something Fun To Do With Your Little Astronauts?

Space Place is a 2-hour interactive program for little ones with big imaginations! Designed for children ages 3 through 6, the program features age-appropriate activities designed to teach preschoolers about our planet and solar system. Children make their own space helmets, sing space songs, watch engaging videos and create memory journals to take home. This adventure even includes a gentle simulated shuttle launch in our on-site simulator!

Group field trips to Space Place are available weekdays by reservations only. Space Place welcomes all pre-schools, kindergartens, mom and tot clubs and neighborhood groups to make reservations by calling 623-322-2001. The cost of the program is \$8.00 per child, which includes a framed photo remembrance of their visit to the Challenger Space Center. Children must be accompanied by an adult.

In addition to being open for group reservations throughout the week, Space Place is open to the general public on the first and third Monday of every month from 9:30 am to 11:30 am. Reservations are also required for the general public sessions, and can also be made by calling 623-322-2001.



## Atlantis Painting Donated

After the Columbia tragedy in February 2003, Mr. Paul Chavez loaned the Challenger Space Center a painting of the Space Shuttle Atlantis painted by his aunt, Emma Soqui. Originally, it was to be a temporary gift, to be displayed until the next shuttle mission was completed successfully. After much consideration, Mr. Chaves has decided that the Challenger Space Center is the appropriate place for the painting to permanently reside.

## Did Santa Bring You a Telescope?

On Tuesday evening, January 20, the Challenger Space Center will host the Fourth Annual Holiday Telescope Help Seminar from 7:00 pm to 10:00 pm. If you received a telescope for the holidays, or have one sitting around and you're not quite sure how to use it, this class is for you!

This special one-night class will help participants learn how to assemble and operate any type of telescope. The goal of the class is to ensure that the telescope is properly assembled and that the user understands the basic use and operation of the telescope. Instructors will help with assembly if needed, and participants will learn how to align the telescope, use the various accessories, and find interesting objects to view, including star clusters, nebula and galaxies. The seminar is free with the price of general admission. Pre-registration is requested, but not required. Please call 623-322-2001 for more information.

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Information: 623-322-2001 or [www.azchallenger.org](http://www.azchallenger.org)  
Hours: Monday-Friday 9 a.m. - 4 p.m.; Saturday 10 a.m. - 4 p.m.  
Admission: \$6 Adults, \$4 Seniors and children; free for age 6 and under.  
Link2Liftoff is a quarterly publication of the Challenger Space Center.  
★ Best Science Lesson, The Arizona Republic  
★ Best Place to See Stars, The New Times  
★ West Valley Treasure, WESTMARC Voter's Award