



Link2Liftoff

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

Challenger Space Center In Association with the Smithsonian Institution

Fall 2003

Encounters

PLAN A STAR-STUDDED HOLIDAY EVENT!

Host your next birthday party (for kids or adults!), holiday party, reunion, civic group luncheon, or corporate meeting at the Challenger Center. Our Space Rotunda seats up to 200 theater-style, 120 for a sit-down dinner. We also feature meeting rooms that will comfortably seat from five to 95. Catering services are available. Call Dianna DeSimone, Director of Facilities and Special Events, at 623-322-2006, or email to: desimone@azchallenger.net.

FIND OUT-OF-THIS-WORLD GIFTS AT THE CHALLENGER CENTER'S GIFT SHOP!

Whether it's for teachers, company gift baskets, or for that special someone, you can find something for all the "stars" in your life at the Challenger Center's unique Gift Shop.

For the person who has everything: name a star in their honor! "Name a Star" is a unique novelty gift that lets you name a star for that special someone. The "starry-eyed" recipient will receive a beautiful, colorful certificate naming the star, along with a detailed star chart to show them exactly where their star is located.

Purchasing a donor tile that will be permanently displayed on the Center's Donor Wall is another unique and long-lasting way to honor a loved one, teacher, or that special anniversary.

Gift certificates in any amount can be purchased and used in the gift shop, for missions or memberships, or for admission to Stargazing Nights. Check out our space-themed t-shirts, Challenger Center t-shirts and polo shirts, bean bag aliens, as well as games for the whole family, including Spaceopoly®. Fill up your family library with stargazing and space related books for all ages, or check out the astronaut action toys.

Finally, don't forget lots of stocking stuffers, including mysterious "floating pens" and glow-in-the-dark wall and ceiling mountable stars, moons, and planets. Members receive a 10% discount in the gift shop!



HOLIDAY CAMPS GEAR UP FOR BLAST-OFF!

Kids bored during the holiday break from school? How about a fun-filled day in space!

The Challenger Space Center is again offering Holiday Camps designed to fit the needs of kids who enjoy fun and stimulating activities (don't tell them we also said it's educational!). Each camp is a full day adventure, so campers need to bring a sack lunch. Cost: \$45 per child. Registration is required for all camps. Camps fill quickly, so call 623-322-2001 to reserve your "space" today!

THE ROCKET BOOSTERS ADVENTURE, Grades 1 - 2

Session 1: December 22, 2003, 9:00 am - 4:00 pm

Session 2: December 23, 2003, 9:00 am - 4:00 pm

Session 3: January 3, 2004, 9:00 am - 4:00 pm

This camp is always chock-full of inquisitive, creative first and second graders. We'll launch into our adventure with age appropriate hands-on activities about our Solar System. We'll key in on some of the best and brightest stars including our home star, the Sun. We'll learn all about comets and asteroids, and campers will learn how astronauts practice living and working in space, including eating and sleeping in very tight quarters. We'll also answer (in a nice way of course!) that question on the minds of little ones everywhere: so, just how DO astronauts go to the bathroom in space? The day will end on a "high note", no pun intended, when we take a simulated launch and dock with the International Space Station in the Center's Earth Space Transit Module.

THE AWESOME ASTRO ADVENTURE, Grades 3 - 4

Session 1: December 22, 2003, 9:00 am - 4:00 pm

Session 2: December 23, 2003, 9:00 am - 4:00 pm

Session 3: January 3, 2004, 9:00 am - 4:00 pm

During our Awesome Astro Adventure, we'll learn some fun facts about comets and asteroids, and take a quick scientific peek into astronomy and geology. Included in the program will be an engaging video and a full hour session on teambuilding, just like the "real" astronauts do! We'll also shed some light on the properties of light and light years. Today's lucky crew will take a simulated launch into space in the Center's Earth Space Transit Module. Upon obtaining orbit, they will dock with the International Space Station. Finally, to wrap up the day, we'll have a discussion about the mysteries and history of the mysterious Red Planet—that is Mars for you non-space-geeks out there. 😊

Link2Liftoff Writer/Editor
Paula Hubbs Cohen
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Giving

The Challenger Space Center thanks the following individuals, corporations, foundations and organizations who have made financial gifts or who have joined as members since our last newsletter.

American Legion Post #26, Mesa
 American Legion Post #83, Mesa
 Sandra Baker
 Bank One
 Jeffrey and Katherine Behr
 Craig Bevins
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 Thomas Wayland
 Wickenburg Rotary Club
 Paul and Julie Wrentmore

SANTA'S SCIENCE WORKSHOPS AT THE CHALLENGER SPACE CENTER!

"DROP AND SHOP" TIME FOR BUSY PARENTS!

Note to busy moms and dads: Wondering how you're ever going to finish your holiday shopping without the kids under your feet? We've got just the ticket! Parents can hitch up the reindeer and fly on over to the Challenger Space Center and drop the kids off at **Santa's Science Workshop!**

Santa's Science Workshops are half-day sessions designed for little elves in grades 1 - 6. Workshops will be held at the Center on **SATURDAYS NOVEMBER 29, and DECEMBER 6, 13, 20, and 27.** On each day, Session 1 is from 9 am to 12 noon, and Session 2 is from 1 pm to 4 pm.

At Santa's Science Workshop, campers will learn about our Solar System, comets, and distant stars. Hands-on, age-appropriate fun and stimulating activities include story hour for the younger kids; space movies; science activities such as creating personalized mission patches; teambuilding challenges; and much more. Hang on to your Santa hats because we will even take a ride up to the International Space Station in the Challenger Center's on-site Earth Space Transit Module! **Sshhhh...who knows, we may even have a visit from the Big Guy himself!**

Cost: Each session costs \$30 per child; each additional child is \$25. Parents wanting to shop all day may sign up for both sessions for the discounted price of \$45. No additional discounts apply. Please note that the same program will be repeated in the morning and afternoon, and all-day campers need a sack lunch. Santa's elves are very busy this time of year, so an additional fee will be charged for any child not picked up on time at the end of their session.

Pre-registration for Santa's Science Workshop is required. To register, please call 623-322-2001. "Space" sells out fast, so call today!



RECENT GRANTS AND GIFTS OF NOTE

The Challenger Space Center would like to say thank you to the following organizations for their support.

ACCS, Inc. for a Corporate Membership	\$2,500
Bank One for Space Weather Exhibit	\$5,000
City of Peoria for United We Stand Exhibit	\$2,500
City of Peoria for Smithsonian Teachers' Night	\$4,500
Coyotes Charities for Field Trip Scholarships	\$5,000
M&I Bank for General Operating Expenses	\$1,000
Medtronic Foundation for Mission Scholarships	\$3,000
Saguaro Astronomy Club for Mission Scholarships	\$1,300
USAA for Mission Scholarships	\$16,800
Music, Mars & Stars Event in partnership with the Phoenix Symphony	\$3,415



Tom Ambrose
Senior Vice President
Phoenix Suns

SPOTLIGHT: TOM AMBROSE AND THE PHOENIX SUNS

This month's Board of Directors Spotlight is on Tom Ambrose and the Phoenix Suns. Tom is Senior Vice President of the Suns and has lent his expertise to the Challenger Center for the past year. Over the last two months, Tom spent several hours with the Center's executive staff participating in interviews for a key Director-level position. His experience and marketing background also proved invaluable when the Center moved its gift shop, more than doubling the size of this retail space. To assist the Challenger Center, Tom "lent" us the Manager of the Phoenix Suns Team Shop, who provided extremely helpful insight into retail marketing and operations. With their help, we have increased the profitability of the gift shop, which translates directly into supporting our education mission. In addition, Tom has donated space memorabilia to the Center, helped author the Center's first gift and donation policy, and awarded \$5,000 towards our scholarship fund. Tom and his wife, Alice, enjoy learning about space and have visited the Kennedy Space Center in Florida, as well as participated in the Challenger Space Center's highly popular telescope classes.

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THE COMET ACADEMY ADVENTURE, Grades 5 - 8

Session 1: December 29, 2003, 9:00 am - 4:00 pm

Session 2: January 3, 2004, 9:00 am - 4:00 pm

This full day program includes an in-depth study of comets and other celestial bodies in our solar system. The campers will be doing hands-on activities learning the importance of communication and problem solving, including a full hour session on teambuilding. The highlight of the day will be a *Rendezvous With a Comet* simulated space mission, where campers build and launch a probe, take part in a daring exploration to rendezvous with Comet Encke, and work with million-dollar technology as Mission Control staff and scientists on board the International Space Station.



THE ROBOTICS AND ROCKETRY ADVENTURE, GRADES 5 - 8

Session 1: December 29, 2003, 9:00 am - 4:00 pm

Session 2: December 30, 2003, 9:00 am - 4:00 pm

Danger, Will Robinson! (Okay, only the parents will get that!). This all-day program combines the best of both hands-on robot construction and model rocket design and construction. Campers will learn about the use of robots in everyday life as well as in the space program, and will learn the basic science behind the design and operation of robots. They will also learn the history of rockets from "A" to "Z", and get to build and launch different styles of rockets.

THE MARS ACADEMY ADVENTURE, GRADES 5-8

One session only: December 30, 2003

The Mars Academy Adventure will include a study of the Red Planet and how it compares to our home planet of Earth. An out-of-this-world video on Mars will be shown and sessions on teambuilding, communication, problem solving and risk assessment

will be included. To cap off the day's events, the campers will participate in the *Voyage to Mars* simulated space mission. During *Mars*, campers 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.

THE HISTORY OF FLIGHT ADVENTURE, GRADES 5-8

One session only: January 3, 2004

If the next Orville or Wilbur Wright is living at your house disguised as a mild-mannered middle-schooler, this one-day workshop is perfect for you. Participants will be introduced to the concepts of lift, thrust, propulsion, and gravity, along with learning all about flight from Da Vinci through the future of the space program. Hands-on activities include making hot air balloons and gliders.



VOLUNTEER SPOTLIGHT: JOHN AND KAREN ANDERSON

Question: What do you get when you take a teacher's ideas about asteroids and astronaut training, mix well with a creative tool maker's mind, throw in a pinch of fun and humor, and build in some underlying education facts?

Answer: Some truly amazing inventions by Mr. John Anderson!

John Anderson is a retired tool maker, originally from England; his wife Karen Anderson is a retired nurse educator. Both have been volunteering at the Challenger Center since 2001. "John can literally build anything I ask him to," says Barb Ervin, Flight Director and Education Activities Coordinator at the Center. "He and Karen assist in our children's programs, and both truly go to infinity and beyond when it comes to helping us out."

During the Center's Space Place program for preschoolers, the children make their very own space helmets. This entailed numerous hours of preparation time by the staff by cutting circles for face plates and squares for picture frames. John created a die cut for the picture frames and a circle cutter for the helmets, eliminating a time intensive task and helping the staff put their energies into creating educational programs for the children. He also designed and created astronaut glove boxes, tools that allow children to discover how asteroids are formed, and a swing that kids can sit on and practice using tools in space - just like real astronauts.

Karen is very involved in health and wellness issues and, in addition to her volunteering at Challenger, also donates time for various women's causes. Karen works at the Center's Reception Desk and also as a tour guide and docent. Her attention to detail, customer service, and friendly manner provide a welcoming atmosphere for the hundreds of students and other visitors who come to the Center every day. She goes out of her way to provide accurate information and to direct customers to programs that fit their individual needs.

The Challenger Space Center is fortunate that people like Karen and John volunteer their time - we truly appreciate all they do!

LEGACY SOCIETY TO "LAUNCH" THIS FALL

Have you remembered the Challenger Space Center in your will or estate? If so, you can automatically become a charter member of the new Challenger Legacy Society - just by letting us know. This society will recognize those who have remembered the Challenger in their will or estate. You don't have to tell us how or for how much—only that you have included Challenger in your plans. Legacy Society members will receive a special appreciation gift as well as take part in an annual Legacy Society member's dinner each year. "Charter members" in this first year (2003-2004) will be recognized on a special tile to be placed in the Center. If you have ever thought about making a lasting gift to the Challenger Center, now is the time to visit with your financial planner or attorney and learn about the simple and easy way that you can make a gift of math and science education to generations of children to come! Contact the Challenger Development Office at 623-322-2044 for information.

STARGAZING AND MORE

FAMILY FUN NIGHTS, FEATURING STARGAZING

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

- ★ November 15, 2003
- ★ December 6, 2003
- ★ January 3, 2004

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.

STARLAB INDOOR PLANETARIUM

- ★ November 1 and 15, 2003
- ★ December 6 and 20, 2003
- ★ January 3 and 17, 2004

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

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

Stargazing and StarLab are presented at the Challenger Center by Tony and Carole LaConte of Stargazing for Everyone.

Thanks to the following for making special gifts of items or services:

Thomas Ambrose and The Phoenix Suns
Michelle Lehman and APS
Ron Carmichael, Attorney At Law
Ned Clouser
Joseph Gaukel, Jr.
Honeywell Aerospace
Scottsdale Mayor Mary Manross
Robert McCall
Milton Meyer
Russell Pickrel
Lee Shedroff
Randy Knight and Total Warehousing
Jason Wolf

LOOKING FOR A GREAT TEACHER GIFT IDEA?

Purchase a Challenger Center Educator Membership for your child or grandchild's favorite teacher. Educator Memberships include 35 Stargazing passes for the teacher to use as gifts for their students, or however they would like. Call 623-412-9799 for more information.



SHOP BASHAS' AND HELP THE CHALLENGER SPACE CENTER

Shop at Bashas' with your Bashas' "Thank You" Card and you can help raise up to \$2,500 for the Challenger Center! Simply give the cashier the Challenger Group ID Number of 27743 when you check-out. After that, the Challenger Center will automatically receive 1% of your shopping dollars through the Bashas' "Thanks A Million" program each time you shop at Bashas' through April 30. Please help us to raise funds through this easy method – thank you!



NEW STAFF MEMBERS ARRIVE AT CHALLENGER

The Challenger Space Center has named two new Directors to its staff.



Kelsea Vescova has been named to the position of Director of Marketing. Kelsea comes to the Challenger Center from the Arizona Office of Tourism, where she was Tourism Development Manager. She holds a Bachelor's degree in Business Administration from Baylor University, and has extensive experience in the tourism, hospitality, special events, and chamber of commerce industries.

Randall (Randy) Harmsen has been named to the new position of Director of Finance and Administration. Randy comes to the Challenger Center from Rural Metro Corporation, where he was Vice President of Finance/Principal Financial Officer.



He is a Certified Public Accountant, and holds a Bachelor's degree in Accounting from Arizona State University. He has an extensive background in financial planning and reporting, general accounting, budgeting, and information systems.

SMITHSONIAN TEACHERS' NIGHT

On September 19, over 750 teachers attended Smithsonian Teachers' Night at the Challenger Space Center. We are very proud that the Challenger Space Center was selected by the Smithsonian Institution as one of just three locations nationwide to host the 11th annual Smithsonian Teachers' Night. All Arizona educators were invited to attend this free event, while on the same day, simultaneous celebrations were scheduled to take place at the Cosmosphere in Hutchison, Kansas, and the National Air and Space Museum in Washington, D.C. (although at the last minute, the event in D.C. had to be rescheduled due to Hurricane Isabel!).

Smithsonian Teachers' Night at the Challenger Center was sponsored in part by the City of Peoria, and this free event for teachers featured speakers, demonstrations, and giveaways, including a complimentary tote bag filled with free curriculum from the Smithsonian and NASA, along with other educational resources for the classroom. Special guest speakers included the Smithsonian Institution's **Dr. Herma Hightower**, Director of National Programs; Arizona Superintendent of Public Instruction **Tom Horne**; and Maricopa County Superintendent of Public Instruction **Sandra Dowling**. In addition, educators were delighted to hear presentations by **Robert McCall**, **Lt. Col. Rich Scobee**, Astronaut **Bill Gregory**, **Jim Ashley** of Minor Planet Research, and **Max and Sherry Beal** of Lockheed Martin.

SENIORS IN SPACE— EARLY BIRD SPECIALS!

Seniors—don't let John Glenn have all the fun! On Mondays from 4:00 to 6:00 pm, crew members ages 55 and better are invited to come fly with us. These early bird special missions are designed just for the mature audience. As one recent participant commented, "We really messed up during our mission - but we had a blast!" Reservations are required. Tickets are \$15 per senior. Senior Missions start on November 3. Call 623-322-2001 for reservations--groups more than welcome to "fly" together!



- ★ Best Science Lesson, The Arizona Republic
- ★ Best Place to See Stars, The New Times
- ★ West Valley Treasure, WESTMARC Voter's Award

SEE INSIDE FOR DETAILS!
Holiday Adventures in Space Registering Now

Link2Liftoff is a quarterly publication of the Challenger Space Center.
Admission: \$6 Adults, \$4 Seniors and children; free for age 6 and under.
Hours: Monday-Friday 9 a.m. - 4 p.m.; Saturday 10 a.m. - 4 p.m.
Information: 623-322-2001 or www.azchallengerc.org

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