

## Community News

### Workshop sparks enthusiasm among visiting educators

By Amy Milkavich

Inspiration comes from many places, but when found in the classroom, sparks fly and the results can be magical.

While magic is not the mission of JSC, the 25 educators who attended a two-week long workshop here July 5-18 will have a chance to see some sparks fly when school starts in the fall.

"People at JSC treated our group to special and rewarding experiences that I will cherish for the rest of my life," said Rebecca Goehring of Wimbledon, S.D. "Sometimes each of us in our careers need to reflect on why we are doing what we are doing, and I can tell you that I left JSC with a new and clearer purpose as to why I am an educator."

The workshop, called NEWEST, is the NASA Educational Workshop for Elementary School Teachers and is produced under the NASA Educational Workshops umbrella of programs.

The NEW programs are part of NASA's ongoing efforts to advance and communicate scientific knowledge and understanding of the Earth, the solar system, the universe, and to invest in America's future.

"We are trying to show how teachers can take space into the classroom and excite the kids and inspire them to explore knowledge," said Norma Rhoads, JSC NEWEST coordinator.

Throughout the two weeks that they were at JSC, the teachers explored educational techniques incorporating the theme of space travel and exploration.

"The knowledge and experience I gained from this workshop will continue on to every child I have an opportunity to reach," said Heather Brown of Van Buren, Ark. "I truly believe that one day one of my students will go to Mars or the Moon."

A portion of the workshop was devoted to an assignment that required the teachers develop a hypothetical Mars base. To complete the project, participants had to consider the challenges of developing a livable envi-

ronment on Mars and imagine possible solutions.

JSC employees from across the site volunteered to serve as mentors for the projects. Mentors helped participants learn about Mars and current plans for Mars exploration.

"I look forward to this every summer. It's a real fun two weeks," said John Gruener, a JSC employee who has served as a mentor for six years.

In addition to the Mars base mentoring project, participants attended presentations on such topics as robotics, space suits, and the X-38 project, toured training facilities, and received training in hands-on activities.

While at JSC, teachers also had an opportunity to videoconference with teachers in Wales, with the goal of maintaining a connection between their classroom and a partner classroom in the United Kingdom.

"The Mars base project will be an important and exciting tool that I will use this year. I have already heard from my Welsh partners and they are very excited too," said Marilyn Brothers of El Dorado, Kan. "Education is truly universal. We need to spend more time on projects such as these to learn from each other."

Participating teachers can choose to use the connection established while at JSC in a variety of ways, including pen pals, cultural sharing projects and an international Mars base.

"We sent several things to them at Christmas time about the Mexican Christmas traditions, and they sent us information about the Welsh Christmas traditions," said Karyl Tench, a NEWEST alumna from San Antonio. "The cultural exchange was wonderful. (The students) were able to see that these were actually kids who had families and pets, just like them."

A total of 17 NEW programs are available across the country for all K-12 teachers and informal educators. In order to participate, teachers must submit an application, which is then reviewed and rated, with the highest ranking applicants selected to participate.



JSC Photo by Mark Sowa

Above: Bill Albee, a teacher from Axtex, N.M., tests a robot his group built during a NEWEST hands-on session at JSC in July. In the background, Jim Christensen, a National Science Teachers Association facilitator from Holstein, Iowa, watches another group's robot perform its task. Below: NEWEST participants and Summer Faculty Fellows enjoy watching the movie *Apollo 13* from where it actually happened—the third floor Flight Control Room in JSC's Bldg. 30.



## Local astronomers earn honors at Texas Star Party

JSC Astronomical Society members Bob Taylor and Jack "Triple" Nickel brought home the equivalent of "gold stars" from this year's Texas Star Party.

Nickel, who works in NASA Aircraft Operations at Ellington Field, and Taylor, who serves the nearby Texas Air National Guard, brought home two of four awards given. Judges do not bestow first, second or third places, instead selecting only those entries worthy of award.

Every year for the past 20 years, a Texas Star Party has been held in the dark skies of West Texas, draw-

ing people from all over the world. Each year, there is a formal judging of these homemade telescopes.

The star party boasts attendance by hundreds of amateur astronomers and astrophotographers and becomes a showcase of new equipment and homemade telescopes. This year, 601 registered astronomers showed up at the Prude Ranch, just outside Fort Davis, Texas, and down the road from the McDonald Observatory, for the "darkest skies in North America."

Of these, there were about 20 entries in the amateur telescope mak-

ing contest. The judging committee consisted of two writers/editors from Sky and Telescope Magazine, one writer from Astronomy Magazine, several members from the Texas Star Party board of directors, and a photojournalist for the Public Broadcasting System. The judging committee carefully examined each entry, listing any noteworthy aspect of the design or functionality. They interviewed the maker and asked many questions regarding unique ideas and design features.

Taylor submitted his homemade Newtonian Reflector telescope and

it's associated equipment. He hand ground, polished and figured the 8-inch mirror and had designed and constructed the truss supports out of common household materials. Additionally, he had made a refractive sighting scope and mounted it on the side of the large telescope. The base and support mechanism for the mirror and trusses was fashioned out of a swimming pool sand filter and parts from a band saw. The telescope resembled "Star Wars" robot R2-D2 when it was packed away.

Nickel's entry also was a Newtonian Reflector telescope. He hand

ground, polished and figured the 8-inch mirror and fashioned the tube out of a 10-inch concrete-pillar-tube form. The base was cut out of three-quarter-inch oak veneer plywood and stained and varnished to a furniture quality finish. The tube was painted a high gloss black, thus making the telescope look like a medium-sized cannon.

Anyone interested in the JSC Astronomical Society or the Texas Star Party, is encouraged to visit their web sites at: <http://www.ghg-corp.com/cbr/jscas.html> and <http://www.metronet.com/~tsp/index1.html>.

## JSC Safety Alert

### Shock Hazard from Tektronix Oscilloscopes

#### What Happened

Tektronix, Inc., is voluntarily recalling oscilloscopes with Model Numbers TDS210 and TDS220.

#### Outcome of the Investigation

Tektronix has determined that using certain models of oscilloscopes incorrectly may cause the ground connection to fail and could cause serious injury or death from electrical shock. Tektronix has received reports of situations where the ground lead on these oscilloscopes has opened as a result of incorrect use. They are not aware of any injuries to users.

This recall applies to Tektronix model number TDS210—serial number below B049400 or C010880; and Tektronix model number TDS220—serial number below B041060 or C011175.

If you incorrectly connect a probe ground lead to a voltage source or incorrectly touch the ground ring near the probe tip to a voltage source, a circuit board trace in the oscilloscope's electrical ground path may open. The oscilloscope may appear to function normally, but because it is no longer properly grounded, you are at serious risk of electrical shock.

#### What You Can Do

Stop using the recalled oscilloscopes immediately and return them to Tektronix. Call James Cooley at x37142 to obtain a copy of the recall return instructions.

Tektronix will modify your oscilloscope(s) to remove this shock potential and return it to you free of charge.

### Memorial to benefit interns, co-ops

## Boeing's Ambrose ends battle against lung cancer

Frank Ambrose, a Boeing contractor whose battle against lung cancer and lymphoma led to an outpouring of support from his teammates earlier this year, died July 16 at his home.

An informal memorial service was conducted July 22 at Stevenson Park in Friendswood. At the family's request, the traditional black dress code was not followed.

Ambrose's fellow International Space Station Program Management and Control Team members demonstrated their support in March by shaving their heads when chemotherapy left Ambrose with such sporadic tufts of hair on his head and beard that he decided to shave it all off.

Kevin Window and Mark Wilson, the NASA and Boeing co-chairs for the SMC team, organized the head-shaving party. At the party, Ambrose was the first to shed his locks. All 19

of the men on the team shaved their heads, and a few from other teams joined in, making the total sheared 23. Several had kept their heads shaved since.

"We can thank the Lord that we had such a great man like Frank that touched all our lives and brought many friends, family, and folks that didn't even know Frank to their knees in prayer," Window said. "It is a great loss to us in the earthly sense, but we know now that we have a great angel to watch over us."

A memorial fund has been established at the JSC Federal Credit Union in Ambrose's name to assist in internships and cooperative education students for the space program. Checks may be made out to the "Frank Ambrose Memorial Fund" and mailed to:

JSC Federal Credit Union  
P.O. Box 58346  
Houston, TX 77258