

Science fun

Students worldwide have a hand in an STS-108 experiment

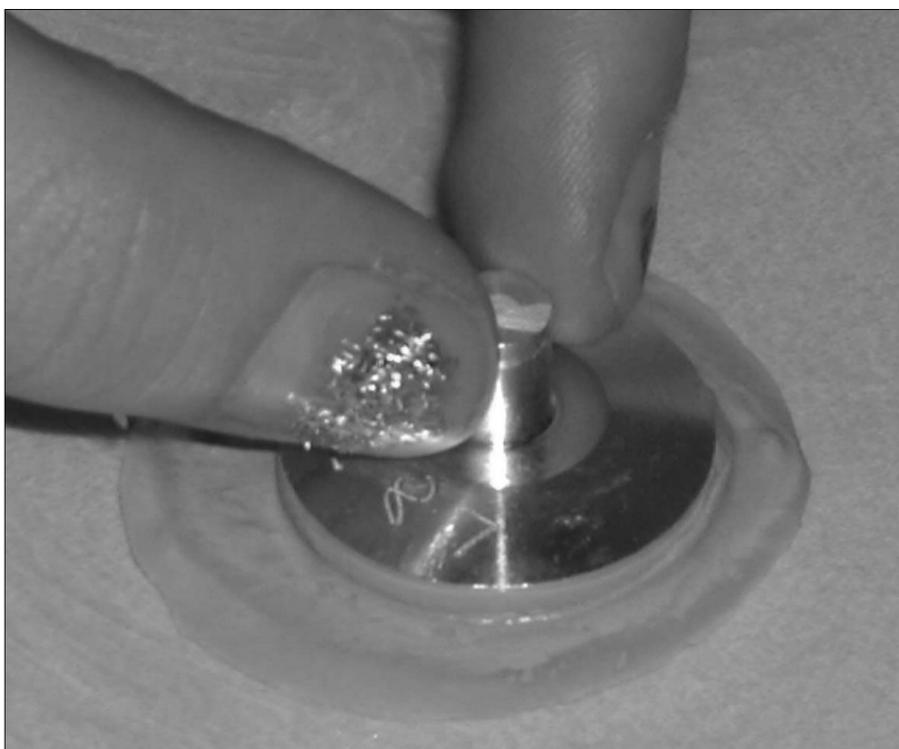
By Aaron Wyatt

Students in schools worldwide had extra interest in the STS-108 Space Shuttle mission, as first graders to college undergraduates had their experiments venture into space.

The students participated in an experiment known as the Student Tracked Atmospheric Research Satellite for Heuristic International Networking Experiment (STARSHINE-2). STARSHINE is an education program for students around the world to help construct a satellite and learn about satellite orbits and natural events that affect these orbits.

To be deployed after the shuttle undocks from the International Space Station, the beach ball-size satellite is covered with nearly 900 aluminum mirrors that have been polished by nearly 25,000 students around the world. The satellite should be visible from Earth with the naked eye.

On a local level, Jim Glock's Fairmont Junior High students were just a handful of students who polished mirrors.



A Fairmont Junior High student demonstrates part of the process it took to polish the thousands of mirrors on the STARSHINE II Satellite. Students worldwide participated in the STARSHINE II project.

Laura Phelps, Josh Goodnight, Luke Gause and Kyle Schnitzer started polishing four mirrors. They only submitted two of them for the satellite. It was a six-step process of meticulously sanding and polishing each mirror. "I felt like our mirrors were up to the requirements," Glock said.

Throughout the satellite's six-month lifetime, students will be able to track its position, visually observe it at twilight hours, calculate orbits, measure changes in the orbit and observe the effect of solar activity on the orbit.

The students thought it was "cool" to polish a mirror that was sent into space. When asked if they thought they'd be the generation to place a human on Mars, Kyle was quick to speak up.

"I want to design the rocket to get us there," he said.

Rocky Mountain NASA Space Grant Consortium in Salt Lake City is sponsoring the project, the third in the STARSHINE series. The first was deployed during a 1999 shuttle mission and the second was launched from Alaska in September 2001. ■

New Customer Support Room for the Mission Control Center completed

Lockheed Martin's Consolidated Space Operations Contract (CSOC) has completed the design and installation of a new Customer Support Room (CSR) in the Mission Control Center (MCC) at JSC.

The Customer Support Room/ISS Management Center (CSR/IMC) supports two major NASA programs: The Space Shuttle and International Space Station. It provides a monitoring and participation area during Shuttle flights and ISS Stage operations for Program Managers, Program Integration Managers and VIPs, as well as for the management and personnel of traditional Shuttle payload customers.

Data analyzed in the CSR/IMC provide the information mission managers use to make decisions concerning the many Space Shuttle and ISS payloads.

"Successful delivery of this new capability required a comprehensive project plan that integrated multiple contractors' inputs," said Doug Tighe, program manager for CSOC. "I am proud to say that despite several challenges, we delivered the room on time and budget."

"As with all ventures of this

magnitude, customer feedback during all stages of the project was critical to meeting project milestones," said Dianne Murphy, NASA's Increment Manager. "We are very pleased with the design, construction, quality of workmanship and flexibility that this new room provides."

The development of the room required demolishing several previously existing rooms and designing a new infrastructure, which included Signal Reference Grids, power and communications cables, ceiling and floor grids, carpet, support equipment, furniture and environmental controls.

Once the infrastructure was in place, CSOC technicians, engineering and staff support personnel installed a more productive and user-friendly support center. This included the installation of state-of-the-art workstations, new flat panel monitors for the workstations, all new flat panel television monitors, new overhead television monitors and new color laser printers.

Upon completing the installation of this equipment and performing the necessary functional tests, CSOC turned the room over to NASA for a planned flight simulation. ■



NASA JSC3001e28110 Photo by Bill Stafford

JSC Deputy Center Director Randy Stone and Daniel C. Brandenstein, CSOC Associate Program Manager, cut the ribbon to the new Customer Support Room in the Mission Control Center. The work was designed and installed by Lockheed Martin's Consolidated Space Operations Contract.

NEW SINGLE NATIONWIDE NUMBER FOR POISON CONTROL

The American Association of Poison Control Centers (AAPCC) has established a single number for people to reach their local poison control center. The new number is **1-800-222-1222**. When people call this number, a computer checks the dialer's area code and first three digits of the phone number and connects the caller to the nearest poison control center. For more information, check out the AAPCC's Website at www.aapcc.org.