

Space Center Roundup

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'Tis the season for giving

JSC's Steve Rickman is one who gives of his time as an Engineers Week speaker, an Open House volunteer and a Speakers Bureau representative. Using a variety of demonstrations, he often speaks about heat transfer and why it's important in relation to spacecraft. "I love sharing my enthusiasm about the space program with kids," he said.

Rickman, who is the Acting Chief of the Thermal Design Branch in the Structural Engineering Division, has worked at JSC for 16 years. Recently Rickman spoke to students (pictured here) during a visit to Greene Elementary School in which Odin presented a computer to the school.

See Page 7 for the complete story.

To find out how you can volunteer for Engineers Week, see Page 2 for more information.

NASA JSC 2001-4221

2

**Randy Stone
named Deputy
Center Director**



3

**Students
participate in
STARSHINE**



4

**Silver Snoopy
Awards
presented**



Mission Control veteran Randy Stone named Deputy Director

Randy Stone, a 34-year veteran of Mission Control and Johnson Space Center, has been named Deputy Director of Johnson Space Center by JSC Acting Director Roy Estess.

Stone began his career with NASA in 1967, developing landing and recovery equipment for the manned lunar landings of the Apollo Program. He most recently has served as JSC's Acting Associate Director of Management. In between, Stone has held positions in Mission Control as a Flight Controller, Flight Director and Chief Flight Director. In senior management, his positions have included Director of Mission operations before being named to the Acting Associate Center Director post in July.

"Randy is one of the foremost experts in the world on human space

flight and he has played key roles for over three decades in the success of space exploration and the Johnson Space Center," Estess said. "His adept leadership already has been proven and he is a natural for this position."

Stone's work at JSC has included contributions to the Apollo Program, Skylab Program, Apollo-Soyuz Test Project, Space Shuttle Program and International Space Station Program. Stone is a native of Brownsville, Texas, and graduated from the University of Texas at Austin in 1967.

As JSC Deputy Director, Stone shares the responsibilities of the Center Director and serves as Acting Director when necessary. The Deputy Director plans, organizes and controls activities required to meet all JSC goals and objectives. ■



JSC collects toys for New York

By Aaron Wyatt

When JSC Co-op Becky Mairoano went home to New Jersey over the Columbus Day holiday weekend, she better understood the result of the terrorist attacks on New York City.

"I was exposed to a much more direct impact from the attacks than I have been here in Texas," she said.

Mairoano was one of several Co-op students who helped JSC collect toys for the children affected by the events of Sept. 11. "I thought about the toy drive and how it is going to help these children get through a rough holiday in the near future."

The citywide drive, supported by area businesses, benefitted children whose parents were killed in September. JSC had several collection bins on-site at both the cafeterias and Gilruth Center. The Marine Corps Toys for Tots and the Red Cross were also instrumental in collecting toys.

Karen Frank, Chief of the GN&C Development & Test Branch, described how Mark McDonald got the idea for the toy drive: "The toy drive was created as the result of a video clip from New York in which a newly-widowed mother of two asked, 'Who will be Santa for my children this year?'"

McDonald's instinctive reply to the clip was, "I will." He presented the idea of a toy drive to Center Management. After some negotiation, the drive was set.

"Within hours of suggesting the idea to my Division Chief, I had escalated through Directorate to Legal, Personnel and the to the Center Director's Office," said McDonald. "Everyone said, 'Go.'"

And they were off. Victoria Vinci prepared graphics and posters. Co-ops helped get the word out and collected toys each night from bins on-site. Monalisa Norton drove to McAllen, Texas, to pick up toys from a supporting drive.

Frank stepped forward to coordinate the efforts of JSC. Several contractors agreed to do drives at their sites as well. The collections at United Space Alliance and Lockheed Martin accounted for 50 percent of the drive. George Davis (USA) and West Womack (LM) helped lead their organizations' efforts.

The team effort collected about \$50,000 of new toys and \$3,000 of used toys. The new toys were delivered to New York and the used toys were donated to local charities for flood victims.

"The total team includes a lot of people beyond JSC and extends all of the way to the wives and husbands who support our endeavors," McDonald said.

ENGINEERS WEEK APPROACHING: VOLUNTEERS NEED

By Aaron Wyatt

As the time of giving quickly approaches, make plans to donate your time and volunteer for Engineers Week 2002.

National Engineers Week, Feb. 17-23, is an annual event to help raise awareness and appreciation of engineers and their work. Volunteer registration begins Jan. 2 on the Engineers Week web page. Registration ends Jan. 24.

Any civil servant or contractor interested is encouraged to participate. Volunteers can be from any field, although focus is placed on technical-type issues.

Last year, 133 JSC volunteers reached out to more than 10,000 area students in grades 4-12. The event increased student interest in engineering, technology, science and mathematics with presentations to local schools. By using hands-on demonstrations, JSC engineers gave of their time with

the hope of getting students excited about the field of engineering and creating a public awareness about engineers and what they do.

Each volunteer will need to attend a training session, scheduled for Jan. 23 and 24. Volunteers may present throughout the month of February, not just during Engineers Week.



For more information on volunteering for Engineers Week, contact Anne Roemer at x32929 or Teresa Gomez at x39588.

You gotta have heart!

The Human Test Subject Facility is currently recruiting healthy men and women 45 years and older with no known personal history of heart disease.

Volunteers will participate in a non-invasive cardiovascular study investigating a new type of computerized electrocardiography called "high frequency QRS electrocardiography." This new computerized ECG method is being studied as a possible way to more sensitively detect coronary artery disease that conventional 12-lead electrocardiography can't.

Interested and qualified participants will complete a questionnaire, have blood drawn (for a free cholesterol screening) and be given a brief physical examination that includes the study's 10-minute, computerized ECG test. The non-invasive ECG test will be repeated by itself a second time in six to 12 months. All activities related to the study will occur in Bldg. 37.

For additional information, please call Linda Byrd, RN, at x37284, or Rori Yager, RN, at x37240. ■

From the Equal Opportunity Office

In the past, we have had the privilege of having entertainers performed at the Holiday Extravaganza program. Unfortunately, due to the heavy security restrictions this year, we will not have any entertainers. However, from Dec. 10-21, we will celebrate the holiday season with taped holiday music in the Bldg. 3 Cafeteria during the lunch hour (11 a.m. to 1 p.m.). The cafeteria stage wall will be decorated for the holiday season and, once again, the U.S. Marine Corps will provide donation barrel for toy collection in conjunction with their "Toys for Tots" program. All employees are encouraged to donate new, unwrapped toys in support of this worthwhile endeavor.

Science fun

Students worldwide have a hand in an STS-108 experiment

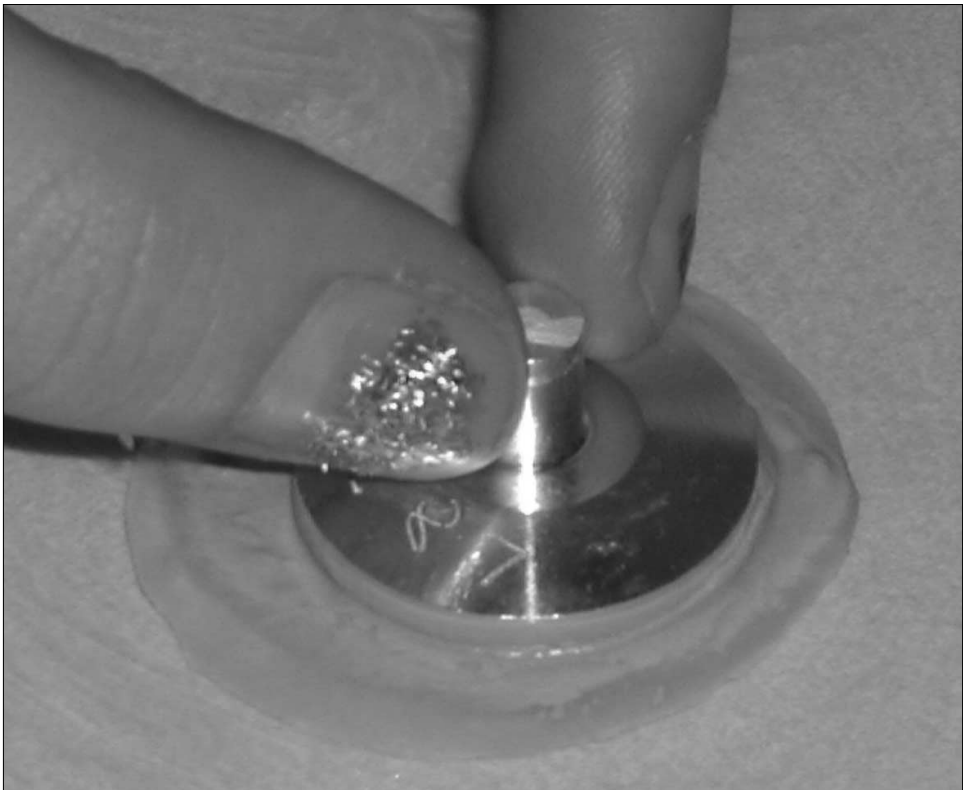
By Aaron Wyatt

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

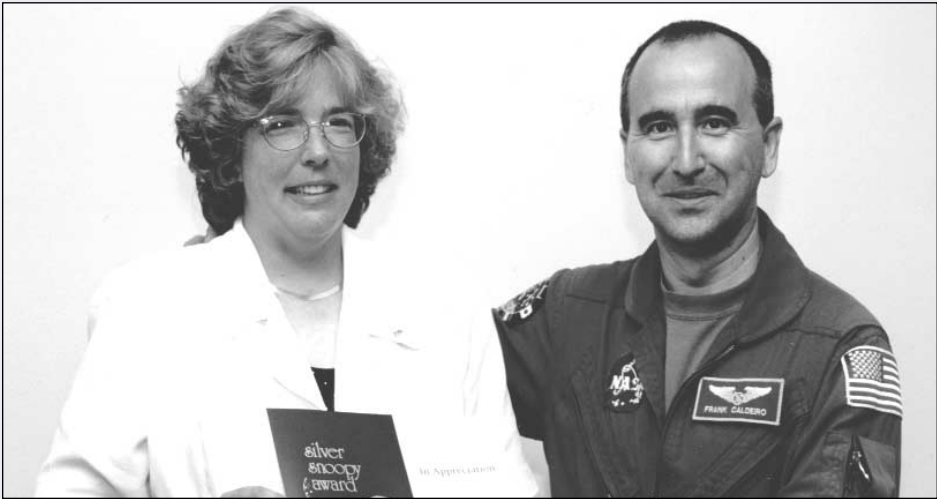
The American Association of Poison Control Centers (AAPCC) has established a single number for people to reach their local poison control center. The new number is **1-800-222-1222**. When people call this number, a computer checks the dialer's area code and first three digits of the phone number and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



NASA JSC 2001-10724

Rodolfo Gonzalez receives Silver Snoopy Award from Edward Lu

Rodolfo Gonzalez, operations lead for the SIGI Orbital Attitude Readiness (SOAR) Detailed Test Objective (DTO), was responsible for defining and coordinating operational requirements, creating the procedures, training the crew in these procedures and providing real-time mission support. His tireless efforts on these tasks directly resulted in the success of the SOAR DTO on its maiden flight, STS-101.



NASA JSC 2001e21545

Cathy Gardner receives Silver Snoopy Award from Frank Caldeiro

Cathy Gardner, Education Outreach Specialist, was recognized for her role in helping NASA achieve its outreach objectives. Her enthusiasm for the space program and dedication to the goal of inspiring students to learn resulted in the Virtual Astronaut. Her direct contribution to the Virtual Astronaut product has been vital in how well students, teachers and other outreach groups have received it.



NASA JSC 2001e25287

Jacqueline Myrann receives Silver Snoopy Award from Marsha Ivins

Jacqueline Myrann, Project Engineer in the Radio Frequency Systems group, was recognized for her ability to sort out problems in the infinitely complex communications world. As the technical “brains” for the Wireless Video System project, Jacque juggled the needs of a demanding crew, the operational capabilities of the hardware and the intricacies of the software and software designers to provide NASA with a wireless video system.



NASA JSC 2001-2872

Phil Cota with wife Linda accepts Silver Snoopy Award from Steve Smith

Phil Cota, Orbiter Main Propulsion System (MPS) Manager and Chief Engineer for the Mars In-situ Propellant Production Precursor (MIP) flight experiment, was cited for his management of countless design- and safety-related activities, including the ET/Orbiter hydrogen disconnect leakage and aft fuselage concentration issue on STS-26R, 29, 35 and 38. Phil was also instrumental in the development and certification of the 17-inch ET/Orbiter disconnect latch. His attention to detail and technical expertise were critical in the success of MIP.



Clifford Dupree receives Silver Snoopy Award from Doug Wheelock

Clifford Dupree, Technician and Facility Manager for the Space Vehicle Mockup Facility (SVMF), was instrumental in development and modifications of the mockups/trainers in the SVMF. His efforts on the outfitting of the Flight Crew Systems Lab, management and work on the Node 1 upgrades and development of the Functional Cargo Block, Service Module and the ISS Airlock were a major contribution to the continued success of the program.



NASA JSC 2001e21545

Sina Hawsey receives Silver Snoopy Award from Wendy Lawrence

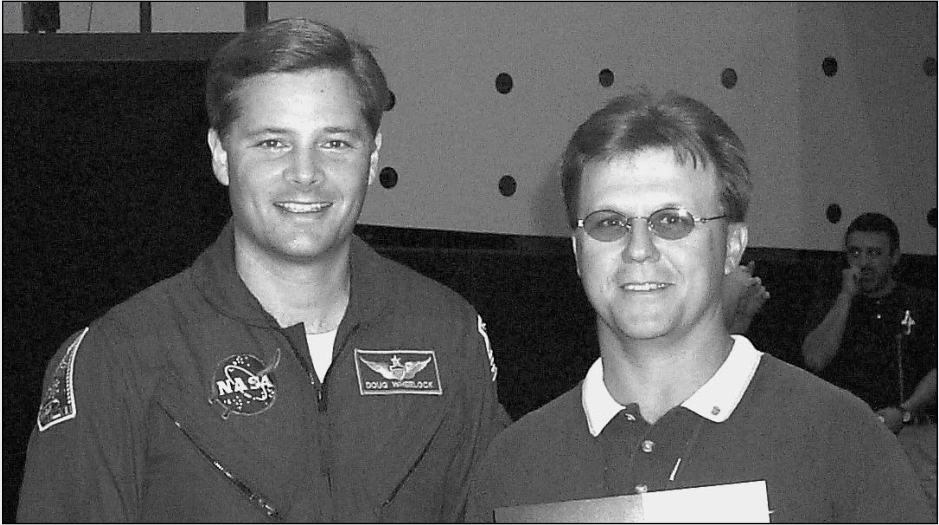
Sina Hawsey, Industrial Property Officer, was recognized for the support she has provided to NASA’s space programs and the Astronaut Corps. Her time and efforts interacting with personnel from the ISS Program, NASA Headquarters, Financial Management and the contractor community have resulted in determining successful ways to track and maintain financial accountability of all assets in orbit on a permanent basis.



NASA JSC 2001-3962

Lisa Holmsely receives Silver Snoopy Award from Jim Voss and Susan Helms

Lisa Holmsely was recognized for her work as an operations planner for the International Space Station. She was also instrumental in getting Increment 2 off the ground. She also integrated three sets of scheduling requirements.



Shannon Gumm receives Silver Snoopy Award from Doug Wheelock

Shannon Gumm, Technician for the Space Vehicle Mockup Facility (SVMF), was recognized for his design and fabrication of safety upgrades to the Functional Cargo Block (FCB) and Service Module in the SVMF. The FCB and Service Module laptop desk assemblies were the subjects of favorable crew review during crew training for STS-106. He also participated in the new Intravehicular Activity (IVA) tool demonstration stand, as currently utilized by crewmembers for IVA tool training.



Brent Carlisle receives Silver Snoopy Award from Doug Wheelock

Brent Carlisle, Neutral Buoyancy Laboratory (NBL) Layout Configuration Specialist, was recognized for his support of the NBL Integration and Engineering Team (IET). His efforts and contributions coordinating complex mockup and trainer configurations were directly responsible for the safe, timely and superior performance of the IET's Reconfiguration Diving Team.



Elizabeth Cross receives Silver Snoopy Award from Barbara Morgan

Elizabeth Cross was recognized for the outstanding human engineering support she has provided to NASA's space program, and her excellent work for NASA Flight 3A's Space Vision System (SVS) lighting analysis. The models and calculations she provided for shadow predictions across Z17 and PMA-3 were accurate and precise. Elizabeth's support was a positive contribution to the success and safety of that mission.



Timothy Braithwaite receives Silver Snoopy Award from Nancy Currie

Timothy Braithwaite, Robotics Flight Controller, was cited for his operational expertise with the Mobile Servicing System and leadership in various International Space Station program forums. His role in the establishment of a hierarchical malfunction reference in the MSS-generated caution and warning messages was also recognized.

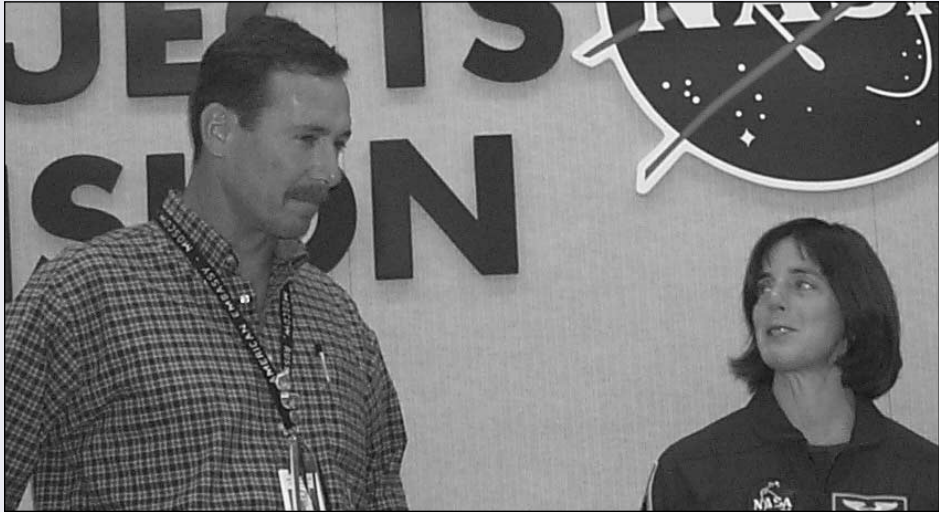


NASA JSC 2001-4095



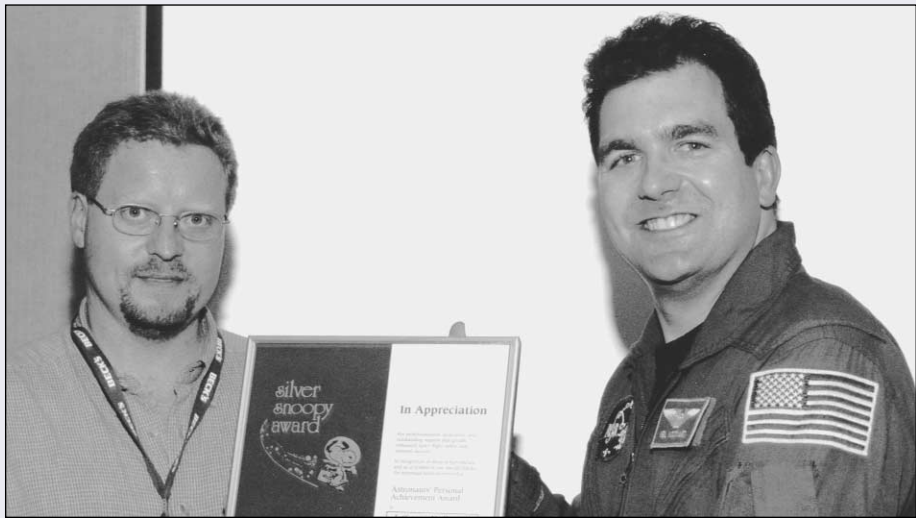
Patrick Donovan receives Silver Snoopy Award from Doug Wheelock

Patrick Donovan was cited for the key role he played during STS-97, helping solve the Solar Array tensioning cable problem. His work enabled the 4A flight crew to set up the articulating portable foot restraint (APFRs) in the positions determined at the Neutral Buoyancy Laboratory (NBL), with the Mission Control Center giving the crew near real time direction from the NBL. Patrick's accurate alignment of the beta gimble APFR settings and the contingency procedures produced at the NBL to reinstall the solar array tensioning wire back on the take-up reel simplified this complex task for the 4A EVA crew to execute.



Lee Silveira receives Silver Snoopy Award from Barbara Morgan

Lee Silveira, Manager for the ISS Stowage Subsystem, was cited for his outstanding support to the space program. His dedicated efforts as a representative at Baikonour ensured the successful stowage of U.S. cargo on Russian Progress supply missions.



Jefferson Powell receives Silver Snoopy Award from Neil Woodward

NASA JSC 2001-4086

Jefferson Powell was recognized for the support he has provided to NASA's space programs. Powell designed and implemented the data reconfiguration process on the Portable Computer System (PCS) project. His knowledge of the project has kept the PCS production on schedule, helping ensure a fully functional PCS was available to both Shuttle assembly crews and the Expedition 1 crew.



NASA JSC 2001-4058

Charles Armstrong receives Silver Snoopy Award from Anna Lee Fisher

Charles Armstrong was cited for his support of the International Space Station Program and leadership in PCS crew and ground display development within the Mission Operations Directorate. His leadership was instrumental in getting flight controllers the proper tools necessary for successful display generation and for getting Web-based display servers, which allow MOD and International Partners to access the latest display sets for standards and examples.



Ripped from the ROUNDUP

Ripped straight from the pages of old Space News Roundups, here's what happened at JSC this week in:

1 9 7 1

How to support life during long-duration space missions, keeping expendable life-support items to a minimum, is an intriguing problem and one to which a group of MSC engineers and technicians is devoted to finding a solution.

Dr. Noel C. Willis, Jr., of the Crew Systems Division is acting chief of the Environmental Control and Life Support Systems Branch and heads the Advanced Systems Section.

This section is tasked with developing prototype hardware for an environmental/thermal control and life support system (E/TCLSS), which could be used aboard a modular space station of the future. The purpose is to duplicate, as closely as possible to the actual flight articles, hardware to be used in a ground test program.

1 9 7 6

Three new exhibits, including a 16-by-10-foot color photomosaic of the continental United States, are now on display in the Building 2 Visitor Center.

A slide-and-sound presentation, "NASA for the '70s: Space for Everyone," and a Space Shuttle exhibit are the other new attractions. Both of these were built at JSC but have been publicly shown only at Kennedy Space Center's 3rd Century America exposition.

The photomosaic is constructed of 569 infrared images taken by Landsats I and II. It provides a virtually cloudless view of the 48 contiguous states at a scale of 1:1,000,000.

1 9 9 1

The Italian Space Agency (ASI) will design and develop two Mini Pressurized Logistics Modules for the Space Station Freedom program under a memorandum of understanding signed last week with NASA.

The agreement was signed by NASA Administrator Richard Truly and ASI President Luciano Guerriero in the presence of Italian Undersecretary of State Senator Learco Saporito. The two agencies also agreed to work toward expanding the relationship to include provision of a Mini Laboratory too.



Back to the future Sixties Chicks reunite

By Aaron Wyatt

The price of the U.S. flag on the moon:
\$5.50

The total cost of the Apollo program:
\$19,408,134

The value of JSC secretaries in the 1960s: **Priceless**

The hugs, smiles and tears that filled the Gilruth Center Ballroom during the "Sixties Chicks" reunion gathering Friday, Nov. 2 were priceless as about 80 past and present secretaries who worked during the 1960s attended the special event.

"It's up to us to inspire the next generation," said guest speaker and former Flight Director Gene Kranz.

Dr. Christopher Kraft was also in attendance. Kraft questioned whom future generations would see as the guide of the space program. He noted that Sacagawea was Lewis and Clark's guide during the exploration of the Louisiana Purchase, and that he hopes historians refer to the secretaries as the space program's guides when documenting the journey of space travel.

Although the three-hour event consisted of dinner, door prizes, a video presentation and brief remarks by Kraft and Kranz, reminiscing of years gone by highlighted the evening. Women came from all over the area, such as Gail (Gannon) Grow, who flew in from Virginia.

Some Sixties Chicks said they thought their bosses were crazy – but agreed they were so talented their bosses had every right to be crazy. They remembered how the men swore a lot, drank a lot of coffee and smoked a lot of cigarettes (to which the secretaries emptied their ash trays.)

One table of "Sixties Chicks" was quick to point out that "back in the good old days," secretaries had to know spelling and grammar. Today, they say computers handle much of that task. Plus, men couldn't type back then either. Now guys do their own typing.

"Back then, we knew what was going on," Wilma Lee said.

Claudia Hess enjoyed walking around and being able to see the real thing while she worked here - the first missions and the landing on the moon. After a splash down, she recalled NASA Road 1 would shut down due to celebration.

"You had to be there to experience the thrill and excitement," said Sue McGehee.

Billie Schmidt worked for Tom Baker in the Apollo Program Office. One day, she said he sent her to meet Neil Armstrong.

"He said Neil would be the first man on the moon," Schmidt said. The amazing thing was Armstrong wasn't even an astronaut candidate at the time Baker made the comment.

The Sixties Chicks reunion was born after a casual conversation between a couple of former secretaries. Before they knew it, word had spread, interest was sparked and there were enough responses to fill a ballroom.

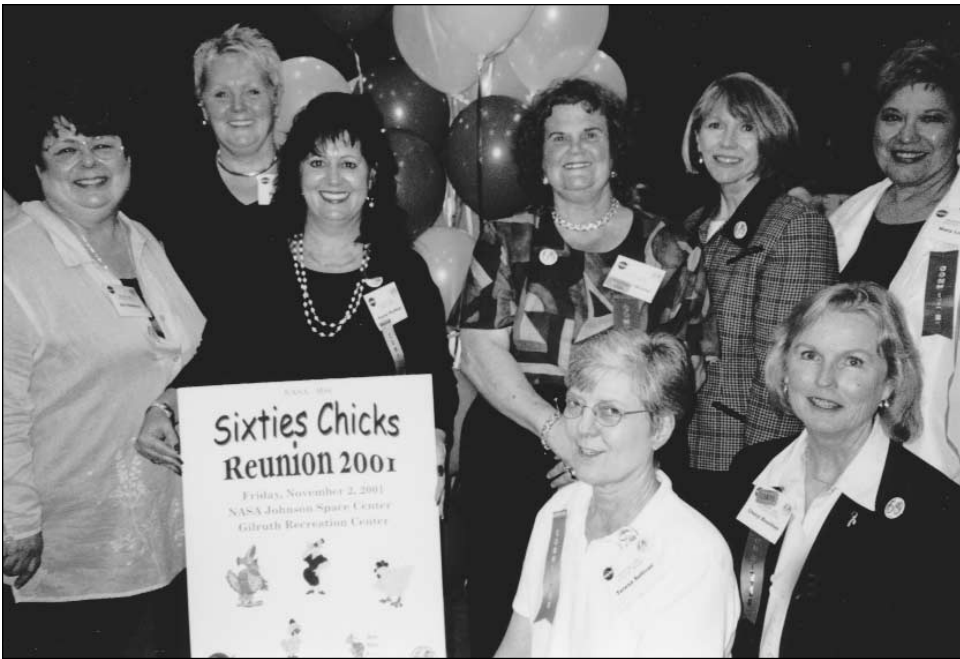
Dawn Hoyle, one of the reunion's organizers, plans on keeping in touch with all those who attended.

"The pure joy of watching those ladies enjoying themselves made it very special for me. You'd have to understand what a unique time the Sixties were for us and what a sense of purpose we had here in this space program," she said.

"We participated in one of the most significant accomplishments of humankind and that creates a camaraderie shared by only an elite few."

Plans are in the works to plant a tree on-site in memory of all the secretaries from the 1960s.

Most agreed working at JSC was the time of their life. Some felt they made a mistake by taking other jobs or deciding to stay at home. But at least they got to re-live the past for a couple hours one Friday night. ■



The 'Sixties Chicks' had a night they will never forget on Nov. 2. Some of the evening's attendees are pictured above. Front row: Teresa Sullivan and Cheryl Bouillion. Back row: Dot Childress, Dawn Hoyle, Rachel Windham, Maureen Bowen, Karla Fischer and Mary Lopez. Below is a complete attendance list.

Sixties Chicks Reunion Attendees

- | | |
|------------------------------|---------------------------------|
| Jeannie (Walker) Bale | Cathey Lamb |
| Cheryl Bouillion | Glenda Lancon |
| Nita Bouldin | Wilma Lee |
| Maureen Bowen | Audrey B.Lemons |
| Marianne Campbell | Sandra Lewis |
| Bettie (Miller) Carney | Mary Lopez |
| Susan Carroll | Lois (Bradshaw) Malone |
| Dot Childress | Alma Martin |
| Evon Collins | Sharon Martin |
| Flo Cox | Sue McGehee |
| Connie Critzos | Dianne (Brizzolara Bell) Milner |
| Mary Crocker | Mr. Arthur Moody |
| Cheryl Damewood | Charlotte Ober |
| Connie Dunaway | Mary O'Connell |
| Elsie Easley | Raynell Perez |
| Ruth Elder | Ann (Sullivan) Philpot |
| Jerry C. Elliott | Liz Pieberhofer |
| Judy (Pfifer) Ernull | Barbara Pope |
| Terry Fechner | Doris Reid |
| Betty Sue Feddersen | Norma (Godeke) Rhoads |
| Karla (Garnuch) Fischer | Pat Ritterhouse |
| Frankie Jim Fisher-Bockman | Dianne Robinson |
| Iris Garner | Kitty Rogers |
| Pat Garza | Paula Scheffman |
| Billie Gibson | Billie (Barmore) Schmidt |
| Estella (Hernandez) Gillette | Ralph Schomburg |
| Dee Goerig | Barbara Shock |
| Gail (Gannon) Grow | Patricia Sims |
| Claranita Haefner | Bonnie Smith |
| Dot (Hart) Hailey | Maureen (Duffy) Smith |
| Martha Halliburton | Susan (Golden) Stone |
| Marilyn (Lamb Davis) Hamner | Sylvia (Salinas) Stottlemeyer |
| Claudia Hess | Teresa Sullivan |
| Roberta Hohmann | Ruby Summers |
| Cheryl Howard | Jean Taylor |
| Dawn Hoyle | Carol (Brinkmann) Temperton |
| Nancy Hutchins | Velna Troxlar |
| Elsie Johnson | Carol (Lines) Turner |
| Barbara (Perkins) Kirkland | Lois Walker |
| Karen (Gardner Kaiser) Kraak | Jan (Pacek) Weede |
| Christopher C. Kraft | Judy White |
| Betty Anne Kraft | Mildred Wilkes |
| Gene Kranz | Beverly (Cox) Williams |
| Marta Kranz | Rachel Windham |

Co-ops in action

Co-ops go trick or treating for a great cause



Fall Co-op students recently wrapped up another tour. For many, it was their first time at JSC. Highlights from this tour included countless tours and lectures, as well as dancing, a beach party, bowling and collecting canned goods on Halloween for the Houston Food Bank. Above are some Co-ops who participated in the collection.

By Kyle Pendergrass

Oct. 31 marked the initiation of an annual trick-or-treat canned food drive, which sent costumed student co-ops and contractors door-to-door in search of canned goods and other non-perishable items. All collected items were donated to the Houston Food Bank.

More than 20 Co-ops and contractors split up into groups of three and four

and went to Clear Lake's neighboring communities in search of giving homeowners. After a couple hours, the participants met to combine the collected cans before a Halloween social event.

More than 500 items were collected during the trick-or-treating festivities. Local grocery stores also contributed. The canned food drive's success was only possible through the efforts of all who participated. ■

Co-ops take their message to local high school students



NASA JSC 2001e08853

Co-ops recently spoke to high school students, discussing the importance of space exploration and the importance of a college education. Several space artifacts were also on display, like this astronaut helmet.

Recently, JSC members of the NASA Cooperative Education (Co-op) Program went to Dobie High School to talk about the program and to stress the importance of receiving a college education. This was done as part of JSC's High School Outreach Program (HSO).

"We want to promote college, engineering, science and, also, the co-op program," said HSO Coordinator Laura Campbell. "A lot of kids don't know the opportunities that are available to them once they enter college, and HSO helps them to become aware of the possibilities."

High School Outreach is an official NASA program run by the college co-op students presently working at JSC, designed to encourage high school

students to enter careers within the space program. HSO began as a supplement to current JSC educational programs and has reached more than 10,000 students at area high schools since its inception in 1991.

"In the past we've had many students want more information about college, the co-op program and how to get involved earlier on, such as high school programs that NASA has," Campbell said. "It's great to see that we have an effect on the students."

"All our students enjoyed the program and I am sure they learned a lot also," said Dobie High School Science Department Head Nancy Walker. "They really liked looking at the various NASA items that were on display." ■

Odin sponsors computer giveaway to elementary schools

A trip to JSC's Open House by local elementary students Sana Chaudhry and Ford Fox in August proved lucky for each of their schools.

G.H. Whitcomb and P.H. Greene schools each were the recipients of a new computer system, thanks to the ODIN. ODIN sponsored a giveaway at the Open House and encouraged students to sign up for the chance to win a computer for their school.

Sana attends Whitcomb School and won a Dell system. Greene elementary received an iMac system thanks to Ford. The schools were awarded the computers at separate presentations.

After the presentation of the computers, Steve Rickman of the Thermal Design Branch spoke to both schools about heat transfer and how it applies to the exploration of space, as well as benefiting life here on Earth. Rickman also stressed the importance of English, reading and writing classes, as well as math and science.

ODIN supplies NASA employees with computer workstations and technical support. ■



NASA JSC 2001e08853

ODIN presented two local schools with computer systems through a drawing held at JSC's Open House in August. Sana Chaudhry and Ford Fox were the lucky students whose names were drawn.

Top photo, pictured left to right: Wanda Hobley (Alternate Technical Management Representative over the ODIN contract), Sumaira Chaudhry, Rashid Chaudhry, Maham Chaudhry, winner Sana Chaudhry, Nida Chaudhry, Laurie Branham (ODIN Outreach Coordinator), Holly Hughes (school principal) and Spencer Meyer (JSC ODIN Program Manager)

Bottom photo, pictured left to right are: Suzanne Jones (school principal), Laurie Branham, winner Ford Fox, Wanda Hobley, Karen Moorner (Deputy JSC ODIN Program Manager) and Steve Rickman (Acting Chief, Thermal Design Branch).

NASA JSC 2001e26834



PEOPLE

on the

MOVE

Human Resources reports the following personnel changes:

Key Personnel Assignments

Mitch Macha was selected as Chief of the Command, Control, and Planning Systems Development and Operations Branch, Advanced Operations Development Division, Mission Operations Directorate.

Eileen Stansbery was named Assistant Director, Office of Astromaterials Research and Exploration Science, Space and Life Sciences Directorate.

Additions to the Workforce

Brad Mudgett joins the Human Resources Development Branch, Human Resources Office, as a Personnel Programs Analyst.

David McMahon joins the Engineering Branch, Aircraft Operations Division, Flight Crew Operations Directorate, as an Aerospace Engineer.

Camille Clark joins the Vehicle Branch, Space Station Division, Safety, Reliability, and Quality Assurance Office, as an Aerospace Engineer.

John Lisle joins the Astromaterials Research Office, Space and Life Sciences Directorate, as a Space Scientist.

Promotions

Margarita Aranda was selected as the Lead Secretary in the Flight Director Office, Mission Operations Directorate.

Reassignments to Other Directorates

Lynn Vernon moves from the Mission Operations Directorate to the Office of the Chief Information Officer.

Marybeth Edeen moves from the Engineering Directorate to the International Space Station Program.

J. G. Holt moves from the Space Shuttle Program to the Space and Life Sciences Directorate.

Retirements

Oma Cross of the Public Affairs Office.

Carl Hohmann of the Engineering Directorate.

Rick Nygren of the International Space Station Program.

Resignations

Leena Joshi of the Mission Operations Directorate.

Carrie Leffert of the Mission Operations Directorate.

Todd Peters of the Engineering Directorate.

Jacque Talboy of the Center Operations Directorate.

Richard Bassett of the Space Shuttle Program.

For additional JSC news, please visit the *Cyberspace Roundup*:
<http://www.jsc.nasa.gov/pao/roundup/>

The Gilruth Center and the JSC Clinic join together

By Lori Armstrong

The next Health-Related Fitness Program begins Jan. 7, 2002, and is now accepting applicants. Since 1983, nearly 2,600 JSC employees and their spouses have participated in the Health-Related Fitness Program, provided by Occupational Health and Medicine Services at the Gilruth Center.

This program has been shown to improve fitness levels in nearly 100 percent of participants. Aerobic power is increased by 12 percent, muscular strength and endurance by 46 percent, flexibility by 8 percent and decreased body fat by approximately 10 percent.

A three-year research study demonstrated participants in the program significantly reduced risk factors for cardiovascular disease by decreasing body weight, body fat, blood pressure and total cholesterol and increasing aerobic power and HDL cholesterol - the "good" cholesterol. However, non-participants showed increases in cardiovascular risk factors over the same time period.

Currently, there are 45 people enrolled in the program, led by Larry Wier, EdD, Director of Health-Related Fitness, and Greta Ayers, MED. Typically, groups of 12-15 people meet three times per week for an educational 20-minute class, followed by an individually prescribed exercise program that is tailored to personal needs. Throughout the program, the Gilruth weight room is available to use for training to complement the outdoor walking/jogging trails.

Medical screening is required for participation in the Health-Related Fitness Program. The screening includes a treadmill test, also known as a Graded Exercise Test (GXT), for men over the age of 45 and women over age 55, or for applicants that have multiple risk factors for cardiovascular disease, such as high blood pressure, obesity, sedentary lifestyle, high blood lipids and family history.

The GXT involves walking on a treadmill at increasing inclines and speeds until at least 85 percent of the age-predicted maximum heart rate is reached. An electrocardiogram (ECG) is measured continually while exercising, so that cardiac abnormalities such as arrhythmias and potential arterial blockages may be detected.

If a serious ECG abnormality is detected, the treadmill test may be considered a positive test. Of more than 2,400 tests done at the JSC clinic over a recent three-year time period, about 87 percent were negative (no disease detected), and about 11 percent were either positive or borderline (disease detected or suspected). Two percent of the tests were indeterminate.

Of the tests that were positive or borderline, approximately 7 percent were false positive. A false positive means that an indication of suspected disease resulted from the treadmill study. However, with follow-up testing there was, in fact, no disease. The follow-up tests are invasive and more expensive, but enable the attending physician to view the blood flow through the coronary arteries during exercise.

Nationwide, the false positive record is about 12 percent. Dr. Brian Arenare, a physician in the cardiopulmonary lab said, "Our tests have been fairly accurate in detecting disease, yet in some instances a false positive treadmill test can be seen. The only way to be sure is to follow-up."

If the positive stress test results are supported by follow-up exams, the patient can then take the necessary steps to halt the advancement of life-threatening heart disease. Although the exercise and nutrition skills learned in the Health-Related Fitness Program are very helpful in preventing cardiovascular disease, other measures, such as a coronary stenting or a bypass, are sometimes needed to treat heart disease indicated by a positive GXT and follow-up exam.

For more information on the Health-Related Fitness Program and medical screening call Larry Wier at x30301.

NASA BRIEFS

NASA "WHY?" FILES TV SERIES WINS FIRST EMMY

An innovative NASA educational television series that reaches millions of elementary students around the world was recognized by the National Academy of the Television Arts and Sciences with an Emmy for "Best Children's Series."

The Office of Education at NASA's Langley Research Center produces the series.

The NASA "Why?" Files introduces students in grades three through five to NASA; integrates mathematics, science and technology through the use of problem-based learning, scientific inquiry and the scientific method; and seeks to motivate students to become critical thinkers and active problem solvers.

Each program includes hands-on classroom and home activities, virtual field trips, research experts and Dr. "D," the tree-house detectives' next-door neighbor and mentor. The tree-house detectives are six ethnically diverse, inquisitive schoolchildren who investigate and solve a variety of everyday problems.

NASA SELECTS 10 INVESTIGATIONS FOR 2005 MARS RECONNAISSANCE ORBITER

NASA announced the selection of 10 scientific investigations as part of the 2005 Mars Reconnaissance Orbiter (MRO) mission. The 2005 MRO will carry six primary instruments that will greatly enhance the search for evidence of water, take images of objects about the size of a beach ball and search for future landing sites on the Martian surface. The investigations selected include two Principal Investigator (PI) Instrument Investigations and eight Facility Team Leader or Member Investigations.

The specific scientific objectives of the MRO mission include: researching the processes of present and past climate change on Mars, searching the surface and shallow-subsurface for sites that show evidence of water-related activity, investigating the processes that are responsible for the formation of the ubiquitous layers that have been observed on Mars and probing the shallow-subsurface to identify regions where three-dimensional layering could indicate the presence of ice or possibly lenses of liquid water.

The 2005 MRO mission represents an integrated scientific-observation platform that will bring together teams from universities, industry, NASA centers and other organizations. The spacecraft will be developed by Lockheed-Martin Astronautics, Denver and is scheduled for launch to Mars in August 2005.

The Mars Exploration Program at NASA's Jet Propulsion Laboratory (JPL) manages the MRO mission.



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