

SPACE CENTER

Roundup

LYNDON B. JOHNSON SPACE CENTER



June 2003
Houston, Texas
Volume 42
Number 6



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20 years ago

Twenty years ago this month, Astronaut Sally Ride became the first American woman to fly in space aboard the Space Shuttle *Challenger*. Today, she continues to inspire girls to reach for the stars.

For more on Sally Ride, see page 4.

Director's Message



Stay cool

It's June in Texas and it's getting hot in Houston. We've been putting out much information about the dangers and symptoms of heat exhaustion and heat stroke. There's good reason for this. Both of these phenomena are

serious business and can attack you just as quickly in your backyard as they can at a ballgame or picnic. I have personally seen a man die from heat stroke. It's a very horrible thing.

The easy counter for both is to stay cool and drink a lot of fluids. That's not the easiest thing to do around here in the summer, so make sure you are aware of the symptoms of these ailments. Monitor yourself and those around you when engaged in outdoor activities. At the earliest warning signs, get the affected party into the shade, drink cold water and stay cool.

These days we're not only subject to heat from the weather. We're also getting it from the press, the halls of Congress and others who are chiming in to find fault with our expertise (or perceived lack of it), our processes, our attitudes, and our management concerning the *Columbia* accident. If you think the 'blame game' is bad now, just wait. It will probably get worse before it gets better.

How should you react to all of this? Just like you do with the summer weather: stay cool. This won't be easy. As you read or hear the criticism, you can easily get very defensive and angry. You might also start losing faith in yourself and your teammates. Don't let this happen. Remember, you're still a member of an elite fraternity like no other in the world. You are an integral part of one of the noblest endeavors in the history of humankind. You and your team are also just as outstanding as you were on January 31.

We're going to find out what went wrong and fix it. We're also going to take a hard look at ourselves and strive for continuous improvement. We will keep working to reduce the risks inherent in human spaceflight. That's what professionals do. Let's keep our chins up, stay cool and get the job done.

Beak sends...

New JSC Features Web site

Along with the new look of the *Space Center Roundup*, the Public Affairs Office is pleased to announce that the *Daily Cyberspace Roundup* is evolving into *JSC Features*, a newly formatted online magazine that will focus on news and happenings around the Center. Over the next couple of months, a new look and new features will be added to this publication including photo feature pages.

JSC Features will offer Center employees an opportunity to read a number of interesting feature stories and view JSC photos. If you have story ideas for people or programs you would like to see featured, contact Editor Joanne Hale at joanne.e.hale1@jsc.nasa.gov.

The site is located at: <http://www.jsc.nasa.gov/jscfeatures/>. Check back often for new stories and photos!

In next month's issue...

The July *Roundup* will feature the successful return of the International Space Station's Expedition 6 crew, as well as a special section on the STS-107 search and recovery effort in East Texas.

APPEARING THIS MONTH IN OUR

Guest Space

Mike Kincaid

Director of Education Programs



To inspire the next generation of explorers... as only NASA can.

I don't know about you, but this phrase from our Mission Statement grabbed my attention a year ago and hasn't let go. The question for each of us is: how are we working to inspire the next generation?

A new education enterprise

On Oct. 28, 2002, NASA Administrator Sean O'Keefe established Education as NASA's sixth Strategic Enterprise. Armed with this fresh mandate and an Associate Administrator for Education, Dr. Adena Loston, our education efforts are gaining increased focus. New initiatives like the Educator Astronaut Program and NASA Explorer Schools are working in parallel with existing programs to help motivate children to pursue careers in science, technology, engineering and math (STEM).

The opportunity is great. Yet the challenge is great as well. The United States faces a workforce shortage in STEM fields – the number of students graduating with engineering degrees has dropped by nearly 20 percent since the mid-1980s. Yet the nation needs more engineers than ever before. As NASA explores new worlds and helps to improve life here on Earth, we have to ensure that there will be new students prepared to join our workforce. To do this, we must partner with others to inspire the next generation – today's K-12 students – to pursue STEM degrees.

Local efforts

Throughout this issue of the *Roundup*, you can see just a few ways that JSC is inspiring the next generation. On page 6 you can learn more about the KC-135 Student Campaign. Imagine yourself as a university student proposing a research project and then experiencing weightlessness above the Gulf of Mexico. These students leave Houston inspired!

Check out the Community College Aerospace Scholars program on page 7. It's a joint effort between JSC and the State of Texas to give community college students an up-close look at engineering. Finally, think about wherever you were when Dr. Sally Ride became the first American woman in space. Twenty years ago, she inspired a generation; and her current education activities continue to inspire students today – see page 4 for details.

However, these highlights are just a few of our education programs. Want to learn about other education activities? Visit our education site at education.jsc.nasa.gov or roam through the new Agency Web site at www.nasa.gov.

...the number of students graduating with engineering degrees has dropped by nearly 20 percent since the mid-1980s.

It'll take all of us

How can you help? Many of you already do. You volunteer to speak to schools, to mentor students and to answer questions in distance learning events. If you're new to volunteering for education events, you can get your feet wet by visiting <http://education.jsc.nasa.gov/internal/volunteer.htm>. Once you are there, check out the list of possibilities, then click "sign me up" and you'll be on your way. Please note: while all JSC volunteers are welcome, contractor employees need to clear any work-related volunteer efforts with their management beforehand.

Other ways you can help right now? Encourage parents and kids you meet to go to edspace.nasa.gov and join the Earth Crew. Earth Crew is a virtual NASA team made up of students, teachers, families and others, all of whom will contribute to missions on the ground and support the Agency as we explore space.

To inspire the next generation of explorers... as only NASA can – will take all of us working together. We hope we can count on your support.

Three out of four ain't bad

JSC wins three of four Agencywide safety awards

by Brenda Lancaster

IN A NEAR SWEEP, Johnson Space Center received the "Best of the Best" Quality and Safety Achievement Recognition (QASAR) Award in three of the four categories this year.

The QASAR Award is given out by NASA Headquarters' Office of Safety and Mission Assurance (SMA). The award recognizes those individuals who face a challenge and display exemplary performance in contributing to quality products and services that lead to safe environments and processes for NASA. JSC's winners are Tamyra Martin, Bernard Rosenbaum and Jim Graver, the latter of whom works at JSC's White Sands Test Facility in Las Cruces, N.M.

QASAR Category 1: NASA employee within the SMA organization

Tamyra R. Martin, Electrical Processing Engineer in JSC's Safety, Reliability, and Quality Assurance Office, received this award in recognition of her exceptional dedication and extraordinary initiative during the assessment and evaluation of electrical process improvements for critical ground support and spaceflight hardware.

QASAR Category 2: NASA employee external to the SMA organization

Bernard J. Rosenbaum, Senior Propulsion & Power Systems Engineer in JSC's Engineering Directorate, won this award in recognition of his pivotal role in resolving the hydraulic pump bolt fraction/insert shear concerns on STS-109 and returning the vehicle to flight status by uncovering a similar problem in the solid rocket booster pump.

QASAR Category 3: Government, non-NASA employee

Paul Phillips, Project Lead Engineer in the Project to Space Office at the U.S. Air Force Flight Test Center, Dryden Flight Research Center, received this award for his diligent efforts in providing the highest-quality project and range safety support to the X-37 and X-38 projects. He played a significant role in establishing an accurate CAD model that will be utilized to understand the safe characteristics for the X-37.

QASAR Category 4: NASA prime or subcontractor employee

James R. Graver, Quality Assurance Specialist for Washington Group International at the White Sands Test Facility's Quality Assurance, Reliability, and Safety Office, won this award for his outstanding and invaluable assessment of flight hardware resulting in crucial identification of an Orbital Maneuvering System bolt anomaly and resolution of STS-110 flight constraint.



The 2003 QASAR Award winners are pictured with Deputy Administrator Frederick D. Gregory. From left to right are: Tamyra Martin, Electrical Processing Engineer, JSC SR&QA Office; Bernard Rosenbaum, Senior Propulsion and Power Systems Engineer, JSC Engineering Directorate; Paul Phillips, Project Lead Engineer, Project to Space Office, U. S. Air Force Flight Test Center, Dryden Flight Research Center; Margaret Haines, daughter of James Graver; James Graver, Quality Assurance Specialist, Washington Group International, White Sands Test Facility, Quality Assurance, Reliability, and Safety Office; Deputy Administrator Gregory.

jsc2003e37555 Photo by Renee Bouchard