



Lyndon B. Johnson Space Center

# roundup



NASA/INGALLS STS122 S 005

**On your mark, get set, go!**

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## On the cover

*Space Shuttle Atlantis patiently sits on the launch pad, waiting to begin the STS 122 mission.*

**At Johnson Space Center**, we're often challenged to come up with solutions. Sometimes the problems and solutions are highly visible, such as the dramatic International Space Station solar array repair last fall. More often, it's a less publicized yet very important response to a need, having in common a group of talented people who rose to a challenge. The development of the Program/Project Manager Development (PPMD) effort by the Human Resources (HR) Office is such an example.



With the human spaceflight programs that are resident at JSC, we have a responsibility to staff those programs with people and managers who possess the right skills. Not all the leaders will come from JSC, but we surely have the greatest concentration of expertise in large program and project management, as well as the expectation that we will continue to provide a pool of future leaders. In response, HR was asked to develop a new program to help prepare managers for those roles. Led by Kelly Elliott, the HR team gathered many ideas. They worked closely with Bob Cabana while he was deputy director at JSC and created a pilot program to address this agency need.

The first class was selected last year and consists of 27 people, with about two-thirds from JSC and the rest from other NASA centers, including Kennedy Space Center, Glenn Research Center, Langley Research Center and Stennis Space Center. They've completed about half of their 18-month program, and I was fortunate to hear from them recently. They praised the variety of experiences they are getting through the program, including background reading, individual training courses, personal leadership assessments, mentoring by past and current leaders, a rotational or change in job assignment for most and classroom modules that concentrate on various aspects of program and project management, such as leadership, systems engineering, contracts and resource management. Many also noted how their new work assignments provided an exciting challenge that really allowed them to add their new knowledge to previous experience in order to meet their goals.

Everyone also mentioned that one of the most valuable and enjoyable aspects of the course was the opportunity to get to know their peers across the agency. Given that human spaceflight programs will continue to involve workers all across NASA, the opportunity to form relationships now will pay dividends in inter-program and inter-center cooperation for many years to come. I encourage you to consider a rotational work assignment that moves you out of your comfort zone and offers a different perspective. Take advantage of leadership, business and technical training, or join the mentoring program by becoming a mentor or protégé. Our HR folks have really stepped up to the plate on PPMD and continuously work to make additional opportunities available so that we have the skills, capabilities and relationships with other centers and partners to fulfill the agency mission.

**Ellen Ochoa**

*JSC Deputy Director*

# Spotlight on...

## Laura Steinmann

Family Services Coordinator, Astronaut Family Support Office

### How long have you been with NASA?

My career with NASA began in 1981 when, as a Registered Nurse working in clinical research, I applied to be a test subject with Wyle (then Technology, Inc.). I wanted to fly on the KC-135! Instead, they hired me to work in the Human Test Subject Facility, and I went on to coordinate aerospace research protocols for Space Medicine. Even better than flying on the KC-135 (which I finally did), I've been honored to work with great researchers from all NASA centers, as well as universities in the United States and around the world. While at Johnson Space Center I continued to work in area hospitals (such as) St. John's, Clear Lake and University of Texas Medical Branch (UTMB). I left for UTMB for five years and returned, full-time, to Wyle in 1999. Shortly after, I went to work in the Astronaut Office.

### What kind of hobbies or interesting things do you do away from the office?

I'm an advisory board member for Family Outreach—Clear Lake/Bay Area, a wonderful organization focused on making our community safer for children, preventing child abuse and strengthening family life. I've been a board member for the City of Webster in one capacity or another since 1980, and I currently serve on the Animal Control Board. I'm also in the Parish Nurse Ministry at Gloria Dei Lutheran Church. But my favorite thing to do is to be with my family, my husband Bob and daughters Camia and Vanessa, who make me laugh.

**What is your favorite food?** Whatever someone else fixes! I used to cook a lot, but now that the girls are grown, we all go out more, and Clear Lake has some of the best restaurants.

### What is your idea of a perfect vacation?

I opt for "adventurous" rather than "perfect" vacations. I like weekend getaways, small drives around Texas, and discounted airfares make it easy to hop around the country to visit family and friends.

### What is the coolest part of your job?

It's absolutely the exceptional people I am honored to work with, the astronauts and their families, our international partners and my caring coworkers. My job is customer service, so I also enjoy the creativity involved in helping people.

**What is your best memory at JSC?** There are so many great memories, and I'd like to mention two of them.

First, while in agriculture classes in 2003, my daughter Vanessa participated in JSC's Longhorn Project. She was at JSC everyday taking care of "Bubba" and the other Longhorns, and I loved visiting the pavilion after work. Her fabulous instructors, Allan and Kara Cranfill, drove the students all over the state to fairs and shows. This opportunity inspired Vanessa to further her education in agricultural science, and she's now a certified agriculture teacher. So thank you, JSC, for all the wonderful educational opportunities you provide!

Second, before working at JSC, I worked in UTMB's Clinical Research Center, and one of our research protocols was for children with cystic fibrosis. I helped transport the children to JSC's Building 37, which has an underground laboratory and a scale that provided extremely accurate weights. Many people don't know about the long-standing cooperation between our health care community and JSC, or about Building 37, its history and this lab. I think it's the most interesting building at JSC.



NASA S91-285399

Laura Steinmann evaluates a research participant being weighed during a bed rest study for the Cardiovascular Lab at St. John's Hospital in 1991.

### What do you look forward to at NASA?

I look forward to expanding the resources provided by the Family Support Office as more crews and families become involved in long-duration missions. I look forward to a space-faring future and laying the groundwork for my grandchildren to travel. As Buzz Lightyear says, "To infinity and beyond!"

### What would people be surprised to know about you?

Bob and I own a home and an apple orchard in beautiful Las Cruces, N.M. We're learning to farm apple and other fruit and nut trees in the Chihuahu Desert along the Rio Grande. He works there as a prosthetist and, like many couples nowadays, we long-distance commute. We fly every few weeks and look forward to the time when we'll be together in Las Cruces.

**What is a quality you most admire in people?** Clarity of thought, word and deed, with a sense of humor.

**Who are your heroes?** My heroes are everyday people who take on extraordinary work. Military personnel who are on the pointy end of the spear of national security. Health care workers, first-responders, police, fire and security personnel on the front lines. Astronauts who risk their lives to explore space, their families who let them go and the workers who support them. They inspire me every day, and I'm grateful to them.

# Safety *is* our mission

By Catherine E. Ragin

With the new year underway, one of Johnson Space Center's resolutions is to be a safe, happy and productive work environment for the thousands of professionals supporting the space program on site. To achieve the kind of harmony we require, it is important that employees understand the roles they play in the workplace. We must all be vigilant when it comes to preventing possible incidents of workplace violence.

"In general, workplace violence is any threat or insinuation of harm. Depending on the circumstances, this can range from a veiled 'You'll pay for this,' to stalking, to a physical assault. We look at context and circumstances to determine the severity of the incident," said Jackie Reese, director of the Employee Assistance Program (EAP).

Even though in our line of work we can be prone to feeling stressed, "It is a myth that stress can cause anyone to 'snap' and hurt others," Reese said. "There is an internal distortion of thought that precedes violence and enables the person to justify carrying out the action. Stress and life changes can be a catalyst, but are not the cause."

The center has safeguards in place to protect the JSC community from incidents that can escalate.

This past November, JSC Human Resources updated and distributed the JSC Policy on Workplace Violence and Threatening Behavior. Although much of the language from the previous policy is also contained in the updated version, some information has been added to provide clarification on certain policy requirements. For example, in reference to behaviors involving a direct or indirect threat of physical harm, the updated policy states, "those who commit such acts may be removed from the premises, denied reentry pending completion of an investigation and may be subject to administrative and/or disciplinary action including removal, criminal prosecution or both."

Further, the policy clearly spells out that all employees, contractors and visitors to the center are personally responsible for contributing to a safe and secure workplace. This can be done by avoiding behavior that can escalate into a hostile situation and by reporting incidents involving workplace violence or threats of violence.

"The JSC policy contains a link to an updated document titled Conflict Management and Workplace Violence Guidelines. These guidelines are a helpful tool for all JSC team members who wish to better understand and identify behaviors that could escalate into workplace violence. The guidelines also provide information on how to appropriately and quickly report the incidents," said Natalie Saiz, JSC director of Human Resources.

## POSSIBLE CHARACTERISTICS

- Displays Obsessive, Controlling, or Intimidating Behavior
- Ruminates, Harasses, or Stalks
- Instigates Arguments
- Displays Frequent or Intense Unremitting Anger
- Blames Others for Problems
- Does Not Accept Authority or Feedback
- Possesses a History of Severe Depression or Violence
- Abuses Alcohol or Other Substances
- Reveals an Intense Interest in Guns or Weapons
- Displays a Fascination with Workplace Violence Incidents
- Seems Overly Focused on the Workplace
- Isolates Themselves from Coworkers
- Holds Grudges for Real or Perceived Wrongs
- Shows a Lack of Regard for Safety
- Takes Company Property or Steals from Coworkers

## SITUATIONAL FACTORS

- Demonstrates Performance and/or Conduct Problems
- Loses Job or Fears Losing Job
- Works in an Authoritarian Environment
- Has a History of Unstable Interpersonal Relationships
- Lacks a Strong Support System
- Intimidates Coworkers

“Of course, we always encourage employees and supervisors to proactively address issues as they arise. This is especially important when there appears to be a potentially threatening behavior involved. Seeking early intervention when employees engage in disruptive, inappropriate and/or threatening behavior is key to preventing workplace violence,” Saiz said.

We have many excellent resources at the center for dealing with situations involving potential workplace violence. JSC offers the EAP, with counselors who can recommend actions, offer guidance and provide information for preventing and dealing with workplace violence. The JSC Security Office is also a good resource for information and assistance in handling workplace violence concerns. The JSC Human Resources Office works very closely with the EAP, Security and management in addressing behaviors that may be considered workplace violence or may lead to violence. It is important that supervisors raise concerns of potential workplace violence to their Human Resources representatives as soon as they become aware of them. However, for emergency situations, all employees must call the appropriate emergency extension as described in the Policy on Workplace Violence and Threatening Behavior.

JSC has a Threat Assessment Team that is convened at the request of NASA or contractor organizations when a possible threat is raised by any member of the JSC community. The team, comprised of participants from the involved contractor organizations and various NASA organizations, ensures that the concern is properly investigated and addressed. “It’s a very collaborative effort,” said Vanessa Bowen, JSC Employee and Labor Relations officer.

“Prior to an incident, the EAP provides consultation to management, Human Resources, Security and/or coworkers if a concern is brought to their attention. The EAP also serves as the mental health subject matter expert on the Threat Assessment Team. During an incident, the EAP works as part of the intervention team to assist in de-escalating or resolving the incident and provides crisis intervention for victims,” Reese said. “After an incident, the EAP provides crisis/trauma management for impacted employees and stress debriefings for responders. The EAP also reviews incidents with other response members to assess response effectiveness and lessons learned.”

And just by simply looking out for one another, it is also easier to notice signs of troubled behavior that may raise red flags.

“It’s very important for people to understand that early intervention can prevent an incident. People, by nature, tend to minimize or give others the benefit of the doubt. We can’t imagine someone doing the unimaginable, so we doubt our fears, gut reactions and concerns,” Reese said. “Coming forward gives us the opportunity to intervene, not only to protect employees, but also to ensure that someone gets the help that he or she needs.”

To view the updated JSC Policy on Workplace Violence and Threatening Behavior, which also contains a link to the Conflict Management and Workplace Violence Guidelines, visit: <http://announcements.jsc.nasa.gov/07-050.html>

## POSSIBLE CATALYSTS

- Burnout
- Organizational Climate
- Personality Clashes
- Rumors and Gossip
- Negative Performance Reviews
- Disciplinary Action or Termination
- Public Statements Made About Company
- Sudden Life Change (Job, Divorce, Etc.)
- Failure of Company to Perform Background Check

# Atlantis to carry commemorative items and mark NASCAR milestone

*NASA is taking three green starter's flags from the Daytona 500 into space to mark the 50th anniversary of NASA and NASCAR's premiere race.*

By Steven Sicheloff, Kennedy Space Center



A trio of flags from the Daytona 500 will set speed marks of their own as they race to 17,500 mph aboard Space Shuttle *Atlantis*.

The green starter's flags are tucked inside the shuttle during the STS-122 mission to the International Space Station. One of the flags will be waved to begin the 2008 installment of what NASCAR calls the "Great American Race," and another will be presented to the winning driver. NASA will keep the third.

While NASA celebrates its 50th anniversary, the Daytona International Speedway is celebrating the 50th running of the Daytona 500 in 2008. Drivers and their crews have been known to pause at the race track to watch a shuttle streak into space on a plume of fire and smoke. The track is less than 100 miles from the shuttle launch pads at NASA's Kennedy Space Center on Florida's east coast.

Over the years, the technology developed for the space program has found many uses on Earth, even helping NASCAR drivers stay safe and increase their performance. NASCAR drivers wear cooling suits very similar to what astronauts wear during spacewalks. Foam that NASA developed for aircraft seats protects racecar drivers' necks in a crash. And the same material that protects the space shuttle

from extreme temperatures when it re-enters the atmosphere protects NASCAR drivers from the heat of their high-performance engines.

NASA and astronauts often pack mementoes aboard space shuttle flights to commemorate historical events, mark milestones and celebrate achievements. The effort also brings awareness of the space agency to a wider audience and gives people a chance to see a tangible sign of exploration.

*Atlantis* will also carry a dried red rose that will be woven into a NASA-themed float during the Tournament of Roses Parade. The float also will celebrate NASA's first 50 years in existence.

The manifest of commemorative cargo takes on a bit of a European accent during STS-122 because the Columbus laboratory that the *Atlantis* crew will install on the International Space Station was developed and built in Europe. The cutting-edge research module will be used by institutions based in Europe to study space and the effects of weightlessness.

The special items for European representatives include dozens of fabric patches for the Columbus program and a host of decals and 20 flags representing the European Space Agency. More than 500 pins representing the STS-122 mission are also stowed inside *Atlantis*.

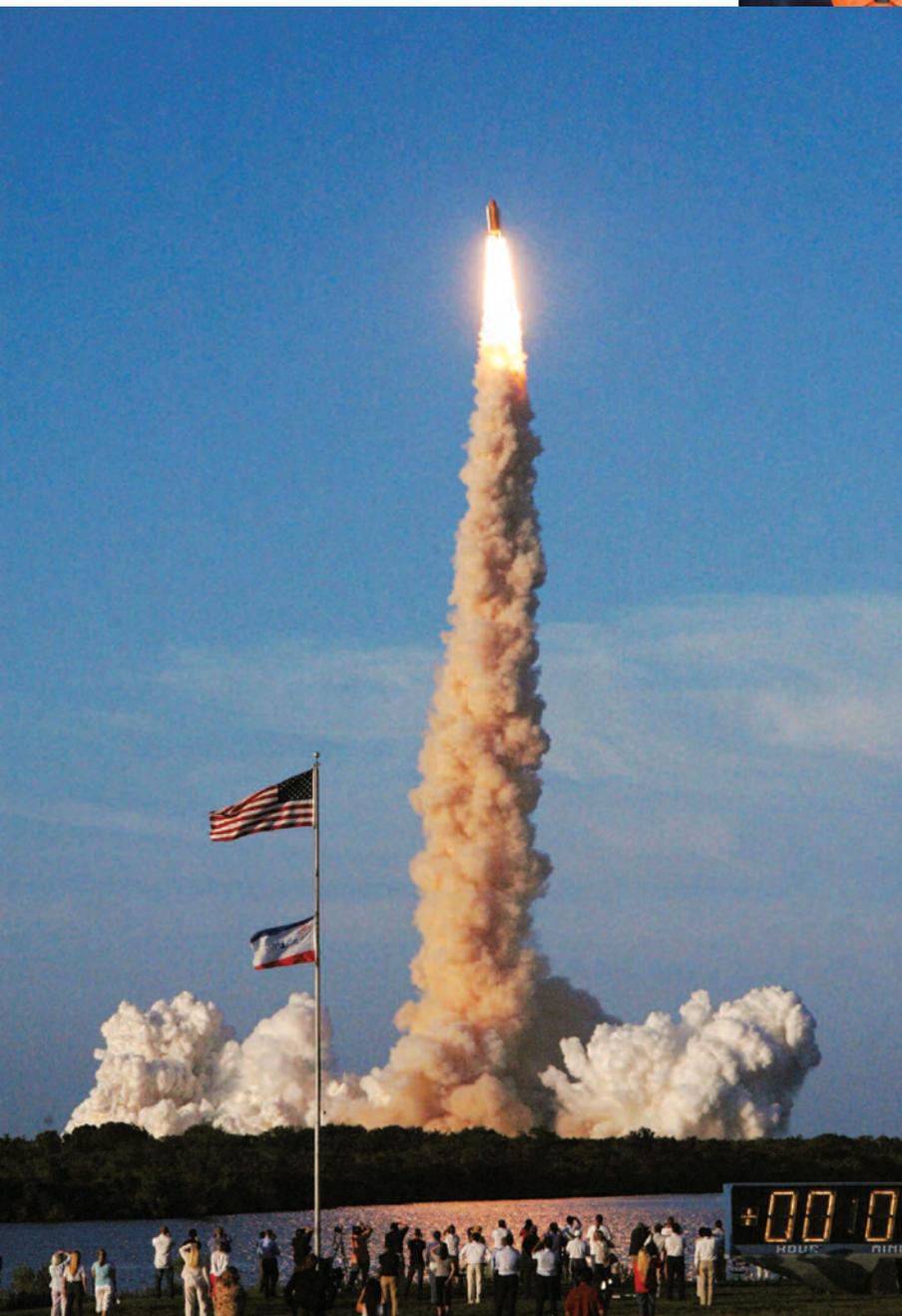
The seven crew members pack a number of items of their own, usually representing schools they attended or units in which they served. There is even a deflated football from the University of Richmond's Athletic Department. Mission Specialist Leland Melvin attended the University of Richmond and played professional football before joining NASA.

The items are packed to take up very little room inside lockers onboard *Atlantis*. Commemorative items that are also chosen weigh very little, but they carry significant meaning and make a big impact upon their return to Earth.



NASA/BLAIR JSC2007E21233

*While seated at the commander's and pilot's stations, astronauts Steve Frick (left) and Alan Poindexter, STS 122 commander and pilot, respectively, participate in a post insertion/de orbit training session in the crew compartment trainer in the Space Vehicle Mockup Facility at Johnson Space Center. Frick and Poindexter will be carrying some very precious cargo up with them during the STS 122 mission.*



NASA STS117 S 008

*Atlantis will be carrying her own set of flags during the STS 122 mission. A trio of flags from the Daytona 500 will set speed marks as they race to 17,500 mph aboard Atlantis to help commemorate NASA's 50th anniversary and the 50th running of the Daytona 500 in 2008.*

# Astronaut Leland Melvin gets his 'game face' on

By Jim Hodges, NASA Langley Research Center

**F**ootball coaches call it a sight adjustment. A wide receiver takes off with the snap of the ball, then alters his assigned route when he sees that the defense has changed from what was anticipated when the play was called.

The quarterback sees the same defensive switch, understands immediately what the new route is going to be and delivers the ball to an area never conceived in the huddle that started the whole operation.

The minds mesh and the ball is caught, sometimes resulting in touchdown.

"It's like telepathy," said Leland Melvin, once a wide receiver at the University of Richmond, then in training camps with the Detroit Lions and Dallas Cowboys.

It's also a mental skill that translates to Melvin's job as a mission specialist on STS-122.

He paints a scenario in which mission Commander Steve Frick and Mission Specialist Rex Walheim are working on a computer malfunction on one side of the orbiter, while Melvin and Pilot Alan Poindexter are tackling a stubborn auxiliary power unit problem on the other.

"There may be times when we have to communicate just like a wide receiver and (a quarterback)," Melvin said. "It's a nonverbal thing. He can start making a motion toward a switch, and I know that's the right switch. I can just tap him or I can nod and he can look in the mirror. We have a lot of communication like that."

Even in space, Melvin is never far from football. It's part of what got him to Richmond, where the game and chemistry lab shared an uneasy existence after he learned the joy of research from Dr. William Myers. That joy eventually earned him a job at NASA Langley Research Center when football played out.

"In football practice, I know some of his teammates wondered," said Myers of Melvin, who took off part of the Tuesday and Wednesday practices for labs. "He would come early (to the lab) and stay late. Coaches had to make adjustments."

Football gave Melvin a false career start in the NFL, and it's given him a certain notoriety in NASA's astronaut corps, where there are frequent references to his having played.

In turn, Melvin credits football for helping him train for the trip he's about to take.

"I can remember with sports, there were times when my coach (at Richmond), Dal Shealy, would come into our room the night before the game and tell me to close my eyes," Melvin remembered. "'Leland, you are in the end zone, pulling the ball in, pulling it to your body for a catch to win the game.' You're going through the mechanics of what you're doing, and when you visualize it and sleep on it, when you wake up the next day, you've already done it. So doing it is really second nature to you. It's in your subconscious."

The repetition, the visualization are all part of the training for Melvin's primary job, which is operating the 58-foot robotic arm on *Atlantis* that will deliver the 22-foot-long,



Astronauts Steve Frick (left), STS-122 commander, Leland Melvin (center) and Rex Walheim, both mission specialists, demonstrate working together as a team.

NASA/BLAIR JSC0007E053776



NASA/BLAIR JSC2007E049833

*STS 122 Mission Specialist Leland Melvin participates in a training session in the crew compartment trainer (CCT 2) at Johnson Space Center. As in both football and spaceflight, training is essential to performing well when it really counts.*

13-ton Columbus Laboratory to the International Space Station. The procedure will take about two-and-a-half hours.

“If I don’t have Columbus on the end of the arm, I have one of my crew members on the end of the arm,” Melvin said. “And working them into very tight clearances and tolerances, if their suit gets snagged on something, that could be a really, really bad situation.”

And so he visualizes good situations, 21 years after he visualized scoring a touchdown against William and Mary.

And he visualizes flight through space, something Shealy and everyone else who taught him football, back to his elementary school days in Lynchburg, Va., couldn’t have imagined.

About 300 people at Kennedy Space Center will watch him go, according to Kathy Clarke, Melvin’s sister. Among them will be Shealy, Myers and a host from NASA Langley Research Center, including Bill Prosser, with whom Melvin shared an office. Between work sessions, the two also shared a rivalry, Prosser having been an athlete at William and Mary, and Melvin at Richmond.

“I wouldn’t miss it,” Prosser said of the launch.

Melvin will be a bit busy, creating another visual, primarily in response to advice from those astronauts who have gone before him.

“There has to be a point during the mission that you say, ‘I’m going to take 15 minutes and do nothing but look out the window,’” Melvin said. “That’s something I’m definitely going to try, a view or two.”

Until then, he tries to remain calm. His time for excitement will come as the final seconds until the launch tick off. Again, the game of football never quite leaves him.

“When we’re strapped in and the countdown clock is going in the right direction and you hear this ignition and you feel this motion behind you, that’s when I’ll say, ‘Okay, game time.’”

And then he’ll prepare for the first sight adjustment.



NASA/BLAIR JSC2007E14470

*Attired in training versions of their shuttle launch and entry suits, astronauts Rex Walheim (left) and Leland Melvin, STS-122 mission specialists, await the start of a post insertion/de-orbit training session in one of the full-scale trainers (out of frame) in the Space Vehicle Mockup Facility at Johnson Space Center.*

# NASA continues to go the distance

By Jenna Mills

What do school visits, hospital patients and running have to do with astronauts? The answer is “plenty,” especially this past December, when astronauts Dottie Metcalf-Lindenburger and Jeff Williams traveled to Dallas to make a few appearances. They capped off the weekend by running the 2007 Dallas Marathon.

Starting off the weekend activities, Metcalf-Lindenburger and Williams made a special visit to the Texas Scottish Rite Hospital for Children. The astronauts were among a number of special guests, including several Dallas Cowboys football players, who spent a few hours with patients and signed autographs. Before the big group photo was taken with patients in front of the Christmas tree, Bob Walker, executive vice president of the hospital, said a few words. He thanked both astronauts for taking time to attend the event, but created a chuckle from the crowd when he said, “The astronauts created more attention than the Dallas Cowboys did!”

After visiting with the hospital patients, Williams and Metcalf-Lindenburger flew via helicopter to Bayles Elementary and then to Griffin Middle School, where they spoke with students about the importance of living healthy, staying in school and studying hard, and what it’s like to be an astronaut. When there was enough time for questions, many eager students raised their hands in hopes that they would be chosen to ask their burning question.



NASA/MILLS JSC2008E005113



NASA/MILLS JSC2008E005110

*Astronauts Jeff Williams and Dottie Metcalf-Lindenburger sign autographs for patients at the Texas Scottish Rite Hospital for Children while in Dallas.*

At Griffin Middle School, one seventh-grader was in awe of being around astronauts for the day. “It was cool to see how others reacted to seeing astronauts at our school,” said Jac, who is also the Junior Race director for the Texas Scottish Rite Hospital, where she’s also a patient.

The weather was perfect on Saturday morning as both astronauts joined hundreds of kids from schools in the Dallas Independent School District for the Mayor’s 5k Race, which included the mayor and the superintendent of schools. All the kids were thrilled to be running with astronauts, and each was proud to cross the finish line. As a special treat, Metcalf-Lindenburger crossed the finish line with a couple of students, only to turn around and accompany another group of students so that each child would leave with the unforgettable memory of running alongside an astronaut.

While the astronauts made appearances around town, JSC staffers set up an exhibit at the marathon expo, held two days prior to the race. The exhibit had a health and fitness theme

*Astronaut Dottie Metcalf-Lindenburger interacts with some young fans.*

*A young boy gets up close and personal with Cosmo, JSC's mascot, at the Dallas Marathon exhibit.*



NASA/MILLS JSC2008E00512

and was designed to emphasize how astronauts stay in shape, especially while living and working aboard the International Space Station. It also highlighted the benefits of NASA spin-off technology. As roughly 25,000 runners and the public wandered by over the next two days, staffers engaged visitors in learning how astronauts exercise in a weightless environment. Visitors were interested to learn that, in space, astronauts must work out approximately two hours each day to combat the loss of bone density and muscle mass. They also learned how spin-off technology contributes to fitness with athletic shoes, sports bras and cool sportswear.

“The question, ‘So why is NASA here at a marathon expo?’ was asked by some visitors who came by our booth,” Johnson Space Center Public Affairs Specialist Debbie Nguyen said. “However, after exploring our booth, the visitors, many of them marathon runners themselves, discovered the benefits and connections of long-duration spaceflight and physical fitness.”

While staffers spent most of their time talking with people over the two expo days, JSC’s famous seven-foot-tall inflatable astronaut, Cosmo, also made an appearance. Cosmo gave hugs and high-fives to kids. He also had his picture taken with visitors on many occasions. Williams and Metcalf-Lindenburger also stopped by the booth for

an hour on Saturday to sign autographs and speak with the crowds, many of whom didn’t realize they would have a chance to meet two astronauts.

The Dallas Marathon attracted approximately 15,000 runners and marked the third marathon at which NASA/JSC has had an exhibit, to date. Each time, staffers have been amazed by the amount of public interest in NASA. Both astronauts finished off the weekend by running the Dallas Marathon. Metcalf-Lindenburger completed the 26.2-mile race. Williams ran the half-marathon. This marathon will not be the last for either astronaut, and it won’t be the last for NASA. The more marathons we appear in, the more marathoners and their families learn about space and the physical requirements needed to work there.



NASA/MILLS JSC2008E005111

*Many visitors to the Dallas Marathon JSC exhibit were educated on the benefits and connections of long-duration spaceflight and fitness. They also had the opportunity to mingle with astronauts.*



## *Valentine jewels for everyone...*

*Thousands of sparkling young stars are nestled within the giant nebula NGC 3603. This stellar "jewel box" is one of the most massive young star clusters in the Milky Way Galaxy.*

*NGC 3603 is a prominent star-forming region in the Carina spiral arm of the Milky Way, located about 20,000 light-years away. This latest image from NASA's Hubble Space Telescope shows a young star cluster surrounded by a vast region of dust and gas.*

*The image also reveals stages in the life cycle of stars.*

*Powerful ultraviolet radiation and fast winds from the bluest and hottest stars have blown a big bubble around the cluster. Moving into the surrounding nebula, this torrent of radiation sculpted the tall, dark stalks of dense gas, which are embedded in the walls of the nebula. These gaseous monoliths are a few light-years tall and point to the central cluster. The stalks may be incubators for new stars.*

*On a smaller scale, a cluster of dark clouds called Bok globules resides at the top, right corner. These clouds are composed of dense dust and gas and are about 10 to 50 times more massive than the sun. Resembling an insect's cocoon, a Bok globule may be undergoing a gravitational collapse on its way to forming new stars.*

*The nebula was first discovered by Sir John Herschel in 1834.*

NASA/ESA/Hubble

## Space Center Roundup

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