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# Spaceport News

*John F. Kennedy Space Center - America's gateway to the universe*

http://www.nasa.gov/centers/kennedy/news/snews/spnews_toc.html

## Endeavour, STS-118 crew members complete extended mission

The Space Shuttle Endeavour and the seven-member STS-118 crew undocked from the International Space Station on Aug. 19 and landed on Aug. 21 at the Kennedy Space Center.

With a major mission objective accomplished, shuttle program managers decided to extend the mission by three days. The new Station-to-Shuttle Power Transfer System worked perfectly, but the early projected path of Hurricane Dean toward Texas shortened the flight. The new system reroutes power from the space station to the shuttle during docked operations, allowing the orbiter to conserve materials needed to generate power and spend more time in space.

During the first spacewalk, Mission Specialists Dave Williams and Rick Mastracchio provided assistance as Pilot Charlie Hobaugh used the station's robotic arm to attach the S5 truss at the end of the Starboard 4 truss segment.

STS-118's second successful spacewalk saw Williams and Mastracchio install a new control moment gyroscope, or CMG, onto the station's Z1 truss during the excursion. The CMG replaced a faulty gyroscope removed during the first half of the spacewalk.

The next spacewalk took place Aug. 15 when Mastracchio and Expedition 15 Flight Engineer Clay Anderson teamed up to prepare the station's Port 6 truss for relocation during the next shuttle flight, STS-120. On the final spacewalk, Williams and Anderson performed tasks that included securing bolts on a station antenna mount to prepare for additional work set for the next flight.

Teacher-turned-astronaut Barbara Morgan spoke to students from space, and Commander Scott Kelly and Mission Specialist Tracy Caldwell also played important roles during STS-118.

Throughout the mission, experts on the ground analyzed data from the thermal protection system on the underside of the orbiter. Foam insulation broke off of Endeavour's external tank about 58 seconds into the flight and appeared to impact the orbiter's starboard wing. After several days of engineering analyses and tests, mission managers decided a repair to the damaged tile on Endeavour's underbelly was not required.

ENDEAVOUR MAKES a picture-perfect touchdown at Kennedy Space Center on Aug. 21, ending mission STS-118.

## Educators gather as Dawn spacecraft awaits September launch

Technicians are monitoring NASA's Dawn spacecraft and its systems at the Astrotech spacecraft processing facility in Titusville while it awaits a return to the launch pad for flight to the asteroid belt. Liftoff is set for no earlier than Sept. 26.

At the end of July, employees removed the Dawn spacecraft from the top of a Delta II rocket and took it back to Astrotech after the mission's launch was postponed.

Educators from more than 20 states recently convened in Cocoa Beach for the Dawn Mission Educator Conference. The three-day conference began with a behind–the-scenes bus tour of Kennedy Space Center.

The next day began with a joint session with the Science Symposium, in which Dawn Principal Investigator Chris Russell presented an overview of the Dawn mission.

Co-investigator Lucy McFadden shared images and information about the protoplanets Vesta and Ceres, and co-investigator Marc Sykes presented "What Makes a Planet?"

Dawn Education and Public Outreach Manager Joe Wise kicked off the second day of the conference. Following his introduction, Shari Asplund provided an overview of the Discovery Program.

The educator participants came from elementary, middle and high school classrooms, as well as informal education settings from around the nation.

THE DAWN spacecraft was returned to Astrotech while the mission awaits its scheduled September launch.

# Director's Update

**Mike Benik**
**Center Operations Director**

As Kennedy Space Center transitions from shuttle processing to the Constellation Program, the Center Operations directorate will have a direct role in the planning, management and transition of facilities and property used by the Space Shuttle Program, as well as the design and construction of KSC facilities required by Constellation.

Center Operations is responsible for the Construction of Facilities Program, which provides for the implementation of major facility construction projects.

We are working closely with the Shuttle Processing directorate and the Constellation Project Office to achieve a seamless transition of facilities and timely execution of numerous major projects.

As the agency prepares for the Ares I test launches, projects in the planning stages include modifications to the infrastructure at Launch Pad 39B and high bay 3 at the Vehicle Assembly Building, or VAB.

A contract was recently awarded for construction of a new lightning protection system at Pad 39B. The system includes three towers approximately 600 feet high designed to protect the largest vehicle that could be processed in the VAB.

Construction will begin this month with scheduled completion by March 2010.

Firing Room 1 in the Launch Control Center was dismantled and work is under way to reconstruct the historic Young-Crippen Firing Room for the Constellation Program's Ares I test flights.

Design is in progress on another project to refurbish the Launch Control Center firing room windows. The current plan is to remove the steel louvers and replace the windows with a new hurricane-rated system.

To reduce center costs associated with major facilities that are no longer required to support KSC programs, the Spacecraft Assembly/Encapsulation Facility II in the Industrial Area and the Prototype Shop on Schwartz Road were recently demolished.

Both Hangar L and the Engineering Support Building at Launch Complex 34 at Cape Canaveral Air Force Station are undergoing demolition, and design is also in work to demolish the Vertical Processing Facility.

Center Operations is also working with Space Shuttle Program elements at KSC to develop guidance for prescreening approximately 300,000 personal property line items accountable to the program.

Accomplishing this work up front will allow for a quicker disposition process when the property is no longer needed by the shuttle program.

Along with all of this work, Center Operations will manage the institutional, medical and environmental services contracts beginning in fiscal year 2009.

**"We are working closely with the Shuttle Processing directorate and the Constellation Project Office to achieve a seamless transition of facilities and timely execution of numerous major projects."**

The directorate will also manage the KSC portion of the agency's protective services contract beginning in late 2008.

# Treat all warnings on the spaceport equally

*By Wayne Kee*
*NASA Emergency Preparedness*

On Kennedy Space Center and Cape Canaveral Air Force Station, there are numerous forms of warning systems in place to alert employees and visitors to an emergency situation. But what about a situation that doesn't necessarily constitute a real emergency, such as a loss of power? How should employees respond to that?

A situation like this can still be an indication of a serious problem within a facility. When directed to do so, either by public address announcement or via the fire alarm being activated, employees should evacuate according to their facility emergency evacuation plan with the same purpose and focus as they would under any other situation requiring an evacuation.

All facilities on the spaceport with 10 or more employees are required to have an emergency evacuation plan in place. These plans are to cover as a minimum:

(a) Clearly defined evacuation routes using drawings.

(b) Assembly or muster points identified both internally and externally.

(c) A designated marshalling area identified by a blue numbered sign located outside the hazard area of the facility. Marshalling areas will be equipped with a telephone and shall have sufficient lighting for after-dark evacuations.

(d) Accountability procedures clearly described to include the people responsible for employee accountability.

*Note: For more information, refer to KDP-KSC-P-3001. Flight hardware facilities should refer to their applicable emergency procedures document. KSC employees can access their respective facility emergency evacuation plan online through the KSC Business World at the "KSC Safety and Health Planet."*

Any evacuation has its particular concerns, and in each case, the earliest notification for evacuation is preferred. However, where we have lost power, there are some unique concerns that we should keep in mind.

If possible, employees should turn off or unplug electrical appliances, such as coffee makers, computers, etc., and take any necessary personal items with them in case they do not return for several hours or days once the power has been restored.

While departing, be extra careful due to the reduced lighting and, as always, be careful when exiting via the stairways. Employees should always report to their designated marshalling area for accountability purposes and to receive further guidance from their supervisors.

## Civil servants eligible for leadership program

NASA's Human Resources Development Office is accepting applications for Kennedy Space Center's Foundations of Leadership Pilot Program, which begins Oct. 12.

This yearlong, part-time program is designed to provide employees in science, engineering and professional administrative positions who are GS-9 through GS-12 with the foundational skills necessary for their future success within NASA.

Copies of the complete announcement, including the application, program overview and eligibility requirements, may be obtained from each directorate's training coordinator. Included as part of the application packet should be a letter from the applicant's supervisor with the director's concurrence acknowledging the time commitment. Nomination packets must be routed through the directorate's training coordinator and submitted to Tanya Phillips, mail code CNI-3, by close of business on Sept. 7.

# National Space Club honors three lifetime achievers

*By Jeff Stuckey*
*Editor*

Three longtime contributors to the nation's space program, Norris Gray, Jay Honeycutt and Charlie Murphy, recently were honored by the National Space Club of Florida with the 2007 Lifetime Achievement Award at a luncheon at the DoubleTree Hotel in Cocoa Beach.

The three Florida residents were awarded at the Aug. 14 event for advancing space exploration and inspiring countless program workers over the years.

The honoree remarks began with Roy Tharpe, deputy site leader for Boeing Florida Operations at Kennedy Space Center, who accepted the award on the behalf of Honeycutt. Honeycutt was unable to attend due to a prior commitment.

"In 1989 there were many changes around NASA and (Honeycutt) was selected to work at KSC to head up the operations and management organization," Tharpe said.

"He took a lot of the training methods used for the work force in Houston and applied them here in Florida. The beauty of this was that he began to mold the young work force."

Honeycutt wanted members of the work force to understand they could do many things in the future they may not have thought were achievable. There are current spaceport managers, launch directors, center directors and astronauts who were influenced by KSC's sixth center director.

"(Honeycutt) also trained three current NASA center directors," Tharpe said. "We're honored to have one of those, Bill Parsons, with us today."

"Chief" Gray, as he is known, began his spaceport career in 1949 at what was called the Joint Long Range Proving Ground before moving on to the Cape Canaveral Missile Annex as fire chief and emergency preparedness officer.

"Some of you know about the M113 tanks the flight crews have to know how to drive, parked next to the slidewire at the launch pad," Gray said. "'Gordo' (Gordon) Cooper and I went to Fort Benning in Georgia to test drive one and decided the range needed one of the vehicles."

"CHIEF" NORRIS Gray (left) and Charlie Murphy received the National Space Club of Florida's Lifetime Achievement Award on Aug. 14. Recipient Jay Honeycutt was unable to attend the event.

The pair had the authority to buy one and, as Cooper and Gray were walking out of the factory in Washington, Cooper said, "Be sure it's complete."

When the vehicle arrived two weeks later, a person in the receiving department called Gray and said, "Chief, you better come down here and look at this vehicle. It's combat ready!"

The tank was sent with a full arsenal of ammunition and subsequently returned for one without weapons.

"Me, you, them and us - that includes everybody you need to have a team effort," Gray said at the end of his speech. "We need more of this to continue space exploration."

Murphy, a 48-year veteran of aerospace launch operations, said talking about his many memories was difficult.

"The Apollo Program was a major memorable event for me and I was privileged to be involved in sending people to the moon and returning them safely to Earth," he said. "There are also many memorable events from the shuttle program, including the approach and landing tests, the testing we performed in Huntsville (Ala.), and activating the facilities for the first flight.

"Challenger and Columbia, of course, were memorable events that remind us all that this is a risky business."

Murphy told the audience he could not think of any career path that could have been more exciting than space exploration. "We are all explorers, even though most of us stay on base camp," he said.

For information about upcoming National Space Club of Florida events, visit **www.nscfl.com**.

KENNEDY SPACE Center Director Bill Parsons (fourth from right in the back row) and Rep. Tom Feeney (left of Parsons) pose with National Space Club of Florida Lifetime Achievement Award recipients, from left, John Neilon, John Tribe, Norris Gray, Sam Beddingfield, Norm Carlson, Russell Barnes, Pat Yount, George English, Horace Lamberth, Tom O'Malley, Charlie Murphy and Jim Harrington.

# Bird trackers protect spacecraft at launch

*By Linda Herridge*
*Staff Writer*

Few birds were sighted at Launch Pad 39A during the minutes leading up to Endeavour's launch on mission STS-118.

This was confirmed by ASRC Aerospace and NASA workers who were sitting in the Expanded Photo Optical Control Center in Kennedy Space Center's Launch Control Center using a software system called the Bird Vision System to monitor bird activity during launch countdown from T-9 minutes through T-60 seconds.

The Bird Vision System was first used last year during the July 4 launch of Discovery on mission STS-121 and for all subsequent missions.

The custom software program was developed by ASRC Aerospace under the University-Affiliated Spaceport Technology Development Contract, or USTDC, after a bird struck the external tank during the launch of Discovery on mission STS-114.

CHRIS IMMER and NASA Bird Vision System Operator Teresa Lawhorn sit next to the Bird Camera Tracking System monitoring Launch Pad 39A.

The system is linked to three tracking cameras at each launch pad with views of the pad near the top of the lightning mast on the fixed service structures.

The system displays two-dimensional and three-dimensional views of the launch pad area and records the track of birds within a 500-foot radius of the pad.

Chris Immer, an ASRC Aerospace physicist and principal investigator, was one of the software/hardware developers. Others included John Lane, Jesus Dominguez, Steve Klinko and Bill Oleen, all with ASRC's USTDC Applied Physics Lab.

Using any one of up to nine different image-processing algorithms, the system identifies birds in each camera view and calculates their position in real-world coordinates.

Immer said the system then sends the detected bird coordinates to a central server where the information is combined into one scene displaying all bird tracks in real time.

"The screen can be displayed as an overhead-type display or in a virtual 3-D-type display similar to that of Google Earth," Immer said.

"The NASA test director has access to both the 2-D and 3-D views in the Firing Room."

Immer said the system complements an existing bird radar system and serves as an aid for the launch director during launch countdown activities.

ASRC is working to upgrade to high-definition cameras in order to enhance the detection accuracy and increase the area of coverage.

# Applied Physics Lab works to deliver new technologies

*By Svetlana Shkolyar*
*Student Intern*

Although a major mission of Kennedy Space Center's Applied Physics Lab is delivering tools and instruments to support launch operations, the verdict of the end users of these technologies dictates which ones make it into the field.

For example, the water extraction tool, a vacuum system for drying multiple orbiter tiles, "is a case where hardware is needed for contingencies," said Dr. Robert Youngquist, a physicist at the lab. The tool, also known as WET, was designed to remove water from orbiter tiles after rain soaked the thermal tiles of Atlantis following the STS-98 mission in 2001. The WET was developed as a method that is five times faster than the one used for Atlantis, which dried by heating. It works by sucking water out through the waterproofing holes in each tile.

The thermal protection system team liked the tool, but when the lab delivered it, the team declined because shuttles are rarely rained upon, said Youngquist. Four years later, Discovery landed in California and was also rained upon. A request for the tool was sent to the lab and within two weeks, the WET was being used in the field.

The gaseous oxygen vent alignment tool, which is positioned on the external tank spike, also came to be used because the end user, engineer Jorge Rivera, accepted it for use in the field.

Other Applied Physics Lab technologies that would not have made it into the field without the end user's active involvement include the reaction control system nozzle inspection tools, used for checking the system's chambers for defects, and the surface light optimizing tool, or SLOT, which helps test the orbiter windows for hazardous defects by light reflection using a prism.

QUALITY ASSURANCE inspector James Allen Atwell is using the fuel hole inspection device to look into a nozzle in the Orbiter Processing Facility bay 2.

According to Youngquist, "The best case is when the end user wants to work with you and develops a vested interest."

Like NASA orbiter maneuvering system engineer John Peters, who "took a hands-on interest" on the reaction control system project, lead window inspector Robin Floyd took a similar interest in developing the SLOT. Floyd conceived the idea for the SLOT independently but had no means of fabricating a field version of it. He and the lab jointly produced the tool when a "meeting of the minds occurred," said Youngquist.

"Technology is a function of how ardent the customer is on getting the product; it is need and personality driven," said Youngquist.

*Shkolyar is a University of North Florida physics major.*

# Operation Dark Dune aids nesting sea turtles

*By Cheryl Mansfield*
*Staff Writer*

On Launch Pad 39A, the Space Shuttle Endeavour sat bathed in glowing light, silhouetting the vehicle against the dark night sky over the seaside complex.

It may sound like an awesome and idyllic scene, but not for nesting sea turtles and their newly hatched babies. During their summer nesting season, these turtles emerge from the ocean along the pristine beach within 200 yards of the space shuttle launch pads.

The light emanating from the pads can deter the adults from coming ashore to lay their eggs and disorient the hatchlings as they emerge from their nests and head toward the moonlit sea.

As part of keeping the balance with its natural surroundings, the space center's environmental management system has as one of its goals to minimize controllable impacts to wildlife, including the nesting sea turtles.

The natural height of the dune normally provides a necessary buffer, but the dunes along Florida's Space Coast have been severely eroded in some spots by hurricanes, particularly during the 2004 season. That year, the space center was impacted by two hurricanes just three weeks apart. And while some dune restoration was completed and more is planned, some stop-gap measures were needed until the nesting season ends at the beginning of November.

AT LEFT in the foreground, a sea turtle nest is marked with a stake, while one of the railcars temporarily placed to block light from the launch pads is visible at left. Below, a line of 25 railcars are strategically placed near Launch Pad 39A to block the light emanating from the facility. Too much light can deter adult sea turtles from coming ashore to lay their eggs and disorient new hatchlings.

Enter some inventive individuals with a novel idea: Use what they have on hand to help block the launch pad lights so the nesting process can continue undisturbed.

As those charged with helping to protect the environmental balance debated how to shield the beach from the lights, Doug Scheidt with Kennedy's life sciences support contractor Dynamac had an idea. "Boxcars are about the right height," he offered.

He thought using freight train cars was "a shot in the dark" that just might work, shading the dunes in the most severely eroded spots. And since the space center has the unique situation of having a rail line that parallels the beach, it was a viable solution that would also avoid the pitfalls inherent in trying to erect some type of temporary barriers that would require permits and funding.

Uniquely bringing together employees from both the operations and environmental sides of the space center's management team, the railcar idea took shape. The cars were big enough and mobile, and some that were scheduled to be removed from service were coincidentally parked just a few miles away from the launch pads.

The solution would be quick, easy and cheap. Somewhere along the way, the project was affectionately dubbed "Operation Dark Dune."

Moving day arrived on a hot Florida day in July, and the team relocated and strategically placed 25 railcars along the rail line in their temporary seaside location.

"As a former environmental protection specialist at Kennedy, I realize how fine a line it is between our operations and the protection of our natural resources," said Propellants Mobile Equipment Manager Gail Villanueva, who is in charge of the railcars. "I was happy I was in a position to help out, although the request was unique, to say the least."

The relationship between space exploration and nature goes back as far as the space program's roots in the region. The space center borders the Canaveral National Seashore, which provides an important nesting area for the sea turtles.

If innovative thinkers at the space center can continue to come up with creative solutions like Operation Dark Dune, then the center's dedication to the delicate balance between nature and space exploration can continue to flourish.

AN ADULT sea turtle heads back into the surf on the Canaveral National Seashore after laying its eggs.

# Kennedy employee, space artist draws from experience

*By Steven Siceloff*
*Staff Writer*

Ron Woods of United Space Alliance is one of the few people to effectively capture spacesuits in their native habitats.

Designed to keep humans alive in the void of orbit and on the moon, the rugged garments nevertheless spend almost their entire lives in pristine rooms on Earth.

It is there that Woods finds them and brings their stories to life.

"To me, there's nothing more artistic than a spacesuit," Woods said. "They're just real interesting pieces of hardware to me and I just started painting them."

The details can be as complex as a wrist joint on an Apollo glove, or as simple as a layer of gold-tinted capton tape over an air gauge on a breathing apparatus.

The hardest part?

"Getting the lighting (effects)," Woods said. Pointing to a painting of Jack Lousma making a spacewalk on the Skylab space station, Woods said it was important to give the spacesuit a glow because of the sunlight reflecting off the station.

As the overseer of the flight crew equipment preparation at the Kennedy Space Center, Woods is never far from his subjects. He and his team pack up all the gear each shuttle carries in the crew cabin for a mission.

That can be anything from prepackaged lockers to custom tools. It also includes readying what are known as EMUs, the bulky white outfits astronauts wear when they make spacewalks. EMU stands for extravehicular mobility unit.

Woods was already a veteran spacesuit preparer by the time the space shuttle astronauts started using the EMUs. He had dressed Buzz Aldrin for the Apollo 11 mission and Jim Lovell before Apollo 8, and aided the crew of the Apollo-Soyuz flight and the first two space shuttle missions.

His NASA career began in Houston, though, at Johnson Space Center. Woods was a living mannequin of sorts when engineers didn't know what spacesuits would work best on the moon. The drive to produce an outfit that would keep astronauts safe but still allow them to move around comfortably produced a number of different designs.

That's where Woods came in. Sometimes testing meant simple fittings. On other occasions, he would have to wear the suit while running on a treadmill or climbing a staircase in a laboratory.

RON WOODS expertly paints another watercolor work related to space equipment. He works for United Space Alliance overseeing flight crew equipment preparation. The Kennedy Space Center Visitor Complex offers some of his prints.

The job was an ideal fit for a man who sees elegance in technical machines and was already developing his artistic skills.

His portfolio includes some 200 originals in watercolors and oils, including works of spacesuits of all sorts, but the attire that made its way to the lunar surface remains his favorite. He has also painted beach scenes including a wood-paneled station wagon on Cocoa Beach. Space equipment is his passion, though.

Several of his paintings are displayed at locations around Kennedy, and the center's Visitor Complex sells some of his prints.

It's "the fascination of looking at it from the standpoint of here's something that was manufactured on Earth and has supported life on the moon and still held up as well as it did," Woods said.

His latest project is a watercolor of Pete Conrad's spacesuit from Apollo 12.

It was noteworthy, Woods explained, because as much as technicians kept the white garment clean on Earth, the moon's dusty gray soil relentlessly collected from the boots to the arms to the upper torso.

Conrad and Al Bean even joked about the dust during the flight.

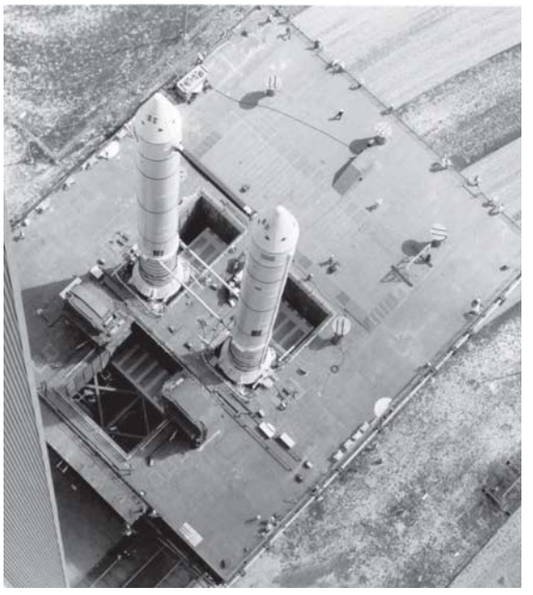
"Some people paint seascapes and boats, and being exposed the last 40 years to hardware and the way it's packaged for flight . . . pieces that have actually gone to the moon and back, I guess that's what keeps my interest up and makes me want to work and paint these so people can see it from a hardware standpoint."

TITLED "HANGING Around After A Walk On The Moon," this Ron Woods original print was painted in 1999. Woods' portfolio includes more than 200 originals. View the color version of this print on the Spaceport News Web site at www.nasa.gov/centers/kennedy/news/snews/spnews_toc.html.

# Remembering Our Heritage

## 40 years ago: Mobile launchers provided foundation for moon launches

*By Kay Grinter*
*Reference Librarian*



AT LEFT, this May 1965 photograph shows the first crawler transporter (at right) moving under Launch Umbilical Tower 3 used for Saturn spacecraft. The tower later evolved into the mobile launcher platform. Below, two space shuttle solid rocket boosters roll out from the Vehicle Assembly Building on the mobile launcher platform.

Two of the three mobile launchers constructed at Kennedy Space Center for the Apollo Program were ready for action in 1967. They have since provided a firm foundation for NASA's human spaceflight programs.

The two-story mobile launcher weighed 10.5 million pounds and could only be moved by a transporter along a crawlerway from the Vehicle Assembly Building, or VAB, to the pads in Launch Complex 39 and back. A 398-foot-tall umbilical tower, topped by a hammerhead crane, was mounted on the platform.

A mobile launcher has two functions. It is the platform on which a launch vehicle is erected in the VAB and the stand from which the vehicle launches at the pad.

Bill Tolson is chief engineer with ASRC today, but during the Apollo era, he was a test engineer on NASA's design team at Marshall Space Flight Center for the umbilical tower's swing arms.

Nine arms extended from the tower to the Saturn V vehicle, providing technicians access at various levels. At liftoff, the arms had five seconds to retract.

At Marshall's Random-Motion/Liftoff Simulator, or "arm farm," a portion of the umbilical tower was replicated to test the detachment and reconnection of the arms under realistic conditions.

"I helped qualify the swing arms at the arm farm and transferred to Kennedy in 1965 to oversee their installation on the towers," Tolson recalled.

Following the Apollo Program, mobile launcher No. 1 was adapted to support the manned Skylab missions. The shorter height of the Saturn IB rocket required the installation of a "milk stool" structure to correctly position the vehicle in relationship to the tower.

Larry Schultz is NASA's mobile launcher senior project manager for the Constellation Program. His work on mobile launchers began in 1967 as a test engineer for the base systems, including the hold-down arms, tail service mast, service arm control switches and S1C aft engine service platforms.

Schultz was lead design engineer for the modifications to transform the mobile launchers into mobile launcher platforms, or MLPs, for shuttle launches. Three smaller openings to accommodate the exhaust from the solid rocket boosters and the orbiter's main engines replaced the 45-foot-square single opening required by Saturn vehicles.

The umbilical towers were dismantled and removed, and segments were used to construct the fixed service structures on the shuttle pads.

"Mobile launcher No. 3 was the first to be modified and became MLP No. 1. It supported the STS-1 launch," Schultz confirmed. "Launcher No. 2 was transformed into MLP No. 2 and was first used for STS-6 in 1983. Launcher No. 1, used during Apollo 11, was the last modified and became MLP No. 3."

These utilitarian platforms will be modified once again to support Constellation Ares V launches.

## NASA requests proposals for Ares I mobile launcher

NASA has issued a request for proposals for Ares I mobile launcher construction. Ares I is the rocket that will transport the Orion crew exploration vehicle and its crew and cargo to low-Earth orbit. The mobile launcher proposals are due to Kennedy Space Center on Sept. 6.

The request for proposals states the procurement approach for obtaining the mobile launcher system. The mobile launcher will be used as a platform to assemble, test and service Ares I in existing facilities, transport the rocket to the pad and support launches.

The selected contractor will supply all labor, materials and equipment to build the mobile launcher structure and its associated facility systems.

These systems include utilities, fire safety, communications, lighting, elevators and life support. The request for proposal includes an option for an additional Ares I mobile launcher.

The contract to build the Ares I mobile launcher will be awarded through a full and open competition and managed by KSC. A selection is expected in February 2008.

For more information about the request for proposal, visit: **http://procurement.nasa.gov/cgi-bin/eps/sol.cgi?acqid=126221**.

# Culture survey leading to management action plan

*By Jennifer Wolfinger*
*Staff Writer*

NASA leaders value employee opinions, so when some of the work force's responses to an agency culture survey were negative, they wanted to understand why.

In a proactive response, teams and focus groups across NASA have been studying the issues and working hard to develop possible solutions.

The survey, conducted by NASA's chief historian, was distributed via e-mail last October to 704 civil servants at all NASA centers. Aside from three additional questions, the survey was identical to one conducted in 1988. The new questions were developed by the Office of Safety Mission Assurance to address concerns related to the Columbia Accident Investigation Board and a Safety Climate and Culture Survey.

These new questions revealed that employees were concerned about management's honesty, effectiveness at taking issues up the chain of command and ability to help them get their jobs done.

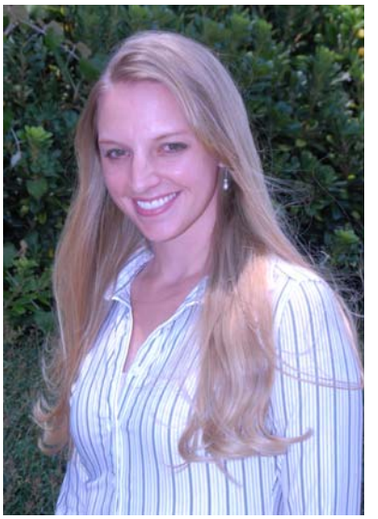
These three work environment dimensions are considered powerful in what they can tell agency leaders about the potential for mission and organizational success. After being briefed on the results, NASA Administrator Mike Griffin requested these issues be addressed. In response, the "Understanding Employee Responses: Survey-Based Change Team" was formed and focus groups were organized.

"Trust in management, perceptions of management honesty, management support, and communication have all been shown to relate to job satisfaction, job performance and overall organizational productivity," said Organizational Development Specialist Laura Gallaher.

Gallaher served as a KSC change team representative along with Anna Maria Ruby, an Engineering Directorate advanced systems technician.

In July, an independent facilitator led focus groups made up of civil servants from five NASA centers. The groups helped management understand employee perceptions, identify issues related to safety and mission assurance, and generate solutions. The results were used to develop follow-up items for a September survey to further understand any negative responses.

Small groups at each center are currently participating in a pilot of the survey.



LAURA GALLAHER is a member of the KSC change team. The team is studying the agency's culture.

"Once the survey goes out and we have that data, the agency team will have a workshop to discuss best practices and formulate an action plan to improve on the key areas," explained Gallaher.

"KSC continues to be among the highest rated across the board for all NASA centers. Many of our organizations can serve as benchmarks on these issues."

# Annual Diversity Event is Sept. 9 in Cape Canaveral

The fourth annual Kennedy Space Center Diversity Event celebrates the diversity of the center's work force, including government partners and the community. Dr. Arden Bercovitz will be the guest speaker at this year's event, themed "Altogether Different."

While in character, Bercovitz blends an inspirational and practical message, sharing humor, notable insights and lively interaction with his audience.

This year's event is scheduled for 6:30 to 11 p.m. on Sept. 8 at the Radisson Resort at the Port Pavilion in Cape Canaveral. The theme was selected from entries in a slogan contest and was submitted by Donna Stubbs, a contract specialist with the Procurement Office.

Tickets are on sale for $25 per person and can be purchased from the Office of Diversity and Equal Opportunity in the Headquarters Building, room 2327, or from the following individuals: Maxine Daniels, Space Station Processing Facility, room 3238X; Lisa Leger, Operations Support Building I, room 6301E5; Shari Bianco, Launch Control Center, room 4P23A; and Kelly Robles, Det. 1, 2 SOP/MAF at the Cape Canaveral Air Force Station (853-1171).

THE 2007 Kennedy Space Center Diversity Event on Sept. 8 at the Radisson Resort at the Port Pavilion in Cape Canaveral will offer food, music, dancing and much more. Pictured is the 2005 event.

## Intercenter Walk/Run at landing facility

The Kennedy Space Center Fitness Centers are sponsoring the Intercenter Walk/Run which will start at 5 p.m. Sept. 18 at the Shuttle Landing Facility. The 2-mile walk/run, 5K run and 10K run are free for all spaceport employees. Stop by either fitness center by Sept. 14 to preregister. Late registration will take place at the race. Anyone interested in volunteering should e-mail *Debra.L.Orringer@nasa.gov*.

John F. Kennedy Space Center
Spaceport News

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