



Spaceport News

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John F. Kennedy Space Center

MESSENGER aims to deliver detailed clues about Mercury

NASA's first trip to Mercury in 30 years and the closest look at the innermost planet starts in August with the predawn launch of the MESSENGER spacecraft from Cape Canaveral Air Force Station.

MESSENGER will conduct an in-depth study of the Sun's closest neighbor, the least explored of the terrestrial "rocky" planets that also include Venus, Earth and Mars. After a scheduled 2:16 a.m. EDT liftoff aboard a Delta II launch vehicle Aug. 2, the first day of a 13-day launch period, MESSENGER's voyage includes three flybys of Mercury from 2008 to 2009 and a year-long orbit of the planet starting in March 2011.

MESSENGER (short for MERcUry SUrface, SPace ENVironment, GEOchemistry, and Ranging) is only the second spacecraft to set sights on Mercury. Mariner 10 sailed past the planet three times from 1974 to 1975, gathering detailed data on less than half the surface.

Carrying seven scientific



AN OVERHEAD CRANE moves the MESSENGER spacecraft from its work stand under the watchful eyes and steady hands of technicians.

instruments on its compact and durable composite frame, MESSENGER will provide the first images of the entire planet. The mission will also collect

detailed information on the composition of Mercury's crust, its geologic history, the nature of its thin atmosphere and active magnetosphere, and the makeup

of its core and polar materials.

MESSENGER's science team will shape its investigation around several questions, including: Why is Mercury, the densest planet in the Solar System, mostly made of iron? Why is it the only inner planet besides Earth with a global magnetic field? How can the planet closest to the Sun, with daytime temperatures near 840 degrees Fahrenheit, have what appears to be ice in its polar craters?

Mercury's proximity to the Sun makes it both a fascinating subject and an unprecedented mission-design challenge. The Sun can burn up to 11 times brighter on Mercury than it does on Earth, but MESSENGER will operate at room temperature behind a sunshade of heat-resistant fabric.

The 1.2-ton spacecraft also features a heat-radiation system and will pass only briefly over Mercury's hottest regions, limiting exposure to the intense heat bouncing back from the surface.

NASA's e-payroll transition brings slight changes

By Sheila Banister
Chief Financial Office

On Aug. 8, NASA will complete the transition of payroll services to the Department of Interior and its Federal Payroll and Personnel System. The consolidation is part of the electronic government initiative set forth by the President's Management Agenda and its purpose is to combine payroll systems throughout the government down to the least amount of providers.

This initiative will provide an

estimated government-wide savings of \$10.2 billion.

NASA employees will see very few changes, with the most notable being the distribution of the Leave and Earnings Statement (LES). Beginning with the pay period ending Aug. 21, the LES will be delivered to employees' home address, not at the office, and will be delivered on or around pay day, which is the second Tuesday following the

pay period. The LES also will be in a different format, but will contain the same data as the current NASA LES. The new LES

year-to-date (YTD) money columns will only display

information from August to date for 2004. The LES YTD columns for Credit Hours, Comp Time, Religious Comp Time, Restored Annual Leave and Time Off Awards will only display August-to-date information for

2004.

The LES YTD columns for Annual Leave, Sick Leave, Military Leave, LWOP and AWOL will show the available leave for the entire 2004 YTD. See an example of the new LES at <http://epayroll.nasa.gov/documents>.

Changing over to a new payroll system in the middle of the calendar year will cause NASA employees to receive a separate Wage and Tax Statement (W-2) for each NASA Center you were employed with for the 2004 tax year through

(See PAYROLL, Page 2)



Jim Kennedy
Center Director

The Kennedy Update

Hi, friends! It's been three weeks since I returned to work and I've enjoyed getting back into the swing of things. I mentioned it at my July 15 All Hands, but for those who may not have been able to tune in, let me again express my thanks for the numerous letters, cards, e-mails, phone calls and visits wishing me well.

It meant a great deal to Bernie and me and shows that people at KSC really care for each other. We are truly a NASA family, just as our core value fittingly states.

But now it's on to the future. I have recovered, implemented the lessons from my experience into my daily life, and feel better than ever as we begin to travel down the road ahead together.

I know I mentioned how proud I was of our annual award winners Wednesday morning, but I believe it's worth restating in this forum. Congratulations to our many award winners from across the Center.

I also appreciate the supervisors who took the time to nominate the individuals and recognize them for their momentous efforts. Three cheers to all, and I'm looking forward to recognizing our biannual award winners when their turn at bat comes in about six months.

I am very excited about the upcoming MESSENGER launch aboard a Boeing Delta II set for early Aug. 2. It begins the spacecraft's seven-year journey to Mercury allowing scientists to study the planet, just as Cassini is now sending data back from Saturn.

Best of luck to our Launch Services Program team and to all of our mission partners as they count down the final moments of this important mission.

The times we are living in are truly amazing times of scientific discovery. In just the last year, NASA sent two rovers to Mars, launched the last of our great scientific telescopes, launched a

satellite to study the Earth's ozone and now is sending MESSENGER on a rendezvous with Mercury. Historians will definitely look back on the period from June 2003 to August 2004 as one of the finest periods in NASA's history.

And the great people of KSC were right in the middle of it all, making it happen. We should all take pause and realize the significance of our work and what it does for our nation and, in reality, for the entire world. I know my chest swells with pride when I reflect upon it!

We announced some good news during the month that is also worth repeating. First, United Space Alliance (USA) was notified of NASA's intent to extend its contract for two years. And to double the excitement, NASA also notified USA of the Agency's intent to noncompete the remaining years of the Shuttle contract until the program's completion.

This is super news for the thousands of dedicated USA employees wondering about their future, with the announcement of the Shuttle's retirement. Yes, the Shuttle will retire one day, but this announcement gives everyone the stability needed to complete the program and make an orderly transition to our future programs.

At the same time, a two-year extension for the J-BOSC contract was signed, sealed and delivered during the month. A reflection on the great service Space Gateway Support (SGS) provides for both NASA-KSC and the 45th Space Wing. As is so often said, "SGS doesn't launch the rockets, but you can't launch without them." I'm extremely pleased to see this extension and offer our congratulations to SGS President Bill Sample and his team.

I hope everyone who has children (of the appropriate age) took advantage of "Take Your Children to Work Day" on Tuesday. While our work is very important, let's never forget that our top priorities in life are our family and friends. I hope they enjoyed themselves and Mom or Dad had a great time giving them an insight into our numerous exciting missions.

Remember to keep safety at the forefront of all you do. Brevard County public schools will soon be back in session. So allow a little extra time to ensure you aren't speeding to work, and always keep a lookout for the young people. They are counting on you to be a defensive driver.

Have a great week and see you around the Center. GO MESSENGER!

June Employees of the Month



STANDING, from left, are: Linda Foster, Launch Services Program; Cathy Giesler, Deputy Director's Office; Lisa Parada, Cape Canaveral Spaceport Management Office; Dawn Oliver, Chief Counsel's Office; Jennifer Van Den Driessche, Shuttle Processing. Seated, from left, are: Guy Etheridge, Spaceport Engineering and Technology; John Jackson, ISS/Payload Processing; Roger Langevin, Spaceport Services.

PAYROLL . . .

(Continued from Page 1)

Aug. 7, plus an additional W-2 from the Department of Interior for the remainder of the 2004 tax year. For dollar YTD totals and cumulative retirement/military deposits, the LES will only include what is processed in the Federal Payroll and Personnel System from Aug. 8 forward.

NASA retirement and military information tracked prior to Aug. 8 will be forwarded to and maintained by the Office of Personnel Management. For their own personal files, employees are recommended to save their last LES issued by NASA's Payroll and Personnel System. This will be for the pay period ending Aug. 7 and employees will receive it approximately Aug. 12.

In another change, employees are now required to utilize Employee Express to make changes to their personnel and payroll file. Employees are strongly encouraged to become familiar with the program and one-on-one help is available by contacting the Benefits Office. NASA's WebTADS system will continue being utilized when posting and approving time and attendance data.

Finally, the Department of Interior uses the ALLTAX program for tax computations, which is more up-to-date than what the NASA Payroll and Personnel System used.

This change may cause a slight variation in tax computation, with most cases experiencing less than a 30-cent difference.

Chief Counsel Stubbs ensures timely legal support

By Jennifer Wolfinger
Staff Writer

Dedication to the workforce's productivity and growth is just one quality that newly-appointed Chief Counsel Jerry Stubbs offers Kennedy Space Center.

"It's a privilege and honor to have been selected," said Stubbs. "I want to ensure that the Chief Counsel's office continues to provide legal support to the Center directorates that is responsive, competent and timely. Our role is to help the rest of the Center get their job done."

Stubbs attained his bachelor's degree from the University of Georgia and graduated from Harvard Law School. His first government contract law experience was at Hanscom Air Force Base, Mass.

He enjoyed the field, committed himself to developing in the discipline, and ultimately attained his KSC chief counsel role July 11.

"We are very fortunate to have someone of Jerry's caliber to lead our Chief Counsel's office here at KSC," said Center Director Jim Kennedy. "I know

that with his legal expertise and leadership qualifications, Jerry and his folks will remain a top-notch legal team."

As KSC's principal legal advisor to the center director and senior staff, he also supervises 14 people. He uses an encouraging leadership style to motivate these employees, who also provide legal support to KSC's directorates.

"I believe I can help the people in the directorate achieve their career goals while accommodating family requirements," said Stubbs. "I'm fortunate to have joined a professional, highly competent and dedicated group of people in the Chief Counsel's office, and that's a definite benefit."

"The challenges are those all of us at KSC face: focusing on Return to Flight and the transformation of NASA."

Prior to his selection, Stubbs was a senior attorney with KSC's Chief Counsel's office, and specialized in contracts and labor law areas. Before then, he served in the U.S. Air Force from 1970 to 2002, retiring as a Brigadier General. His roles included Chief Counsel for the



KSC CHIEF
Counsel Jerry
Stubbs.

Air Force Material Command.

His family includes his mother, Nancy, who lives with Stubbs and Helen, his wife of 32 years. His son, Richard, is an architect, and his daughter, Laura, is a lawyer who recently made Stubbs a grandfather.

The chief counsel spends

some of his spare time playing piano and refereeing youth soccer.

"My wife and I also very much enjoy this area and we take advantage of the location to see the many things Florida offers," said Stubbs.

Center's disabled employees offer unique talents

Kennedy Space Center doesn't only break sound barriers, but through the Disability Awareness and Action Working Group (DAAWG), it shatters workforce barriers as well. The group supports KSC's disabled community by informing and inspiring the entire workforce.

Through its endless efforts, the DAAWG hopes to create an environment that allows these unique employees to continue advancing. "This includes facility modifications, obtaining assistive devices, hiring of new disabled employees, and more," said DAAWG Co-chairwoman Nicole DelVesco.

Some of this year's upcoming activities include October's

National Disability Awareness Month Breakfast and a sign language class.

"The upcoming DAAWG events are exciting," said DelVesco. "They offer opportunities for education about various disabilities. There are many people at KSC who would enjoy supporting DAAWG and our efforts."

Anyone with an interest in DAAWG can become a valuable member. "We would like disabled as well as able-bodied individuals," said DelVesco. "Each person brings their own unique insight essential to accomplish our objectives."

Visit www.ksc.nasa.gov/nasa-only/groups/daawg/index.htm for details.

July Employees of the Month



STANDING in the back row, from left, are: Ronnie Lawson, ISS/Payload Processing; Laura Mosher, Safety and Mission Assurance; and Sean Howe, Procurement Office. Seated in the front row, from left, are: Ralonda Farrant, Spaceport Engineering and Technology; Tamara Alexander, Shuttle Processing; Priscilla Elfrey, Information Technology and Communications Services; and Paulletta McGinnis, Spaceport Services. Not shown are: Veronica Saucedo, Workforce and Diversity Management; Cheri Wynn, Independent Technical Authority; and Eric Haddox, Launch Services Program.

Shuttle Discovery marching to

By Charlie Plain
Staff Writer

Cocooned in scaffolding and transforming at the hands of hundreds of skilled technicians, the orbiter Discovery is well on its way to being ready for the Space Shuttle Program's Return to Flight.

In the spotlight among the completed work is the reinstallation of the Shuttle's Reinforced Carbon-Carbon (RCC) wing panels. The panels hang on the leading edge of the orbiter and protect the wings as they heat up during reentry.

As part of the Return to Flight safety requirements and the vehicle's usual overhaul procedure, the panels were removed for inspection and, if necessary, replacement. New to the panel inspection procedure is the use of flash thermography. This involves applying a burst of intense and hot light to heat the RCC panel.

Technicians then use a heat-detecting, infrared camera to scan the panel for flaws.

Another inspection upgrade is Discovery's new digital External Tank (ET) camera. Located in the rear underbelly of the orbiter, the

camera snaps a series of photos as the tank separates from the vehicle. Following ET separation, the pictures will be sent back to Earth for analysis.

Discovery is also receiving a new wing leading edge impact-detection system. Placed inside the wing RCC panels, the detection system consists of a network of sensors to monitor for temperature changes and debris impacts along the wing's leading edge.

"At this point, I feel very confident and optimistic about a March launch," said NASA Vehicle Manager Stephanie Stilson.

However, she was quick to caution that Discovery won't fly until the necessary work is done, no matter how long that takes. "We're not going to fly until we're safe to fly; that's the bottom line," said Stilson.

There's still plenty of work to do before the launch. But if you ask Stilson, she'll tell you that the men and women of Kennedy Space Center have the skill and the experience to get the job done.

"It's a challenge, but this is a team that's used to challenges."



STEPHANIE STILSON (left), NASA Vehicle Manager, briefs the media attending an information tour of the Orbiter Processing Facility housing the Space Shuttle Discovery at KSC. During the tour, media received the latest information on Discovery's processing and viewed workers performing the final work on the orbiter for its safe return to flight.

BELOW, workers in the Orbiter Processing Facility watch closely as Discovery's Forward Fuselage System is lowered into position in the orbiter's forward fuselage nose area.



WORKERS IN THE Orbiter Processing Facility lift the Reinforced Carbon-Carbon (RCC) chin panel to install on Discovery.



oward safe Return to Flight



ormative workshop and
ring this event, the
preparing the vehicle for

ard Reaction Control



ABOVE, workers in the Orbiter Processing Facility check the placement of the Reinforced Carbon-Carbon chin panel on Discovery.



LEFT, in the Orbiter Processing Facility, installation of wiring is underway in Discovery's cargo bay to support the addition of an Orbiter Boom Sensor System.

BELOW, the Orbiter Boom Sensor System is one of the new safety measures for Return to Flight, equipping the Shuttle with cameras and laser systems to inspect the Shuttle's Thermal Protection System while in space. Discovery is designated as the Return to Flight vehicle for mission STS-114 and scheduled for a launch planning window of March 2005.



KSC showcases new technologies for Space Act Awards

By Linda Herridge
Staff Writer

While most activity at Kennedy Space Center focuses on processing and launching NASA's fleet of Space Shuttles, there's also a hub of research and technological innovation at several KSC facilities.

Dr. Paul Curto, NASA Inventions and Contributions Board senior technologist, recently visited KSC to view the technological advances of NASA and contractor researchers and scientists. He will help to determine the best ideas at the Center.

Curto assists in recommendations for the Agency's Space Act Awards, a program that awards dollars to inventors for patent applications, tech briefs and software releases.

The program also provides action awards for technologies contributing to the NASA mission, including many that have commercial potential.

"The scientific community wants to know about these ideas. I'm here to encourage the workers to submit their work for a Space Act Award," Curto said.

In June, more than 100 NASA civil servants and contractor workers were honored during the 2004 Space Act Awards luncheon at the Debus Conference Center. Award recipients were from Arctic Slope Research



DR. GARY STUTTE explains to Paul Curto (left), chief technologist with NASA's Inventions and Contributions Board, the research being done in this chamber in the Space Life Sciences Lab. Stutte is a senior research scientist with Dynamac Corp. Curto visited KSC to talk to innovators and encourage workers to submit technologies for future Space Act Awards.

Corp., Bechtel, Boeing, Bionetics, Dynacs, Dynamac, ENSCO, United Space Alliance and Wyle Labs.

The Space Act Awards presented to KSC have grown over the years.

In fiscal year 1992, the award total was \$12,000; in 1998, awards totaled \$97,000; and last year, KSC recipients were honored with a total of \$196,000 in awards.

Curto visited workers inside Orbiter Processing Bay 3 for a demonstration of an Orbiter Tile Optical Measurement System. He traveled to the Space Life Sciences Lab to see new plant growth experiments, waste water

purification studies, and a demonstration of a new wireless medical communication system in development.

Inside the Operations and Checkout building, Curto visited a biomedical lab to view personal protective equipment studies and development, a design visualization lab and the NASA Launch Services Simulation Lab.

He also visited the Boeing TCMS Lab to see the development of a payload services check-out systems application; the Applied Chemistry Lab to view groundwater remediation technology; and the Launch Equipment System shop to see

the Blast Wrap Machine.

"What you're doing here will have a great impact on humanity," Curto told researchers.

Jim Aliberti, Technology Commercialization Office chief, said the Space Act Awards program stimulates development and prompt reporting of new technologies, and helps KSC's technology transfer efforts.

"When inventors are personally recognized for their efforts in this way, both NASA and the public benefit," Aliberti said.

For more information on NASA's Space Act Awards Program, go to: <http://icb.nasa.gov>.

NASA Competition Working Group seeks input for future

By Dr. Phillip Meade
Safety and Mission Success

The Competition Working Group (CWG), a newly created NASA organization, aims to ensure the Agency's Centers thrive together through the "One NASA" philosophy.

On last year's One NASA survey, many employees identified that competition could be a barrier to collaboration and information sharing.

The Competition Working Group will make recommendations and help to implement

changes to current competitive practices that are assessed as unhealthy to One NASA principles. More than 20 CWG participants, including representation from various Centers and enterprises, identified three competitive environments for detailed study: Science and Technology, Programs and Projects, and Institutional Investments.

"We are seeking to get a better understanding of the costs and benefits of internal competition so that our Agency can best use it in a judicious manner,"

said Steve Pearson, member of the One NASA Implementation Team and team leader for the CWG.

Each competitive environment was assigned to a specific sub-team, which submitted its initial findings and draft recommendations in late June. Once the recommendations have been developed, the CWG will meet with senior Agency leaders to begin a dialogue that will optimize the success of the overall effort.

NASA has long used competition and peer review to success-

fully identify the best approaches to address some of the scientific challenges within the Agency's vision. More recently, many new opportunities for competition by individuals and organizations at NASA Centers are arising with the birth of the nation's Vision for Space Exploration.

If you would like to send input to the CWG, please e-mail OneNASAComments@nasa.gov. Feedback and participation is critical to NASA's success; carrying out the nation's exploration vision depends on it.

Aura launch will help NASA understand air we breathe

NASA's Aura satellite successfully launched on a mission dedicated to the health of Earth's atmosphere on July 15 at 6:01 a.m. EDT from the Western Range of Vandenberg Air Force Base, Calif., aboard a Boeing Delta II rocket.

Spacecraft separation occurred at 7:06 a.m., inserting the Agency's latest Earth-observing satellite into a 438-mile orbit. Its goal is to help us understand and protect the air we breathe.

Aura will aid us in answering three key scientific questions: Is the Earth's protective ozone layer recovering? What are the processes controlling air quality? How is the Earth's climate changing?

NASA expects early scientific data from Aura within 30-90 days.

Aura also will help scientists determine how the composition of the atmosphere affects and responds to Earth's changing climate. The results from this mission will provide new insight into the processes that connect local and global air quality.

Each of Aura's four instruments is designed to survey



NASA's Aura satellite successfully launched July 15 at 6:01 a.m. EDT from the Western Range of Vandenberg Air Force Base, Calif., aboard a Boeing Delta II rocket.

different aspects of Earth's atmosphere. Aura will survey the atmosphere from the troposphere, where mankind lives,

through the stratosphere, where the ozone layer resides and protects life on Earth.

Aura's launch completes the

first series of NASA's Earth Observing System satellites. The other satellites are Terra, which monitors land, and Aqua, which observes Earth's water cycle.

Aura's four instruments include the High Resolution Dynamics Limb Sounder (HIRDLS), the Microwave Limb Sounder (MLS), the Ozone Monitoring Instrument (OMI) and the Tropospheric Emission Spectrometer (TES).

HIRDLS was built by the United Kingdom and the United States. OMI was built by the Netherlands and Finland in collaboration with NASA. The Agency's Jet Propulsion Laboratory in Pasadena, Calif., constructed TES and MLS. NASA's Goddard Space Flight Center in Greenbelt, Md., manages the Aura mission.

NASA's Earth Science Enterprise is dedicated to understanding the Earth as an integrated system and applying Earth System Science to improve predictions of climate, weather and natural hazards using the unique vantage point of space.

For Aura information and images, visit: <http://www.nasa.gov/aura>.

Center hosts educators, pre-service teachers for workshops

By Patricia Leonard
Education Programs and
University Research

Kennedy Space Center was host to 26 educators from NASA Explorer Schools last month. Participants traveled from as far as California, Arizona, New Mexico and Montana to attend workshops that will help them to inspire their students to learn more about math, science and other subjects.

NASA is providing an opportunity for all 2003 NASA Explorer Schools to attend a field Center for workshops this summer. As with the workshops last year, the Agency is covering all transportation, housing and



Twenty-six educators from NASA Explorer Schools recently attended workshops to help inspire their students.

meals for the NES educators to attend the session of their individual choice.

One of a pair of two-day workshops that educators took part in was "Signals of Spring." The award-winning classroom program teaches students to use Earth imagery to explain the movement of birds and marine

animals that are tracked by satellite in real-time.

The second workshop was "Web Watchers," and educators learned how to better evaluate and integrate NASA Web-accessible educational resources into their classroom. Participants also learned about KSC's history, nature and future.

KSC also hosted 19 pre-service teachers who were selected to participate in its first Pre-Service Teacher Institute. This program, which originated at Langley Research Center in Virginia, was formed to provide teachers with opportunities to

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Camp Kennedy Space Center offers 'Right Stuff'

Camp Kennedy Space Center is offering children an out-of-this-world experience to explore space as never before.

This summer, campers will discover life as an astronaut from space flight training on realistic, motion-based space simulators by performing a simulated Space Shuttle mission and by meeting a real astronaut. The discovery continues as they launch rockets, investigate space travel to the Moon and Mars, and design space exploration vehicles and habitats.

Camp KSC is designed for children ages 8 to 14. Five-day sessions are held weekly beginning June 7 and running through August 13. Summer day camp hours are from 9 a.m. to 4:30 p.m., with extended early drop-off and late pick-up hours available.

Tuition is \$260 per child per

session, with discounts available for multi-child households and badged Kennedy Space Center, Cape Canaveral Air Force Station, Patrick Air Force Base employees and retired KSC personnel.

Campers receive a complimentary Visitor Complex 12-month pass, lunches and afternoon snacks, an Official Camp KSC T-shirt, four complimentary admission tickets to the Astronaut Hall of Fame, a Camp KSC graduation ceremony and a certificate of completion.

Camp KSC is based at the Astronaut Hall of Fame, located on S.R. 405. Complimentary transportation is available through Brevard County Parks and Recreation at designated locations in Brevard.

For more information and registration details, call (321) 449-4444 or visit <http://www.KennedySpaceCenter.com>.



ABOVE, A GROUP of youths at Camp KSC explore what it takes to launch a model rocket

'Living the NASA Values'

To stress the importance of NASA's commitment to shared values, an essay contest is open to provide employees the opportunity to express their ideas about these values. NASA Administrator Sean O'Keefe recently relayed the importance of shared values across the Agency to ensure a safe Return to Flight, implementation of the space exploration initiative and more. In everything we do, he said we all should aspire to live with the values in mind: safety, the NASA family, excellence and integrity.

All KSC employees are invited to write an essay of 300 words or less about one of the values, to explain "what that value means to you," and give examples of how it is demonstrated at the Center. One essay for each of the values will be published in *Spaceport News*.

For contest rules and the great prizes offered, visit the Star Alignment Team Web site: <http://www.ksc.nasa.gov/nasa-only/SAT/index.htm> or contact Michael Bell, 867-3312, Michael.bell-1@nasa.gov. The deadline is August 29.

Senator John Kerry visits Spaceport



SEN. JOHN F. KERRY, D-Mass., holds a public meeting at the Dr. Kurt H. Debus Conference Facility at the Kennedy Space Center Visitor Complex. Accompanying him, from left, are Sens. Bob Graham, D-Fla., and Bill Nelson, D-Fla., and former Sen. John H. Glenn, D-Ohio. Kerry said he chose to speak at KSC because it symbolizes America's commitment to science, innovation and technology.

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enhance their skills in teaching mathematics and science using technology at the elementary and middle school levels.

KSC formed a partnership with Bethune-Cookman College in Daytona Beach to recruit pre-service teachers from colleges and universities in the Virgin Islands, Puerto Rico and Florida. Participants spent two dynamic weeks at KSC engaging in mathematics and science enrichment activities.

Teachers interfaced with NASA personnel and toured KSC's facilities, while learning to incorporate the Agency's unique educational resources into lesson plans for students. The institute culminated with the pre-service teachers developing and teaching a problem-based learning lesson to children from local schools.



John F. Kennedy Space Center

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