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Spaceport News

America's gateway to the universe.

http://www.nasa.gov/centers/kennedy/news/snews/spnews_toc.html John F. Kennedy Space Center

O'Keefe, Kennedy update NASA's Vision on anniversary

By Jennifer Wolfinger
Staff Writer

On the first anniversary of Pres. George W. Bush's announcement of the Vision for Space Exploration, NASA Administrator Sean O'Keefe said Kennedy Space Center will make the first major step in accomplishing the Vision's Return to Flight goal.

"We're really doing exactly what the president talked about a year ago," O'Keefe said. "It's a different agenda.

"It's one that's about the desire in all of us as human beings to want to know, to want to explore, to want to understand, and along the way, we're developing capabilities we never would have had the motivation to do as promptly as we are were it not for yielding to that human desire."

NASA ADMINISTRATOR Sean O'Keefe (right) is accompanied on stage in the TV Auditorium by Center Director Jim Kennedy for a report to employees on the state of the Agency, including the achievements of 2004 and the goals set for 2005.

O'Keefe gave his Jan. 14 NASA Update at the Center's TV Auditorium in a televised event broadcasted to NASA Centers across the nation. He said he is encouraged by the progress at KSC for the next important Space Shuttle launch.

"The External Tank arrived here just a little over a week and a half ago," he said. "Everything now will begin from that point to begin the Shuttle stack and the whole process of visibly showing we're returning to flight."

Along with screening Bush's 2004 NASA address, O'Keefe said the president did not arbitrarily select the Vision goals, but insisted on a feasible plan. Through this approach, NASA can build on each milestone.

In the course of the past year, NASA has obtained strong congressional backing for the new goals and has engaged the international space community and academic institutions in planning for Vision implementing missions and activities.

The Agency has also received 17.5 billion hit on its Web site, an indication of renewed public interest in space exploration.

"I commend everyone involved in these and other impressive NASA accomplishments for your hard work and dedication," O'Keefe said.

KSC Director Jim Kennedy then shared the stage with O'Keefe and updated the audi-

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Deep Impact launches Jan. 12 from Cape Canaveral Air Force Station.

Deep Impact to provide its own Fourth of July fireworks

NASA's Deep Impact spacecraft began its 268-million-mile journey to Comet Tempel 1 Jan. 12 when it launched into the bright afternoon sky aboard a Boeing Delta II rocket from Pad 17-B at Cape Canaveral Air Force Station.

Data received from the spacecraft indicates it deployed and locked its solar panels, is receiving power and has achieved proper orientation in space. Shortly after launch, the spacecraft placed itself in a safe mode until the following day, when it returned to action in a healthy state.

Deep Impact is comprised of two parts: a fly-by spacecraft and a smaller impactor. The impactor will be released into the comet's path for a planned collision on July 4. The crater produced by the impactor could be as large as a football field and two to 14 stories deep. Ice and dust debris will be ejected from the crater, revealing the material beneath.

The fly-by spacecraft will observe the effects of the collision. NASA's Hubble, Spitzer and Chandra space telescopes, and others on Earth, will also observe the collision.

Comets are time capsules that hold clues about the formation

(See IMPACT, Page 2)

Jim Kennedy
Center Director

The Kennedy Update

Greetings, everyone! Wow, what a start to 2005! The Space Shuttle External Tank arrives, our Launch Services Program has a successful launch of Deep Impact and NASA Administrator Sean O'Keefe holds a senior leader off-site and NASA Update.

All of this happening right here and within the first two weeks of 2005. Whew, talk about starting the year with a bang!

What an important milestone the arrival of the ET signifies for Return to Flight. We now have all the components necessary right in our backyard to successfully return Space Shuttle Discovery to safe flight.

Now, our processing team will work toward mating the tank, Solid Rocket Boosters and orbiter in March for rollout to the pad, set for around the middle of that month. What a spectacular sight it will be to see a Space Shuttle, in its rightful place, back out on its launch pad.

I think it's appropriate to recognize the hard work of our fellow workers at Marshall Space Flight Center and the Michoud Assembly Facility, who installed all of the modifications necessary in order to deliver the safest tank ever to our launch team. I'm getting excited about our launch set for a May-June window and know you are, as well. This is what it's all about.

Congratulations to our Launch Service Program for another spectacular launch of Deep Impact on Jan. 12 aboard a Boeing Delta II rocket. When Deep Impact's impactor, now speeding through space, collides with Comet Tempel 1 on July 4, NASA will once again unlock a secret of the universe. We'll learn more about comets in the months that follow than ever before.

When that happens, our launch team can take pride that they were the ones who put Deep Impact on its proper path of discovery. It was a super job from the entire team!

"We'll learn more about comets than ever before. When that happens, our launch team can take pride that they were the ones who put Deep Impact on its path of discovery."

It was fitting to host our Administrator for a NASA Update Jan. 14, the one-year anniversary of Pres. George W. Bush's unveiling of the Vision for Space Exploration.

Now the official space policy of the United States, Sean O'Keefe played a critical role in the formation of the policy and obtaining congressional approval for the plan that will take us to the Moon, Mars and beyond.

With returning the Space Shuttle to flight as the first step in the Vision, KSC will certainly remain the operations center of NASA's future and that is a great thing for our Center and the Space Coast.

As you know, by the time I write this column again, we will have passed the second anniversary of the Columbia tragedy.

While you'll see details elsewhere, KSC will honor the Columbia crew, along with the Challenger and Apollo 1 crews, on NASA Remembrance Day Jan 27 (see below). The Astronauts Memorial Foundation will also host an event at the Space Mirror Memorial honoring the Columbia crew Feb. 1.

I invite you all to attend and salute our space heroes who helped lay the groundwork for our Agency's future successes.

With that, it's great to have kicked off another year at KSC and I believe it will be one of the greatest in our storied history!

NASA Remembrance Day is Jan. 27

THESE SPACEPORT employees observe the patch for Columbia mission STS-107 in the lobby of the Orbiter Support Building. Behind them is the patch for Challenger mission STS 51-L, with the Apollo 1 patch displayed around the corner.

Starting last year, Administrator Sean O'Keefe has designated the last Thursday in January as NASA Remembrance Day. This is a day for the NASA Family to take time to remember those who have died in the pursuit of exploration, and the legacy of lessons learned that they have given us so we may carry on the Vision for Space Exploration.

This year, NASA Remembrance Day is being held Jan. 27. At noon, everyone is asked to pause for one minute of silence to remember those people and their legacy.

VISION . . .

(Continued from Page 1)

ence on the Return to Flight progress. "It's an honor for me to attempt to represent the people of the Shuttle Program," he said. Kennedy also praised the thousands of NASA workers supporting the Vision, thus exemplifying "One NASA."

From Johnson Space Center in Houston, International Space Station Manager Bill Gerstenmaier reviewed the status of the Station and Expedition 10.

"We're going to learn to adapt and we're going to take that learning and adaptability and pass it on," Gerstenmaier said.

Via satellite, Jet Propulsion Laboratory Director Charles Elachi summarized the missions he leads, including Mars Exploration Rovers Spirit and Opportunity. Exploration Systems Associate Administrator Craig Steidle shared how the amazing Exploration Systems team aligns different Agency facets and uses current operations knowledge to accomplish broader exploration goals.

IMPACT . . .

(Continued from Page 1)

and evolution of the Solar System. They are composed of ice, gas and dust, primitive debris from the Solar System's distant and coldest regions that formed 4.5 billion years ago.

The management of the Deep Impact launch was the responsibility of Kennedy Space Center. Deep Impact Project Management is by NASA's Jet Propulsion Laboratory. Visit **http://www.nasa.gov/deepimpact** for details.

Recognizing Our People

Childhood dreams fuel Saucedo's success at KSC

By Jennifer Wolfinger
Staff Writer

Veronica Saucedo used childhood inspiration to launch her career in the space industry, and her out-of-this-world efforts helped her win the Employee of the Year award for her directorate.

In 1990, as a seventh-grader in Kingsville, Texas, she helped plant and monitor tomato seeds that were subjected to weightlessness and cosmic radiation for six years in space on the Space Shuttle Challenger.

"The NASA project was designed to compare the growth rates of the space seeds to regular seeds," said Saucedo, a work force analyst with Human Resources. "This project really made me take an interest in science, and it truly inspired me."

Her enthusiasm for the space program has only grown over time. The avid reader and beginner yoga student shared that she's humbled and honored by the recognition.

"I want the awesome people in my organization to know how grateful I am for all of the mentoring and coaching," she said. "I have been positively influenced by NASA's education efforts, and find myself mentoring education program students in the hopes of returning the favor."

Saucedo was recently reintroduced to the admiration felt for her childhood mentors when she met John Costulis, a Langley Research Center project manager who helped develop the Challenger payloads she contributed to more than a decade ago.

Through the Workforce Planning and Analysis Office, she examines work force data and trends to develop organization and program phasing, attrition, cost models and forecasting tools. These tools help organizations make Human Resources planning decisions to support mission objectives while working within constraints.

Some of her current projects are helping to integrate the KSC Program Operating Plan, and serving on the Agency's Workforce Integrated Management System and Competency Management System teams.

Saucedo has also grown professionally by teaming up with civil servants and contractors on the Manage To Budget Project, which automates and integrates planning tools.

VERONICA SAUCEDO, a work force analyst with Human Resources, examines data to develop forecasting tools, among other responsibilties.

"My hopes are that these efforts will contribute to the development of a management-decision support network that will help management make better-informed decisions," said Saucedo, who lives near the beach with Luis, her college sweetheart and husband of one year.

She entered her career field during her graduate co-op experience, when she decided to convert to a full-time, permanent position. "As an industrial engineer, I felt I could offer a different set of skills to the Human Resources world," Saucedo said. "The Workforce Planning and Analysis Office is a place where I can apply processing re-engineering, statistical analysis and integration concepts."

After five and a half years with NASA, she still focuses on the future by improving office processes and continuing to train for Program Project Management.

Harding known to be 'best of the best'

By Charlie Plain
Staff Writer

When a rocket launches, its success isn't just due to good engineering, but also to some of the world's best engineers.

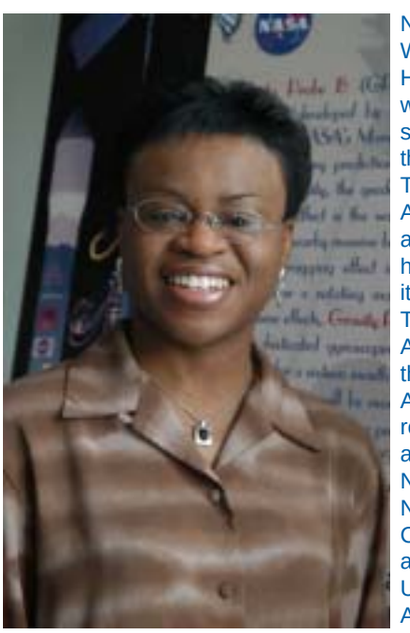
That's why NASA's Wanda Harding was recently selected by the National Technical Association (NTA) as one of six honorees for its 2004 Technical Achiever of the Year Award. This distinguished honor recognizes minority pioneers in the fields of science and technology. Harding received the award in November at the NTA's 76th National Conference at Tuskegee University in Alabama.

Kennedy Space Center Deputy Director Dr. Woodrow Whitlow nominated Harding for the award. "The technical excellence that Wanda demonstrates as a mission integration manager in our Launch Services Program and her dedicated service to the local community led me to nominate her," confirmed Whitlow.

Despite the award's prestige, the NASA manager isn't one to let the accolade go to her head. "I was humbled by the selection," said Harding.

It's Harding's job at Kennedy to ensure that spacecraft and rockets are appropriately teamed and outfitted for a perfect flight. Harding held the position for the Gravity Probe B mission launched in April.

(See HARDING, Page 7)



NASA'S WANDA HARDING was recently selected by the National Technical Association as one of six honorees for its 2004 Technical Achiever of the Year Award. She received the award at the NTA's 76th National Conference at Tuskegee University in Alabama.

Safest-ever Space Shuttle Exte

The External Tank that will hold the propellants for the Space Shuttle's Return to Flight mission has reached its final Earthly destination: Kennedy Space Center.

NASA and Lockheed Martin Corp. spent nearly two years upgrading the tank to make it safer for liftoff. The arrival of the 15-story, bronze-colored tank marks an exciting milestone in NASA's Return to Flight efforts.

"This will be the safest tank we've ever flown, no doubt about it," said Space Shuttle Program Manager Bill Parsons, who celebrated his birthday by watching the tank's arrival.

Among dozens of changes is a redesigned forward attach fitting, where the Space Shuttle orbiter connects to the tank. The new design satisfies the Columbia Accident Investigation Board's recommendation to reduce the risk to the orbiters from falling debris during the climb to space.

The Solid Rocket Booster retrieval ship *Liberty Star* towed the barge from the Michoud Assembly Plant in New Orleans to Port Canaveral early Jan. 5. Tugboats brought it through the port and up to the Launch Complex 39 Turn Basin.

The tank stayed aboard Pegasus overnight and finally rolled out onto Kennedy soil as planned at 9 a.m. Jan. 6. A crowd of eager spectators - media representatives, NASA and contractor executives and dozens of employees - gathered to watch the bulky tank emerge from the barge and begin its 30-minute trek to the neighboring Vehicle Assembly Building (VAB).

In the VAB's 50-story transfer aisle, the tank was lifted vertically and placed into a "checkout cell," where it will begin final preparations for launch. Later, Discovery will be attached to the tank and the entire assembly will make the trek to the launch pad.

A TUG
redesig
Launch

ernal Tank arrives at Kennedy

BOAT maneuvers the barge carrying the newly gned External Tank toward the dock at the n Complex 39 Area Turn Basin.

RAISED TO A VERTICAL POSITION in the Vehicle Assembly Building, the redesigned External Tank was lifted into the checkout cell, where the tank's mechanical, electrical and thermal protection systems are inspected.

'One NASA' workshop updates work force on space vision

By Linda Herridge
Staff Writer

NASA DEPUTY ADMINISTRATOR FRED GREGORY (left) moderates the panel presentation during the One NASA Leader Led Workshop about the Agency's transformation strategies. Seated at right are panel members Lynn Cline, deputy associate administrator for Space Operations; Adm. Craig Steidle, associate administrator for Exploration Systems; and Dr. Woodrow Whitlow Jr., Kennedy Space Center deputy director.

The "One NASA" Leader Led Workshop, recently held at the Kennedy Space Center Visitor Complex IMAX Theater, was an opportunity for NASA's family to learn more about the Agency's ongoing transformation activities and the Center's role in the Vision for Space Exploration.

The Dec. 16 workshop included updates from Fred Gregory, NASA deputy administrator; Rear Adm. Craig Steidle, Exploration Systems associate administrator; and Lynn Cline, Space Operations deputy associate administrator. KSC's One NASA Team hosted the event, which broadcasted on NASA TV.

KSC Deputy Director Dr. Woodrow Whitlow greeted the packed auditorium. "The Agency is undergoing lots of changes. We have a new direction that has been set forth. We have a lot of questions about where we're going and what happens next," he said.

Gregory said the Agency accomplished an amazing amount of work following the Columbia Accident Investigation Board's (CAIB) identification of NASA's technical, operational and cultural issues. He emphasized NASA is committed to responding to the 15 CAIB recommendations.

"We are caretakers of the Space Program," he said, "The Vision has given us an amazing impetus to do even greater things."

He emphasized that the first two of 18 Vision tasks are essential building blocks in fulfilling obligations to international partners and building science to move forward. The first task is Return To Flight and the second is completing the International Space Station.

Steidle said the Vision's fundamental goal is advancing U.S. scientific, security and economic interest through a robust space exploration program.

He explained Exploration Systems' objectives, which include implementing a sustained and affordable human and robotic program, extending human presence across the Solar System, promoting international and commercial participation and focusing on Space Station research to support exploration goals.

Future goals include reviewing all biological and physical research programs and undertaking lunar exploration to sustain and support human and robotic missions to the Moon. Steidle added that instrumentation was selected that fits scientific and exploration needs for a polar orbital mission.

According to Steidle, robotic missions to the Moon are planned for 2008, with human expeditions to the lunar surface as early as 2015. Future projects include human expeditions to Mars, project Prometheus (a nuclear electric propulsion and capability program), a new crew exploration vehicle and international and commercial participation.

"Last year was the year of progress, process and credibility," Steidle said. "This is the year of systems engineering integration. There's a lot of good stuff on the way."

Next, Cline spoke about transformation and applying lessons learned. "We are very much in a process of transitioning to how we do operations in the future in a different way, once we finish with this near-term focus that we have under way," she said.

Afternoon workshops addressed "Human Capital Management" with Vicki Novak, Human Resources associate administrator; "Agency Strategic and Capability Roadmaps" with Mary Kicza, Systems Integration associate deputy administrator; and "NASA Values" with Michael Bell, KSC benchmarking manager.

All of the presentations are available to the work force on the Star Alignment Team Web site at **http://www.ksc.nasa.gov/nasa-only/SAT/workshop.htm**.

STS-114's Thomas inspects new Orbiter Boom System at KSC

In the Remote Manipulator Lab inside the Vehicle Assembly Building, STS-114 Mission Specialist Andrew Thomas talks with Rafael Rodriguez, an advance systems technician with United Space Alliance, about the 50-foot-long Orbiter Boom Sensor System (OBSS) in front of them.

The OBSS will fly on Shuttle Discovery on Return to Flight mission STS-114. Thomas is in charge of operating the new system on the flight. The OBSS attaches to the end of the Shuttle's robotic arm. The system is one of the new safety measures for Return to Flight, equipping the orbiter with cameras and laser systems to inspect the Shuttle's Thermal Protection System while in space.

One NASA Peer Award honors collaboration

By Eric Barcon
Shuttle Processing

The first winners of the One NASA Peer Award have been selected for October 2004. Kennedy Space Center is honored by the demonstrated One NASA behaviors of these members of the NASA Family.

Congratulations go out to Michael Helmick of Space Gateway Support, Jay Garland of Dynamac Corporation and Patrick Whittingham and David Zorn of United Space Alliance.

What does One NASA behavior look like? Across the Agency, there are employees and contractors who make decisions for the common good, collaborate to use existing capabilities and work toward setting standards. These individuals or teams work to share lessons learned, increase collaboration and improve communication. Individuals also contribute to One NASA by creating Inter-Center Teams, inviting members from outside their home center to join existing teams and/or making important leadership decisions on behalf of the entire Agency, beyond solely what is best for their Center.

The One NASA Peer Award allows members of the NASA Family (both contractors and civil servants) to recognize and celebrate the One NASA behaviors wherever they occur.

For more information on One NASA behaviors, additional details on the selection criteria and to submit a nomination, visit the One NASA Web site at: **www.onenasa.nasa.gov**.

RECENT ONE NASA PEER AWARD winners pictured from left are: David Zorn (United Space Alliance), Patrick Wittingham (USA) and Mike Helmick (Space Gateway Support). Not shown is Jay Garland (Dynamac Corp.)

HARDING . . . *(Continued from Page 3)*

Harding's current assignment is with the Demonstration of Autonomous Rendezvous Technology (DART) mission. DART is an experiment in computer-guided spacecraft due to launch from California in spring 2005.

As a child, Harding wasn't immediately interested in aerospace. "Growing up, I wanted to either be a newscaster or concert pianist."

That all changed when she started to think about a career in engineering while enrolled in a math and science high school in Atlanta. After high school, Harding went on to earn bachelor's and master's degrees in electrical engineering from Hampton University in Virginia and the Georgia Institute of Technology, respectively.

Harding then joined the Kennedy Space Center in 1994 and began working with the International Space Station program.

Despite her achievement, being named an honoree hasn't dampened Harding's hunger to reach higher. "Receiving the award has provided [me] additional encouragement and motivation to take on new challenges," said Harding.

More than that, Harding hopes her example and success can be a source of inspiration to kids. "It's the basic 'if I can do it, so can you' philosophy" she said.

The NTA was founded in 1925 by an engineer named Charles S. Duke, who was the first African-American to receive an engineering degree from Harvard University. The association is dedicated to encouraging minority participation in science and technology.

Cape Canaveral Spaceport Management Office assists NASA and Air Force

Located in the annex building of Hangar I on Cape Canaveral Air Force Station is one of the most unique organizations in the federal government.

Referred to as the Cape Canaveral Spaceport Management Office (CCSMO), this organization is tasked with the responsibility to manage a multi-billion-dollar base support contract for NASA and the U.S. Air Force in the areas of security, infrastructure operations and maintenance, environmental services, occupational health and safety, propellants and transportation, among others.

"We really cross organizational boundaries and structures," said CCSMO Deputy Director Thomas Eye. "We have Air Force members working NASA issues and vice versa. Good working relationships have resulted from partnerships with technical experts, fund-source managers and the contractor. It really is a unique partnership."

Historically, NASA's Kennedy Space Center and the Air Force (the 45th Space Wing, including Patrick Air Force Base and Cape Canaveral Air Force Station) have had unique and separate base-support contracts, managed by agency-unique civil service and military organizational structures.

In the summer of 1997, the Joint Base Operations and Support Contract (J-BOSC) concept was born as a result of the visionary thinking of former KSC Director Roy Bridges Jr. and the 45th Space Wing Commander, Brig. Gen. Randy Starbuck, to combine the requirements of the two installations.

The CCSMO team is promoting teamwork in three distinct areas: improving and consolidating base operations and support capabilities for KSC and the 45th Space Wing facilities, normalizing operating procedures and policies between NASA and the Air Force to achieve common goals, and serving as the benchmark for joint operations.

A review of CCSMO and the J-BOSC by the National Academy of Public Administration stated the J-BOSC has performed successfully due to a a well-qualified joint government organization. So, if you see someone from CCSMO, they could be a member of the Space Wing or from KSC, but chances are you wouldn't know the difference.

Space Congress evolves into Florida Space conference

Leaders of prominent Florida space organizations recently convened at the Florida Space Authority campus in Cape Canaveral to sign a memorandum of agreement with the Space Foundation to launch the first Florida Space conference.

The conference will combine and build on the best features of previous Florida space events including Space Congress, which for the past 41 years has been a staple of the Space Coast calendar, and the Cape Canaveral Spaceport Symposium.

Both will be retired now in favor of this new event that will be held annually and operated by the Space Foundation, headquartered in Colorado Springs, Colo.

Florida Space 2005 will be presented in November. For information, visit: **http://www.spacefoundation.org**.

A signing ceremony to launch Florida Space 2005 took place at the Florida Space Authority. Those participating, from left, are Jim Banke (at podium), vice president of Florida operations for the Space Foundation; Dr. James Johnson, chairman of the Canaveral Council of Technical Societies; Col. Mark Owen, commander of the 45th Space Wing at Patrick Air Force Base; retired Navy Capt. Winston Scott, executive director of the Florida Space Authority; Dr. Woodrow Whitlow Jr., deputy director of the Kennedy Space Center; and Elliot G. Pulham, president and chief executive officer of the Space Foundation.

Lt. Gov. Jennings praises spaceport aerospace training

Florida Lt. Gov. **Toni Jennings (center)** poses with the nation's first core-certified aerospace technicians, graduates of Brevard Community College's SpaceTEC program, including **Stephen Blaschak (left)**, a United Space Alliance composite technician, and **Jeff Duncan**, a Lockheed Martin Titan launch operations mechanic.

Jennings recently visited the Cape Canaveral Spaceport, where she praised the SpaceTEC program as a national model for aerospace technician training.

She also announced a $102.8 million increase in proposed funding for job training programs, ranging from aerospace to homeland security. Increasingly high-paying, high-skill jobs will be available that don't require a bachelor's degree, but do require secondary education and specialized training, Jennings said.

The SpaceTEC program was developed in 2000 after a statewide summit of space industry representatives decided training was needed to replace an aging work force of aerospace technicians.

KSC All Hands update scheduled Feb. 10

You won't want to miss Kennedy Space Center Director Jim Kennedy's All Hands meeting at 9:30 a.m. Feb. 10 in the Training Auditorium. The director will talk about the major events from 2004 and where the Center stands regarding the Space Shuttle's Return to Flight.

Watch the meeting on NASA TV, channel 7, or the KSC internal home page at **http://www.ksc.nasa.gov/nasa-only/internal.html**. Seating allocations will be made by each directorate's management. Look for details in *Countdown* and *KSC Daily News*.

John F. Kennedy Space Center

Spaceport News

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