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NASA Administrator views AJ26 engine test

NASA Administrator Charles Bolden (I) and Stennis Space Center Director Patrick Scheuermann watch the successful test of the first Aerojet AJ26 flight engine Feb. 7. The 53-second test was conducted on the E-1 Test Stand at Stennis. The engine now will be removed from the test stand and sent to Wallops Flight Facility in Virginia. There, it will be used to power the first stage of Orbital Sciences Corporation's Taurus II space vehicle.

See page 3 article

Stennis hosts NASA Day at the Capitol

Stephens tennis Space Center representatives visited Jackson on Feb. 10, to meet with Mississippi legislators as part of the 2011 NASA Day at the Capitol.

Astronaut Steven Swanson joined the Stennis representatives to thank Mississippi legislators for their continued support of NASA.

Stennis officials displayed exhibits highlighting the center's important role in the past, present and future of America's space program, and its positive effect on surrounding communities and on Mississippi's economy and quality of life. They also focused on the end of NASA's Space Shuttle Program, scheduled for later this year, as well as Stennis' 50th anniversary celebration as the nation's premier rocket engine test facility.



Astronaut Steven Swanson (front) speaks to members of the Mississippi Senate in chambers, with Lt. Gov. Phil Bryant presiding (rear), during NASA Day at the Capitol in Jackson on Feb. 10. Swanson was joined at the podium by Sen. David Baria, D-Bay St. Louis (I to r), NASA Shared Services Center Executive Director Rick Arbuthnot, Stennis Director Patrick Scheuermann, Sen. Ezell Lee, D-Picayune, and Sen. Billy Hewes, R-Gulfport. Baria, Lee and Hewes all are members of the Mississippi Senate Gulf Coast delegation.

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From the desk of

Jim

Bevis Chief Financial Officer Stennis Space Center



reetings from the budget and finance world! The new calendar year is just starting, but the fiscal year is well under way. As of this writing, we are still under a federal budget continuing resolution (CR) through March 4 and may remain under a CR for the entire year. This freezes NASA at fiscal year 2010 spending levels, several hundred million dollars below our \$19 billion request.

Once the U.S. House Budget Committee sets a new fiscal year 2011 discretionary spending cap, House non-security subcommittees will receive spending reduction targets. While lowering non-security discretionary spending to fiscal 2008 levels would be considered a major victory by Republicans, the White House and Senate Democrats are unlikely to go along with the House proposal. This debate will be very interesting in light of the upcoming vote to raise the nation's debt ceiling.

While not alone in terms of facing potential budget reductions, NASA's situation is particularly challenging as we complete space shuttle operations while forging a new pathway beyond low-Earth orbit (LEO) in accordance with the president's new Vision for Human Exploration. However, as Stennis Director Patrick Scheuermann reminds us, we have just cause for optimism despite these uncertainties.

Regardless of what new architecture the agency and its commercial partners will develop, Stennis' role in large-scale chemical propulsion system development and certification remains secure. Thus, we will continue to be a key player in the agency's subsequent return to LEO – and beyond!

In consideration of all the above, perhaps it is the time to ask ourselves some fundamental questions: Why do we work for NASA? What motivates us in light of the many challenges we face?

As a child growing up in the Apollo era, I was enthralled at the prospect of being part of something that excited the imagination, engaged the public and pushed the frontiers of human existence. When the opportunity arose, I jumped at the chance to be part of this agency. Now, 30 years hence, I have no regrets. It's been an experience I love to share with friends, family and colleagues. I'm certain the future holds as many exciting prospects as the past, and I look forward to the challenges that lie ahead. Without doubt, the Stennis team is ready and eager to meet the demands of a changing environment. Rest assured, we will once again prove that, despite our relatively small size, we are truly capable of achieving great things!

All the best.

Jim Bevis



Mississippi congressman visits Stennis

Stennis Space Center Director Patrick Scheuermann (left) and Deputy Director Rick Gilbrech (third from left) host U.S. Rep. Steven Palazzo, R-Miss. (second from left), during a tour of the A-3 Test Stand under construction at Stennis Space Center. Palazzo visited the south Mississippi engine test center on Feb. 1. During his visit, Palazzo was briefed on various test activities, including the AJ26 commercial rocket engine test partnership under way at Stennis. Palazzo is serving his first term in Congress and recently was chosen to chair the U.S. House Subcommittee on Space and Aeronautics, a key congressional body that will determine the future of the nation's space program. Palazzo was joined on his visit by staff member Jamie Miller (far right).

FULFILLING NASA'S EXPLORATION MISSION

Stennis tests first AJ26 flight engine

ASA conducted a test fire Feb. 7 of the first Aerojet AJ26 flight engine that will power the first stage of Orbital Sciences Corporation's Taurus II space launch vehicle, marking the beginning of planned "acceptance testing" for the space flight partnership.

NASA Administrator Charles Bolden, NASA Assistant Administrator for Exploration Systems Mission Directorate Doug Cooke and executives for Orbital and Aerojet visited Stennis to view the test, which supports NASA's commitment to partner with companies to provide commercial cargo flights to the International Space Station. NASA has partnered with Orbital as part of the agency's ongoing Commercial Orbital Transportation Services initiative. Orbital is scheduled to carry out the first of eight cargo missions in early 2012.

Prior to Monday's test, a team of Orbital, Aerojet and Stennis engineers performed a pair of initial tests on AJ26 engine No. 1. The AJ26 engine used in that testing was removed from the E-1 Test Stand at Stennis on Jan. 24. It is being refurbished



NASA Administrator Charles Bolden speaks with reporters following the successful test of the Aerojet AJ26 engine at Stennis Space Center on Feb. 7. He is joined by: (r to I) Stennis director Patrick Scheuermann, NASA Assistant Administrator for Exploration Systems Mission Directorate Doug Cooke, Orbital Sciences Corporation President J.R. Thompson, and Aerojet President Scott Seymour. They are standing in front of AJ26 engine No. 1 tested earlier at Stennis.

at Aerojet facilities in Sacramento, Calif., to be used on an upcoming Taurus II mission.

The same day engine No. 1 was removed, the first flight engine was installed. Following its successful test firing on Feb. 7, the engine will be removed and sent to the Wallops Flight Facility launch site in Virginia. "The AJ26 test marks yet another milestone in what is proving to be a very successful NASA partnership with Orbital Sciences," Stennis Director Patrick Scheuermann said. "We are excited to be a part of enabling historic commercial cargo flights to the International Space Station and of supporting the nation's continuing space flight efforts."

Discovery rolls out for STS-133 launch



Space shuttle Discovery arrived at Launch Pad 39A from the Vehicle Assembly Building at NASA's Kennedy Space Center in Florida on Feb. 1. It took the shuttle, attached to its external fuel tank, twin solid rocket boosters and mobile launcher platform, about seven hours to complete the move atop a crawler-transporter. This is the second time Discovery has rolled out to the pad for the STS-133 mission, and comes after a thorough check and modifications to the shuttle's external tank. Concerns with the external tank caused a delay of the STS-133 mission in November. Discovery is now targeted for launch Feb. 24, when an 11-day window will be available. Discovery will deliver and install the Permanent Multi-purpose Module, the Express Logistics Carrier 4 and provide critical spare components to the International Space Station.

'Moon tree' planted at INFINITY site

or Rosemary Roosa and Fred Haise, planting a "moon tree" at the INFINITY at NASA Stennis Space Center site on the Apollo 14 mission's 40th anniversary, had very personal meaning.

Roosa and students from four area schools planted the sycamore "moon tree" during a Feb. 3 ceremony celebrating the anniversary of the Apollo 14 lunar mission. The event was attended by dozens of guests, as well as students from Nicholson Elementary School, Picayune; and Our Lady Academy, Bay High School and St. Stanislaus High School, all in Bay St. Louis.

"Moon trees" exist at all because of Roosa's father, Stuart, who was command module pilot on the Apollo 14 mission in early 1971. Prior to becoming a pilot and an astronaut, Stuart Roosa, an Oklahoma native and a longtime Gulf Coast resident, worked for the U.S. Forest Service as a smoke jumper. He maintained connection with the agency throughout his career and was determined to fly something honoring it into space. When the Apollo 14 mission launched on Jan. 31, 1971, Roosa carried about 500 tree seeds of different varieties on the flight.

Upon return to Earth, the seeds were germinated by the Forest Service at stations in Gulfport, Miss., and Placerville, Calif. About 450

germinated. The sycamore, pine, sweetgum, redwood and Douglas fir seedlings were planted at numerous locations across the United States, including several in Louisiana and Mississippi.

"He had a love for trees and the woods," Rosemary Roosa said of her father, who died in 1994. "He had a lot of vision to take seeds with him on his mission. They really are a living legacy to him."

> For Haise, Stuart's mission on Apollo 14 had particular significance. Haise, a native of Biloxi, was lunar module pilot on the Apollo 13 mission in 1970. An onboard explosion days into the flight crippled the Apollo 13 spacecraft and forced a perilous return to Earth for the crew.

The aborted lunar mission of the Apollo 13 crew then fell to Roosa and the Apollo 14 crew to fulfill. In early 1971, the Apollo 14 crew landed at the site originally planned for the earlier mission and conducted the scheduled experiments. To assist in that effort, Haise volunteered as capsule communicator during the Apollo 14 lunar landing and the second extravehicular activity onto the surface of the moon. In that role, Haise had sole responsibility for communicating from ground control to the Apollo 14 astronauts during the assigned activities. Later, Haise also would work closely with Roosa as a fellow member of the Apollo 16 backup crew.

"I thought Stu had an out-ofthis-world idea to fly a number of

different types of seeds on the flight," Haise said. "Now, the sycamore tree we plant here will be an inspiration for many years of the Apollo lunar missions and of what our nation can accomplish."

Partners for Stennis members recognized for service

hirty-one persons were recognized Jan. 12 for longstanding support to NASA and Stennis Space Center through their leadership in Partners for Stennis. Partners for Stennis is a group of volunteer leaders formed 15 years ago to promote the growth of the Stennis federal city.

Each person received a framed photo

collage with a citation of appreciation signed by Stennis Director Patrick Scheuermann and a small state flag flown aboard a space shuttle mission.

Honorees were: (Louisiana) Irma Cry, Clay Harper, Roy Keller, Ned Peak, Brenda Reine, Lee Reid and Al Watkins; (Mississippi) Larry Barnett, Chuck Benvenutti, Martin Berry,

Marc Bonis, Freida Dobson, Latonja Ervin, Dave Geiger, Allen Goff, John Harral, Jerry Hemphill, Greg Hinkebein, Randy Holland, Sherrell Johnson, Cindy Vernon-Knoblock, David Mauffray, John Ritten, Bill Stallworth, Joe Swaykos, Dave Treutel, Chuck Ueltschey, Clay Wagner, Hal Walters, Tish Williams and Glade Woods.

Apollo 13 astronaut Fred Haise stands with Rosemary Roosa, daughter of late Apollo 14 astronaut Stuart, beside a "moon tree" planted at the INFIN-ITY science center on Feb. 3. The moon tree is a descendent of seeds carried into space by Stuart

Roosa on the Apollo 14 mission in 1971.



February 2011

NASA launches new health records system

ASA officials took a major step toward fulfilling a longstanding federal vision Feb. 4 with the rollout of an electronic health records system (EHRS) at Stennis Space Center.

In doing so, NASA moved toward fully realizing a goal of the last three presidential administrations and became the first federal agency without health care in its charter to implement an EHRS. Now in place at Stennis, the system will be implemented at other NASA centers during the next 18 months.

"We are proud to lead the way for this important step forward in healthcare delivery and reform," Stennis Director Patrick Scheuermann said. "Employees at Stennis and across the NASA agency will benefit from implementation of this electronic system with more efficient delivery of quality health care."

The federal push for electronic health record systems began in 2002, with a goal of full EHRS adoption by 2014. In 2003, a study by the NASA Office of the Chief Health and Medical Officer (OCHMO) showed the agency would best be served by using a commercial, off-the-shelf EHRS. A 2005 review found NASA's occupational health preventive programs to be excellent but also recommended the agency have a single health-risk assessment tool.

In 2007, NASA officials decided to use Medgate software, and OCHMO initiated certification and authentication testing. It also selected the Mayo Clinic Health Risk Assessment tool for use agencywide as recommended and chose Stennis for its EHRS rollout. The rollout was



Participants in the rollout of NASA's new electronic health records system at Stennis Space Center on Feb. 4 included: (I to r) Dr. Richard Williams, NASA chief health and medical officer; Cathy Angotti, NASA director of occupational health; Linda Cureton, NASA chief information officer; Clyde Dease, medical technical representative for the Stennis contracting officer; and Gay Irby, Stennis deputy director of center operations.

scheduled for 2010; however, a delay until 2011 allowed NASA to upgrade to the newer Medgate software.

The impact of the new system may not be obvious to employees but will be significant, said Vincent Michaud, OCHMO director of medicine in extreme environments. "It will allow better monitoring of the health care delivered to patients because all of their information will be readily available for doctors to use," he said. "Also, the system provides great portability, so if a Stennis employee finds himself or herself at Kennedy Space Center and in need of a doctor, his or her medical records will be immediately accessible to ensure quality care is delivered."



Stennis remembers fallen astronauts

Stennis Space Center Director Patrick Scheuermann (left) and Deputy Director Rick Gilbrech observe a time of silence Jan. 27 in front of a wreath in memory of the 17 astronauts lost in service of the American space program since 1967. The wreath was placed during NASA's 2011 Day of Remembrance, which is observed each year on the last Thursday of January. The annual observance memorializes the three astronauts lost in the Apollo 1 launch pad fire in 1967, the seven astronauts lost in the Challenger tragedy in 1986 and the seven astronauts lost in the Columbia accident in 2003. Scheuermann praised the fallen astronauts, emphasizing to facility employees gathered for the ceremony that "all of humanity has benefited from their courage and devotion."

Apollo 11 second-stage rocket leaves Stennis

Note: John C. Stennis Space Center has played a pivotal role in the success of NASA's and the nation's space program. This month, Lagniappe looks back on an important moment in the rocket engine testing center's history.

orty-two years ago on Feb. 1, 1969, an Apollo Saturn V second stage rocket (S-II-6) departed Stennis Space Center for its last earthly destination to NASA's Kennedy Space Center in Florida.

The S-II was manufactured by North American Aviation at Seal Beach, Calif. Too large to be transported by road or highway, its size also ruled out shipment by air. Water transportation became the only feasible means of transporting the mammoth rocket stages needed to carry humans to the moon.

The 81-foot-long, one millionpound-thrust, liquid hydrogen rocket was captive fired and flight certified at the Mississippi site. The Saturn V vehicle that left Stennis 42 years ago this month was used on the Apollo 11 mission, the first trip to the moon's surface. The S-IC first



A second stage Saturn V rocket is shown leaving the Vertical Checkout Building at NASA's Mississippi Test Facility, known today as Stennis Space Center, on Feb. 1, 1969. The stage was used on the Apollo 11 mission, the first to land astronauts on the surface of the moon.

> stage booster for Apollo 11 was also acceptance tested at the Mississippi rocket proving ground.

Other February historical events and milestones during Stennis Space Center's 50-year history include:

23 years ago

Feb. 25, 1988 - National Space Technology Laboratories (now Stennis Space Center) conducts its 1,000th test firing of a space shuttle main engine.

14 years ago

Feb. 21, 1997 - Stennis Space Center is designated as NASA's lead center for implementing commercial remote sensing.

10 years ago

Feb. 14, 2001 – As part of NASA's Advanced Space Transportation Program, ground is broken to construct a facility for testing rocket-based combined cycle engines.

Five years ago

Feb. 24, 2006 - NASA Shared Services Center breaks ground at Stennis Space Center.

One year ago

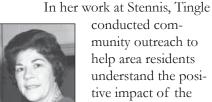
Feb. 24, 2010 - Stennis Space Center unveils a partnership with Orbital Sciences Corporation to test AJ26 engines to power commercial cargo transport flights to the International Space Station.

1st Stennis employee remembered

argaret A. (Mc-Cormick) Tingle, the first employee hired at NASA's John C.

Stennis Space Center, passed away Jan. 13, 2011 at Fairfax (Va.) Nursing Home. She was 92.

Tingle was proud to have served the federal government. Her first full day at Stennis Space Center, then known as Mississippi Test Operations, was Nov. 20, 1962, the day the American flag and NASA's



facility.

conducted community outreach to help area residents understand the positive impact of the NASA installation. She spoke of her experiences often.

colors were first raised at the

Tingle was preceded in death by her husband and six siblings. She is survived by two children. She is interned at Long Beach City Cemetery.



Stennis employee receives award

Stennis Space Center Director Patrick Scheuermann presents the Stennis Diversity Council Most Valuable Professional Award to Lakeisha Robertson on Dec. 8. Robertson is an employee with the Environmental Protection Agency's Gulf of Mexico Program at Stennis. She received the MVP Award for her volunteer spirit, dedication and service. Scheuermann was joined in presenting the award by Gloria Car, deputy director of the Gulf of Mexico Program.

Office of Diversity and Equal Opportunity

'Four Layers of Diversity' a useful tool

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ith rollout of NASA's Diversity & Inclusion Initiative, from time to time, the Office of Diversity and Equal Opportunity will offer tools and information to enhance our workforce's understanding of the benefits it affords to the center and agency.

The usefulness of the accompanying model is that it includes the dimensions that shape and impact both the • Think about those you have difficulty accepting in other people. Which factors do you make snap judgments on? Which influence your decisions at work in a negative manner? Which factors cause you to try to avoid contact with others?

• To explore your values as a manager, create a list with

the names of your staff members on it. Next to each person's name, write some of the factors from the dimensions that you are both aware of and those you assume to be true about the person. For example - Ruben: Hispanic, middle-class, college degree, single, Catholic. You can select different factors for each person. Ask yourself: how do I treat this person differently, both in a positive and a negative

manner, based on what I know, or the assumptions I am making? Where are my biases coming out?

A manager who wants to

understand diversity and be an effective manager of a diverse team needs to pay attention to all these layers of diversity with the goals of using both differences and similarities to enrich the work environment and bring us closer to our mission. Only then can we benefit from the best each employee has to offer.

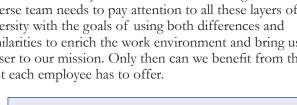
Hail & Farewell

NASA bids farewell to the following:

Daniel Brady AST, Facility Systems Safety Office of Safety & Mission Assurance

And welcomes the following:

Kathy Hinds Management support assistant Project Directorate Charles Johnson AST, Propulsion Systems & Tech Engineering & Test Directorate Christina Zeringue AST, Facility Systems Safety Office of Safety & Mission Assurance Karen Robinson AST, Facility Systems Safety Office of Safety & Mission Assurance





Stennis observes MLK Jr. Day Stennis Space Center employees observed Martin Luther King Jr. Day with a focus on service during a Jan. 13 ceremony onsite. The Stennis program focused on the 2011 theme of "Remember. Celebrate. Act." Participants included (I to r): speaker Lionel Hicks, Slidell (La.) City Council member; Stennis Director Patrick Scheuermann; speaker "Rip" Daniels, CEO/ manager of WJZD radio in Gulfport; and Capt. David Walsh with the U.S. Naval Oceanographic Operations Center.

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Organizational Dimension Occupation External Dimensions Home Geographic Location Wolk Selections Mainal Internal Dimensio Status Age Manage, Parental personal $R_{A_{C_o}}$ Habits Status Personality Affiliation (SIC)HUNDA Ability 6µAzic9 * OM Punoubyce8 Education MOUK TOCHLON Vinoin

individual and the organization. While the "Internal Dimensions" receive primary attention in successful diversity initiatives, the "External" and "Organizational" dimensions often determine the way people are treated, who "fits" or not in a department, who

gets the opportunity for development or promotion, and who gets recognized.

"The Four Layers of Diversity" is not only a useful model, but can be used as a teaching tool as well. To develop your own under-

standing of the impact of diversity on your life, try using the Four Layers as a reflective tool:

• Read over the factors on the four dimensions. Think about how the various factors influenced the choices and decisions made up to this point in your career.

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Stennis conducts educator workshop

Middle school teachers from across Louisiana participate in a hands-on activity during a professional development workshop at Louisiana State University in Baton Rouge on Jan. 22, 2011. Fifty-five participated in the workshop, which was hosted by the Stennis Education Office in collaboration with NASA's Exploration Systems Mission Directorate, the Louisiana Department of Education and LSU. During the workshop, Stennis specialists presented hands-on, problem-based learning and technology-based activities teachers can use in their classrooms to promote interest in areas of science, technology, engineering and mathematics. Workshop sessions also highlighted "Spaced Out Sports" and "Mass vs. Weight" curricula recently developed at Stennis, robotics and NASA education programs and resources. Educators received Continuing Learning Units, stipends, and NASA education materials and resources.

Scholarship deadline set

The NASA College Scholarship Fund has announced its 2011 agencywide call for applications. The NCSF program awards scholarships to qualified dependents of former and current NASA employees.

During this 29th year of the program, up to six scholarships will be awarded in the amount of \$2,000 each. Each scholarship is renewable for a maximum of \$8,000 over a period of six calendar years. Deadline for applications is March 31.

Applicants must have a high school diploma or be enrolled in college. An applicant must have a combined high school and college grade point average of 2.5 or greater on a 4.0 scale.

Information and materials are available at http://nasapeople. nasa.gov/nasascholarship/index.htm. For additional details, call Joy Smith, program manager, at 228-688-2118.



USRP students begin term

Three NASA Undergraduate Student Research Program interns recently arrived for a 15-week term working with research and engineering mentors at Stennis Space Center. They are (I to r): Linamaria Perez from the University of Puerto Rico in Mayaguez; Ryan Nazaretian from Mississippi State University in Starkville; and Clara Cruz from the University of Puerto Rico in Rio Piedras.