



National Aeronautics and Space Administration



# LAGNIAPPE

John C. Stennis Space Center

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[www.nasa.gov/centers/stennis](http://www.nasa.gov/centers/stennis)

February 2010

## NASA faces ‘culture change’

NASA faces a “huge culture change, a huge paradigm shift” with release of President Barack Obama’s proposed budget for fiscal year 2011, Stennis Space Center Director Gene Goldman acknowledged during a Feb. 1 All Hands session for employees.

The proposed budget would increase agency funding by \$6 billion during the next five years and extend U.S. involvement in the International Space Station until at least 2020. However, it would end the Constellation Program, NASA’s 2004 plan to go back to the moon and possibly beyond. The proposed budget offers a new vision of the space agency working with commercial interests to develop space travel capabilities. NASA also will sharpen its focus on climate and science studies.



NASA Administrator Charles Bolden discusses the new direction of NASA, as set forth in the president’s proposed 2011 budget, during an appearance at the National Press Club in Washington, D.C., on Feb. 2.

“Today we are launching a bold and ambitious new space  
See **BUDGET**, page 5



### STS-129 crew visits Stennis

Members of the STS-129 space shuttle crew visited Stennis Space Center on Jan. 19 to share details of their November visit to the International Space Station. During their 11-day mission aboard shuttle Atlantis, crew members delivered equipment, supplies and spare parts to the ISS. Following their mission report, the astronauts traded commemorative plaques with Stennis Space Center Director Gene Goldman (center). Astronauts visiting Stennis were (l to r) Pilot Barry Wilmore, Mission Specialist Randy Bresnik, Commander Charles Hobaugh and Mission Specialists Mike Foreman and Robert Satcher.



### STS-130 mission under way

Space shuttle Endeavour launched in the early morning Feb. 8 to begin a 12-day mission to the International Space Station. During the mission, the six-member Endeavour crew will deliver a third connecting module – the Tranquility node – which will increase the space station’s interior space for crew members and many life support and environmental control systems. Attached to Tranquility is a cupola, a robotic control station with seven windows to provide a panoramic view of Earth, celestial objects and visiting spacecrafts. The mission features three planned spacewalks.

From the desk of  
**Gene Goldman**  
 Director  
 Stennis Space Center



*"How does it all turn out?"  
 "I don't know. It's a mystery."  
 (Shakespeare in Love," 2000)*

The president's budget request was released Feb. 1, adding \$6 billion to the NASA budget. In addition, it called for cancellation of the Constellation Program to "enable the agency to embark on an ambitious 21st century program of human space exploration." To many, it will be viewed as another change. Change ... our only constant.

There are a lot of things we don't know about what this change will bring. What programs will we test here? What will be the effects on the workforce? Will we finish the A-3 Test Stand? We already knew the Shuttle Program would be ending this year, following five remaining flights. We know preparations are nearing completion to test Orbital Science's AJ26 engines in E-Complex, exactly the type of collaboration with industry the budget request proposes. We know we have ongoing Earth science work, and increased climate studies are also included. Unknowns and challenges, all

offering significant opportunities.

At Stennis, our job is learning "what we don't know." The transition of space operations from NASA-managed to commercial interests is a huge challenge, but one to which we bring extensive experience. The budget includes \$3 billion for development of propulsion technology, including heavy lift space vehicle capabilities. I think these initiatives are an exact match with our capabilities.

When President John F. Kennedy challenged this country to go to the moon in 1961, we hadn't even been to orbit. Getting there was still very much a dream, but with a deadline. Those dreamers wrote the book on getting to space. Then, President Richard Nixon ended the Apollo Program, relegating three completed lunar flight sets of hardware to rust and eventual museums. The Shuttle Program is ending, with a completed, wondrous and truly International Space Station for at least 10 more years. These programs have been amazing chapters in space exploration. Quoting Gen. Charles Bolden, our NASA administrator, "In these challenging economic times, this budget request demonstrates the great confidence that the president has in NASA to contribute to our highest goals." Our highest goals. As Bob Seger sings, let's "Turn the Page."

Dream even bigger; work even harder!

*Gene*

## Mississippi officials visit Stennis

Tupelo Mayor Jack Reed Jr. (l to r), Mississippi Gov. Haley Barbour and Gulfport Mayor George Schloegel visited Stennis Space Center on Jan. 26 in conjunction with a visit by members of the World Presidents' Organization. (See page 4 article and photos) Barbour spoke to the visiting presidents, while Reed and Schloegel joined the group during a daylong tour of the NASA facility. Reed and Schloegel were part of the committee that arranged the Stennis visit for the WPO group. The World Presidents' Organization is a global group of more than 4,600 business leaders who are or have been chief executive officers of major companies and who are "graduates" of the Young Presidents' Organization. Barbour and the visiting mayors are shown in StenniSphere, the space center's visitors center and museum.



## FULFILLING NASA'S EXPLORATION MISSION

## A-1 Test Stand work continues



(Top photo) A structural steel beam to support the new thrust measurement system on the A-1 Test Stand at Stennis Space Center is lifted to waiting employees for installation. Four such beams have been installed in preparation for placement of the new measurement system in upcoming weeks.

(Right photo) Stennis employees prepare to maneuver a structural steel beam into place on the A-1 Test Stand on Jan. 13. The beams are needed to support a new thrust measurement system being installed on the stand for future rocket engine testing.



Stennis Space Center employees began installing the new thrust measurement system at the A-1 Test Stand last month, another step in preparing for testing the next generation of rocket engines at the site.

Large steel beams were lifted into place and installed as part of work on the thrust takeout system that will support the mea-

surement system. Work to install the measurement apparatus itself is set to begin in upcoming weeks.

The procedure was intricate, with employees maneuvering the large pre-fabricated steel beams through the center of the stand with just two inches of clearance on each side.

The new thrust measurement system represents a

state-of-the-art upgrade from the equipment installed more than 40 years ago. The 102,000-pound system was fabricated by Force Measurement Systems in Illinois at a cost of about \$3.5 million.

Installation of the new thrust measurement system is part of ongoing upgrade and maintenance work being done on the A-1 Test Stand.

## 2010 launch schedule

**GOES-P****satellite (Delta IV)**

Target: March 1, 2010

Web information:

[www.nasa.gov/topics/earth/features/goesp-kennedy.html](http://www.nasa.gov/topics/earth/features/goesp-kennedy.html)

**STS-131**

Shuttle Discovery

Target: March 18, 2010

Web information:

[www.nasa.gov/mis-sion\\_pages/shuttle/shuttlemissions/sts131/index.html](http://www.nasa.gov/mis-sion_pages/shuttle/shuttlemissions/sts131/index.html)

**STS-132**

Shuttle Atlantis

Target: May 14, 2010

Web information:

[www.nasa.gov/mis-sion\\_pages/shuttle/shuttlemissions/sts132/index.html](http://www.nasa.gov/mis-sion_pages/shuttle/shuttlemissions/sts132/index.html)

**STS-134**

Shuttle Endeavour

Target: July 29, 2010

Web information:

[www.nasa.gov/mis-sion\\_pages/shuttle/shuttlemissions/sts134/index.html](http://www.nasa.gov/mis-sion_pages/shuttle/shuttlemissions/sts134/index.html)

**STS-133**

Shuttle Discovery

Target: Sept. 16, 2010

Web information:

[www.nasa.gov/mis-sion\\_pages/shuttle/shuttlemissions/sts133/index.html](http://www.nasa.gov/mis-sion_pages/shuttle/shuttlemissions/sts133/index.html)

# Business leaders visit Stennis

Corporate leaders from several states spent Jan. 26 touring Stennis Space Center as part of a visit by a World Presidents' Organization group.

WPO is a global organization of more than 4,600 business leaders who are or have been chief executive officers of major companies and who are "graduates" of the Young Presidents' Organization.

"It was exciting to have the opportunity to host so many proven corporate leaders," said Deputy Director Patrick Scheuermann, who welcomed the group to Stennis. "This really was a rare opportunity to let them know firsthand the vital work Stennis does in this nation's space program and in so many other ways. Now, they will

go back and share the excitement of the Stennis story with others."

The leaders were hosted by Gulfport Mayor George Schloegel and also were greeted by Mississippi Gov. Haley Barbour in a morning session. They had an opportunity to hear and meet Apollo 13 astronaut Fred Haise, a native of nearby Biloxi. They also learned about ongoing work and future plans at the space facility.

However, much of the day was spent touring Stennis facilities. The visitors toured the A-2 Test Stand, viewed work on the new A-3 Test Stand being built to provide high-altitude testing of rocket engines, visited rocket engine assembly facilities, toured a 3-D visualization lab and rode on the Navy's elite riverine training boats.



(Top photo) Apollo 13 astronaut Fred Haise speaks to WPO participants.

(Bottom left photo) WPO visitors enjoy a ride on the Navy's elite riverine training boats.

(Bottom right photo) A WPO participant tries his hand at "landing" the shuttle at StenniSphere.



## AGT earns contractor award

Stennis Space Center Director Gene Goldman (left) presents the site's first-ever Contractor Excellence Award to AI Watkins, program manager for Applied Geo Technologies Inc. The Stennis award was established in 2008 to recognize contractors, subcontractors or providers for outstanding performance during a three-year period. Criteria for selection include such things as quality performance, safety record, timeliness and cost efficiency. AGT earned the award for its work under the center's Laboratory Services Contract. Goldman praised the company for its performance, especially noting its budget efficiency and stellar safety record. He noted the company was the first at Stennis to gain Star Demonstration status under the Occupational Safety and Health Administration's Voluntary Protection Programs safety initiative. AGT has gone three years without a single OSHA recordable incident.



## Stennis observes annual Day of Remembrance

Stennis Space Center Deputy Director Patrick Scheuermann (left) and Associate Director Rick Gilbrech place 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 2010 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. During the Stennis observance, Scheuermann praised the fallen astronauts as "brave space pioneers who gave their lives in the cause of exploration and discovery."

## BUDGET

Continued from page 5

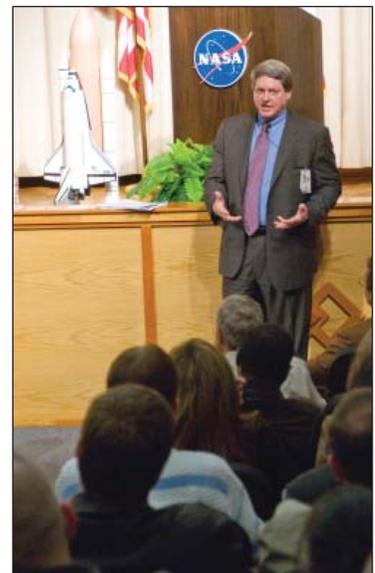
initiative to enable us to explore new worlds, develop more innovative technologies, foster new industries, increase our understanding of the earth, expand our presence in the solar system, and inspire the next generation of explorers," NASA Administrator Charles Bolden said following release of the president's budget.

In his All Hands session, Goldman stressed that Stennis is positioned well for the new direction because it has an active Applied Science and Technology Project Office, has worked closely with commercial interests for more than a decade and has established itself as a world-class rocket engine test facility unlike any in the country.

"Stennis has a long history of testing for commercial entities, including the current, major E Complex test program with Orbital Sciences Corporation," Goldman

said. "We are very well postured for this evolution in space policy."

A NASA Headquarters release echoed the assessment. "Stennis Space Center's unique capabilities and rocket engine test facilities will still be needed as part of the new initiative in heavy-lift (space vehicle) propulsion research and development..." it said. "Stennis will continue to play a robust role in rocket propulsion testing well into the future."



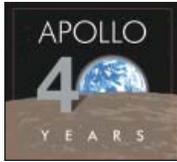
Stennis Space Center Director Gene Goldman speaks with employees during a Feb. 1 All Hands session.

# NASA honors Stennis employees

NASA John C. Stennis Space Center and NASA Shared Services Center employees recently were honored by NASA's Space Flight Awareness program for contributions to flight safety. The awards were presented by Stennis Deputy Director Patrick Scheuermann and NSSC Executive Director Rick Arbutnot during a Feb. 3 ceremony. Pictured are: (seated, l to r) Cindy Mroueh (NASA Shared Services Center), Cindy Milligan (Lockheed Martin Information & Global Services), Wendy Houser (NASA), Robert Knight (Pratt & Whitney Rocketdyne), LaTonya Senegal (Pratt & Whitney Rocketdyne) and Lisa Subat (Jacobs Technology NASA Test Operations Group); (standing, l to r) Scheuermann, Kirk Foster (Applied Geo Technologies Inc.), Ronnie Byrd (NASA), Eddie Drago (Bastion Technologies), Jim Williams (Jacobs Technology NASA Test Operations Group), Roger Flynt (Pratt & Whitney Rocketdyne), Curtis Hyatt (Jacobs Technology Facility Operating Services Contract Group), Delton Bales (Pratt & Whitney Rocketdyne), Don Woodman (CSC Inc.), Frank Lorusso (Jacobs Technology Facility Operating Services Contract Group) and Arbutnot..



# Historic photo shows early work at Stennis



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

While many African Americans have made great contributions to the American space program, Wardell Burnett made his historical mark at Stennis Space Center in a famous photo.

Burnett (left) described the historic moment in 1987. "We were working with mules brought in because we could plow with them where we couldn't use a tractor, and one day, NASA sent someone to take our picture. Now, you see the picture all over the site."

The Associated Press released the photo to media worldwide. It shows Burnett



and a co-worker using a mule to plow in front of the newly constructed B-1/B-2 Test Stand.

Burnett began work at Stennis in 1962. "When I first came here, the land and site had to be made," he said in 1999. "I couldn't imagine all that they were going to do."

Burnett was present for many "firsts," including the first test firing. "It was great," he said. "I watch the space shuttle launches on television and feel like I have a part in all of it." Before Burnett retired from Stennis on April 30, 2004, he also witnessed other space "firsts" recognized during this Black History Month – the first African American in space, Guion Bluford; the first African-American woman in space, Mae Jemison; the first African American to command a space shuttle mission, Col. Frederick Gregory; and the first African American to walk in space, Bernard Harris.

## Astro Camp, Astro STARS sessions set

Astro Camp participants will enjoy a "voyage" through the solar system and into outer space during a series of summer sessions (or missions). It all is part of the 2010 Astro Camp theme – "Solar System Voyagers: Outer Space's Cool Places."

Voyagers ages 7-12 will engage in hands-on activities designed to bring celestial bodies closer and discover their special traits. Sessions for children ages 7-9 are scheduled for June 1-5, June 7-11, June 14-18, June 21-25 and July 12-16. Sessions for children ages 10-12 are set for June 14-18, June 21-25, June 28-July 2 and July 19-23.

A new science/technology camp for 13-15 year olds will be offered June 28-July 2. Astro STARS (Spaceflight, Technology, Astronomy & Robotics @ Stennis) participants will engage in hands-on experiences in Web design, digital imaging and multistage model rocketry; will build a replica of Galileo's first telescope; and will program and operate the Tetrix robotics platform.

Session fees are \$150 per person for Astro Camp and \$180 for Astro STARS. For registration forms, visit <http://education.ssc.nasa.gov/astrocampschedule.asp>. For details, call 228-688-7623 or 800-237-1821, Option 4.

### @ Stennis

#### What is your initial reaction to the new direction for NASA set forth in the president's proposed 2011 budget?

**Editor's Note:** @ Stennis highlights the views and opinions of Stennis Space Center employees.



"I was disappointed. I think it's a step back when we should be moving forward."

**Diane Altzman**  
EPA Gulf of Mexico Program

"It's too bad we're cancelling a major program that would have gotten NASA back into technology and capabilities development like we had in the '60s. It's unfortunate"

**Bill Camus, NASA**



"Nervousness. Excitement. Uncertainty. It's only a proposed budget, so we'll have to wait for the final decision to see where we are going from here."

**Shelby Russell, CSC Inc.**

"I don't like it. I think it just doesn't look good for the future."

**Cindy Smith**  
Jacobs FOSC Group



## Office of Diversity and Equal Opportunity

# Celebrate Stennis diversity year round

The Stennis Diversity Council (SDC) was formed in November 2008. It hosted several events during the past year, with the help of many volunteers. The sitewide SDC has joined forces to sponsor, support and celebrate the multiculturalism of the Stennis workforce. The educational programs, events, activities, forums and presentations sponsored by the council promote communication, understanding, diversity and inclusion, as well as strengthen partnerships across Stennis.

Many events are again being planned for this year. Just as diversity in the workplace makes us stronger and better at what we do, diversity in the planning and production of these events makes them more informative and effective. Below is a list of planned events. If others need to be included, please forward that information to Jo Ann Larson at joann.m.larson@nasa.gov. If anyone would like to participate in an event, the SDC welcomes the energy, thoughts and time in making this the best year ever.

**March:** Women's History Month

**April:** Holocaust Days of Remembrance

**May:** Asian Pacific American Heritage Month

**August:** Women's Equality Day

**September:** Hispanic American Heritage Month

**October:** Disability Awareness

**November:** National American Indian Heritage Month

The Stennis Office of Diversity and Equal Opportunity wants to thank all employees for their continued participation and support of these events.

February is Black History Month. Help celebrate it! This year's theme is: "The History of Black Economic Empowerment." On Feb. 25 in the StenniSphere auditorium,



### Stennis upgrades machine shop

The Stennis Space Center machine shop recently added a new computer numerical control (CNC) lathe machine, which can machine parts to precise tolerances, cutting conventional turning time considerably. It is the fourth CNC machine to be added to the shop.



### A day on – not a day off

Stennis Space Center employees visit exhibits of volunteer organizations during their observance of Martin Luther King Jr. Day with a Day of Service on Jan. 12. During the day, Mississippi and Louisiana organizations visited the center to encourage employees to register and serve as volunteers for various community activities. The day's focus was emphasized again and again – great things can happen when individuals work together toward a common goal.

employees will be able to interact with three speakers, each tackling a topic related to economic empowerment.

Who said –

1. "Leadership has a harder job to do than just choose sides. It must bring sides together."
2. "A people without the knowledge of their past history, origin and culture are like a tree without roots."
3. "One cannot hold another down in the ditch without staying down in the ditch with him."

Check next month's Lagniappe for the answers.

## Hail & Farewell

### NASA bids farewell to the following:

Jason Adam     AST, Quality Assurance  
Office of Safety and Mission Assurance

Sara LeBlanc Stuart     Student/Program Analyst  
Office of the Chief Financial Officer

### And welcomes the following:

Larry Pigott     AST, Engineering Program Management  
Rocket Propulsion Test Program Office

Casey Wheeler     AST, Experimental Facilities Techniques  
Center Operations Directorate

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NASA PUBLIC AFFAIRS OFFICE  
Attn: LAGNIAPPE  
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Building 1100, Room 304  
Stennis Space Center, MS 39529

or call 228-688-3749

Managing Editor ... Chris McGee  
Editor ... Lacy Thompson



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## Central Mississippi team wins LEGO title

The Central Mississippi Techno Warriors robotics team from Brandon won top honors during the FIRST (For Inspiration and Recognition of Science and Technology) LEGO League 2009 Mississippi Championship Tournament held Jan. 30 in Gautier.

Students ages 9-14 from private, public and home-schooled sectors from around the state competed in the annual tournament. At the end of the daylong competition, the Brandon team claimed the Champion's Award.

In addition to the overall prize, the state competition is judged in four areas: robot performance, robot design, project presentation, and teamwork.

The team from St. James Elementary School in Gulfport won first place for robot performance. The team from St. Alphonsus Elementary School in Ocean Springs won top prize for robot design. The team from Neshoba Central Elementary School in Philadelphia won the project presentation award for their response to this year's "Smart Move" research challenge. The team from Della Davidson Elementary School in Oxford won teamwork honors.

NASA recognizes FIRST activities as an excellent hands-on method to increase students' knowledge of science, engineering, technology and mathematics. Stennis Space Center supports FIRST by providing mentors and training, as well as competition judges and event personnel.



Hannah Brown (left) and Desiree Goodfellow from St. James Elementary School in Gulfport cheer on their robots during the Jan. 30 Mississippi FIRST LEGO League Championship.

## Scholarship deadline set

The NASA College Scholarship Fund has announced its 2010 agencywide call for applications. The NCSF program awards scholarships to qualified dependents of former and current NASA employees. During this 28th 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 19.

All 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 (l to r): John M. Worden (South Dakota School of Mines and Technology in Rapid City), Dallin D. Jolley (Brigham Young University - Idaho in Rexburg) and Mallory S. Lefland (Georgia Institute of Technology in Atlanta).