

# LAGNIAPPE

John C. Stennis Space Center

Volume 5 Issue 3

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

March 2010

## Scheuermann named SSC director

**N**ASA Administrator Charles Bolden has named Patrick Scheuermann as director of the John C. Stennis Space Center. Former Director Gene Goldman has moved to NASA's Marshall Space Flight Center in Huntsville, Ala., where he will serve as deputy director.

"As we work to better align NASA for the future, I'm asking proven members of my team to help us reach our goals through their excellent leadership skills," Bolden said. "I'm grateful that Gene and Patrick are willing to step up to these new responsibilities and help make NASA's future the best it can be."

Scheuermann was named deputy director at Stennis in December 2008. He also served as Stennis associate director and as chief operating officer of NASA's Michoud Assembly Facility in New Orleans. Since joining NASA in 1988 as a propulsion test engineer, he has worked numerous major test projects and was project manager for the Evolved Expendable Launch Vehicle program.



NASA has named Patrick Scheuermann as the new director of Stennis Space Center. A graduate of the University of New Orleans, Scheuermann was a finalist in NASA's astronaut candidate selection program in 1998.



### Discovery set for April launch

Space shuttle Discovery is lifted and rotated into a vertical position for its move into the high bay at Kennedy Space Center in late February. Discovery has been attached to its external fuel tank and solid rocket boosters. It was rolled out to Launch Pad 39A on March 3 in preparation for its targeted April 5 launch to the International Space Station. Discovery will carry a multipurpose logistics module filled with science racks for the laboratories aboard the station. The mission has three planned spacewalks. The three visible main engines on Discovery all were tested at Stennis Space Center.



### Endeavour completes mission

Space shuttle Endeavour returned to Earth late on Feb. 21, completing a 14-day mission to the International Space Station. During the mission, Endeavour crew members delivered a third connecting module – the Tranquility node – which will increase the space station interior space. Attached to Tranquility was a cupola, a robotic control station with seven windows to provide a panoramic view of Earth, celestial objects and visiting spacecrafts. The mission featured three spacewalks, as well as a rare nighttime launch and landing. Only four additional shuttle missions now are scheduled.

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



*“The power of a man’s virtue  
 should not be measured by his special efforts,  
 but by his ordinary doing.”*

*(Blaise Pascal)*

First, join me in welcoming Patrick Scheuermann as the new Stennis center director. Patrick “grew up” at Stennis, with mentors who are now legends here, in the agency and industry. “It took!” This is an excellent example of how a confluence of experiences can fulfill a unique opportunity. Best wishes of success for Patrick and Stennis!

This is another unique time in the center’s history. Though Stennis has worked effectively with commercial entities for years, our future now depends on it. The president’s 2011 budget request has many challenges, and, thus, many opportunities. This center does liquid engine propulsion testing and Earth science, two major facets of the proposed budget. Your future is in your hands. That is a phenomenal setting.

Nothing in life is really easy. We all have examples where events are overrun by luck, good or bad. An old adage is “you make your own luck.” If that is true, we hold the ingredients. The future will be what we make it. The only philosophy that guarantees failure is, “I can’t.” Guaranteed.

Stennis Space Center has a remarkable history of accomplishment. It exists due to a set of individual and collective events at a particular point in history. It is at a similar juncture. We aren’t sure how the transition will be made from NASA-managed to -enabled, but the future of human spaceflight depends on it. There will be budget battles and debate. There will be endless, often mindless, speculation over what should be versus what is. Trite but true, the journey to anywhere begins with a single step. That step is enabled by each of us. Working together with other centers, industry and, above all, each other, is crucial at this time. We can’t afford parochialism.

My time here has been incredible. In my home state, I have worked with some of the most capable, dedicated and endearing people I’ve ever known; this is one of the treasures I will always “ponder in my heart.” You do extraordinary things quantifying the unknown. Make it an ordinary doing!

Thank you for your friendship and support. I cherish each of you, and look forward to what the future holds for all of us!

*Gene*

## Rear Admiral Landry visits Stennis

New Stennis Space Center Director Patrick Scheuermann (right) and Associate Director Rick Gilbrech (left) visit with Navy Rear Adm. Mary E. Landry, commander of the Eighth Coast Guard District, during her Feb. 24 visit to the south Mississippi rocket engine testing facility. During her visit, Landry also met with members of the National Oceanic and Atmospheric Administration, National Data Buoy Center, the Naval Meteorology and Oceanography Command, and the Naval Oceanographic Office. She also toured StennisSphere, the space center’s visitors center and museum. As commander of the Eighth Coast Guard District in New Orleans, Landry is responsible for U.S. Coast Guard operations covering 26 states, more than 1,200 miles of coastline and 10,300 miles of inland waterways from Florida to Mexico.

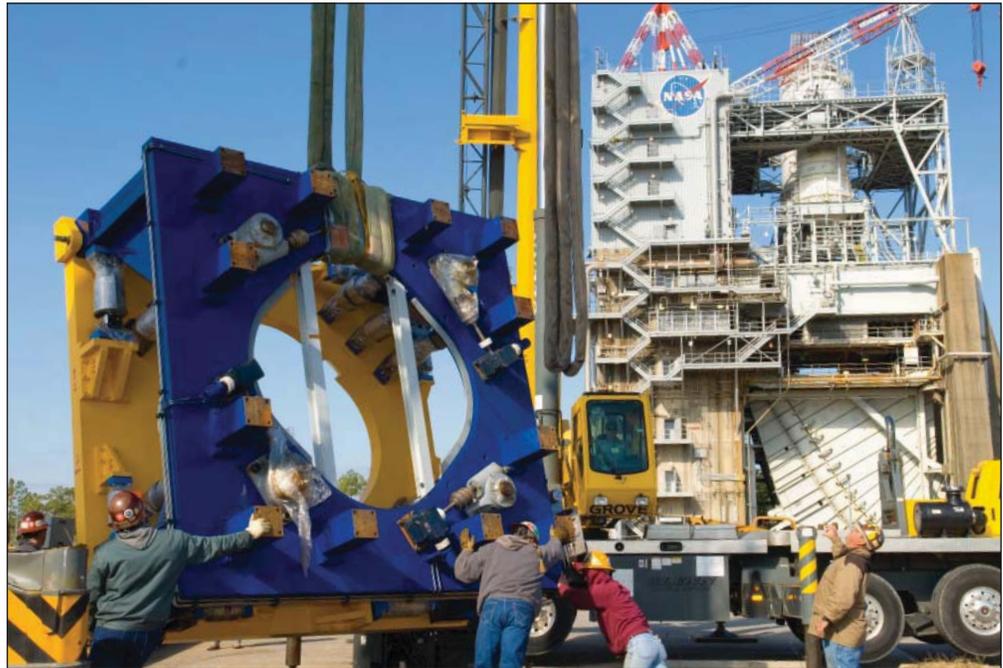


**FULFILLING NASA'S EXPLORATION MISSION**

# New TMS installed on A-1 Test Stand

A new thrust measurement system has been installed on the A-1 Test Stand at Stennis Space Center in preparation for testing of next-generation rocket engines. Employees installed the new system this month.

The new TMS is a considerable upgrade from the equipment installed on the test stand in the 1960s. It is an advanced calibration system capable of measuring vertical and horizontal thrust loads with an accuracy within 0.15 percent at 225,000 pounds. It also will allow engineers to measure thrust as they gimbal (or tilt) engines during tests. The system was fabricated by Thrust Measurement Systems in Illinois at a cost of about \$3.5 million.



(Top photo) Stennis Space Center employees maneuver a new thrust measurement system in preparation for its installation on the A-1 Test Stand on March 3. The system was fabricated by Thrust Measurement Systems in Illinois and represents a state-of-the-art upgrade from the equipment used on the stand for more than 40 years.

(Bottom left photo) The new TMS is lifted onto the A-1 Test Stand deck in preparation for its installation.

(Bottom right photo) Stennis employees complete installation of the new TMS on the A-1 Test Stand.

## 2010 launch schedule

**STS-131**

Shuttle Discovery  
Target: April 5, 2010

**STS-132**

Shuttle Atlantis  
Target: May 14, 2010

**STS-134**

Shuttle Endeavour  
Target: July 29, 2010

**STS-133**

Shuttle Discovery  
Target: Sept. 16, 2010

**Orbital Sciences Corp.**

Taurus rocket  
Target: Nov. 22, 2010  
Site: Vandenberg AFB



# Stennis unveils AJ26 project

NASA's John C. Stennis Space Center unveiled a new initiative Feb. 24, charting the future for the nation's premier rocket engine testing facility.

Then-Stennis Director Gene Goldman announced plans for the center to test Aerojet AJ26 rocket engines for Orbital Sciences Corp. as part of a NASA partnership with the companies.

"We're excited about this program and the opportunity to collaborate with two of the world's leading space technology companies," Goldman said. "This also helps pave the way to the future for Stennis. Testing the AJ26 engine not only supplies a service for the Taurus® II program, it also provides Stennis a unique opportunity that will help sustain the skills and capabilities we need for future test projects."

The AJ26 testing is part of NASA's new direction for space exploration. Under the 2011 fiscal year proposed budget, NASA will end its Constellation Program effort to return to the moon and possibly travel beyond.



Then-John C. Stennis Space Center Director Gene Goldman (center) stands in front of a "pathfinder" rocket engine with Orbital Sciences Corp. President and Chief Operating Officer J.R. Thompson (left) and Aerojet President Scott Seymour during a Feb. 24 news briefing.

Instead, it will work closer with commercial interests to develop space travel capabilities.

The Aerojet AJ26 is a prime example of that new direction and of the immediate future of Stennis, which completed engine testing for remaining space shuttle flights last July. The AJ26 is the first new engine in years to be tested at Stennis and representative of the commercial work the

facility now is pursuing. The center also provides RS-68 rocket engine testing for Pratt & Whitney Rocketdyne.

Stennis operators have been modifying their E-1 Test Stand since last April in order to test the AJ26 engines. Work has included construction of a 27-foot-deep flame deflector trench, which was toured by media during the Feb. 24 news briefing.

Orbital is working in partnership with NASA under the agency's Commercial Orbital Transportations Services joint research and development project. The company is under contract with NASA through the Commercial Resupply Services program to provide eight cargo missions to the International Space Station through 2015. The AJ26 Aerojet engines will power Orbital's Taurus® II space launch vehicle for the supply missions.

"Our team is very excited to begin the ground testing of the AJ26 engine here at Stennis, one of the great rocket engine testing facilities in the world," Orbital President and Chief Operating Officer J.R. Thompson said.



Operators at NASA's John C. Stennis Space Center are completing modifications to the E-1 Test Stand to begin testing Aerojet AJ26 rocket engines in early summer. Modifications to the test stand include construction of a 27-foot-deep flame deflector trench (shown at left). The AJ26 rocket engines will be used to power Orbital Sciences Corp.'s Taurus® II space vehicles to provide commercial cargo transportation missions to the International Space Station for NASA. Stennis' role in the project was announced during a Feb. 24 news briefing.

# NASA honors Stennis company

NASA presented its highest honor for quality and performance, the small business service George M. Low Award, to Applied Geo Technologies Inc. on Feb. 10 for its commitment to teamwork, safety, customer service, technical and managerial excellence at John C. Stennis Space Center.

Applied Geo Technologies (AGT) of Choctaw, Miss., is a small, tribally owned, disadvantaged provider of aerospace and defense services. It provides scientific, laboratory and geographic analysis services; maintains measurement standards; and calibrates and repairs instrumentation at Stennis Space Center.

On Feb. 2, AGT received the first-ever Stennis Space Center Contractor Excellence Award, which made it eligible for the NASA honor. In October 2009, AGT also was selected as Stennis Space Center's Small Business Prime Contractor of the Year under NASA's newly established Small Business Industry Awards Program.



Al Watkins (right), program manager for Applied Geo Technologies Inc. at NASA's John C. Stennis Space Center, and Kirk Foster, deputy program manager, display the three awards recently received by the company: NASA's George M. Low Award, the first-ever Stennis Space Center Contractor Excellence Award and NASA's Small Business Prime Contractor of the Year Award for Stennis Space Center.

## NASA awards Stennis information technology contract

NASA's John C. Stennis Space Center near Bay St. Louis, Miss., has awarded a contract to ASRC Research and Technology Solutions, LLC (ARTS), a small business in Greenbelt, Md., to provide information and technical services at the center.

The cost-plus-incentive-fee contract is valued at \$54.5

million. It includes a base two-year contract plus three one-year option periods.

Work performed by ARTS and its subcontractor includes a broad range of information, technical, technology and applied science services. It also covers future requirements and additions, such as telecommunication services.

## Total rebuild of security gates under way

Work to rebuild the north and south security gates at Stennis Space Center is under way and should continue for at least the next three months.

"Both gates will be totally remade in a new design," said David Del Santo, center security officer. "There will be a lot of construction associated with the project, and drivers entering the facility will need to be especially aware of the situation and drive safely."

Heavy construction work at the north gate has begun, with

the south gate set to follow in upcoming days. The work will necessitate changing traffic patterns at times and could result in some delays for persons entering the center, Del Santo said.

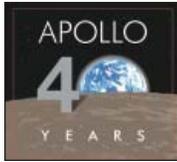
"Our big concern is safety, of those entering the center and especially of the security personnel and construction workers at the gates," he emphasized. "We do not want anyone hurt."

The new gates will enhance center appearance and contribute greatly to the safety of Stennis employees, Del Santo said.



An artist's rendition shows how Stennis security gates will look following redesign.

# Former official recalls early spring 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.*

In the March 18, 1983, issue of Lagniappe, then-Public Affairs Officer Mack Herring wrote about his favorite spring, being his first spring at the Mississippi Test Operations (now Stennis Space Center) in 1963. He wrote:

"I had the distinction of being the first NASA employee to transfer to Mississippi. Like the many, many others who followed, being on the ground floor of a new organization and what was to be a new NASA installation was, indeed, a new start and a new chance, or 'beginning,' for all of us.

"I got here in the winter, and believe me, it was plenty cold. The day the plane I was on landed in Biloxi at Keesler Air Force Base, it was 18 degrees. The big fireplace at

the old Rouchon House, where our first office was, helped us make it until spring.

"We met a lot of new friends and acquaintances in the area who taught us a lot of survival techniques, such as how to use a fly rod to catch green trout in the Pearl River. Another local friend helped me run a fishing line clean across the big river. You've never seen as many catfish as that line yielded.

"It wasn't all play down here. We kept busy working long days and sometimes three to five nights a week. Our No. 1 mission, as delegated from the Marshall Space Flight Center in Huntsville, Ala., was to inform as many people as possible, as soon as possible, that NASA was really going to build a very large rocket testing center on this site along the Pearl River. In other words, 'get prepared' for a huge government project that would bring thousands of new people to this beautiful area that was once Gainesville. I sometimes felt like a preacher, or politician, bringing this message to anyone, or any group, who would listen. It kept us busy, but it was fun."



## NASA kicks off VPP safety emphasis

Stennis Space Center Associate Director Rick Gilbrech discusses the Voluntary Protection Programs emphasis under way at the NASA facility during an all hands gathering Feb. 24. Stennis is seeking to gain Star status in the VPP initiative, launched by the Occupational Safety and Health Administration as a proactive safety management model so organizations and their employees can be recognized for excellence in safety and health. During the all hands gathering, Gilbrech stressed the importance of the effort, noting, "Mission success starts with safety."

## @ Stennis

### What are your thoughts on NASA's move to a commercial space travel approach?

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



"I think it's a good idea and should result in more interaction between the federal government and the private sector."

**Shanda Bennett**  
EPA Environmental Chemistry Laboratory

"The question I have is – Are there any commercial agencies able to take over? We've always led the world in space technology, and I don't want to give that up."

**John Byrnes, Jacobs FOSC Group**



"As a child of the space program, I think NASA should continue to take us to space. I'm concerned the new approach will involve too much special interest."

**Tracy Patman, NASA Shared Services Center**

"I don't care for it. NASA's never done business that way. It's not a good idea to change methodology in midstream, when you have a challenge before you."

**Jim Rector, Jacobs NTOG**



Office of Diversity and Equal Opportunity

# Observe National Women’s History Week

*“While they were saying among themselves  
it cannot be done, it was done.”*  
(Helen Keller)

This year marks the 30th anniversary of the first National Women’s History Week and the 90th anniversary of women in the United States winning the right to vote.

Women now hold more than half of the labor force’s top jobs, filling 51 percent of professional and management occupations. And with women earning 60 percent of today’s master’s degrees, this trend may be accelerating. When it comes to all college degrees, women earn 58 percent of them, including 49 percent in the field of medicine, 48 percent in the field of law and 34 percent in the field of theology.

Some other interesting facts include:

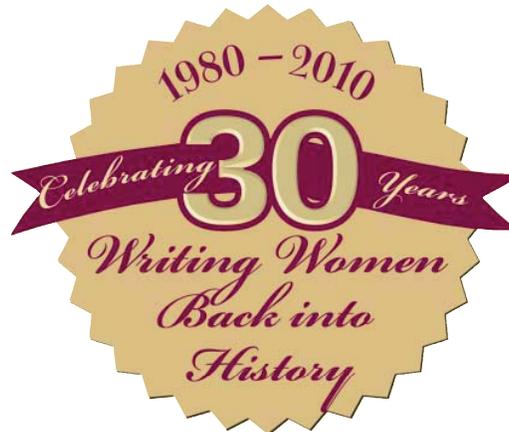
- 15 Fortune 500 companies have women as their chief executive officers.
- There are 10.1 million businesses owned by women.
- Working women age 50 or older in professional, management or business occupations equals 42 percent of the workforce.

The National Women’s History Project’s Web site serves as the portal for information related to U.S. multicultural women’s history. In the Resource Center, one will discover

an extensive section on the Women’s Rights Movement, as well as brief biographies of all the National Women’s History Project honorees. The site also features a whole array of other information and resources related to women’s history.

The National Women’s History Project exemplifies women’s accomplishments throughout history, including many that have not been acknowledged in the past. For more information on women’s history, and for informative articles on the subject, go to [www.nwhp.org](http://www.nwhp.org).

Be sure and catch one or more planned activities that will be taking place at Stennis Space Center during the month of March highlighting women’s history.



Answers to last month’s quotes:

- (1) Jessie Jackson
- (2) Marcus Garvey

Hail & Farewell	
<b>NASA bids farewell to the following:</b>	
Gene Goldman	Center Director Office of the Director
Chris McGee	Public Affairs Specialist Office of External Affairs

## Stennis Space Center focuses on economic empowerment during Black History Month program

Then-Stennis Space Center Director Gene Goldman (second from left) stands with Everett Lewis of Back Bay Mission in Biloxi (l to r); Ray Alfred, owner of Le Café De Bon Temps in Slidell; and Steve Jackson of the Jacobs NASA Test Operations Group at Stennis following a Black History Month presentation in the StenniSphere auditorium Feb. 25. Jacobs NTOG and the Stennis Office of Diversity and Equal Opportunity sponsored the program, which focused on “The History of Black Economic Empowerment.” During the program, Lewis spoke on affordable housing and home ownership, while Alfred discussed entrepreneurship. Black History Month is observed each year in the United States during February and dates back to a week-long emphasis established by historian Carter Woodson in 1926.



# LAGNIAPPE

is published monthly by the  
Office of External Affairs - Public Affairs  
at NASA's John C. Stennis Space Center

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National Aeronautics and  
Space Administration

John C. Stennis Space Center  
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## Area teams claim Bayou Regional honors

Students from 36 high school teams in eight states competed for top honors during the 2010 FIRST (For Inspiration and Recognition of Science and Technology) Robotics Bayou Regional competition held March 4-6 in New Orleans.

A combined team from Picayune High School and Pearl River High School in Picayune partnered with a team from Mandeville (La.) High School and a team from Tallahassee, Fla., to emerge as the tournament's alliance champion. In addition, Northshore High School in Slidell, La., walked away with the most prestigious of honors, earning the Regional Chairman's Award, which recognizes the team creating the best partnership effort and best exemplifying the true meaning of FIRST.

More than half of the 2010 Bayou Regional field hailed from Louisiana and Mississippi (25 teams combined). Of those, 16 teams made it past qualifying rounds to compete in the alliance portion of the weekend. Nine Louisiana and Mississippi teams survived the quarterfinals – and five of those teams advanced to the finals.



Student-built robots maneuver the course during the 2010 Bayou Regional FIRST Robotics competition in Westwego on March 5-6.

Several Louisiana and Mississippi teams also garnered awards for their robotics work and their level of participation at the Bayou Regional event. They included Horn Lake (Miss.) High School, which received the Rookie All-Star Award and Highest Rookie Seeding Award for its first-year performance.

## New Educator Resource Center hosts first session

Stennis Educator Resource Center Coordinator Diana Nunez leads teachers in a Feb. 23 training session on "Butterflies in Space" in the new ERC classroom located at the south gate security building at Stennis Space Center. The new classroom makes it more convenient for educators attending training sessions since they no longer have to gain security clearance. The Stennis Education Office regularly offers Continuing Education Unit classes for area teachers, training them in space-related presentations that can be shared with students. The Feb. 23 session focused on an International Space Station experiment about the effects of weightlessness on butterflies.

