National Aeronautics and Space Administration

LAGNIAPPE

John C. Stennis Space Center

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Gilbrech named deputy director

NASA announced April 12 that Rick Gilbrech is the deputy director of John C. Stennis Space Center, the agency's primary testing ground for rocket engines and propulsion systems, and its systems engineering center for applied science activities.

"Rick did an outstanding job as associate director, and I feel confident his excellent leadership skills will be an asset to our center in his role as deputy director," Stennis Director Patrick Scheuermann said.

Gilbrech, a graduate of Mississippi State University and the California Institute of Technology, began his NASA career at Stennis in 1991.

After holding several positions at the south Mississippi rocket engine testing facility and at NASA's Langley Research Center in Hampton, Va., Gilbrech was named director at Stennis in January 2006.

He served in that position until August 2007, when he was appointed associate administrator for NASA's Exploration Systems Mission Directorate, the division charged with designing the agency's next generation of manned spacecraft. Gilbrech retired from the Headquarters post in November 2008. In February 2009, he returned to federal service as associate director at Stennis.

Discovery crew completes STS-131 mission

Space shuttle Discovery lands on Runway 33 at NASA's Kennedy Space Center in Florida on April 20, completing the 15-day STS-131 mission to the International Space Station. The seven-member STS-131 crew – commanded by astronaut Alan Poindexter – carried the Leonardo Multipurpose Logistics Module, filled with supplies, new crew sleeping quarters and science racks that were transferred to the station's laboratories. The crew also switched out a gyroscope on the station's truss, installed a spare ammonia storage tank and retrieved a Japanese experiment from the station's exterior.

Stennis to play 'extensive' role in NASA's development plans

NASA officials confirmed John C. Stennis Space Center will play a featured role in the agency's proposed $3.1 billion heavy-lift and propulsion research-and-development effort during the next five years.

The effort will focus on providing new launch systems, propellants, materials, and combustion processes for space exploration.

Stennis test facilities and capabilities will be used "extensively" as part of the program, states budget documents at www.nasa.gov/news/budget/index.html. Facility modifications will begin in fiscal year 2011 to ensure they are ready to support component and full-scale engine testing, as well as integrated stage testing.

Stennis also will work to increase testing partnerships with commercial space transportation customers.

NASA released the program details in response to the president's proposed budget, which cancels the Constellation Program to return to the moon and beyond, and emphasizes reliance on commercial transportation to space instead.

From the desk of
Keith Brock
Director
Stennis Project Directorate

What makes Stennis unique? This was a question recently discussed at a senior management retreat. There were many responses to that question ... and they were all right!

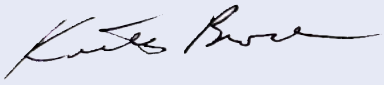
Some answered it is our unique rocket propulsion testing facilities, a collection of capabilities unmatched anywhere in the United States. Others said it is our buffer zone, an essential requirement to perform testing work, and its ability to provide a unique place for NASA and other federal entities to perform their missions. Still others recognized the "federal city" of Stennis as a truly unique environment forged through partnerships and agreements that provide benefits to all parties.

These are all true and are important to our Stennis history and path ahead. As remarkable and valuable as these are, they are nothing without the uniquely skilled Stennis workforce to harness the full extent of their capabilities.

Stennis' ability to get the job done is well known and highly acclaimed. That said – it's not easy. It takes hard work from **all** to achieve our mission. Like Randy Galloway mentioned in last month's *Lagniappe*, there are many successes to celebrate. We can celebrate them because the entire Stennis team takes tremendous pride in achieving its piece of the mission. It always has.

This is how our next chapter begins – our Stennis team primed and ready to bring our unique capabilities to meet NASA's needs and conquer the challenges they bring.

It's what we do. Bring it on!



Stennis welcomes state, Canadian officials

Leaders from the southeastern United States and Canadian provinces visited NASA's John C. Stennis Space Center on April 12 during the annual Southeastern United States - Canadian Provinces (SEUS-CP) Alliance annual conference in nearby Biloxi. Stennis Director Patrick Scheuermann (far right) hosted Mississippi Gov. Haley Barbour (fourth from right), Tenn. Gov. Phil Bredesen (sixth from right), three Canadian premiers, a state lieutenant governor and several economic development officials on a tour of center facilities. The group also was able to view Stennis from atop the B-1 Test Stand, built in the 1960s to test the Saturn V stages that carried humans to the moon. Canadian premiers were Danny Williams (Newfoundland), Jean Charest (Quebec) and Robert Ghiz (Prince Edward Island). The SEUS-CP alliance is a strategic partnership between states in the southeastern U.S. and member provinces in Canada that promotes trade and investment opportunities among its member jurisdictions.

Leaders break ground for MSU science facility

Various Mississippi leaders visited NASA's John C. Stennis Space Center on May 3 to break ground for a new Mississippi State University Science and Technology Center at the site. The $9 million, 40,000-square-foot facility represents a partnership with the National Oceanic and Atmospheric Administration (NOAA). It will serve as home of the university-led Northern Gulf Institute, as well as provide space for staff and researchers with the MSU Geosystems Research Institute and others. Participants in the groundbreaking for the facility included (l to r): Jeffery Barns, partner in Dale and Associates Architects; Dr. David Shaw, MSU vice president for research and economic development; Sally Yozell, NOAA director of policy and senior adviser to the administrator; U.S. Sen. Thad Cochran, R-Miss.; MSU President Mark Keenum; U.S. Rep. Gene Taylor, D-Miss.; Stennis Director Patrick Scheuermann; and Ed Blakeslee, Mississippi Institute for Higher Learning board member.

FULFILLING NASA'S EXPLORATION MISSION

ISS node departs Stennis for Kennedy

An International Space Station node is prepared for shipment aboard an Aero Spacelines Super Guppy aircraft from Stennis International Airport to NASA's Kennedy Space Center in Florida, on May 4. The node was built as a structural test article in the 1990s by The Boeing Company. It was used to do primary structure qualification testing on the Node 1 (Unity) flight hardware for ISS, with the possibility that it would fly as the primary structure for Node 2. Instead, Node 2 and Node 3 were built by the Italian Space Agency and successfully added to the space station. The node structural test article was first stored at NASA's Marshall Space Flight Center in Huntsville, Ala., then transported to Kennedy Space Center's operations and checkout building in Florida, until modifications to that facility forced it to be moved. Stennis acquired the structure as an eventual display at the INFINITY Science Center under construction. The recent move supports a general consolitation of space station hardware at Kennedy.

Stennis operators conduct launch acoustics testing

Operators at the E-3 Test Stand at NASA's John C. Stennis Space Center completed 32 acoustics tests April 16-28, designed to gather critical information for future space launches. Stennis operators are investigating liftoff acoustics that can damage vehicle components by testing the benefits of injecting water onto the upper surface of the launch pad, simulating the above deck sound suppression system currently planned for Ares I. The Stennis tests – and additional tests at NASA's Marshall Space Flight Center in Huntsville, Ala. – will provide critical data to determine what can be gained from this system. Stennis operators tested the above deck system or "rainbirds" at a 2 percent scale configuration compared to the actual launch equipment. "Working at that level, we can save a lot of headache by determining the real benefits in an inexpensive way," said Barry Robinson, a NASA engineering project manager.

Operators perform E-1 activation test

Stennis Space Center operators at the E-1 Test Stand perform a liquid oxygen cold flow activation test April 28 in preparation for upcoming testing of Aerojet AJ26 rocket engines. Stennis has partnered with Orbital Sciences Corporation to test AJ26 engines, beginning this summer. Orbital is working in partnership with NASA under the Commercial Orbital Transportation Services project to provide eight cargo missions to the International Space Station through 2015. The AJ26 engines will be used to power Orbital's Taurus® II space vehicles for the flights. Stennis operators began modifying the E-1 Test Stand last April for the new test series.

2010 launch schedule

STS-133
Shuttle Discovery
Target: Sept. 16, 2010

STS-134
Shuttle Endeavour
Target: Nov. 2010

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

Stennis remembers Apollo 13 mission

NASA's John C. Stennis Space Center marked the 40th anniversary of the historic Apollo 13 flight with exhibits and remembrances from Biloxi native Fred Haise Jr., who served as lunar module pilot on the mission.

During an afternoon of activities, Stennis hosted employees and area senior citizens to tour Apollo 13 exhibits, take photos with Haise, collect NASA-related items and offer their own remembrances of the 40-year-old mission. In addition, Stennis is providing Apollo 13 exhibits and NASA collectible items to public libraries throughout the Mississippi and Louisiana area.

Established in the 1960s, Stennis played a pivotal role in all manned Apollo missions, testing every engine used on the flights. When that program ended, Stennis assumed responsibility for testing the main engines used for space shuttle missions.

"Stennis really grew up through the Apollo and Shuttle programs to establish itself as the nation's premier rocket engine testing facility," Center Director Patrick Scheuermann said. "We are very proud that, from Apollo to the present, every manned American space flight has been powered by engines tested by Stennis. Every employee takes great pride in contributing to the continued safety of our astronauts and to the success of each space mission, including Apollo 13, which ranks as one of NASA's most amazing achievements."

Biloxi native and Apollo 13 astronaut Fred Haise (against the backdrop of a 1970 photo) talks about his experience on the mission during a presentation at NASA's John C. Stennis Space Center.

A highlight of the Apollo 13 anniversary event was the opportunity to hear Haise recount his memories of that dramatic space flight. Scheduled as the third lunar mission, the Apollo 13 spacecraft was launched April 11, 1970. Two days into the flight, the command module spacecraft was crippled by an oxygen tank explosion, necessitating a perilous free-trajectory return to Earth.

During his presentation to Stennis employees and visitors April 20, Haise recounted details of the now-famous mission and answered questions from the audience. He acknowledged feeling disappointed at first about failing to walk on the moon. "But I look back on it now, and I'm not disappointed," he said. "I feel fortunate to have had a chance."

Astronaut receives honorary county deputy commission

Astronaut Kay Hire (l) receives a Harrison County sheriff's commission, making her an honorary department deputy. Hire visited the Harrison County Sheriff's Office during a trip to the Mississippi Gulf Coast area April 15. Sheriff Melvin Brisolara presented the commission to Hire in appreciation of technological advancements the space program has provided for use in law enforcement efforts. In turn, Hire presented Brisolara with a packet of coffee identical to that consumed by astronauts in orbit. Hire has flown on two space shuttle missions, STS-90 and STS-130, logging more than 711 hours in space.

NASA honors Stennis employees

Employees of John C. Stennis Space Center, Dryden Flight Research Center and the Defense Contract Management Agency were honored April 2 by NASA's Space Flight Awareness program for contributions to flight safety. Keith Brock (l to r), director of NASA's Project Directorate Office at Stennis, stands with recipients: Brett Merkley (Defense Contract Management Agency); Velencia Ducre (DCMA); Theresa Spears (Applied Geo Technologies); James Fleming (Jacobs Technology Facility Operating Services Contract Group); Amy Rice (NASA); Scott Olive (NASA); James Cain (Jacobs Technology NASA Test Operations Group); Deanna Dartez (SaiTech Inc.); Pete Taggard (Pratt & Whitney Rocketdyne); Ken Hawkins (Jacobs Technology FOSC Group); Jeff Bradshaw (PWR); and Jeff Henderson (NASA). Not shown are: Barry Robinson (NASA); Peter Lamb (PWR); Charles "Barney" Nokes (Jacobs Technology NTOG); Walter Kondracki and Mark Mangelsdorf (Dryden Flight Research Center).

Astronauts visit Mississippi shipyard

Astronauts from the crew of space shuttle mission STS-130 present a flown mission patch April 15, prior to the christening of U.S. Navy Destroyer William P. Lawrence at Northrop Grumman Shipbuilding in Pascagoula. Lawrence served a decorated career in the Navy, rising to the rank of vice admiral. He was the first naval aviator to fly twice the speed of sound in a Navy aircraft and was one of the final candidates for the Mercury space program. He also served as superintendent of the U.S. Naval Academy from 1978 to 1981. His daughter, Wendy, is a former astronaut and a retired Navy captain. Participants in the recent shipyard ceremony were (l to r): shuttle Commander George Zamka; Wendy Lawrence; Thomas Williams II, commanding officer of the christened craft; and shuttle Mission Specialist Kay Hire.

Area teams compete at FIRST nationals

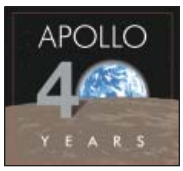
Four Mississippi and Louisiana teams competed in the 2010 FIRST (For Inspiration and Recognition of Science and Technology) Robotics World Championships held April 15-17 in Atlanta.

NASA Administrator Charles Bolden attended and spoke at the event. Area teams competing included: Pearl River County Robotics from Picayune; Horn Lake High School from Horn Lake; Northshore High School from Slidell, La.; and Mandeville High School from Mandeville, La. The Pearl River team received "Finalist" honors for battling their way to the finals of their division.

NASA and Stennis Space Center are strong supporters of FIRST Robotics and the annual Bayou Regional competition in New Orleans through direct monetary support and the work of judges, volunteers and team mentors. Stennis Education Office Director Katie Wallace offered thanks to "everyone who helped schools and their communities throughout the robotics season."

NASA Administrator Charles Bolden (center) stands with NASA's John C. Stennis Space Center employee David Lorance (r to l); Stennis employee Dawn Davis; Delana Lorance; and Doug Lorance during the season-ending 2010 FIRST (For Inspiration and Recognition of Science and Technology) Robotics World Championships held April 15-17 in Atlanta. David Lorance served as a mentor for the team from Northshore High School in Slidell, La. Davis served as a judge during the national competition.

Early work on engine test site begins



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.

On May 17, 1963, a dozen men cleared the first land for the soon-to-be rocket engine testing facility, NASA's Mississippi Test Operations (now Stennis Space Center), in Hancock County. The workers started chopping away in a dense swamp one and one-half miles from the East Pearl River.

When they cut the first cypress tree, not only did it change the face of the land, but it signaled the start of the largest construction project in the state of Mississippi and the second largest in the United States at that time. Crews cleared the land for T.L. James and Co. of Ruston, La.

That first clearing project made way for a boat harbor and construction dock, where barges brought steel in from

Pittsburgh, Pa., Chicago and Birmingham, Ala., right up to a dock that was once a cypress and pine thicket.

The brick-and-mortar cost of carving the engine testing base out of the Mississippi wilderness totaled about $270 million. In 1966, when all of the chain saws, tractors, cranes, earth movers, and pile drivers were finished with their noisy task, a new sound was heard – the rumble of the giant Saturn Apollo rocket engines being fired.

Stennis employees observe Earth Day

Employees at NASA's John C. Stennis Space Center participate in Earth Day 2010 activities held April 22 at the rocket engine testing facility. During the day, Stennis employees were able to tour various exhibits featuring environmentally friendly and energy-conscious items and information. Earth Day is observed each year on April 22 as a way to inspire awareness and appreciation for the Earth's environment. It was founded in 1970 and is celebrated in more than 175 countries every year. At Stennis, Earth Day activities are coordinated by the center's Environmental Office.

@ Stennis

What do you think is a good way to interest young people in the areas of science, technology, engineering and math?

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

"Kids need to know careers in science and engineering are incredibly interesting, rewarding and exciting. If inspired, these topics will be important to them."

Duane Armstrong, NASA

"Continue the programs we have. Start as early as kindergarten, and continue the emphasis as kids get older and begin to think it's not cool to be smart."

Andrew "Bo" Clarke, NASA

"Show kids the practical benefits, as in a fair that highlights the careers and opportunities available and what they pay."

Antonio Isaac
Human Resources Service Center

"Start with young kids, and make it fun. We have to let kids know these areas will be part of their various jobs and their daily lives as they get older."

Vinh Tran, CSC Inc.

Office of Diversity and Equal Opportunity

Celebrate Asian-Pacific Americans

The month of May is Asian-Pacific American Heritage Month, a time to commemorate and celebrate the many accomplishments and contributions of immigrant, refugee and American-born Asian Americans and Pacific Islanders who – through sacrifice, perseverance, education, government and leadership – have helped transform this country into the greatest and most benevolent nation in history.

Ancestors of today's Asian-Pacific Americans came from nearly 50 countries throughout the world's largest continent, in addition to land masses throughout the Pacific Rim. Each country has its distinct history, culture, traditions and values. An estimated 100 different languages and dialects are spoken by the people who inhabit this vast and majestic region. About 305,000 Asian-Pacific Americans have served in the U.S. Armed Forces and have stood shoulder-to-shoulder with other American soldiers and sailors since the Civil War.

On behalf of the Stennis Diversity Council, the NASA Shared Services Center is sponsoring a sitewide celebration for Asian-Pacific American Heritage Month with a display in front of the Building 1100 cafeteria on May 25 from 11 a.m. to 12:30 p.m.

The display will feature and highlight mementos, keepsakes, souvenirs, photographs, artifacts, ethnic costumes and music related to this far-reaching and vibrant culture and heritage. A slideshow highlighting photographs of Stennis employee family members and friends and scenic Asian Pacific locations also is planned.

Everything has beauty, but not everyone sees it.

NASA Stennis Space Center
Shooting For A Star

VPP
Voluntary Protection Programs
An OSHA Cooperative Program

FOSC granted VPP Merit status; NTOG audit coming soon

On April 27, Jacobs Technology Facility Operating Services Contract and NASA personnel met with the VPP Region IV Management in Atlanta to discuss OSHA's tentative decision to deny VPP Star status. OSHA determined the best avenue was to admit FOSC into the VPP Merit program, which will put them on a positive path to VPP Star in 2011. The Jacobs Technology NASA Test Operations Group has received OSHA confirmation that their application has been accepted, and an audit date will be announced. NASA's application is under review.

Stennis marks Holocaust Days of Remembrance

Jeannine Burk of Kenner, La., recounts her experiences during the Holocaust as part of the 20th annual observance of Holocaust Days of Remembrance on April 8 at NASA's John C. Stennis Space Center. Burk was born in Brussels, Belgium, in 1939 and spent two years as a "hidden child" under the care of a Christian woman after the Germans invaded her native country. At age 5, she was liberated by Allied forces. She emigrated to the United States at age 12 and has resided in Louisiana for the past 39 years.

Hail & Farewell

NASA bids farewell to the following:

Elizabeth Messer	General engineer Engineering and Test Directorate

And welcomes the following:

Samone Faulkner	Student trainee Office of External Affairs
Peter Gruzinskas	Information technology specialist Center Operations Directorate
Rebecca Strecker	Public affairs specialist Office of External Affairs
Richard Wear	AST, flight systems test Engineering and Test Directorate

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Stennis provides Zurich Classic activities

Will Constant, 5, of New Orleans tries his hand at putting on a moon "landscape" during the 2010 Zurich Classic golf tournament at the The Players Clubs Louisiana course in Avondale held April 22-25. John C. Stennis Space Center hosted education and information activities in a NASA Kids Zone tent during the tournament. In addition to the moon putting green, attractions included displays of the Apollo 13 moon mission, an interactive activity on how NASA developments impact everyday life, a build-your-own rocket transportation exercise and an astronaut ice cream tasting station. The exhibit attracted hundreds of visitors during the four-day tournament. Built in the 1960s to test the huge engines for the Saturn V moon rockets, Stennis Space Center is America's premier rocket engine test complex. Since 1975, every main engine used in the Space Shuttle Program has been test-fired and proven flight-worthy at Stennis. The center also is building a new stand to test-fire the next generation of rocket engines needed to carry astronauts to explore destinations beyond low-Earth orbit.

Stennis visits Laurel museum for NASA Family Art Day event

A young visitor to the Lauren Rogers Museum of Art in Laurel prepares his balloon "rocket" as part of an activity featured during NASA Family Art Day at the site on April 10. Employees from NASA's John C. Stennis Space Center hosted several space-related activities during the free gathering, including using balloons and fishing line to teach young visitors about rocket propulsion. The event was planned as part of the museum's promotion of its new NASA art exhibit. More than 300 children and their families visited the museum for the April 10 event, said Holly Green, marketing director for the Laurel museum. In addition to providing activities for children, the event offered an opportunity to promote more interest in math and science among young people, according to Alexis Harry, assistant director of Astro Camp for Stennis.