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Estess: Legacy of leadership

NASA and community officials paid tribute to the late John C. Stennis Space Center Director Roy S. Estess on May 2, naming a site facility in his memory and announcing establishment of the annual Roy S. Estess Public Service Leadership Award.

Estess, a Mississippi native and graduate of Mississippi State University, served as director of Stennis Space Center from 1989 to 2002, gaining a reputation as a pioneer, as well as a mentor and coach to many who later led or still lead across NASA.

“His legacy will not be forgotten,” Stennis Director Patrick Scheuermann said during the ceremony at the south Mississippi facility. “The

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Stennis Space Center Director Patrick Scheuermann welcomes Estess family members and guests May 2 to the ceremony dedicating and naming the main NASA administration building for the late Stennis Director Roy S. Estess.

Endeavour targeted for May mission

With an initial launch attempt delayed to address a technical concern, space shuttle Endeavour now is targeted for a May mission to the International Space Station. The STS-134 mission will be Endeavour's 25th and final flight to space. Upon completion, the shuttle will become the second in the three-orbiter fleet to be retired. On this final mission, the Endeavour crew will deliver the Alpha Magnetic Spectrometer to the space station, as well as spare parts, including two S-band communication antennas and a high-pressure gas tank. Endeavour flew its maiden mission in 1992. In ensuing years, it became the first shuttle to include four spacewalks on a mission, then the first to include five. Its STS-67 mission set a length record almost two full days longer than any shuttle mission before it. In addition, the first two pieces of the International Space Station were joined together in the Endeavour cargo bay.



From the desk of
Freddie Douglas III
 Manager
 Office of Safety &
 Mission Assurance
 Stennis Space Center



Uncertainty – many are seeking clarity regarding the NASA budget and the architecture that will constitute our space exploration program. What is certain, from a Stennis Space Center perspective, is the need for rocket propulsion test services and our culture of safety.

At Stennis, we are experiencing significant uncertainties that concern us all – the transition of test operations responsibilities, acceptance of the Army ammunition plant as a NASA facility and increased military operations in the buffer zone. In all cases, it is our commitment to safety that serves as the backbone, reflected throughout the planning and execution processes.

The Office of Safety and Mission Assurance (SMA) is ready to embrace the challenges as the center grows and changes. We have shored up our software capability, and added procedural discipline to auditing and inspection processes. Areas of construction safety and procurement quality assurance have benefited from increased attention to process repeatability and to communicating our safety culture to contractors performing work at Stennis and working on behalf of Stennis. With a more active military presence, SMA has developed, and now employs, a range safety function that includes airspace and ground mission management.

Over the last few years, the center has applied attention and resources to areas of process safety management for our most risky systems, made improvements in our general housekeeping and improved situational awareness through a variety of topics applicable to our work at Stennis and to our home lives alike. As a result of such hard work and attention to detail, the Occupational Safety and Health Administration (OSHA) notified the center April 8 that Stennis is one of its newest Voluntary Protection Programs' Star sites. This VPP designation recognizes exemplary worksites with comprehensive, successful safety and health management systems. The OSHA designation also converts contractor organizations providing hardware assurance tests, lab services and information technology services at Stennis from Star Demonstration sites to Star sites. Well done by all!

The Safety Day planning committee is hard at work completing details for our June 9 event, where we will come together to increase our awareness, improve our skills and rejuvenate our commitment to a culture of caring and commitment. Our featured speaker has a great message that should encourage and inspire us to further embed safety into our daily lives. In addition to our safety message, we will have a presentation and celebration for receipt of our VPP Star flag.

As usual, continue to look out for and protect your fellow co-workers and help each other to be safe in everything we do, so that when we depart for our respective homes, we go there in the same or better mental and physical condition than we arrived.



Sen. Landrieu staff members visit Stennis

Lonnie Dutreix (right), manager of the A-3 Test Stand Project with NASA's Project Directorate at Stennis Space Center, stands with a pair of staff members for U.S. Sen. Mary Landrieu, D-La., during their May 3 visit to the rocket engine test facility. Joining Dutreix at the construction site for the new test stand are Jeanne-Marie Ganucheau, Smart Growth coordinator in Landrieu's Baton Rouge office, and Wes Kungel, regional representative in the senator's New Orleans office. Landrieu is serving her third term in the U.S. Senate. She was elected in 1996 as only the second woman senator from Louisiana and now ranks as the state's senior member in the Senate. The A-3 stand under construction is the first large test facility to be built at the NASA site since it was established in the 1960s. When activated in 2013, it will allow operators to test next-generation rocket engines at simulated altitudes up to 100,000 feet.

FULFILLING NASA'S EXPLORATION MISSION

A-3 test stand 'tops out'

A construction "topping out" milestone was reached April 13 with placement of the test cell dome atop NASA's new A-3 Test Stand at Stennis Space Center. NASA broke ground in 2007 for the new stand, which is being built to provide simulated high-altitude testing for next-generation rocket engines that will carry humans into deep space. The stand will use a series of chemical steam generators to create a vacuum that allows operators to test full-scale engines at simulated altitudes up to 100,000 feet. The accompanying photos show aspects of ongoing work at the test stand, including placement of the test cell dome atop the structure (top right) and Stennis Director Patrick Scheuermann presenting center director coins to employees following the "topping out" procedure (bottom right). In below photos, Stennis employees focus on completing work on both the exterior and interior of the new test stand, which is scheduled for completion and activation in 2013.



ESTESS

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significant contributions of Roy Estess will be etched in our memories for generations.”

Stennis hosted NASA, civic and government representatives during a tribute ceremony that featured the unveiling of new lettering on the Roy S. Estess Building, which is the main NASA administration facility onsite. During the ceremony, Stennis officials also unveiled a commissioned portrait of Estess, which now will hang in the central lobby of the building bearing his name.

The ceremony also paid tribute to Estess' 42 years of government service by launching the new public service leadership award. Each year, Stennis Space Center will present the award to an individual demonstrating a career record of innovative leadership benefitting the government, as well as a history of volunteerism supporting the general public.

Estess arrived at what was then



Stennis Space Center Director Patrick Scheuermann (right) and members of the Roy S. Estess family unveil a commissioned portrait of the late Stennis director during a May 2 ceremony. Estess served as director of the south Mississippi facility from 1989 to 2002.

known as the Mississippi Test Facility in 1966 as a test engineer working on the Saturn V S-II second stage test program. When facility manager Jackson Balch began diversifying the south Mississippi installation in the early 1970s, he assigned Estess to

search for compatible federal and state agencies to share in the vast facilities and diverse programs starting up at the center.

In ensuing years, Estess held several managerial positions at the rocket engine test facility, including stints as the center's equal opportunity officer and as interim director of the Earth Resources Laboratory. During this time, he also completed the advanced management program at the Harvard Graduate Business School.

In 1980, Estess was named deputy director of the south Mississippi facility and served in that position until 1989, when he succeeded Jerry Hlass and became the fourth director of what then had become Stennis Space Center.

Estess led the test facility for more than a decade, a tenure which also featured temporary duty as assistant to two consecutive NASA administrators and as acting director of NASA's Johnson Space Center in Houston.

Estess retired in 2002 after compiling a 37-year NASA career. He died June 25, 2010.



Stennis Space Center Director Patrick Scheuermann stands with family and friends of the late Stennis Director Roy S. Estess in front of the NASA administration building named in memory of Estess during a May 2 ceremony. Shown with Scheuermann are: (l to r) Carrie Estess, Andy Estess, Mauri McKay, Lauren McKay, Marc Estess, Zann Estess, Conner Estess, Ted Estess, Drew Estess and Mississippi Rep. Mark Formby, R-Picayune.

NASA honors Stennis employees

Employees of Stennis Space Center were honored April 27 by NASA's Space Flight Awareness program for contributions to flight safety. The awards were presented by astronaut Michael Barratt during a ceremony in conjunction with the scheduled launch of shuttle Endeavour on the STS-134 mission at Kennedy Space Center in Florida. Recipients and ceremony participants included: (seated, l to r) Sheena Antoine (ASRC Research & Technology Solutions), Philis Hurd (Lockheed Martin IS & GS Test Operations Group), Jean Rushing (Pratt & Whitney Rocketdyne) and Phillip Hebert (NASA); (standing, l to r) Barratt, B.J. Autin (Jacobs Technology Facility Operating Services Contract Group), Mohammad Pourraji (A²Research), John Sneed (PWR), Stennis Director Patrick Scheuermann, David Keith (NASA), Greg Condiff (PWR), Stennis Deputy Director Rick Gilbrech, Craig Chandler (NASA), Kevin Power (NASA) and Kerry Gallagher (Jacobs FOSC). Randall Hicks (Jacobs FOSC) also received an award but was unable to attend the ceremony.



Final Discovery crew visits Stennis

Stennis Space Center Deputy Director Rick Gilbrech (far right) welcomes members of the STS-133 shuttle mission crew during an April 20 visit. The mission was the final flight for the space shuttle Discovery, which now becomes the first of the three-orbiter fleet to be retired. During the visit to Stennis, Mission Commander Steven Lindsey (l to r), Pilot Eric Boe and mission specialists Alvin Drew, Steven Bowen, Michael Barratt and Nicole Stott recapped their historic flight and thanked site employees for providing main engines that performed "as advertised." Stennis Space Center has tested every main engine used in more than 130 space shuttle missions. The STS-133 crew launched aboard Discovery on Feb. 24 and returned to Earth on March 9, completing a flawless 13-day mission to the International Space Station. During the visit to the ISS, crew members delivered and installed the Permanent Multipurpose Module and the Express Logistics Carrier 4. They also delivered critical spare components. The final mission marked the 39th flight to space in 27 years for Discovery.



NASA selects research/technology projects

NASA has selected 27 small-business proposals that address critical research and technology needs for agency projects for final contract negotiations. The proposals have a combined value of about \$16.2 million. Three involve technologies being developed for the Office of the Chief Technologist at

Stennis Space Center:

- "Hydrogen Recovery System" with Sustainable Innovation, LLC in Glastonbury, Conn., and the University of Connecticut in Storrs.
- "Gaseous Helium Reclamation at Rocket Test Systems" with Sierra

Lobo Inc. in Fremont, Ohio, and the University of Hawaii in Honolulu.

- "Innovative Solid State Lighting Replacements for Industrial and Test Facility Locations" with Energy Focus Inc. in Solon, Ohio, and John Carroll University in University Heights, Ohio.

May 1961 speech leads to Stennis facility



Note: For 50 years, NASA's 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 south Mississippi rocket engine test center's history.

Fifty years ago on May 25, 1961, President John F. Kennedy proposed that the United States commit itself to the goal of landing humans on the moon and returning them safely to Earth. Soon after, a decision was made to build a major NASA facility for test firing the large space vehicle propulsion systems that would be needed to achieve that goal.

On Oct. 25, 1961, a site in the Pearl River area in southwest Mississippi was chosen for construction of the test facility. Those working most closely with the construction project referred to the site as the Mississippi Test Facility (MTF) or the Pearl River Site. On Dec. 18, 1961, however, NASA officially designated the new facility as NASA Mississippi Test Operations (MTO). The installation remained under that name until July 1, 1965, when it was officially renamed the Mississippi Test Facility.

The test facility remained MTF as a component of the Marshall Space Flight Center until June 14, 1974. At that time, it was given independent status and renamed the National Space Technology Laboratories. NSTL remained the official name until May 20, 1988, when President Ronald Reagan signed an executive order renaming it for the distinguished Mississippi senator and longtime supporter of the space program, John C. Stennis.

Other May historical events and milestones during Stennis' 50-year history include:



A 1963 photo shows the Mississippi Test Operations Information Center.

48 years ago

May 17, 1963 – Employees cut first tree to start clearing the test area for construction.

36 years ago

May 19, 1975 – First space shuttle main engine test is conducted at the Mississippi facility.

23 years ago

May 9, 1988 – NSTL is assigned the key role for space remote sensing commercialization.

15 years ago

May 30, 1996 – NASA names Stennis as lead center for managing rocket propulsion test capabilities and assets.

10 years ago

May 2001 – The E Test Complex at Stennis begins work on nearly \$24 million worth of upgrades.

Four years ago

May 8, 2007 – NASA announces decision to build the new 300-foot-tall A-3 Test Stand at Stennis.

Stennis to host public open house June 2

Stennis Space Center is inviting the public to visit the rocket engine test facility for a 50th Anniversary Open House on June 2.

Gates will open at 9:30 a.m. Activities – including exhibits and demonstrations by Stennis agencies, speakers and interactive activities for children – will continue until 2 p.m. on the lawn near the StenniSphere visitor center. Normal StenniSphere operations will be suspended for the event and will resume June 3. Guests must arrive no later than noon to attend activities.

Food and drinks will be available for purchase. Personal coolers will not be allowed on site.

Open house visitors must have a car pass to gain entry to activities. Car passes are free and available until May 20 at the following Chamber of Commerce offices: St. Tammany Parish Chamber, Washington Parish Chamber, Greater Picayune Area Chamber, Hancock County Chamber, Stone County Chamber and Jackson County Chamber. Passes also are available until May 20 at the Launch Pad at the Mississippi Welcome Center, I-10, Exit 2, during normal operation hours – Wednesday through Saturday from 10 a.m. to 3 p.m.

Each car pass admits one vehicle. A limited number of passes are available. For information, call 800-237-1821 or 228-688-2370.

Office of Diversity and Equal Opportunity

Treating everyone equally not always fair

"The highest courage is to dare to appear to be what one is."

John Lancaster Spalding

Many people think that "fairness" means "treating everyone the same." How well does treating everyone the same work for a diverse staff?

For example, when employees have limited English language skills or reading proficiency, even though that limit might not impair their ability to do their jobs, transmitting important information through complicated memorandums might not be an effective way of communicating with them. While distributing such memos to all staff is "treating everyone the same," this approach may not communicate essential information to everyone who receives them. It is easy to see how a staff member who missed out on essential information might feel that the communication process was "unfair."

A process that takes account of the diverse levels of English language and reading proficiency among the staff might require extra time to make certain that everyone understands an important memorandum. Such efforts on the part of supervisors and managers should be supported and rewarded as good management practices for working with a diverse staff.

Educating managers and staff on how to work effectively in a diverse environment helps to prevent discrimination and promote inclusiveness. There is evidence that manag-

ing a diverse work force well can contribute to increased staff retention and productivity. It can enhance the organization's responsiveness to an increasingly diverse world of customers, improve relations with the surrounding community, increase the organization's ability to cope with change and expand the creativity of the organization.

"Diversity is broader than affirmative action. ... Emphasizing diversity moves us beyond considerations of only race and gender to achieve an inclusive work environment."

Diversity

Diversity is broader than affirmative action and is voluntary (i.e., it is not "strictly necessary" to incorporate diversity concepts in order to meet federal requirements). Emphasizing diversity moves us beyond considerations of only race and gender to achieve an inclusive work environment.

While affirmative action and equal employment opportunity focus on employment practices, the concept of diversity extends to the work environment, including individual attitudes and behaviors. Yet, diversity is related to affirmative action and equal employment opportunity, as there is a direct relationship between individual attitudes and behaviors, and employment practices. Diversity workshops can help

managers learn a variety of options to enhance diversity and understand how to consistently apply fair employment practices and procedures.

Actions that promote diversity for staff are those that lead to a work environment that maximizes the potential of all employees while acknowledging their unique contributions and differences.



Stennis employees observe Earth Day

Pat Drackett of the Crosby Arboretum in Picayune (l) speaks with Helen Robinson and Arlene Brown, both employees of the Naval Oceanographic Office at Stennis Space Center, during Earth Day 2011 activities April 21. During the day, Stennis employees were able to visit various exhibits featuring environmentally friendly and energy-conscious items and information. The activities were coordinated by the Stennis Environmental Office. Earth Day is observed each April 22 in more than 175 countries as a way to inspire awareness and appreciation for Earth's environment. The annual emphasis was first observed in 1970.

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NASA names Spaced Out Sports winners

NASA announced three winners April 5 in the Spaced Out Sports competition, which challenged U.S. students in fifth through eighth grades to create games for astronauts to play aboard the International Space Station. The challenge was part of a broader agency education effort to engage students in science, technology, engineering and mathematics (STEM) activities.

Students at K.W. Barrett Elementary School in Arlington, Va., earned the top prize for creating a game titled "Save the World." Second-place honors went to students at Kinser Elementary School, a Department of Defense Education Activity School in Okinawa, Japan, for their "Alligator Clip Capture" game. Third place was awarded to students at Manhattan Beach Middle School in Manhattan Beach, Calif., for their "Independence Day" game.

The Spaced Out Sports challenge was unveiled last fall to accompany the Science and Sports curriculum developed by the Stennis Space Center education team. The curriculum focuses on helping students learn and apply Sir Isaac Newton's Laws of Motion. Using the accompanying curriculum, teachers led Spaced Out Sports students through a study of Newton's laws, highlighted by hands-on activi-

ties and video podcasts featuring NASA scientists and engineers explaining how the laws are used in the space program. The videos also feature celebrity athletes, such as members of the New Orleans Saints football team, explaining the science behind their sports. Students learn the differences in a game played in the gravity environment of Earth and the same game played in a microgravity environment, such as the space station. Spaced Out Sports competitors used the knowledge to design or redesign a game to illustrate and apply Newton's laws.

"Save the World" features teams gathering objects and building devices to save Earth from incoming meteorites. In "Alligator Clip Capture," players race around the station's Destiny Lab retrieving alligator clips of varying point values. "Independence Day" challenges players to throw batons through "Liberty Rings" to gain points. All three games will be played aboard the station.

"Response to the challenge was very encouraging, with more than 55 submissions," said Katie Wallace, director of the Stennis Office of Education. "Even more encouraging was seeing students excited about, and involved in, learning science. Hopefully, they will continue in these studies and consider STEM careers."

Stennis hosts partner high schools for HUNCH showcase

Tommy Carroll (l), an aerospace engineer at Stennis Space Center, talks with students from East Central High School in Hurley, Miss., during a High Schools United with NASA to Create Hardware (HUNCH) showcase event at Stennis on May 6. During the showcase event, high school teams displayed hardware and software models they designed in partnership with NASA engineers as part of the 2010 HUNCH effort. Each year, NASA enlists high schools to work with agency engineers on assigned projects to benefit the space program. Eight teams from Louisiana and Mississippi were recognized for their efforts during the May 6 event. Students on participating teams also had a chance to talk with NASA engineers about their projects, tour rocket engine test facilities and view a pocket rocket demonstration. Stennis has been involved in HUNCH since 2009.

