National Aeronautics and Space Administration

LAGNIAPPE

John C. Stennis Space Center

Volume 10 Issue 9 www.nasa.gov/centers/stennis September 2015

The RS-25 engine fires up for a 535-second test Aug. 27 at Stennis Space Center. This is the final in a series of seven tests for the development engine, which will provide NASA engineers with critical data on the engine controller unit and inlet pressure conditions.

NASA concludes RS-25 test series

NASA has completed the first developmental test series on the RS-25 engines that will power the agency's new Space Launch System (SLS) rocket on missions deeper into space than ever before.

The test series wrapped up Aug. 27 with a seventh hot fire test of a developmental RS-25 engine on the A-1 Test Stand at NASA's Stennis Space Center. The test ran for a full-duration 535 seconds.

"The completion of this test series is an important step in getting SLS ready for the journey to Mars," said Steve Wofford, engines manager at NASA's Marshall Space Flight Center in Huntsville, Alabama, where the SLS Program is managed for the agency. "The RS-25 engine gives SLS a proven, high-performance, affordable main propulsion system. It is one of the most experienced large rocket engines in the world, with more than a

See **RS-25, Pages 3-4**

"The future of Stennis Space Center remains bright as it continues its longstanding tradition of being the agency's premier rocket engine test center."

From the desk of
Jerry Cook
Former Deputy Director, Stennis Space Center

As I type my last article for the Lagniappe, it is difficult to believe that I have had the honor of being a part of the Stennis family for over two-and-a-half years. While I will try not to sound cliché, time does truly fly when you are having fun.

I never imagined in my wildest dreams that I would have been blessed with this opportunity. To leave the center where I started my NASA career and move to another center seemed like a very large leap of faith, but when I first walked through the doors of the Roy S. Estess Building and got to know the people, it felt like I was home.

Stennis is a special place. You guys know that, but I can now say that I know it as well. It is a place where dreams become reality and hardships forge lifelong bonds of friendship, caring and respect. You have embraced me as one of your own, and for that, I am eternally grateful.

I have grown very fond of being part of this center and a member of the Stennis family. I will never have the adequate vocabulary to answer when someone asks, "What makes Stennis the Best Place to Work?" However, I will have the memories that reinforce that sentiment – the fun rivalry of football season, the cafeteria "lunch bunch," the board meetings and sometimes probably the "bored" meetings, steak nights, crawfish boils, Christmas socials and countless other events and activities.

While I am physically moving to start the next chapter of my NASA career, I will always carry part of Stennis with me. The future of Stennis Space Center remains bright as it continues its longstanding tradition of being the agency's premier rocket engine test center.

I look forward to returning for one of the upcoming RS-25 or RS-68 engine tests later this year, as well as the Space Launch System core stage test slated for later in 2017. Thank you for the support, encouragement and friendship.

Godspeed.

Jerry R. Cook

Lagniappe is published monthly by the Office of Communications at NASA's John C. Stennis Space Center.
Access monthly copies at: www.nasa.gov/centers/stennis/news/publications/index.html
Contact info – (phone) 228-688-3749; (email) ssc-pao@nasa.gov; (mail) NASA OFFICE OF COMMUNICATIONS, Attn: LAGNIAPPE, Mail code IA00, Building 1100 Room 304, Stennis Space Center, MS 39529
Managing Editor – Valerie Buckingham
Editor – Lacy Thompson Staff Photographer – Danny Nowlin

FULFILLING NASA'S EXPLORATION MISSION

NASA-SpaceX testing partnership going strong

Operators at the E-2 Test Stand at Stennis conduct a test of the oxygen preburner component being developed by SpaceX for its Raptor rocket engine, which is being built to power flights to Mars.

When SpaceX sought a partner to conduct testing for development of the company's ambitious Raptor rocket engine, its focus naturally fell on the versatile high-pressure test stands at NASA's Stennis Space Center.

In the spring of 2014, NASA and the company, which also had support from the Mississippi Development Authority and the Hancock County Port and Harbor Commission, officially launched a testing partnership with a ribbon-cutting at the E-2 Test Stand at Stennis. Stennis Director Rick Gilbrech characterized the collaboration as "opening new doors of commercial space exploration."

As the summer of 2015 draws to a close, the ongoing testing agreement is paying off. SpaceX completed a successful round of main injector testing in late 2014. Earlier this summer, the company and the E-2 Test Stand team achieved another milestone, completing a full-power test of the oxygen preburner component for the new engine.

Additional preburner testing has continued throughout the summer.

"This is a very exciting and unique partnership," explained NASA Project Manager Randy Holland, who manages the SpaceX test collaboration at Stennis. "Other test partnerships involve private companies that are funded from NASA, but this project is strictly private industry development for commercial use."

The company is developing a Raptor staged combustion engine to eventually power unprecedented flights to Mars. As envisioned, the methane-fueled engine will be one of the highest-performing in the world, said Jeff Thornburg, senior director of propulsion engineering for SpaceX.

The article being tested is the first preburner component developed by SpaceX and the first full-scale component developed for the Raptor engine. Hitting the full-power mark in June was a major milestone.

"With a preburner, you're always focused on reliable ignition and proper temperature distribution for the pump turbines," Thornburg explained. "In this case, the test article and test facility performed very well. The two teams really have worked well together and are hitting their stride. This is just a great spot to do development testing."

The preburner was installed on the E-2 stand in mid-April. By the end of August, SpaceX and the Stennis test team had conducted 76 hot fire tests on the component, totaling 399.36 seconds. "This is pure research and development testing," said Stephen Rawls, who is NASA test conductor for the project. "You focus on firing the article at a steady state and collecting performance data."

"There are not a whole lot of high-pressure test facilities around, and we wanted to find a site and team that were small and nimble," Thornburg noted. "Also, the interplay between the test article and test facility is no trivial matter; it must be right to ensure collection of good data. Considering all factors, Stennis is really the best spot for us to be."

Both Holland and Thornburg are optimistic about the partnership continuing with future testing projects. SpaceX has made it no secret that it hopes to launch humans to Mars during the 2020s. If that goal is achieved, Stennis will have played a key role in enabling the flights.

RS-25

Continued from Page 1

million seconds of ground test and flight operations time."

The series was designed to collect valuable data on performance of the RS-25 engine, a former space shuttle main engine operating at higher thrust levels in order to provide the power needed for the SLS vehicle. Of particular interest is data that will aid in development of a new engine controller, or "brain," to monitor engine status and communicate programmed performance needs.

"These are extremely reliable engines. We are testing them again because we want to ensure that the engine performs as required with a new engine controller, higher propellant inlet pressures and lower temperatures that are part of the SLS design. We also want to mitigate any risks on the ground before flight," Wofford said.

Four RS-25 engines will help power the SLS core stage during launch. Firing simultaneously at 109 percent of its operating level, the engines will provide approximately 2 million pounds of thrust. The engines will operate in conjunction with a pair of five-segment solid rocket boosters for a total of 8.4 million pounds of thrust to lift the initial 70-metric-ton (77-ton) SLS off the launch pad. The SLS eventually will evolve to a 130-metric-ton (143-ton) configuration that will enable missions to such deep space destinations as an asteroid and Mars.

Testing of RS-25 flight engines for the initial SLS missions will begin at Stennis this fall. In addition to testing RS-25 flight engines, Stennis operators will employ their collective expertise to test the SLS core stage. The B-2 Test Stand at Stennis is being renovated to conduct tests on the SLS flight core stage prior to its first uncrewed mission. That testing will involve installing the flight stage on the stand and firing its four RS-25 engines simultaneously, just as during an actual launch.

"What a great time to be at Stennis," Center Director Rick Gilbrech said. "When it comes to powering the future of the deep space exploration program for this country, this is the front lines, where we enable those missions to fly."

The developmental tests began with a Jan. 9 hot fire and resumed in May after scheduled work was completed on the high-pressure industrial water system that provides the thousands of gallons of water needed during an engine test. Aerojet Rocketdyne of Sacramento, California, is the prime contractor for the RS-25 engine work.

"This was a great test series for Stennis," said Ronnie Rigney, RS-25 project manager at Stennis. "Our teams built up a lot of history with space shuttle main engines and were able to use that expertise to meet very challenging test specifications for the RS-25. The testing done here will help ensure the engines perform as needed during actual SLS missions."

For more information about SLS, visit: http://www.nasa.gov/sls.

FULFILLING NASA'S EXPLORATION MISSION

SLS core stage Pegasus barge arrives at Stennis

NASA's Pegasus barge arrived at Stennis Space Center on Aug. 13, remaining moored at the site's bascule bridge before moving through the lock-and-dam system Aug. 19. The Pegasus barge was specially designed and built in 1999 to transport the large external tanks used by the space shuttle from NASA's Michoud Assembly Facility in New Orleans to Kennedy Space Center in Florida. It has been modifed in preparation for carrying the massive Space Launch System core stage between NASA sites in Louisiana, Mississippi, Alabama and Florida. The 213-foot-tall, 27.6-foot-diameter core stage will be the longest item ever shipped by a NASA barge. Following the end of the Space Shuttle Program in 2011, the Pegasus barge was stored at Stennis until NASA officials decided to retrofit it for SLS use. In 2014, crews at Conrad Shipyard LLC in Morgan City, La., were employed to complete modification of the barge. A 111-foot section of the barge was removed and replaced with a 165-foot section, lengthening the barge to 310 feet – longer than a professional football field. The modifications also increased the cargo weight the Pegasus can carry. Modification work on the Pegasus was completed earlier this year. The first voyages for the new craft are planned for 2016 when the Pegasus will carry core stage structural test articles from Michoud to Marshall Space Flight Center in Huntsville, Ala. The trip will take 7-10 days. At Huntsville, the core stage elements will undergo structural loads testing. Pegasus then will carry an SLS flight core stage from Michoud to Stennis in 2017, just a one-day trip between the two sites. The flight stage will undergo testing on the B-2 Test Stand at Stennis; Pegasus then will carry the core stage on a 900-mile, six-day trip across both inland and open-ocean water to Kennedy for use on the first uncrewed SLS mission. In addition to being 310 feet long, the Pegasus barge is 50 feet wide. It is not a self-powered craft; tugboats or towing vessels are required to move the barge.

FULFILLING NASA'S EXPLORATION MISSION

History in the making: When it comes to testing, data is the key

Editor's Note: The following is the fifth in a series of articles highlighting the A-1 Test Stand at Stennis Space Center. The articles focus on aspects of the stand and how they enable rocket engine testing that supports America's human space program. The series is presented as NASA engineers test RS-25 engines on the A-1 stand. The engines will power the core stage of NASA's new Space Launch System, which is being built to carry humans deeper into space than ever before.

(Bottom left photo) Lockheed Martin Test Operation Contract employee Scotty Herrin checks the status of the A-1 Test Stand accelerometer, which measures rocket engine pump vibrations during a test.

(Top left photo) Robert Drackett of NASA (standing) and W. Mark Mitchell of Lockheed Martin monitor the DataMax high-speed data acquisition system at the A-1 Test Stand.

(Top right photo) NASA A-1 Test Stand Instrumentation Lead David Carver reviews data acquisition lines that transmit performance information during a rocket engine test.

Anyone who has viewed a rocket engine test at Stennis Space Center is familiar with the accompanying "shake, rattle and roll" vibrations that carry across the viewing distance and the towering steam cloud created when water hits the superhot engine exhaust.

What they are less familiar with – and likely not even aware of – is the millions upon millions of operating data samples being collected during a typical test. Think 28 billion bytes of data generated during a single 535-second test – and that is just through the high-speed data acquisition system. The low-speed system generates its share of data as well, beginning early on the morning of a test and continuing after hot fire until the test article has been secured. Its typical data count reaches into the billions as well; throughout the test day, the system generates more than 921 million bytes of information every hour.

Even without adding in the low-speed total, if each two-byte, high-speed data sample constituted a single page of information, the total number of pages stacked on top of one another would reach 8,714 miles high. If the pages were laid end-to-end, they would reach around the equator – 98 times!

"This is where the water hits the wheel," said Jeff Henderson, A-1 Test Stand director at Stennis Space Center. "Data is our product."

NASA tests engines for two very fundamental reasons – to confirm expectations of how an engine will perform under particular circumstances and to expand understanding of how an engine will perform under particular circumstances. NASA must know an engine's capabilities in order to plan a mission. It also must know the limits of an engine, how it will react with changes in circumstances, such as a sudden drop in propellant pressure. These changes can be introduced during testing to monitor what happens.

The data will tell you. Data also will tell when an engine is ready for flight and how new components affect performance. A lot of the data collected during the recent RS-25 rocket engine test series on the A-1 stand was used for just this latter purpose, to monitor the operation of a new engine controller component.

When an engine does not perform as expected, data allows engineers to conduct a "forensics" investigation and determine what happening – and why. "If you don't have data, you can't prove what's going on," Henderson said.

"Data is your evidence," echoed David Carver, NASA instrumentation lead on the A-1 Test Stand. "It's the end result of testing."

Indeed, NASA does not test rocket engines in order to put on a good "shake, rattle and roll" show but in order to collect data. At Stennis, the responsibility for doing that falls to a team of three engineers and six technicians. "Their job is very important, and they do it very, very well," Henderson said. "There's a lot of work that goes into the amount and quality of data we need."

Obviously, the amount of data collected by the Stennis team is enough to redefine the term "voluminous." Every aspect of engine operation is measured, including such things as pressures, temperatures, pump revolutions per minute, thrust and valve function. The list goes on and on. Information is collected on the stand itself as well. Since operators are located away from the stand in the Test Control Center during a test, data must be monitored to evaluate what is happening on the stand.

Most of the data on engine performance is collected through the high-speed DataMax system of 256 channels, each of which collects 102,400 samples per second. The collection of the data is carefully timed so accurate comparisons can be made and engineers can gain a full picture of all that is happening at a given moment.

Most of the data on test stand performance is collected via the low-speed, multi-channel integrated data acquisition system. In this system, 512 separate channels generate 250 samples per second.

As one would expect when it comes to rocket science, precision is of utmost concern. The data collected has an "extreme amount of accuracy," Henderson said. For instance, test requirements may call for a pump operating at 30,000 rpms to be adjusted by plus or minus 50 rpms. The data acquisition system must be precisely calibrated to provide accurate information on the impact of even that small change in circumstances.

"There is just very little room for variance," Henderson said. "We spend a lot of time between tests making sure all of the stand systems, including the data acquisition equipment, is accurately calibrated and ready."

Much of the data equipment is updated from the original system. Obviously, technology has progressed since the stand went into operation in the 1960s, and it continues to evolve. For instance, the recent RS-25 test series featured a new NASA Data Acquisition System (NDAS) developed at Stennis during the past three to four years. The NASA system replaces previous heritage systems and is being installed on all of the Stennis test stands.

A lot of time also is spent between tests evaluating "data squawks," instances in which data readings do not match expectations. It is important to identify whether the cause of the squawk is engine performance or a data system anomaly. After all, the data collected during the test is the same data that will guide decisions made during an actual launch and flight to space. There is no room for uncertainty.

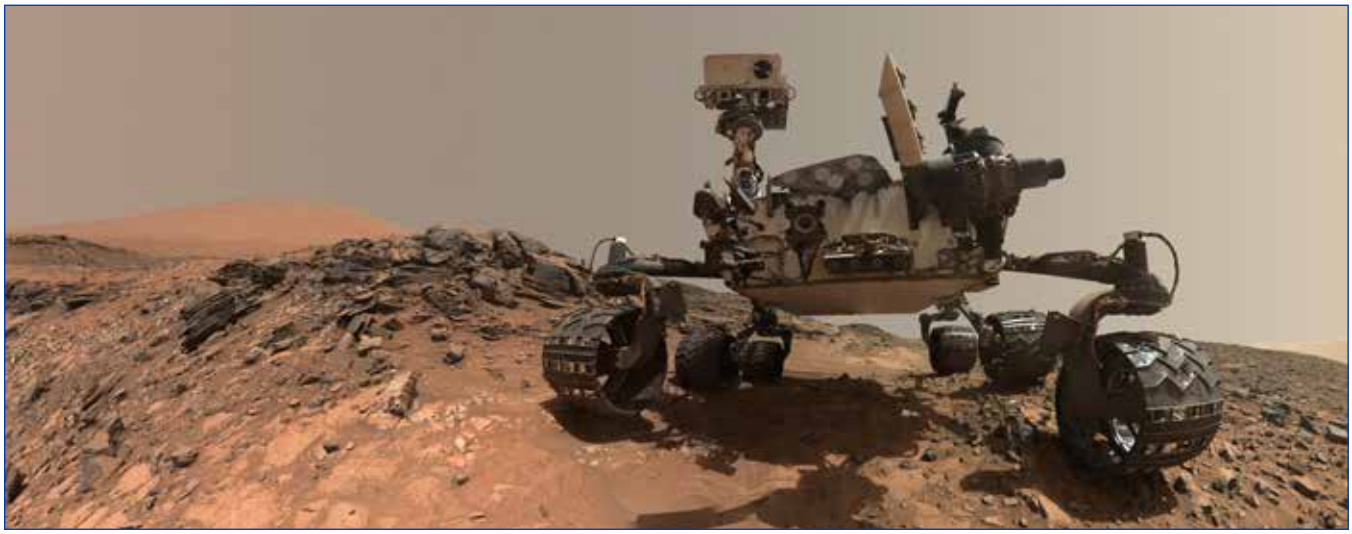
"The data we collect is overlooked and taken for granted by some, but it is highly scrutinized and critical for our space flight missions," Henderson said. "The work of the instrumentation and data acquisition team is very, very important."

Super Guppy makes stop at Stennis Airport

NASA's Super Guppy airplane visited Stennis International Airport on Sept. 9-10 to deliver the Crew Module Barrel for the Orion Exploration Mission-1. Once unloaded, the Crew Module Barrel was prepared for transport by truck to Michoud Assembly Facility in New Orleans. The Super Guppy aircraft was acquired by NASA from the European Space Agency and is the latest version in a long line of Guppy cargo aircraft used by NASA to transport spacecraft components. The first Guppy was developed for NASA in 1962 by Aero Spacelines of California. The Super Guppy has a cargo compartment that is 25 feet tall, 25 feet wide and 111 feet long. It can carry a maximum payload of more than 26 tons. The aircraft has a unique hinged nose that can open more than 200 degrees, allowing large cargo pieces to be loaded and unloaded from the front. A number of Stennis employees traveled to the airport Sept. 10 to view and tour the Guppy aircraft.

FULFILLING NASA'S EXPLORATION MISSION

Three years and counting, Curiosity still at work



This low-angle self-portrait of NASA's Curiosity Mars rover shows the vehicle at the site from which it reached down to drill into a rock target called "Buckskin" on lower Mount Sharp. The selfie combines several component images taken by Curiosity's Mars Hand Lens Imager (MAHLI) on Aug. 5, 2015, during the 1,065th Martian day of the rover's work on Mars. For scale, the rover's wheels are 20 inches in diameter and about 16 inches wide. This view is a portion of a larger panorama available online at http://photojournal.jpl.nasa.gov/catalog/PIA19807. MAHLI is mounted at the end of the rover's robotic arm. For this self-portrait, the rover team positioned the camera lower in relation to the rover body than for any previous full self-portrait. The selfie does not include the rover's robotic arm beyond a portion of the upper arm held nearly vertical from the shoulder joint. With the wrist motions and turret rotations used in pointing the camera for the component images, the arm was positioned out of the shot in the frames or portions of frames used in this mosaic. More about Curiosity is online at http://www.nasa.gov/msl and http://mars.jpl.nasa.gov/msl/.

NASA in the News

NASA's Orion coming together

NASA is another small step closer to sending astronauts on a journey to Mars. On Sept. 5, engineers at the agency's Michoud Assembly Facility in New Orleans welded together the first two segments of the Orion crew module that will fly atop NASA's Space Launch System (SLS) rocket on a mission beyond the far side of the moon. The primary structure of Orion's crew module is made of seven large aluminum pieces that must be welded together in detailed fashion. The first weld connects the tunnel to the forward bulkhead, which is at the top of the spacecraft and houses many of Orion's critical systems, such as the parachutes that deploy during reentry. Orion's tunnel, with a docking hatch, will allow crews to move between the crew module and other spacecraft. During the coming months as other pieces of Orion's primary structure arrive at Michoud from machine houses across the country, engineers will inspect and evaluate them to ensure they meet precise design requirements before welding. Once complete, the structure will be shipped to NASA's Kennedy Space Center in Florida where it will be assembled with the other elements of the spacecraft, integrated with SLS and processed before launch. For more about Orion, visit: http://www.nasa.gov/orion..

ISS mission hits midpoint

Sept. 15 marked the midpoint for NASA astronaut Scott Kelly and Russian cosmonaut Mikhail Kornienko of their one-year mission aboard the International Space Station. The average space station expedition lasts four to six months. Research enabled by the current one-year mission will help scientists better understand how the human body reacts and adapts to long-duration spaceflight. This knowledge is critical as NASA looks toward human missions deeper into the solar system, including to and from Mars, a journey that could last 500 days or longer. The one-year space station mission also carries potential benefits for humans on Earth, from helping patients recover after long periods of bed rest to improved monitoring for people whose bodies are unable to fight infections. The International Space Station has been continuously occupied since November 2000 and, since then, has been visited by more than 200 people and a variety of international and commercial spacecraft. The space station remains the springboard to NASA's next giant leap in exploration, including future missions to an asteroid and Mars. More information about the one-year mission is available at: http://www.nasa.gov/oneyear.

Access all NASA news releases online at: http://go.usa.gov/3f3KW.

September 1965 – test site moves forward

Note: For more than 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's Lagniappe provides a glimpse into the history of the south Mississippi rocket engine test center.

While the Mississippi Test Facility (MTF) was preparing for one of the most historic moments in Mississippi, the first 10 days of September 1965 were eventful due to issues that ranged from conflicts with the education of local school children to recovery efforts of a hurricane.

One hundred twenty-nine students headed back to Logtown School for the 1965-66 school year, the last operational session that came with stipulations from NASA. The school had to close whenever rockets were being tested, and it had to be carefully inspected before school resumed.

Logtown was one of five former Hancock County towns NASA bought in 1961 for the future site of the Saturn rocket testing facility. It is also one of four towns that comprises Stennis Space Center's buffer zone.

(Top photo) A 1963 photo shows Logtown School, which operated through 1965-66. (Bottom photo) An August 1965 photo shows construction of the A-1 Test Stand.

The school was the last structure in MTF's buffer zone still in use. Other structures in the town had been torn down or moved. The school was permitted to continue for a year because a replacement school had not yet been built at Pearlington, four miles to the south. Parents objected to their children going to the Bay St. Louis or Waveland schools located 20 to 25 miles to the east.

In the meantime, there were a lot of curiosity seekers who wanted to know what was taking place at MTF and how the new site would help send humans to the moon. As a special treat to employees, their families and the general public, NASA held an Open House on Labor Day for an opportunity to see the giant rocket testing facility under development. More than 7,000 visitors attended the eight-hour event that mesmerized the crowd with presentations and motion pictures on MTF and the nation's space program. There were exhibits at the Central Control Building (Building 1200), where the visitors gathered for a drive-through tour.

A few days after the first-time public event, setbacks occurred when Hurricane Betsy slammed into the Mississippi-Louisiana Gulf Coast on Sept. 9-10. Roads and grounds and some structure damages caused by the hurricane at MTF were minor. A fixed crane on the A-2 Test Stand was ripped off during a load test before the S-II simulator could be mounted for checkout. Following the storm, MTF was used as a shelter by some 350 Hancock County residents from nearby communities.

Meanwhile, progress continued in the Saturn Test Complex with ongoing construction of the test stands in preparation for the next month's arrival of the S-II-T, the test model of the Saturn V's second stage, also known as the "T-Bird."

Hail & Farewell

NASA bids farewell to the following:

Jerry Cook	Deputy Center Director	Office of the Director
Joshua Finch	Student Trainee (Public Affairs)	Office of Communications

Office of Diversity and Equal Opportunity

Religious discrimination and accommodation

The following information was gathered from the U.S. Department of Labor. It is Part 2 of 2.

In last month's article, religious discrimination and accommodation were discussed along with what constitutes undue hardship on the employer's part. This month's article will show the accommodation process, and discuss discrimination and harassment, as well as employee best practices.

Religious Accommodation Process In The Workplace

In requesting an accommodation, an employee or applicant is not required to use "magic words" (such as indicating that they are seeking "an accommodation"). However, an employee or applicant must make the agency aware of the need for an accommodation based on a conflict between the individual's religious belief or practice and their work duties or the agency's application process. The request for an accommodation may trigger an interactive process, particularly if the employer reasonably needs more information, between the responsible management official and the individual making the request to discuss the request and assess available options. Examples of religious accommodations may include: scheduling changes (arrivals, departures, floating/optional holidays, flexible work breaks, etc.); voluntary shift substitutions and/or swaps; job reassignments, such as changes of position tasks and lateral transfers; and modifications to workplace practices, policies and procedures.

An accommodation also may involve designating an unused or private location in the workplace where a religious observance or practice can occur if it is disrupting others. The need for accommodations may also apply to such things as dress or grooming practices that an employee has for religious reasons. These might include wearing particular head coverings or other religious dress (such as a Jewish yarmulke or Muslim headscarf), or wearing certain hairstyles or facial hair (such as Rastafarian dreadlocks or Sikh uncut hair and beard). It also may include an employee's observance of a religious prohibition against wearing certain garments (such as pants or miniskirts).

Stennis observes Women's Equality Day

Stennis Space Center Deputy Director Randy Galloway (r) presents a plaque of appreciation to Teresa Vanhooser following her presentation to site employees during a 2015 Women's Equality Day Program on Aug. 26. Vanhooser recently retired as deputy director at NASA's Marshall Space Flight Center in Huntsville, Ala. Women's Equality Day annually commemorates the granting of the vote to women throughout the country.

Religious Discrimination & Harassment

It is illegal to harass a person because of their religion. Harassment can include, for example, offensive remarks about a person's religious beliefs or practices. Although the law does not prohibit simple teasing, offhand comments or isolated incidents that are not very serious, harassment is illegal when it is so frequent or severe that it creates a hostile or offensive work environment or when it results in an adverse employment decision (such as the victim being fired or demoted). The harasser can be the victim's supervisor, a supervisor in another area, a coworker or someone who is not an employee of the department, such as a contractor.

Employee Best Practices

Employees who are the recipients of unwelcome religious conduct should inform the individual engaging in the conduct that they wish it to stop. If the conduct does not stop, employees should report it to their supervisor or appropriate agency official in accordance with the procedures established in the agency's anti-harassment policy.

Employees who seek to proselytize in the workplace should cease doing so with respect to any individual who indicates that the communications are unwelcome. Employees who are not comfortable confronting the individual in question should report the conduct to their supervisor, a member of management in their supervisory chain of command or, if necessary, the agency's Equal Employment Opportunity manager.

Employees requiring an accommodation should advise their supervisors of the nature of the conflict between their religious needs and their work environment or duties. Employees should provide enough information to enable the employer to understand what accommodation is needed and why it is necessitated by a religious practice or belief. Likewise, supervisors should follow up with employees to request any relevant information before making a determination regarding an accommodation request.

NASA sponsors annual Safety and Health Day activities

(Left photo) Russel L. Honoré (Retired Army Lt. Gen.), Commander of Joint Task Force Katrina following the 2005 storm, speaks to Stennis employees during 2015 Safety and Health Day activities. As leader of the Katrina task force, Honoré gained reknown for coordinating military relief efforts for Hurricane Katrina-affected areas across the Gulf Coast. The theme of the 2015 Safety and Health Day at Stennis was "Hurricane Emergency Preparedness."

(Right photos) Stennis Space Center employees visit exhibits highlighting various aspects of safety and health. Exhibits included information on topics ranging from ear protection to the dangers of electricity to hurricane preparedness. They also included opportunities for employees to gather health-related information, check their blood pressure and receive ergonomic massages.