National Aeronautics and Space Administration

NASA's John C. Stennis Space Center 2015 Mission Brochure

Overview

stennis space center

For more than five decades, John C. Stennis Space Center in south Mississippi has served as NASA's primary rocket propulsion testing ground. Today, the center provides propulsion test services for NASA and the Department of Defense, as well as the private sector. It is home to NASA's Rocket Propulsion Test Program, which manages all of the agency's propulsion test facilities.

State-of-the-art facilities, a seven-and-one-half-mile canal waterway system and the 125,000-acre acoustical buffer zone that surrounds Stennis enable delivery and testing of large-scale rocket stages, engines and components.

Stennis was established in the 1960s to flight-certify all first and second stages of the Saturn V rocket for the Apollo manned lunar landing program. From 1975 to 2009, the primary mission was to test the main engines that propelled space shuttle vehicles on their eight-and-one-half-minute ascent into orbit.

Stennis now is testing RS-25 engines (modified space shuttle main engines) that will power the core stage of NASA's new Space Launch System. The center also is working with commercial companies to meet their rocket propulsion testing needs.

Stennis' state-of-the-art facilities include three test complexes. The newest of these, the E Test Complex, provides a particularly versatile option for testing a range of engines and components.

Stennis' Applied Science and Technology Project Office uses NASA-generated science research, remote sensing and other technical capabilities to support research efforts by partner agencies, such as the Federal Emergency Management Agency and the U.S. Department of Agriculture. For instance, Stennis scientists use remote sensing technologies and their expertise in rapid prototyping to expand and improve hurricane prediction capabilities. They also focus on coastal management, an important consideration for the entire Gulf Coast region and one of NASA's national science priorities.

Stennis was established in the 1960s to flight-certify all first and second stages of the Saturn V rocket for the Apollo manned lunar landing program.

Through the Office of the Chief Technologist, engineers and researchers at Stennis work to transfer NASA-developed technologies to the commercial sector to help improve the economic strength of the United States and the quality of life for its citizens.

Stennis is home for the NASA Shared Services Center, which provides the national agency with centralized administrative processing services and customer contact center operations. The work performed by the center frees agency resources that can then be redirected to NASA's core mission.

The center also hosts a number of federal, state, academic and private organizations and several technology-based companies that share the cost of owning and operating the facility, making it more cost-effective for each agency to accomplish its independent mission. These include such organizations as the Lockheed Martin Mississippi Space and Technology Center, the Rolls-Royce North America Outdoor Jet Engine Testing Facility and the Aerojet Rocketdyne rocket engine assembly facility.

Stennis is a model of government efficiency, providing American taxpayers positive returns on their investments.

The Naval Meteorology and Oceanography Command, the largest concentration of oceanographers in the world, is headquartered at Stennis, along with the Naval Research Laboratory, the Navy's corporate laboratory. Stennis is the riverine warfare training ground for the Department of Defense's Special Boat Team TWENTY-TWO, the headquarters of the Naval Small Craft Instruction and Technical Training School and Naval Oceanography Mine Warfare Center.

With its effective cost-sharing philosophy, state-of-the-art test facilities, highly-trained and professional workforce, and commitment to safety and customer satisfaction, Stennis is a model of government efficiency, providing American taxpayers positive returns on their investments.

NASA has a workforce of about 2,000 civil servants and contractors, part of the center's total workforce of 5,000-plus. The center has a strong influence on the economy of surrounding communities. Its community involvement includes various outreach activities, participation in the Combined Federal Campaign fundraising drive, hosting the area's annual Special Olympics and support of the annual Feds Feed Families food drive.

Bus tours of America's largest rocket engine test complex originate at INFINITY Science Center at I-10, Exit 2, which features a variety of Stennis-related displays, hands-on activities and space artifacts and memorabilia.

History

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When President John F. Kennedy made his historic 1961 announcement that the United States would put humans on the moon by the end of that decade, a site was needed to test the powerful engines and rocket stages that would propel them on the journey.

For NASA officials, the rough terrain of Hancock County, Miss., provided the five things necessary to test the large Apollo engines and stages: isolation from large population centers, water and road access for transportation needs, available public utilities, supporting local communities and a climate conducive to year-round engine testing. In May 1963, workers felled the first tree in a daunting construction project. The effort marked the largest construction project in the state of Mississippi and the second largest in the United States at that time.

Despite a pressing schedule, occasional setbacks and even the disruption of Hurricane Betsy in 1965, construction workers prevailed in their tasks. On April 23, 1966, a Saturn V second stage prototype was test-fired on the A-2 Test Stand. With the shake, rattle and roar of the test, south Mississippi was blasted into the space age.

Until 1972, Stennis test-fired first and second stages of the Saturn V rocket for the Apollo Program. Stennis Space Center then was called on to test main engines for NASA's new reusable spacecraft, the space shuttle. After necessary modifications to the test structures, Stennis tested the first space shuttle main engine on the A-1 Test Stand on May 19, 1975.

For 34 years, until a final test firing on July 29, 2009, Stennis Space Center would continue to test every main engine used to power the shuttle spacecrafts into orbit. Not a single mission failed because of engine malfunction.

Stennis now is testing RS-25 rocket engines for use on NASA's new Space Launch System, being developed to carry humans deeper into space than ever. Stennis also will test the SLS core stage, which will involve firing a configuration of four RS-25 engines simultaneously.

Into its sixth decade of NASA support, Stennis remains focused on building on its rich history as the nation's largest rocket engine test facility – a place where space dreams are powered into reality.

A 1965 photograph shows the B-1/B-2 Test Stand under construction at Stennis Space Center.

Propulsion Testing

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Since the 1960s, Stennis Space Center has grown into the nation's largest rocket engine test site, featuring facilities collectively valued at more than $2 billion and considered national assets. State-of-the-art facilities include A, B and E complexes, where propulsion tests can be conducted on rocket stages, full-scale engines and engine components.

The A Test Complex at Stennis Space Center consists of two single-position, vertical-firing test stands designated A-1 and A-2, both built in the 1960s. The stands have been used to conduct full flight-stage and engine component tests, as well as single-engine tests at sea level and simulated altitudes. The A-1 stand is now testing RS-25 rocket engines, which will power the core stage of NASA's new Space Launch System (SLS), being developed to carry humans deeper into space than ever.

The B Test Complex at Stennis features a dual-position, vertical, static-firing test stand designated B-1/B-2, also built in the 1960s. First stages of the Apollo Saturn V rocket were fired at the test stand from 1967 to 1970. Stennis now leases the B-1 test position to Aerojet Rocketdyne for testing of the RS-68 engine. Meanwhile, the B-2 position is being modified to test the SLS core stage, which will involve firing four RS-25 rocket engines simultaneously.

The E Test Complex at Stennis was constructed in the late 1980s and early 1990s. This three-stand complex includes seven separate test cells capable of supplying ultra high-pressure gases and cryogenic fluids, using a variety of rocket propellants. The complex offers particularly versatile options for testing engines and components, including engines and components for commercial companies, such as Space Exploration Technologies Corp. (SpaceX).

Various infrastructures support the Stennis test complexes. Test stands are linked by a seven-and-one-half-mile canal system used primarily for transporting liquid propellants. Additional features include test control centers, data acquisition facilities, a large high-pressure gas facility, an electrical generation plant, and a high-pressure industrial water facility served by a 66-million gallon reservoir.

Engineers monitor a rocket engine test from a control center room at Stennis Space Center.

Applied Science

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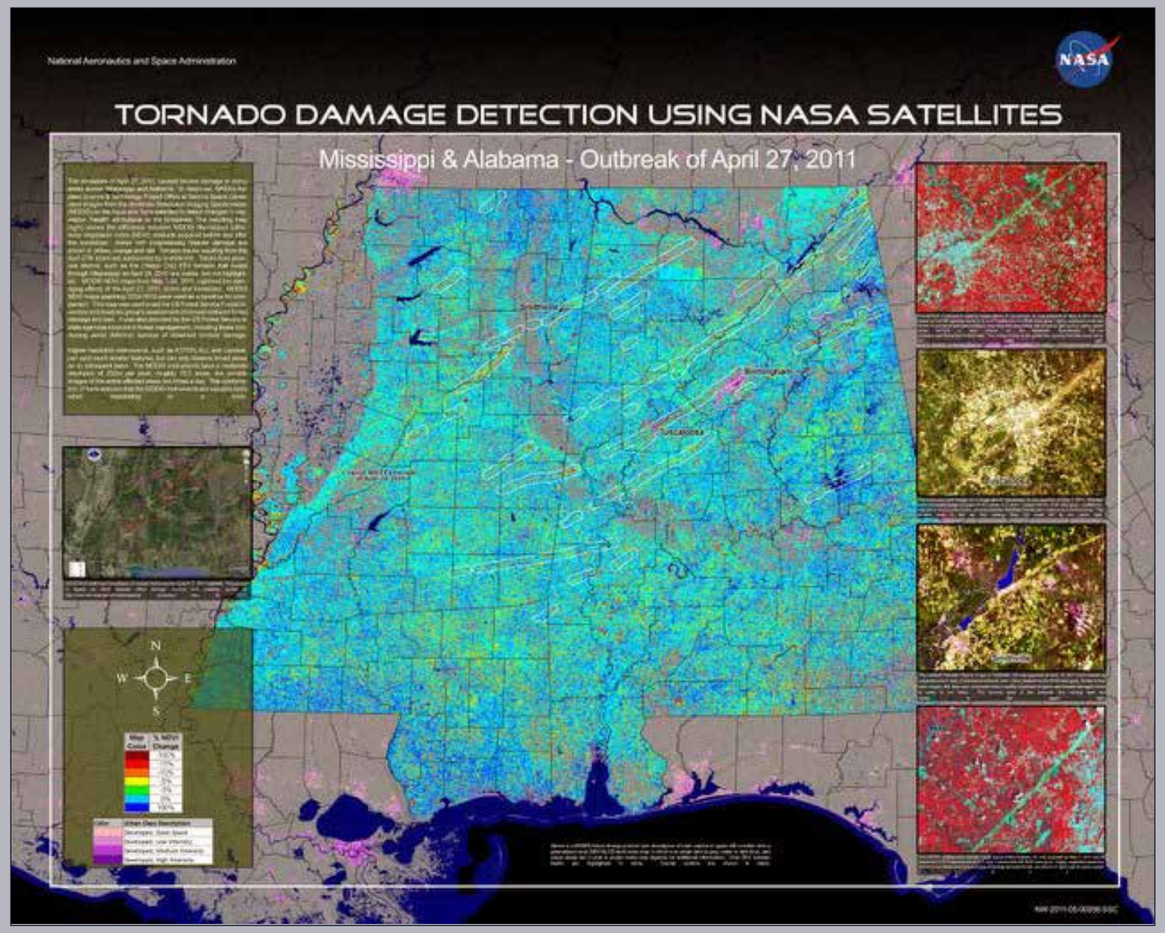

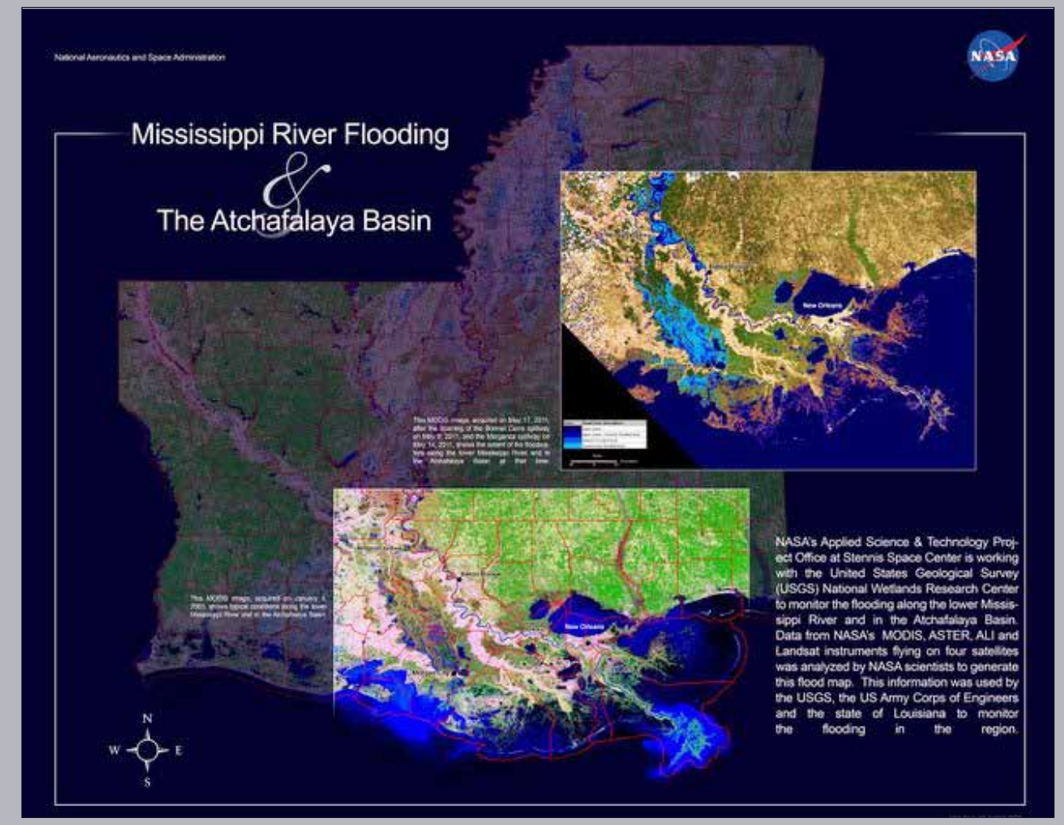

The Applied Science & Technology Project Office (ASTPO) at Stennis Space Center works on the front lines of science and engineering to make a meaningful, beneficial impact on the world. ASTPO works with community partners to demonstrate how Earth science research can help respond to crises, establish sustainable policies and address societal issues. Using expertise in remote sensing, oceanography, land use/land cover analysis, signal processing, electronics, and mathematical modeling, ASTPO conducts scientific research, creates new tools and techniques to monitor the environment, and generates information to help leaders make informed decisions.

ASTPO also oversees the Gulf of Mexico Initiative, established by NASA to help the Gulf region recover from the devastating hurricanes of 2005 and to address coastal management issues of the future. The Initiative employs hundreds of scientists and engineers across the country to address high priority issues defined by the Gulf of Mexico Alliance, a regional collaboration of 13 federal agencies and the five states bordering the Gulf of Mexico.

ASTPO also helps the Gulf region respond to disasters such as the Deepwater Horizon oil spill, tornadoes and flooding. ASTPO researchers use data from satellites, aircraft, buoys, monitoring stations and computer models to observe coastal marshes, barrier islands, estuaries, fields and forests; to detect threats to critical habitats; and to evaluate conservation, restoration and management strategies. Working with local, state and federal partners, ASTPO scientists apply the lessons learned to issues across the Gulf region, the nation and the world.

In all ASTPO efforts, the goal is clear: use NASA expertise to solve real-world problems.

Outreach

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Stennis Space Center conducts a variety of outreach activities aimed at informing and educating leaders and the public about the nation's space program and the range of work performed at the facility to support that mission.

Stennis supports special events throughout the region to provide information and hands-on activities for adults and children alike. Each year, representatives visit the Mississippi Capitol to share the Stennis story with elected officials. The center also hosts community leaders from Louisiana and Mississippi for an annual briefing with the Stennis director.

NASA's Speakers Bureau Program at Stennis regularly provides scientists, engineers and other employees for lectures and presentations to civic organizations and schools along the Mississippi Gulf Coast and throughout southeast Louisiana. Topics of interest include RS-25 rocket engine testing work, aerospace engineering, propulsion systems technology, remote sensing applications, technology transfer, the benefits of space program "spinoff" technologies in society, NASA education programs and the economic impact of Stennis Space Center.

Media and social media members are frequent visitors to Stennis. The site also periodically hosts open house events, providing the general public an opportunity to visit the center that consistently ranks as the best place to work in NASA and one of the best among all federal agencies.

(Top center) A young girl enjoys a hands-on activity during Stennis Space Center's 2014 Family Day event.
(Far right) Two young people visit with Orbie the Astronaut during an outreach event at INFINITY Science Center.
(Bottom left) Astronaut Jeanette Epps signs autographs for young students during a visit to the Gulf Coast region.
(Bottom center) NASA Administrator Charles Bolden poses with social media visitors at Stennis.

Education

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There is no mistaking the goal of the Stennis Education Office – to inspire and enable a new generation of science, engineering and space leaders. To that end, the Stennis education team focuses squarely on promoting science, technology, engineering and mathematics (STEM) training, learning and careers. The aim is emphasized and advanced through a variety of efforts and initiatives.

The Stennis Education Office supports a variety of special events, providing hands-on demonstrations and presentations. Team members partner regularly with schools on special projects, all intent on inspiring students to pursue studies and careers that will make them supporters and leaders of the American space program of tomorrow.

The Stennis Office of Education continues to provide professional development to pre-service, in-service and informal educators of local, regional and virtual audiences around the world.

The Stennis office also provides annual support to *FIRST*® LEGO® and *FIRST*® Robotics activities, an invaluable training ground for students. The education team provides support to teams, judges, mentors and volunteers for the annual student competitions.

For higher education students and teachers, the Stennis Education Office offers a wide range of fellowship, internship and study programs. All involve STEM activities and place a heavy emphasis on introducing participants to real-life research and work environments.

Gulf Coast students participate in a long-distance call Sept. 2, 2014, talking with astronauts aboard the International Space Station during a live downlink at INFINITY Science Center.

2014 Economic Impact

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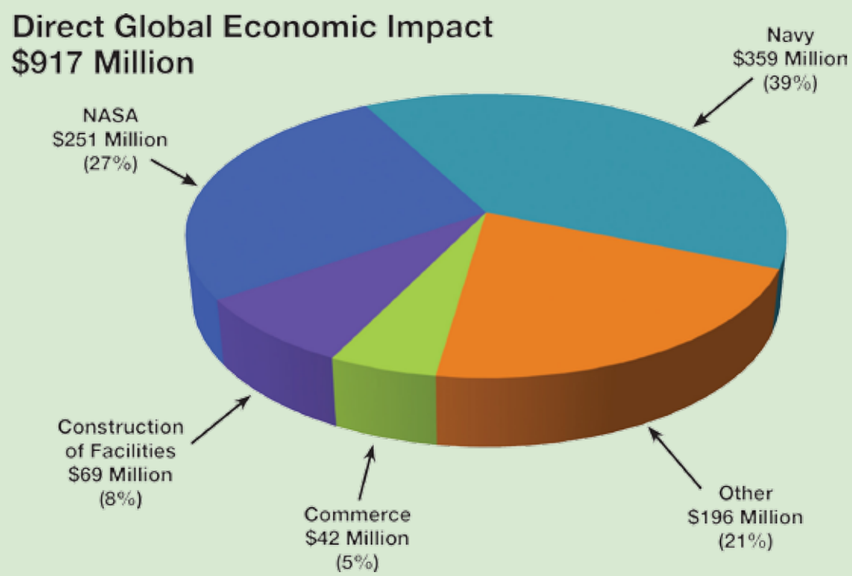
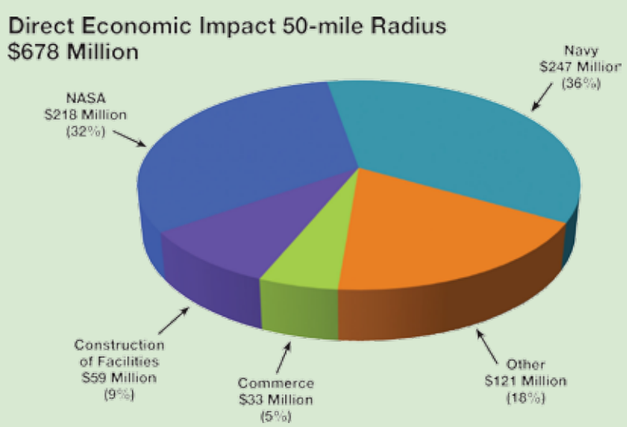


Stennis Space Center is a major contributor to the Gulf Coast economies of Louisiana and Mississippi. It spends almost three-fourths ($0.74) of every dollar within a four-county/parish, 50-mile-radius area. It also is responsible for contributing more than $1.08 billion to the economies of that region, which include Hancock, Harrison and Pearl River counties in Mississippi and St. Tammany Parish in Louisiana. Ninety-one percent of all Stennis employees reside in the four counties and parish.

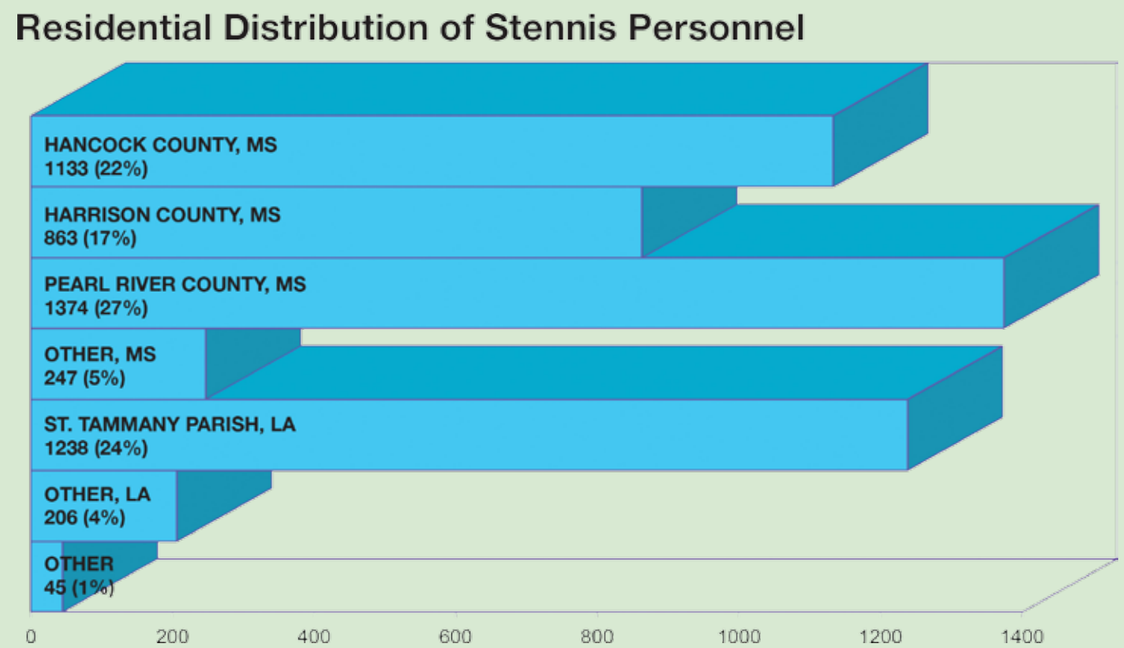
**Study by Dr. Alan Barefield and Dr. Becky Smith of Mississippi State University, March 2015.*



Workforce*

- NASA and contractors – 1,951
  (Stennis federal civil servants, 441; contractors and other, 1,510)
- Department of Navy and contractors – 1,920
- Department of Commerce and contractors – 182
- Other Resident Agencies – 1,053

**Totals as of Sept. 30, 2014*



Employee Skills

- Scientific/Engineering – 30%
- Business/Professional – 25%
- Technical/Crafts/Production – 24%
- Clerical – 7%
- Other – 14%

Education Levels (All Employees)

- Doctorate – 4%
- Masters – 14%
- Bachelors – 32%
- Associates – 12%
- Some College – 17%
- High School Diploma – 20%
- Other – 1%

INFINITY Science Center

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Visitors to the 72,000-square-foot INFINITY Science Center enter a world of discovery, from the depths of the oceans to the farthest reaches of outer space. View up-close the work conducted at Stennis Space Center, the nation's largest rocket engine test facility and a unique federal city of more than 40 agencies and organizations.

See how many of the agencies touch everyday life through exhibits such as coastal research in the Gulf of Mexico, a tsunami buoy, submarines, a U.S. Navy riverine training boat and an interactive view of ocean life.

Learn about exploration from the early days of seafaring nations to modern-day space travel in the Great Nations Dare to Explore exhibit. Take a mesmerizing journey at Science on a Sphere and explore the tracks of hurricanes, the surface of the sun or Mars and much more.

Look to the stars in the Space Gallery, and discover how space travel has evolved over the past 50 years. See the space suit Biloxi, Miss., native Fred Haise wore during the historic Apollo 13 mission. Explore life aboard the International Space Station in a full-scale ISS module. Discover NASA's plans for astronauts to travel deeper in space than ever before using its new launch vehicle currently in development, the Space Launch System, which will carry the Orion spacecraft.

Experience the shake, rattle and roar of a real rocket engine test or take a journey on the motion simulator ride. Take your photo in a space suit on the surface of Mars or with the Curiosity rover.

Join a bus tour of Stennis Space Center and see the massive test stands used to test the engines that propelled humans to the moon and powered each of the space shuttle missions. Today, the stands are testing the engines for the Space Launch System, as well as commercial companies.

Experience all this and more when visiting INFINITY Science Center, where discoveries are nedless!

Young visitors to INFINITY Science Center enjoy a variety of space-related activities and events, including interactive exhibits and presentations.

Stennis Facts

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General

- Stennis is a home to more than 40 federal, state, academic and private organizations and several technology-based companies. The entities share the cost of owning and operating the Mississippi facility, making it more cost-effective for each one to accomplish its independent mission.

- Stennis features seven-and-a-half miles of canal waterways, which include a lock-and-dam system needed to transport large rocket stages and cryogenic barges to and from the Gulf of Mexico via the Pearl River.

- All Stennis facilities are located within a 13,800-acre "fee" area owned by the federal government. The Stennis fee area is surrounded by a 125,000-acre noise buffer zone, designated as a national asset.

- The U.S. Navy conducts training for its Special Boat Team TWENTY-TWO special ops riverine force on Stennis Space Center waterways.

- Stennis is home to the largest concentration of oceanographers in the world.

- In April 2008, the American Institute of Aeronautics and Astronautics named Stennis a historic aerospace site.

- Stennis facilities have been affected by numerous tropical storms, including three major hurricanes – Hurricane Betsy in 1965, Hurricane Camille in 1969 and Hurricane Katrina in 2005.

- The INFINITY Science Center facility, located just outside of Stennis Space Center, features informative and interactive exhibits, including a moon rock and space program artifacts.

- In 2009, Stennis unveiled an "all hazards network" system (HazNet) that provides comprehensive information in emergency situations. Developed through NASA's Innovative Partnerships Program, the system has been adopted at all NASA centers, as well as by several area communities.

History

- NASA announced plans to open a rocket engine test facility in Hancock County on Oct. 25, 1961.

- Construction of Stennis facilities required relocation of 660 families.

- Tree-cutting for construction of Stennis facilities began May 17, 1963.

- At the height of construction in the 1960s, some 6,100 employees were onsite with 30 prime and 250 subcontractor companies.

- Rocket scientist Dr. Wernher von Braun affirmed the importance of Stennis Space Center by stating, "I don't know yet what method we will use to get to the moon, but I do know that we have to go through Mississippi to get there!"

- NASA first called its test facility Mississippi Test Operations, then Mississippi Test Facility and National Space Technology Laboratories. On May 20, 1988, President Ronald Reagan named the site in honor of U.S. Sen. John C. Stennis of Mississippi.

Propulsion testing

- Stennis is America's largest rocket engine test center, with structures valued at more than $2 billion.

- NASA's Rocket Propulsion Test Program Office at Stennis manages test facilities across the agency.

- Stennis is among the world's largest consumers of liquid hydrogen – a primary fuel in rocket propulsion testing.

- The three major test stands at Stennis are the single-position, vertical-firing A-1 and A-2 tests stands, and the dual-position, vertical-firing B-1/B-2 Test Stand. The versatile three-stand E Test Complex includes seven separate cells capable of various test activities.

- On Aug. 8, 1998, all four test positions at Stennis were occupied for the first time in center history.

Stennis Facts

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Current and Future Testing

- In 1998, Stennis partnered with Pratt & Whitney Rocketdyne (now Aerojet Rocketdyne) to test RS-68 engines used for Delta IV rocket launches. It marked the first longterm commitment to allow Stennis engine test facilities to be used for commercial purposes. RS-68 engines continue to be tested on the B-1 Test Stand.

- Two test stands are currently involved in testing for NASA's new Space Launch System (SLS). RS-25 engines to power the SLS core stage are being tested on the A-1 Test Stand. The B-2 Test Stand is preparing to test the SLS core stage with the simultaneous firing of four RS-25 engines.

- Stennis continues to partner with private companies, such as Space Exploration Technologies Corporation (SpaceX), to test engines for commercial space exploration and travel.

Apollo Program

- First- and second-stage Saturn V rocket boosters for NASA's Apollo Program were tested at Stennis, including those that propelled humans to the moon on seven lunar missions from 1969 to 1972.

- Stennis engineers conducted the first rocket engine test at the facility on April 23, 1966, a 15-second firing of a Saturn V second stage prototype (S-II-C).

- During the Apollo Program years, Stennis engineers conducted 45 test firings. The accumulated experience of the test team members amounted to 2,475 years of rocket engine test expertise.

- The Stennis team tested 27 Saturn V rocket stages in the Apollo years. All that were launched performed their missions without failure.

Space Shuttle Program

- Stennis engineers conducted the first full-duration test of a space shuttle main engine June 24, 1975.

- Space shuttle main engines at Stennis were test fired for 520 seconds, the same amount of time the engines fired during an actual flight.

- All of the main engines used on 135 space shuttle flights from 1981 to 2011 were tested and proven flightworthy at Stennis, as well as every engine modification and configuration.

- Stennis conducted the last test of a space shuttle main engine on July 29, 2009.

- In April 1978, Stennis conducted the first test of the Space Shuttle Main Propulsion Test Article with three main engines configured as on an actual flight. The engines were fired simultaneously on the B-2 Test Stand to prove the propulsion system flightworthy. Many view the testing as one of Stennis' finest hour.

- The 1 millionth second of space shuttle main engine firing, including flight operations, was recorded on the A-2 Test Stand on Jan. 24, 2004.

- On Aug. 20, 1990, for the first time ever, space shuttle main engines were tested on all three large test stands in a single day.

Timeline

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May 25, 1961 ... President John F. Kennedy challenges the United States to send humans to the moon and return them safely by the end of the decade.

Oct. 25, 1961 ... NASA publicly announces plans to build a rocket engine test facility in Hancock County. On Dec. 18, the facility is officially named Mississippi Test Operations.

May 17, 1963 ... Construction workers cut the first tree to start clearing an area for NASA's new rocket engine test facility.

April 23, 1966 ... The space age arrives in Hancock County as operators at NASA's Mississippi Test Facility conduct the first-ever Saturn V rocket booster (S-II-T) test on the A-2 Test Stand.

July 29, 1969 ... Astronaut Neil Armstrong becomes the first human to set foot on the moon. His Apollo 11 mission is powered by first- and second-stage Saturn V rocket boosters tested at the Mississippi Test Facility.

Sept. 9, 1970 ... NASA announces its Earth Resources Laboratory will be located at the Mississippi Test Facility.

March 1, 1971 ... As the Apollo Program ends, NASA assigns responsibility for testing space shuttle main engines to the Mississippi Test Facility.

May 19, 1975 ... The first-ever space shuttle main engine is test-fired at then-named National Space Technology Laboratories.

April 21, 1978 ... The first test of the Space Shuttle Main Propulsion Test Article is conducted, which involves simultaneously firing three space shuttle main engines arranged in flight configuration.

April 12, 1981 ... Columbia launches from Kennedy Space Center on the first flight of NASA's Space Shuttle Program. It is powered by three main engines tested at Stennis.

May 20, 1988 ... National Space Technology Laboratories is renamed the John C. Center Space Center to honor the longtime U.S. senator from Mississippi who was instrumental in establishment and growth of the rocket engine test facility.

Aug. 20, 1990 ... Space shuttle main engine tests are conducted for the first time on all three Stennis test stands on the same day.

July 24, 1992 ... Stennis conducts its 2,000th test firing of a space shuttle main engine.

Dec. 30, 1991 ... NASA designates Stennis as the Center of Excellence for large propulsion system testing.

May 1, 1994 ... Management of the space shuttle main engine test operations program is transferred from NASA's Marshall Space Flight Center in Huntsville, Ala., to Stennis Space Center.

May 30, 1996 ... NASA designates Stennis as its lead center to manage capabilities and assets for rocket propulsion testing.

Feb. 21, 1997 ... Stennis is designated as NASA's lead center for implementing commercial remote sensing activities.

July 27, 1998 ... Activation is initiated on the E-1 Component Test Facility, a world-class, high-pressure cryogenic test structure at Stennis Space Center.

Aug. 8, 1998 ... All four test stands – A-1, A-2 and B-1/B-2 – are occupied for the first time.

Jan. 21, 2004 ... A test firing at Stennis marks 1 million seconds of space shuttle main engine test and flight operations.

Aug. 29, 2005 ... Hurricane Katrina makes landfall, battering southeast Louisiana and the Mississippi Gulf Coast. Tracking maps show the storm's eye passing directly over Stennis Space Center, inflicting damage to several facilities. After the storm, Stennis serves as key relief/recovery location for area residents.

Aug. 11, 2005 ... Stennis marks 30 years of space shuttle main engine testing with an afternoon firing on the A-2 Test Stand.

April 21, 2006 ... A space shuttle main engine test marks the 40th anniversary of rocket engine testing at Stennis Space Center.

Oct. 22, 2008 ... Stennis' A-2 Test Stand team conducts a final certification test on engine No. 2061, the last space shuttle main flight engine scheduled to be built.

Timeline

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July 29, 2009 ... The final space shuttle main engine is tested at Stennis Space Center, ending 34 years of testing flight engines for 135 shuttle missions.

Aug. 2010 ... The Stennis Education Office develops Mass vs. Weight, its first-ever teaching curriculum. It offers a series of hands-on activities for grades 5-8 to help educate students about mass and weight concepts.

May 2, 2011 ... The main administration building at Stennis Space Center is named in memory of late site Director Roy S. Estess.

Aug. 11, 2011 ... The crew of STS-135 space shuttle Atlantis, the last flight of the Space Shuttle Program, visits Stennis Space Center/

July 26, 2011 ... Stennis operators conduct a successful ignition test of the next-generation J-2X rocket engine. The test launches the third major test series on the historic A-2 Test Stand.

Aug. 18, 2011 ... Stennis hosts its first live video link from space. Students from four Louisiana and Mississippi schools gather at the center to talk with astronauts aboard the International Space Station.

Oct. 25, 2011... Stennis culminates a yearlong celebration of its 50th anniversary on the day in 1961 that NASA publicly announced plans to build the rocket engine test facility in south Mississippi. The day's activities included burial of a time capsule to be opened on the center's 100th anniversary in 2061.

Nov. 9, 2011 ... NASA conducts a milestone 500-second test on the J-2X rocket engine at Stennis. The engine was tested at 100 percent power in just four tests and achieved the full flight-duration test of 500 seconds in its eighth test, faster than any other U.S. engine program in history.

April 11, 2012 ... The ribbon is cut to open the INFINITY Science Center facility. The 72,000-square-foot NASA visitor center features space and Earth science artifacts and activities.

July 24, 2012 ... NASA engineers conduct a 1,350-second test of the J-2X powerpack at Stennis Space Center, marking the longest-duration test firing in the facility's A Test Complex. The test broke a record of 1,150 seconds, which engineers had set just weeks earlier during a June 8 powerpack firing.

Aug. 20, 2012 ... Stennis marks a historic moment with the first instance of two female engineers conducting rocket engine tests on the same day at the facility.

Nov. 5-9, 2012 ... NASA records a historic week in the E Test Complex at Stennis Space Center, conducting tests on three different rocket engines/components on three E Complex test stands. The 27 total tests included firings on all three stands during a 24-hour period Nov. 6-7 and a nine-hour-plus period on Nov. 8.

April 21, 2014 ... NASA and Space Exploration Technologies Corp. (SpaceX) cut the ribbon at the E-2 Test Stand at Stennis Space Center to mark the beginning of a new testing partnership, illustrating NASA's continued support of America's burgeoning commercial space program.

Jan. 9, 2014 ... Orbital Sciences Corporation launches an Antares rocket and Cygnus spacecraft on its first cargo mission to the International Space Station, powered by two Aerojet Rocketdyne AJ26 engines tested at Stennis.

Dec. 5, 2014 ... NASA marks a major milestone on its journey to Mars with the launch of the Orion spacecraft on its first voyage to space. During its 4.5-hour mission, Orion traveled farther than any spacecraft designed for astronauts has been in more than 40 years. The launch was powered by a trio of RS-68 rocket engines tested by Aerojet Rocketdyne on the B-2 Test Stand at Stennis Space Center.

Jan. 9, 2015 ... The new year gets off to a blazing start as NASA conducts a test of the RS-25 engine on the A-1 Test Stand at Stennis Space Center. The RS-25, formerly the space shuttle main engine, fired up for 500 seconds, representing the first hotfire of an RS-25 engine since the end of space shuttle main engine testing in 2009. Four RS-25 engines will power NASA's new Space Launch System on future missions, including to an asteroid and Mars.

2014 in Review

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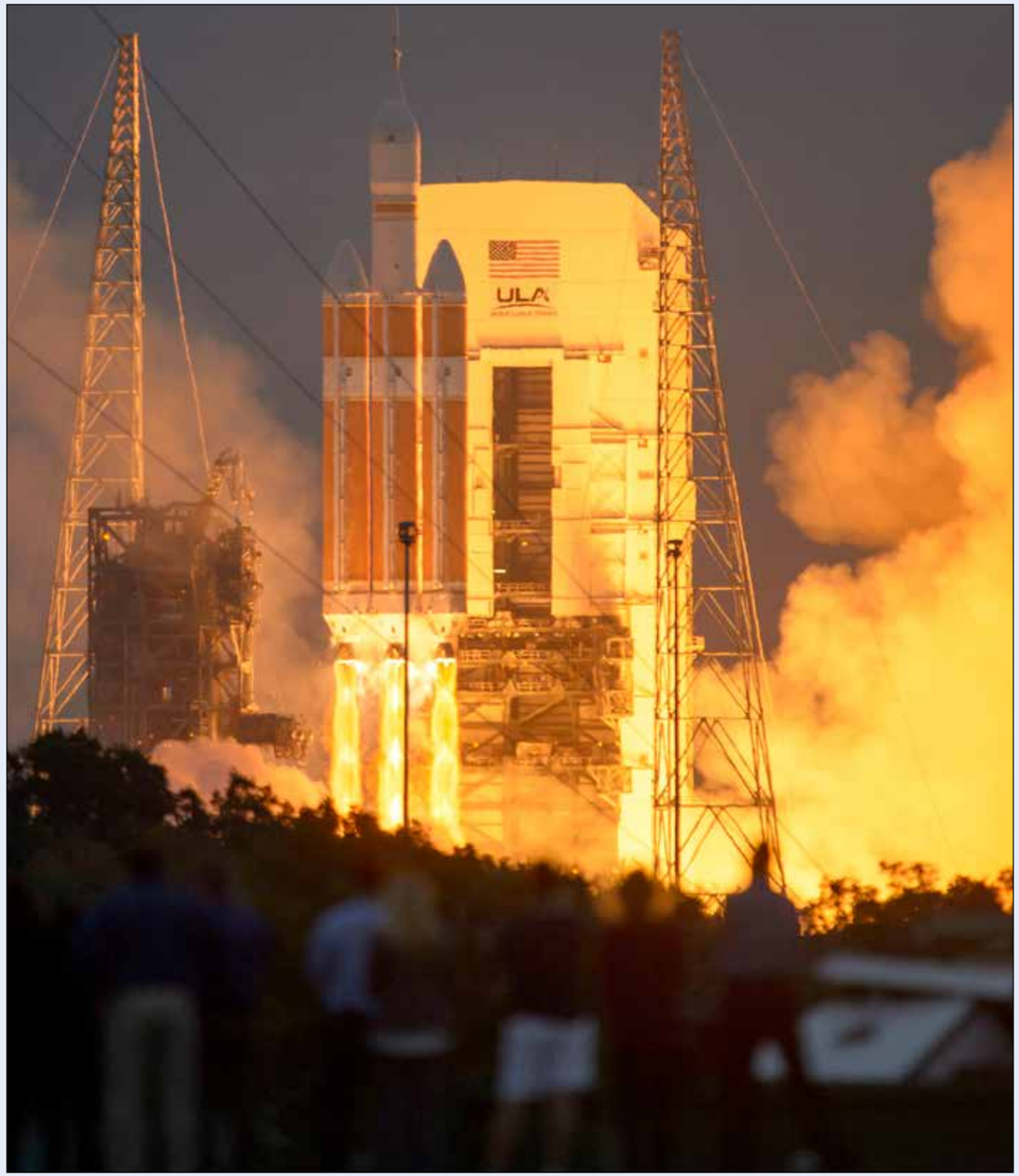

(Left) The United Launch Alliance Delta IV Heavy rocket, with NASA's Orion spacecraft mounted atop, lifts off, powered by engines tested at Stennis.

(Right) NASA Administrator Charles Bolden (center) holds a press conference during a visit to Stennis.

(Bottom) Stennis Director Rick Gilbrech briefs community leaders regarding ongoing work at the center.

2014 in Review

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(Left) A visitor to INFINITY Science Center signs an "I'm on Board" banner, signaling her support of NASA's test flight of its new Orion space capsule.

(Center) Springtime at Stennis is a time of bloom and color, as seen in this photo with the test observation tower named for engineer Wernher von Braun in the background.

(Right) A contract employee paints the NASA "meatball" logo on the B-2 Test Stand during renovation work in preparation for testing NASA's Space Launch System core stage.

2014 in Review

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(Left) Apollo 13 astronaut Fred Haise, a native of Biloxi, Miss., visits with a young person during an event at INFINITY Science Center marking the launch of NASA's Orion space capsule. (Above) Astronaut Jeanette Epps speaks to INFINITY Science Center visitors during a visit to Stennis Space Center and the Gulf Coast region.

2014 in Review

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(Left) NASA Chief Scientist Ellen Stofan participates in a robotics demonstration with students from Gulfport High School during a visit to Stennis.

(Top) Students at Long Beach (Miss.) Middle School view a cryogenic demonstration by NASA engineer Jason Hopper during outreach activities conducted by Stennis.

(Right) Two youth enjoy an educational activity during a camp event at INFINITY Science Center.

2014 in Review

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(Left) A member of the A-1 Test Stand operations team examines the progress of a cold-shock test on the new A-1 structural piping system. The test marked a milestone in preparing the stand to test the RS-25 rocket engines that will power the core stage of NASA's new Space Launch System.

(Right) Stennis Space Center crews install a longer derrick crane boom atop the B-2 Test Stand, continuing preparation to test the core stage of NASA's new Space Launch Sysyem.

Websites/Apps

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WEBSITES

www.nasa.gov
Gain access to the NASA Image of the Day, mission information, video feeds, NASA blogs and much more regarding the American space program.

www.nasa.gov/exploration/systems/sls/
Read the latest about NASA's deep-space exploration plans.

www.nasa.gov/centers/stennis/home/index.html
Gain access to the latest news and information about Stennis Space Center.

www.nasa.gov/centers/stennis/education/index.html
Access information about NASA education programs and opportunities.

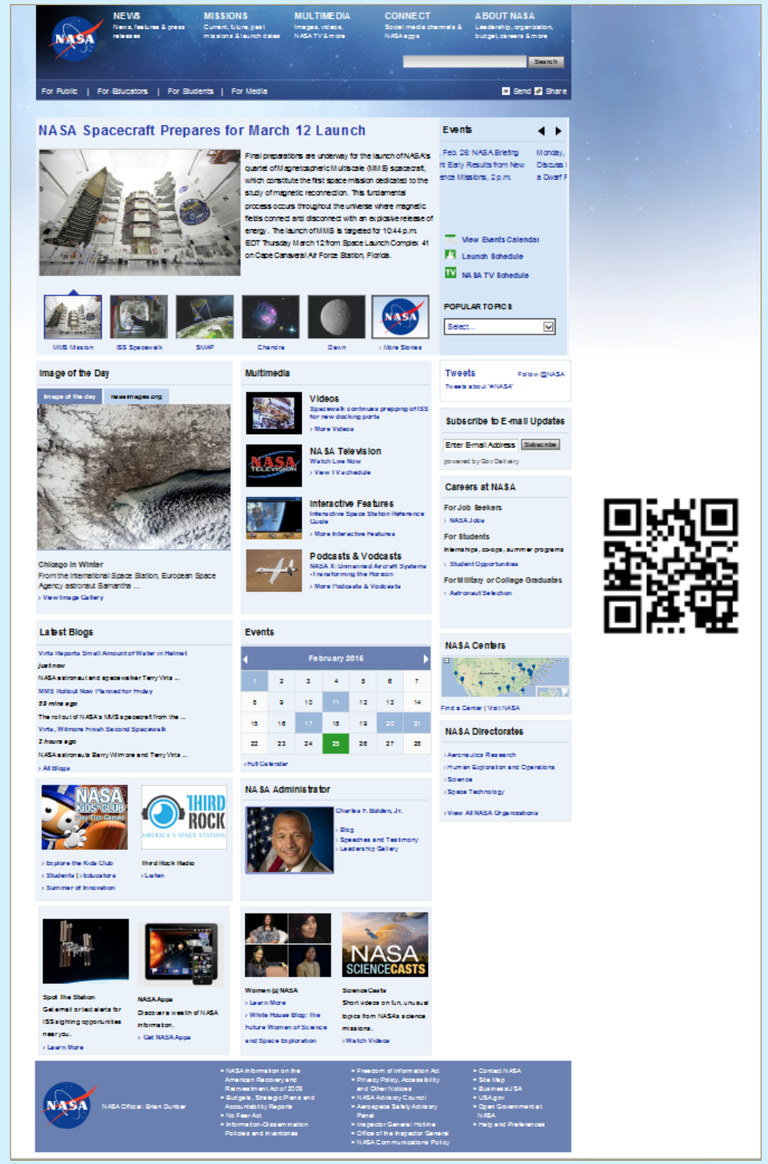
http://usajobs.gov
Search a database of job vacancies at all or selected federal agencies.

http://intern.nasa.gov
Learn about NASA student research opportunities, internships, fellowships and scholarships.

http://nasajobs.nasa.gov
Learn about NASA job vacancies and career development opportunities.

http://nasajobs.nasa.gov/studentopps/default.htm
Gather information on NASA student programs and opportunities.

http://www.nasa.gov/centers/stennis/about/jobs/index.html
Access information about job vacancies at major resident agencies located at Stennis Space Center



APPS

http://www.nasa.gov/connect/apps.html

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Learn about NASA technology that can be found in commercial products.

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Learn about NASA's Deep Space Exploration project.

NASA APP
Access a huge collection of the latest NASA content, including images, videos on-demand, mission information, news and feature stories, International Space Station sighting opportunities, satellite tracking and much more.

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Serve as air traffic controller for Sector 33 in the San Francisco Bay area.

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Social Media

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http://www.nasa.gov/socialmedia/

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https://www.facebook.com/NASA
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SLIDESHARE
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http://www.slideshare.net/nasastennis

VINE
https://vine.co/nasa

FLICKR
https://www.facebook.com/NASA

SOUNDCLOUD
https://soundcloud.com/nasa

YOUTUBE
https://www.youtube.com/NASA

Resident Agencies

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Department of Commerce

National Oceanic & Atmospheric Administration (NOAA)
National Weather Service (NWS)
National Data Buoy Center
NOAA National Marine Fisheries Service
NOAA National Coastal Data Development Center

Department of Defense

Commander, Naval Meteorology & Oceanography Command
Naval Oceanographic Office
Naval Research Laboratory
Navy Small Craft Instruction and Technical Training School (NAVSCIATTS)
Navy Special Boat Team 22
Navy Office of Civilian Human Resources - SSC Center
Navy Facilities Southeast
Army Corps of Engineers

Department of Energy

Strategic Petroleum Reserve

Department of Transportation

Information Systems at NCCIPS

Department of Interior

U.S. Geological Survey (USGS), Hydrologic Instrumentation Facility

Environmental Protection Agency

Gulf of Mexico Program

Government Printing Office

Passport Production Facility

Government Services Agency

Information Systems at NCCIPS

Department of Homeland Security (DHS)

DHS Data Center
United States Citizenship & Immigration Services (USCIS)
Immigration & Customs Enforcement (ICE)

NASA Stennis Space Center

Rocket Propulsion Testing
Applied Science & Technology Project Office (ASTPO)
NASA Shared Services Center (NSSC)
National Center for Critical Information Processing & Storage (NCCIPS)

Center for Higher Learning

Mississippi State University
University of Southern Mississippi
University of Mississippi
University of New Orleans
Pearl River Community College

Mississippi State University

Northern Gulf Institute

University of Southern Mississippi

Dept. of Marine Science

State of Mississippi

Mississippi Enterprise for Technology (MSET)
Enterprise for Innovative Geospatial Solutions
National Oceans & Applications Research Center (NOARC)

State of Louisiana

Louisiana Technology Transfer Office
Louisiana Business & Technology Center - LSU

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A^2Research
ASRC Research and Technology Solutions (ARTS)
Computer Science Corporation
ISS Action
Lockheed Martin
Science Applications International Corporation
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