



National Aeronautics and Space Administration

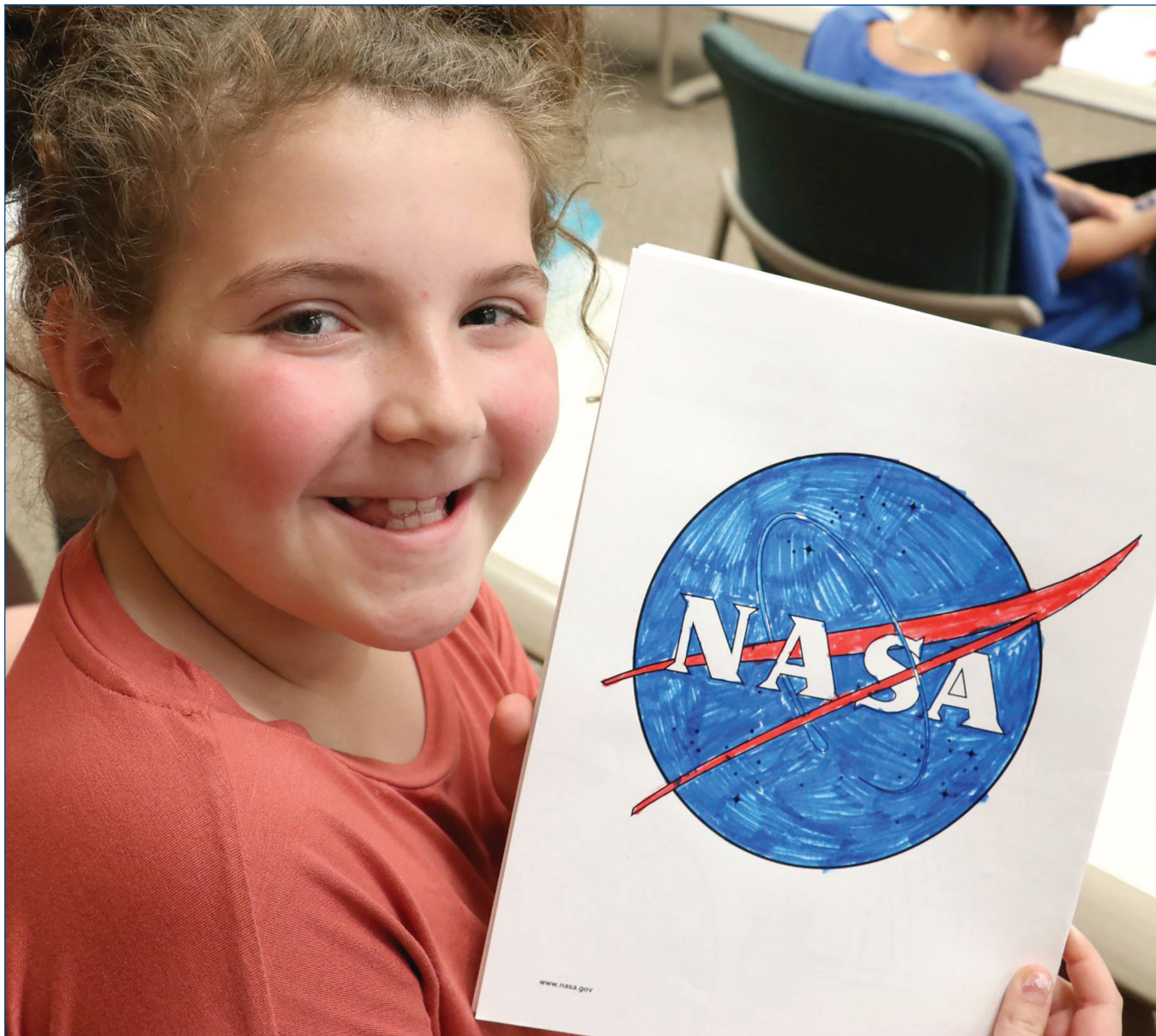
LAGNIAPPE

John C. Stennis Space Center

Volume 18 Issue 6

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June 2022



‘One Giant Leap for Children’

Stennis Participates in Language School Space Day

See page 5 and 6

Greetings on this warm summer day of June! As more of the fine people at Stennis Space Center return to working on site, I am delighted to see both familiar faces, as well as newer people about the center. If you see me eagerly waving at you from my green '63 Plymouth convertible, just know it is because I have missed seeing all my wonderful friends or I recognize a new face.

It does not take long for a new face to become a familiar one in these parts. When I made my way to Stennis many years ago, I came on board to boost morale and encourage everyone here.

I have found more times than not that it is the great employees throughout Stennis who leave me feeling encouraged. No matter how times have changed over the past six decades, that is a key component that remains in place – the welcoming nature of all who contribute to a great workplace environment.

Speaking of things that remain consistent, I recently ventured over to a few safety training classes. The training leaders were great at informing newcomers

about being safe in the test complex and other areas. NASA regards safety as mainstays of everything it does. The expectation is for folk to go home safe and healthy to family and loved ones every day.

One interesting tidbit I learned was there are about 300 instances each year of animal strikes with vehicles at Stennis. I explained to my wildlife friends how people here practice being careful, such as always wearing seat belts and no texting while driving. Some things are unavoidable but safe practices provide the chance for more successful outcomes. I cannot speak for everyone, but the gator community took it to heart. Many reassured me that they too would not be crawling along with phone in hand. Ark!

The main takeaway is it is important to practice safety each day. Whether one is cruising around in a pretty green Plymouth on a summer day or out working on a test stand, be mindful of surroundings at all times. Practicing safety helps every one.

Now that the long days of June are here, I am off to safely soak up the sun. See you around, friends!



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NASA's MOON to MARS MISSION

Stennis Completes Upgrade to Critical Test System

NASA's Stennis Space Center has completed upgrades to a critical system needed to test RS-25 engines that will power the new Space Launch System (SLS) rocket on Artemis missions to the Moon.

Engineers and operators on the Fred Haise Test Stand at Stennis recently completed testing of an upgraded thrust vector control (TVC) system needed to gimbal RS-25 engines during testing. Gimbaling is the term for moving an engine a few degrees along a tight circular axis to direct the thrust and “steer” the SLS rocket on a proper trajectory during launch.

Two hydraulic actuators are used to push and pull the engine several degrees and direct the thrust in a particular direction. The upgrades completed to the TVC system were performed to increase the speed of the actuators in returning an engine from a gimballed angle back to the null position with the engine pointing directly down.

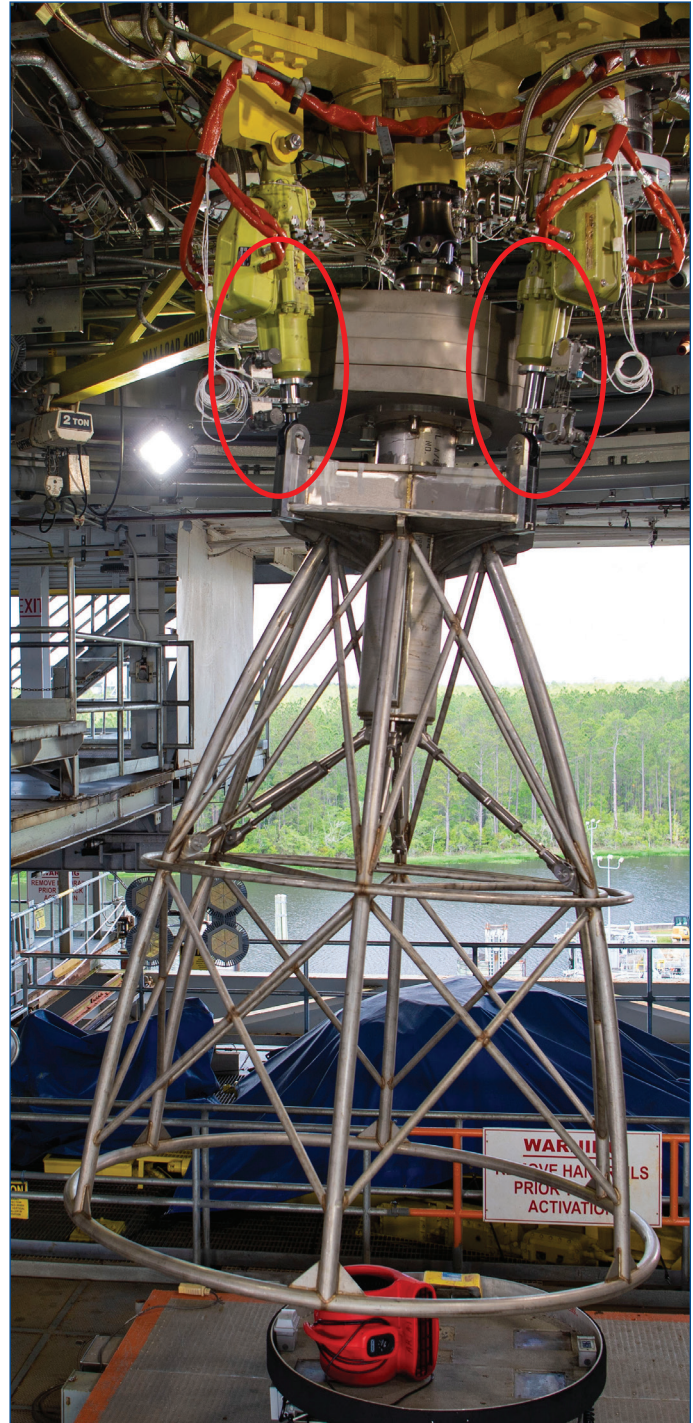
“We did this to make sure that if we ever encounter any failure scenarios during hot fire tests, we have enough speed in the system to get back to home before we cut the engine,” said David Carver, lead engineer of Electrical Test Operations. “This is important because if we cut the engine while it is gimballed out to say six degrees, it could cause potential damage ... to the engine or nozzle.”

Stennis engineers used a mass simulator to test TVC system upgrades. The mass simulator is designed to be the approximate size and shape of the RS-25 engine and nozzle, including its weight of about 8,000 pounds.

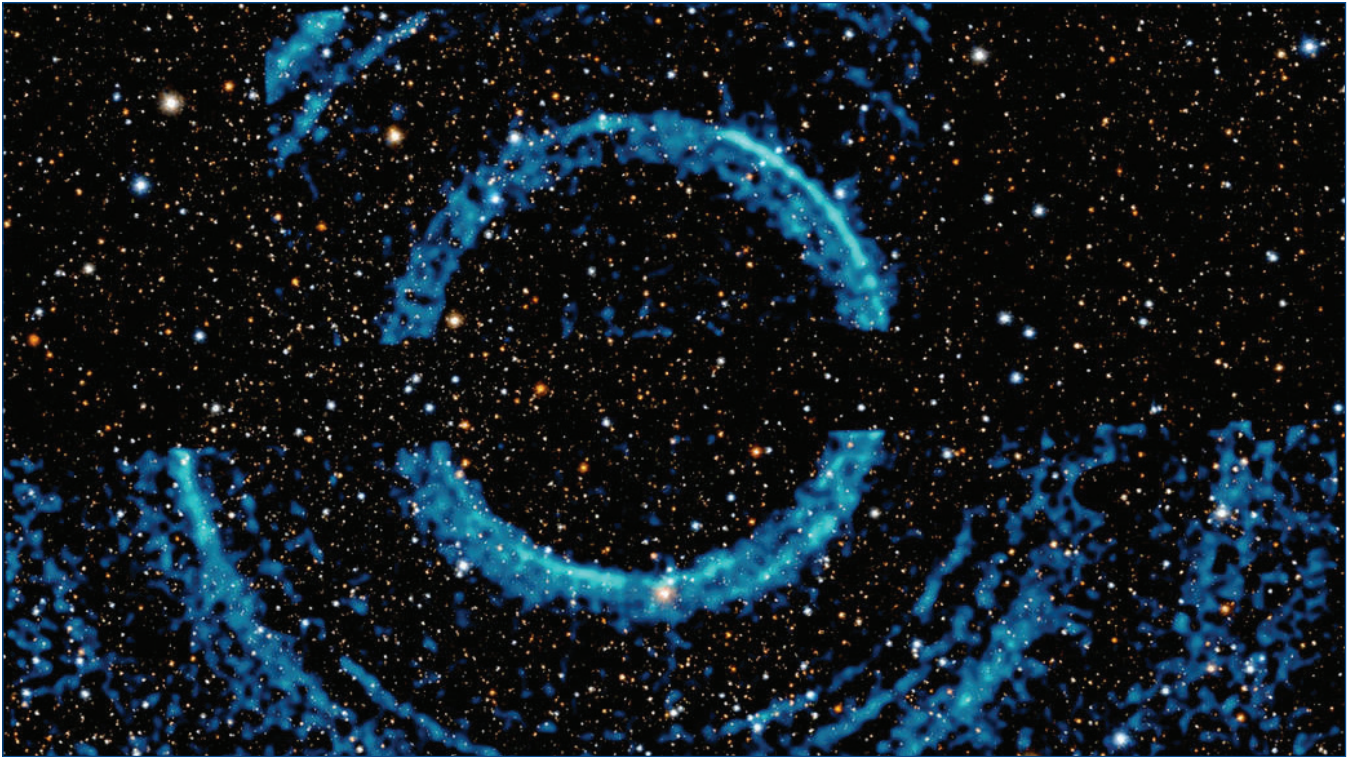
Using this simulator allows engineers to check the control system to ensure there are no clearance issues between the engine and test stand. It is also used to ensure the timing and responses from the system are correct. The simulation allows engineers to orchestrate different scenarios to see how the TVC system reacts.

Stennis Space Center currently is preparing to conduct certification tests for production of new RS-25 engines for future Artemis missions. Stennis already has tested engines for the first four Artemis missions. Every RS-25 engine that will help power the SLS rocket at launch will be tested at Stennis, including those that return the first woman and first person of color to the Moon and those that power eventual missions to Mars.

To view a video version of this article, visit [here](#).



Operators on the Fred Haise Test Stand at Stennis Space Center conduct a test of the thrust vector control (TVC) system, using a mass simulator that replicates the approximate size, shape, and weight of an RS-25 engine and nozzle. The TVC system is used to gimbal an engine during testing. Gimbaling is the term for moving an engine a few degrees along a tight circular axis to direct the thrust and “steer” a rocket on a proper trajectory. A pair of red circles identify the hydraulic actuators used to pull and push the engine in a particular direction. Stennis currently is testing RS-25 engines to help power NASA's Space Launch System rocket on Artemis missions to the Moon and eventual missions to Mars.

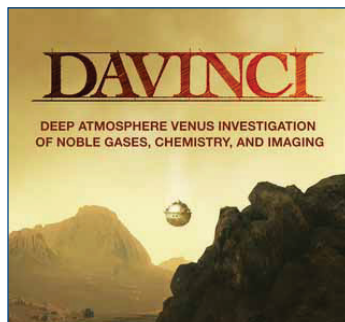


This image features a spectacular set of rings around a black hole, captured using NASA's Chandra X-ray Observatory and Neil Gehrels Swift Observatory. The X-ray images of the giant rings reveal information about dust located in Earth's galaxy, using a similar principle to the X-rays performed in doctor's offices and airports. The black hole is part of a binary system called V404 Cygni, located about 7,800 light years away from Earth. The black hole is actively pulling material away from a companion star — with about half the mass of the Sun — into a disk around the invisible object. This material glows in X-rays, so astronomers refer to these systems as "X-ray binaries."

NASA in the News

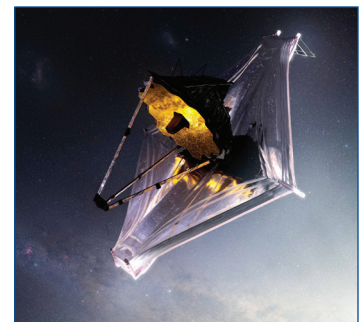
NASA Provides New Details for DAVINCI Mission to Venus

NASA scientists and engineers recently gave new details about the agency's Deep Atmosphere Venus Investigation of Noble gases, Chemistry, and Imaging (DAVINCI) mission. It will descend through the layered Venus atmosphere to the surface of the planet in mid-2031. The mission, a first of its kind, will study Venus with both spacecraft flybys and a descent probe. DAVINCI is tentatively scheduled to launch June 2029 and enter the Venusian atmosphere June 2031. "No previous mission within the Venus atmosphere has measured the chemistry or environments at the detail that DAVINCI's probe can do," said DAVINCI principal investigator Jim Garvin from NASA's Goddard Space Flight Center in Greenbelt, Maryland. Visit [here](#) to learn more.



First Images From NASA's Webb Telescope Set for July 12

NASA's James Webb Space Telescope, a partnership with ESA (European Space Agency) and the Canadian Space Agency (CSA), is set to release its first full-color images and spectroscopic data on July 12. "We are on the precipice of an incredibly exciting period of discovery about our universe," said Eric Smith, Webb program scientist at NASA Headquarters in Washington. "The release of Webb's first full-color images will offer a unique moment for us all to stop and marvel at a view humanity has never seen before. These images will be the culmination of decades of dedication, talent, and dreams — but they will also be just the beginning." Webb is the largest and most complex observatory ever launched into space. To learn more, visit [here](#).



'One Giant Leap for Children' – Stennis Celebrates Space with Hattiesburg Students

As NASA worked to send the first humans to the Moon on historic Apollo missions in the 1960s, Mississippi native Etoile DuBard was becoming a pioneer in developing techniques to teach students with language and speech disorders.

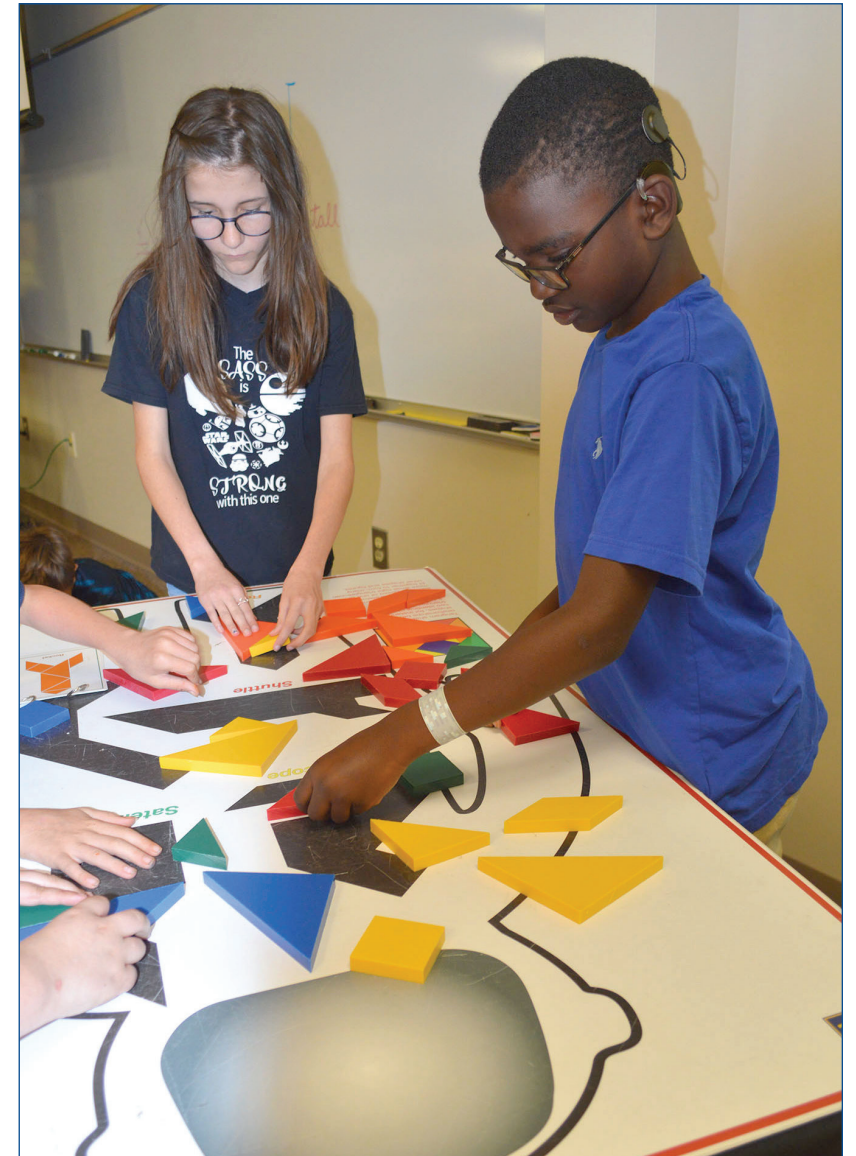
By the time astronauts stepped onto the lunar surface in 1969, DuBard had founded what now is the DuBard School for Language Disorders on The University of Southern Mississippi campus in Hattiesburg, Mississippi.

As the school prepared to celebrate its 60th anniversary this year, it was natural for the school Communications Coordinator Brittney Dykes to reach out to Stennis Space Center to participate in a "One Giant Leap for Children with Language Disorders" open house event.

Stennis representatives joined the celebration with various presentations and activities for students. Presentations included demonstrations of cryogenics and how astronauts live and work in space.

Among other activities, students also had a chance to collect NASA backpacks and memorabilia, sample astronaut ice cream, construct straw "rockets," and receive temporary space-related tattoos.

The Dubard School serves students (ages three to 13) across Mississippi with severe language-speech disorders, hearing impairments, and the written disorder of dyslexia. The school enrolls about 80 students a year in a full-time education program and also provides outclient and referral services. Full-time enrollment students return to their local schools once they have developed needed skills.



Students at the DuBard School for Language Disorders at The University of Southern Mississippi in Hattiesburg, Mississippi, enjoy a day of space-related activities May 17 as part of the school's 60th anniversary celebration. Activities during the "One Giant Leap for Children with Language Disorders" emphasis included a planetary parade led by an inflatable NASA astronaut (top left photo), a tattoo station (top center photo), a space-related tangram station (top right photo), and a cryogenic demonstration. During the parade, each class represented a different planet or planetary body, such as Mars (Bottom left photo).



(Top photo) A student at the DuBard School for Language Disorders at The University of Southern Mississippi in Hattiesburg, Mississippi, tries out an astronaut sleeping bag during a Living and Working in Space demonstration May 17. The demonstration led by Stennis Space Center visitor relations specialists was part of the school's space-related 60th anniversary celebration.

(Bottom photo) Stennis Space Center public affairs specialist Samone Wilson speaks to students at the DuBard School for Language Disorders during a "One Giant Leap for Children with Language Disorders" event at the school May 17.



'Hometown' Stennis Engineer Supports NASA Missions



Andrew Bracey, NASA electrical design engineer, began his journey at Stennis Space Center by participating in an internship and co-op program.

Early on, Andrew Bracey thought working at Stennis Space Center seemed like the obvious choice. It was somewhere he could use his skills while staying close to home.

In his second year of studying computer engineering at Mississippi State University, the Carriere, Mississippi native began looking for opportunities to gain experience in his chosen field.

This led to a summer internship in 2005 working for the Naval Oceanographic Office at Stennis. Bracey followed that by participating in a co-op program at Stennis from 2006 through 2007, which ultimately led to a full-time position as electrical design engineer with NASA in 2008 – a position he has held ever since.

“The best thing about working at Stennis is the people I get to work with,” Bracey said. “I am grateful for all the people I have had the opportunity to learn from over the

years. My hope is that I will be able to have the same impact on others. The workforce at Stennis is made up of people from all walks of life. Everyone brings a unique perspective to the table. This diversity is the reason we can successfully face the challenges we encounter.”

Bracey currently works on an assortment of projects ranging from the E Test Complex to the Stennis High Pressure Gas Facility to the B-2 Test Stand. He also supports the Small Business Technology Transfer program as a subtopic manager, reviewer, and contracting officer representative.

Bracey directly contributed to the Green Run testing of NASA’s first Space Launch System core stage Green Run at Stennis. The Green Run test series culminated with a hot fire of the stage’s four RS-25 engines on the B-2 Test Stand in March 2021. The hot fire was the most powerful propulsion test in more than 40 years at Stennis.

The electrical design engineer worked on the hardware design control system upgrades to the nitrogen system at the High Pressure Gas Facility in support of Green Run.

“It was exciting to work on a project of such magnitude,” Bracey said. “I was just happy to play my role, however small that may have been.”

As work continues for NASA’s Artemis Program that will land the first woman and first person of color on the Moon, Bracey will continue to contribute through electrical design work for the future Exploration Upper Stage test project at the B-2 Test Stand.

The last time humans walked on the Moon was before Bracey was born. It is something he looks forward to watching take place.

“I am excited to see us go back and eventually watch as we send people where no one has ever gone before,” he said.

Stennis News



NASA Chief Financial Officer Visits, Tours Stennis

NASA Chief Financial Officer Margaret Schaus (seated, r) visits with Stennis Space Center Director Rick Gilbrech (center), Deputy Director John Bailey (l), and center senior managers during a site visit May 24. Schaus was hosted by Stennis Chief Financial Officer Deborah Norton (second row, second from right). Schaus also served as speaker for an Asian American and Native Hawaiian Pacific Islander employee program. Schaus participated in a tour of Stennis facilities, including the Fred Haise Test Stand and the Aerojet Rocketdyne Engine Assembly Facility.



Stennis Hosts NASA Chief Information Officer

NASA Chief Information Officer Jeff Seaton speaks to Stennis Space Center employees during an on-site visit May 16-17. During his two-day visit, Seaton met with Stennis Center Director Rick Gilbrech and NASA Shared Services Center (NSSC) Executive Director Anita Harrell, along with the senior management teams from both agencies and the Stennis Engineering and Test Directorate staff. Seaton also participated in an all hands meeting with Office of the Chief Information Officer employees from Stennis and the NSSC. Seaton's tour of Stennis included visits to the Fred Haise Test Stand, the Records Retention Facility and other site facilities.

Stennis News

Hancock County Leadership Class Visits Stennis

Members of the Hancock County Leadership Class stand in front of the A-2 Test Stand during a Stennis Space Center visit May 25. During the day-long visit, the class learned more about the Stennis federal city and participated in briefings with the U.S. Naval Research Laboratory and Relativity Space. The group also toured the Rolls-Royce North American Test Facility, Lockheed Martin's Space and Technology Center, and Aerojet Rocketdyne Engine Assembly Facility. The 21-member class included representatives from Mississippi Power, the city of Bay St. Louis, Lockheed Martin, Hancock County Sheriff's Office, and Hancock County Chamber of Commerce, among others.



NASA Recognizes Stennis Space Center Employee

To mark progress in NASA's Artemis program that will return humans – including the first woman and first person of color – to the Moon, the space agency recognizes Space Heroes performing necessary and critical work. Overall, 34 Stennis Space Center employees have been cited for their Artemis-related efforts.

Nyla Trumbach is the latest Stennis employee to be recognized by the NASA Space Operations Directorate for her contributions as a NASA lead mechanical test operations



engineer in the center's Engineering and Test Directorate.

Trumbach served as one of the two liquid hydrogen transfer engineers for Green Run testing of the Space Launch System (SLS) core stage. Hot fire of the large SLS stage and its four RS-25 engines required 537,000 gallons of liquid hydrogen. This pushed the center's systems to its limits. Trumbach's team overcame challenges to see their hard work pay off in real time during a hot fire. Trumbach's work with the core stage and its RS-25 engines has contributed significantly to the advancement of NASA's space exploration mission.

Hail & Farewell

NASA welcomes the following:

Zachary Lewton

Aerospace Technology, Technical Management

Engineering and Test Directorate

Stennis News



INFINITY Science Center Hosts INFINIcon

Stennis visitor relations specialist Holley Argus assists a visitor to INFINITY Science Center during an INFINIcon event June 4. INFINITY sponsored the event, which featured hands-on activities and a robotics demonstration, as a celebration of science and fandoms. The event attracted about 350 visitors to INFINITY, the official visitor center for Stennis Space Center. Stennis Space Center representatives supported the event with exhibits and other activities throughout the day.

Stennis Contractor Receives Small Business of the Year Award

Advon Corporation President Bill Graham (center) accepts the U.S. Small Business Administration's (SBA) 2022 Southeast Region Small Business Federal Contractor of the Year Award during a recent ceremony in Jacksonville, Florida. Advon, a service-disabled, veteran-owned small business located in Tallahassee, Florida, was nominated by Cheryl Timko, contracting officer at Stennis Space Center. Advon was awarded its first federal construction contract in 2012 at Stennis. The construction company led in redoing the tarmac at the B-2 Test Stand to prepare for Green Run testing of the first Space Launch System core stage, directly supporting NASA's Artemis program to return humans to the Moon and prepare for missions to Mars. Following a completion of that initial work, Advon was selected by NASA to be part of a followup contract. During the recent ceremony, Graham was joined in the award presentation by Jon Malcolm Richards, SBA North Florida district director (I) and Allen Thomas, SBA regional administrator for the Southeast Region.



Relativity Space Hits Key Testing Milestones at Stennis



Relativity Space Inc. conducts a mid-May hot fire test of its Terran 1 second stage on the E-4 Test Stand at Stennis Space Center.

Relativity Space marked a pair of major milestones in recent testing of its new 3D-printed rocket and engines at NASA's Stennis Space Center.

The company successfully completed a full-duration mission duty cycle (MDC) test for its integrated Stage 2, marking the first time a 3D-printed rocket stage has undergone acceptance testing. Relativity also has completed acceptance testing for all nine Aeon 1 engines for Stage 1 of its Terran 1 rocket.

The Stage 2 MDC is a particularly significant milestone that demonstrates key stage systems can operate in flight-like configuration, moving Relativity one step closer to launch. The company is working towards its first launch from NASA's Kennedy Space Center this summer.

Relativity originally teamed with Stennis to test its Aeon 1 engine on the site's E-3 Test Stand. In March 2018, Stennis entered into its first-ever Commercial Space Launch Act with the company, granting Relativity use of the E-4 Test Complex at Stennis.

The 25-acre E-4 Test Complex was designed by NASA with multiple test cells, but full construction never was

completed. Under the agreement, Relativity completed development of the cells for use in testing Aeon engines.

Based in Long Beach, California, Relativity is working to create an entirely 3D-printed, expendable Terran 1 rocket and a fully reusable, entirely 3D-printed Terran R rocket. As designed, the Terran 1 rocket will be capable of carrying small satellite payloads. Terran R is being developed to launch payloads up to 44,000 pounds to low-Earth orbit.

In both instances, the company is using 3D printing and other state-of-the-art techniques, including machine learning and autonomous robotics, to develop rockets with 100 times fewer parts. It anticipates the production process will enable rockets to be created within 60 days.

The Terran 1 rocket will be powered at launch by nine Aeon 1 engines, each capable of producing 23,000 pounds of sea-level thrust. The Terran R rocket will use seven Aeon R engines, each producing 302,000 pounds of thrust during launch. Both rockets will use a single Aeon 1 engine for second stage propulsion.

To watch the Terran 1 Stage 2 MDC, visit [here](#).

Partners for Stennis Shines Light on Center



Legislators interact with the Stennis Space Center exhibit at the Mississippi State Capitol for NASA Day in 2009.

In 1994, a group of volunteer citizens, passionate about what was happening at Stennis Space Center in Mississippi wanted others to know more about the site. Partners for Stennis was formed and later expanded to include NASA's Michoud Assembly Facility in Louisiana. Partners for Stennis and Michoud now serves as an advocate for space, Earth and, ocean exploration. The group connects with potential commercial partners and assists businesses or agencies looking to relocate or expand.

Members are representatives from chambers of commerce, economic development foundations, local governments, and community groups, as well as individual citizens, who are enthusiastic about what the area offers. Partners for Stennis and Michoud have 250 members and continues to grow.

The group supports programs that ensure government decision makers, business interests, and citizens know the value and importance of Stennis and Michoud.

In 1995, Partners for Stennis and Michoud hosted NASA Administrator Daniel Goldin for a community dinner in Gulfport, Mississippi. The agency leader was impressed with their enthusiasm, leading to an invitation to Washington, D.C.

A few weeks later, Goldin found himself in the halls of Congress with members of the group, helping spread awareness of what Stennis and Michoud do.

As outside cheerleaders, Partners for Stennis and Michoud has consistently promoted both locations. It organized an annual NASA Day

at the Mississippi State Capitol in Jackson, Mississippi that started in 2006.

In addition to bringing awareness to Stennis and Michoud, the group maintains data on the quality of life, cost of living, healthcare resources, economic impact, and educational opportunities Stennis and Michoud bring to the region. This information proves beneficial in attracting new opportunities to the area.

Partners for Stennis and Michoud serves as the welcoming committee when a new business or agency comes to Stennis or Michoud. The group assists by providing referral services and support for new hires.

Partners for Stennis and Michoud has played a part in the history of Stennis and Michoud and serves an important role for both locations.

Office of Diversity and Equal Opportunity

Honor Juneteenth and its Historic Legacy

On Jan. 1, 1863, hundreds of enslaved African Americans gathered throughout the country in various locations to await the news of freedom. The Emancipation Proclamation went into effect after midnight and news spread that all enslaved people in the Confederate states were legally free. Afterwards, white and African American Union soldiers visited plantations throughout the South to spread the news of freedom.

Even though the Emancipation Proclamation was effective in 1863, many states continued to keep now freed slaves in bondage. Texas, the Confederacy's most western state and one of the most infamous, kept slavery in operation until 1865. Many slave owners moved to the state to keep their slaves.

Two thousand Union troops finally arrived in Galveston, Texas on June 19, 1865, with the news of freedom. According to the National Museum of African American History and Culture, more than 250,000 enslaved African American people in Texas were freed by the executive decree. June 19, 1865, later became known as "Juneteenth." This was first for newly freed people in Texas but eventually became recognized throughout the country.

As freed African Americans migrated out of Texas, the celebration of Juneteenth traveled with them. In the ensuing decades, Juneteenth became a day of commemoration. Celebrations featured music, barbecues, prayer services, and other activities.

After years of community celebrations, the Biden-Harris administration announced Juneteenth as a federal holiday. The 2021 proclamation stated: "Juneteenth marks our country's second Independence Day. Although it has long been celebrated in the African American community, this monumental event remains largely unknown to most Americans. The historical legacy of Juneteenth shows the value of never giving up hope in uncertain times.

"Juneteenth reminds us of both the unimaginable injustice of slavery and the incomparable joy that must have attended emancipation," the proclamation continues. "It is both a remembrance of a blight on our history and a celebration of our nation's unsurpassed ability to triumph over darkness. ... This Juneteenth, we commit, as one nation, to live true to our highest ideals and to build always toward a freer, stronger country that values the dignity and boundless potential of all Americans." ([A Proclamation on Juneteenth](#))

This Juneteenth, individuals are encouraged to take time to learn more about this country's history by visiting the resources below.

- [The Historical Legacy of Juneteenth | National Museum of African American History and Culture \(si.edu\)](#)
- [History.com](#)
- [What is Juneteenth? – Juneteenth Worldwide Celebration](#)



NASA Office of Diversity and Equal Opportunity

**NASA Stennis Space Center
NASA Shared Services Center**

At NASA, we make Air and Space available for everyone.

Office of Diversity and Equal Opportunity

Pride Month Highlights Stonewall Leaders

In 1999, then-President Bill Clinton announced the month of June as LGBT (lesbian, gay, bisexual, transgender) Pride Month. The president cited the 30th anniversary of the Stonewall Inn uprising in 1969 as “the birth of the modern gay and lesbian civil rights movement. Gays and lesbians, their families and friends, celebrate the anniversary of Stonewall every June in America.” ([Proclamation 7203](#))

The Stonewall uprising that President Clinton referred to is credited by what is now defined as LGBTQIA+ (lesbian, gay, bisexual, transgender, queer, intersex, and asexual) community as the beginning of liberation. In the early hours of June 28, 1969, New York police officers began a raid at the Stonewall Inn, a bar in Greenwich Village. The Stonewall Inn, at the time, was one of the few bars that was open to members of the LGBTQIA+ community and that hosted drag shows.

During the raid on June 28, police officers entered the Stonewall Inn and began roughing up patrons in the bar and arresting people for violating the state’s gender-appropriate clothing law. As officers began escorting arrested individuals into vans, bar patrons became agitated. Members of the LGBTQIA+ community often had faced police violence and harassment. However, on June 28, 1969, they began to take a stand. The crowd around the bar began throwing anything they could at the police officers, and the altercation quickly escalated into a riot outside the bar. Hours after the riot began, police were able to contain the crowd long enough to leave the bar. In the following days, members of the LGBTQIA+ community continued to meet at the Stonewall Inn and protest police brutality.

The Stonewall Riots sparked a collective shift for the LGBTQIA+ community in New York and across the country. The community began to organize politically and create numerous gay rights organizations. On the one-year anniversary of the riots, the LGBTQIA+ community launched the Christopher Street Liberation Day. Thousands of LGBTQIA+ and allies marched from Stonewall Inn to Central Park as a march of political resistance. The Christopher Street Liberation Day commemorated the riots and sparked the celebration of LGBTQIA+ Pride, thus making June LGBTQIA+ Pride month.

Though no one knows who first started the riot at the Stonewall Inn, there are several LGBTQIA+ individuals who took charge on June 28, 1969, and led political resistance following the riots. These include:

- Marsha P. Johnson, a Black transgender woman living in New York at the time of the riots who was at Stonewall Inn on June 28, 1969. She often spoke out against the injustice experienced by the LGBTQIA+ community and was co-founder of Street Transvestite Action Revolutionaries (STAR), an organization committed to helping homeless transgender youth in New York City.

- Sylvia Rivera, a Latina transgender woman who also was at the Stonewall Riots and was an advocate for injustices among the LGBTQIA+ community. After the riots, Rivera co-founded the Gay Liberation Front, a group of individuals who fought against homophobia, capitalism, militarism, racism, and sexism. Later, she co-founded STAR with Johnson.

- Miss Major Griffin-Gracy, a Black transgender woman who is an advocate for the LGBTQIA+ community and was a part of the riots in 1969. After the riots, Griffin-Gracy advocated for the AIDS epidemic and prison abolition. In 2005, Griffin-Gracy began working for the Transgender Gender Variant and Intersex Justice Project, eventually becoming the executive director. She founded the House of GG in 2015. This is a retreat house for the transgender community with programming on survival skills, healing, advocacy, and community organizing.

- Stormé DeLarverie, a biracial, masculine-presenting lesbian who was cited to be at the Stonewall Riots. Before the riots, DeLarverie founded the Jewel Box Revue, the first racially integrated drag touring company in North America. She is often credited with igniting the charge of the riots when she was hit over the head with a police baton and asked for someone to do something. After the riots, she remained an LGBTQIA+ advocate and worked as a bouncer at multiple lesbian bars to protect patrons inside. She also volunteered as a street patrol guardian for areas where members of the LGBTQIA+ community lived.

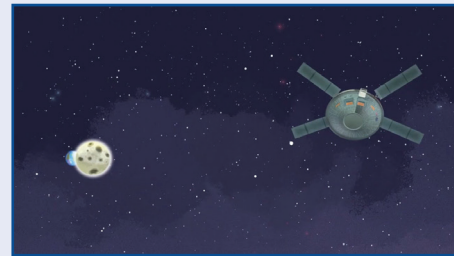
Pride month means more than parades. The LGBTQIA+ community has come a long way to find liberation. The month of June is a time for the community to have visibility and for LGBTQIA+ individuals and allies to fellowship and celebrate. To learn more about LGBTQIA+ pioneers and advocates, check out the links below.

[1969 Stonewall Riots](#)
[The History of The Stonewall Inn](#)
[LGBTQIA+ Leaders of the Movement](#)

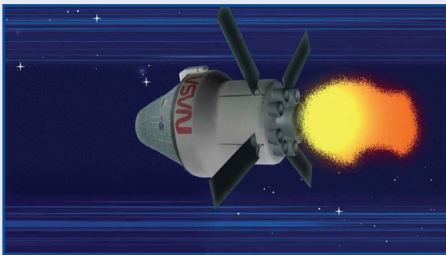
Online Resources



Orion's Journey - Part 1: Leaving Earth



Orion's Journey - Part 2: Entering Distant Retrograde Orbit (DRO)



Orion's Journey - Part 3: Returning Home

Stennis Fact Sheets

I Am Stennis Facebook Videos

Stennis Emergency Management

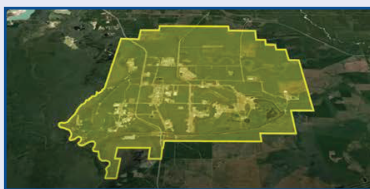
Hubble: Not Yet Imagined



Faces of Technology:
Meet Megan Martinez



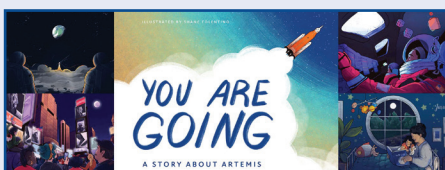
Stennis Artemis Resources



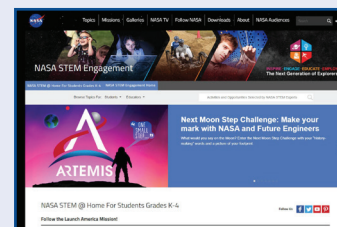
Stennis Virtual Tour



First Woman Graphic Novel



You Are Going
Children's Book



NASA STEM@Home for Students

2022 Hurricane Guide

The 2022 hurricane season has arrived, and NASA's John C. Stennis Space Center has prepared this guide as a resource for Stennis employees. The guide offers interesting and valuable information, including a contraflow evacuation map and contact numbers for emergency situations. It also serves as an important reminder for every Stennis employee to be prepared and alert for anything the 2022 season may deliver.

**Stennis Space Center
WILL NOT
serve as a shelter
to any workers or families
(including families of ride-out personnel).**

As part of their hurricane season preparation, individuals are urged to contact county/parish offices to identify available shelters in their areas.

In Mississippi and Louisiana, persons are reminded they may call 211 to obtain information about health and human services available in their areas. The number is staffed 24 hours a day in Louisiana and every day but Sundays, 7 a.m. to 6 p.m., in Mississippi. It offers information on various services, including food, clothing, shelters and, transportation assistance.

Stennis employees are reminded to discuss their evacuation plans with supervisors so they can be contacted after a storm or to acquire their company/agency policy on contacts after a storm.

NOTE: If NASA employees cannot contact Stennis due to downed communications after a storm, they should call 877-776-4654 to report their status.

Stennis Space Center Resource Information

Stennis Emergency Management: www.scsos.com

Stennis Site Status App: Available for download on Apple's App Store and GooglePlay

The Site Status App provides Stennis civil servants, contractors, and tenants the ability to view the center's weather radar and current site status bulletin from a mobile device. The application also alerts users via push notification when a new site status is posted.

Facts and Information

The Atlantic Ocean hurricane season extends from June 1 through Nov. 30 each year, hitting its peak from mid-August to late October. Beginning in 1953, Atlantic tropical storms were named from lists originated by the National Hurricane Center. The storms still are named after reaching a certain category status, but the names now are now maintained and updated through a procedure by an international committee of the World Meteorological Organization (WMO).

Lists of names rotate and are recycled every six years. So, names used or intended for storms in 2022 will be used again in 2028. A change in the list occurs only if a storm is so deadly or costly that future use of the name for a different storm would be inappropriate for reasons of sensitivity. The offending name then is replaced by another name following a meeting of the WMO committee. Since the 1950s, 94 storm names have been retired, including one in 2021 (Ida).



(Above photo) NASA cameras outside the International Space Station captured a stark and sobering view of Hurricane Florence the morning of Sept. 12, 2018 as it churned across the Atlantic in a west-northwesterly direction with winds of 130 miles an hour.

(Bottom right photo) Taken on Aug. 29, 2021, this image shows Hurricane Ida as a category 4 storm.

2022 Atlantic Hurricane Names

- Alex
- Bonnie
- Colin
- Danielle
- Earl
- Fiona
- Gaston
- Hermine
- Ian
- Julia
- Karl
- Lisa
- Martin
- Nicole
- Owen
- Paula
- Richard
- Shary
- Tobias
- Virginie
- Walter

Supplemental Names

The names below will be used if there are more than 21 named storms in 2022.

- Adria
- Braylen
- Caridad
- Deshawn
- Emery
- Foster
- Gemma
- Heath
- Isla
- Jacobus
- Kenzie
- Lucio
- Makayla
- Nolan
- Orlanda
- Pax
- Ronin
- Sophie
- Tayshaun
- Viviana
- Will

Prepare Ahead

Individuals are urged to be proactive to ensure the safety and best possible outcome for themselves and their families during hurricane season. The best approach is to gather and organize food, water, medicines, and medical supplies into a Go-Kit and a Stay-at-Home Kit.

A Go-Kit includes three days of supplies that persons can carry with them during evacuation. It should include backup batteries and chargers for electronic devices (cell phone, powered wheelchair, etc.). A Stay-at-Home Kit includes two weeks of supplies. Stores and pharmacies might be closed, so residents should plan accordingly.



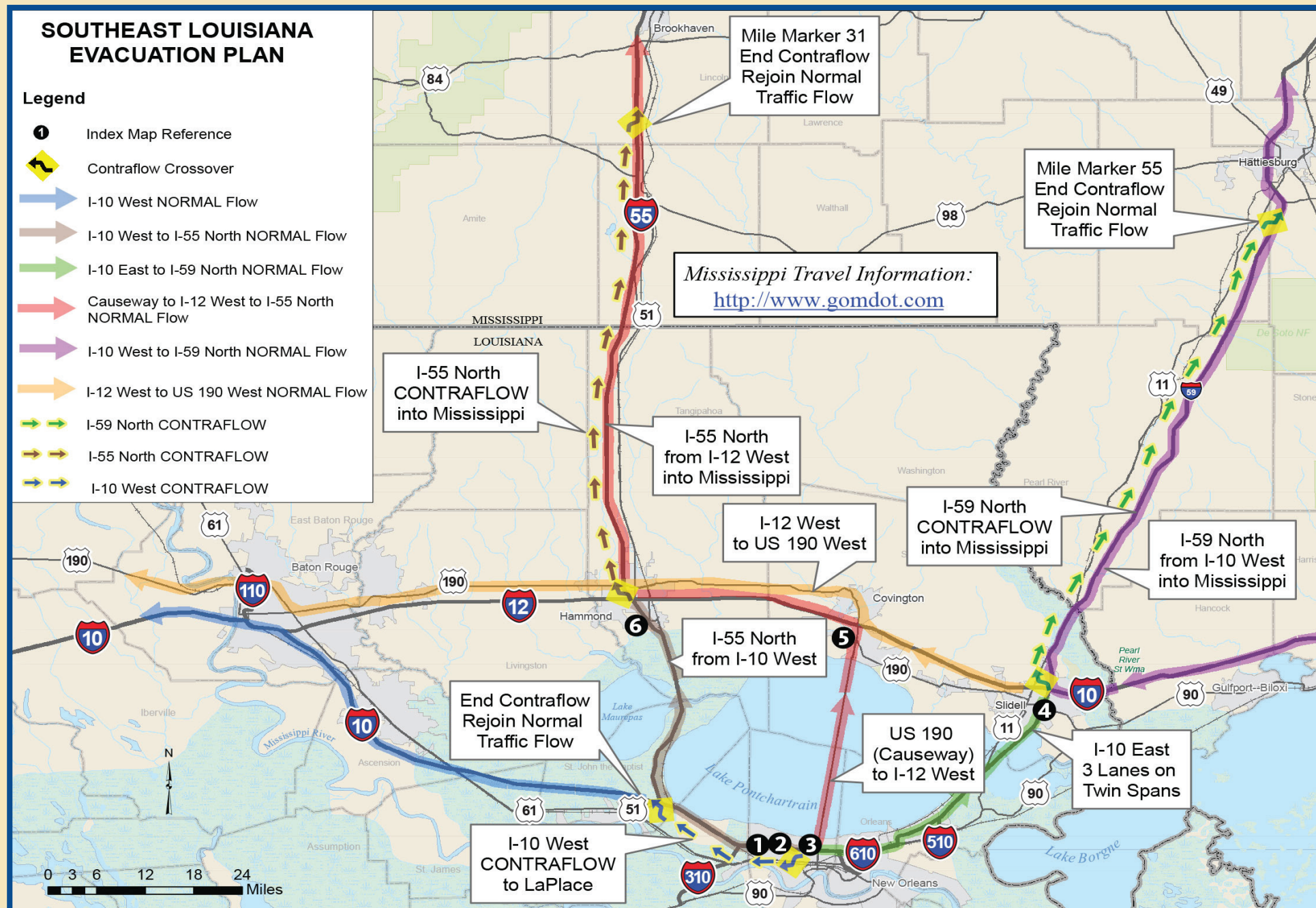
Louisiana-Mississippi Interstate Contraflow Plan

In an effort to assist Louisiana in the event of a mandatory hurricane evacuation, the Mississippi Department of Transportation will implement contraflow (lane reversal) for I-59 and I-55 when requested by Louisiana and approved by the Mississippi governor.

- A contraflow decision is not automatic and will only be used when absolutely necessary. Citizens should not delay evacuation plans in anticipation of contraflow.
- I-59 contraflow will begin in Louisiana, extend into Mississippi and end at mile marker 55.

- I-55 contraflow will begin in Louisiana, extend into Mississippi and end at mile marker 31.
- Exits within the contraflow sections of the interstate highways will remain open as conditions allow. Law enforcement officers will assist with traffic control.
- Shoulders of both Interstates 59 and 55 should be kept clear for emergency vehicles. Motorists needing to stop should use the next available exit.
- Motorists traveling west into Louisiana on I-10 will be routed north onto I-59 at the I-10/I-12 split.

- Tune in to public broadcasting radio stations for emergency information and road conditions.
- The following procedures will be enforced in the Hattiesburg area to avoid severe congestion:
 - Northbound traffic on Hwy. 49 may not be allowed to exit at either Hwy. 98 or I-59.
 - Northbound traffic on I-59 can only exit at Hwy. 11 (Exit 60) or west onto Hardy Street/Hwy. 98 (Exit 65).
 - Westbound traffic on Hwy. 98 will not be allowed to exit onto Hwy. 49, but directed to merge onto I-59 instead.



National Resource Information

American Red Cross

www.redcross.org/hurricane 800-REDCROSS (733-2767)

Federal Emergency Management Agency

www.fema.gov 800-621-FEMA (3362)

NOAA National Hurricane Center

www.nhc.noaa.gov nhc.public.affairs@noaa.gov

National Weather Service Forecast Office

New Orleans: www.weather.gov/lix 985-649-0429 or 504-522-7330

Jackson: www.weather.gov/jan 601-936-2189

U.S. Coast Guard – 8th District (Gulf of Mexico region)

www.atlanticarea.uscg.mil/Our-Organization/District-8/

Mississippi Resource Information

Mississippi Emergency Management Agency

www.msema.org 24 hours: 866-920-6362 800-222-6362

Mississippi Department of Transportation

www.mdot.ms.gov www.mdottraffic.com 866-521-6368

Mississippi Highway Safety Patrol

www.dps.state.ms.us 601-987-1212 (*HP from any cell)

Mississippi Insurance Department

www.mid.ms.gov 800-562-2957

Mississippi Power

www.mississippipower.com 800-487-3275

Coast Electric Power

www.coastepa.com 877-769-2372

Louisiana Resource Information

Office of Homeland Security and Preparedness

www.gohsep.la.gov www.getagameplan.org/ 225-925-7500

Louisiana Department of Transportation

www.sp.dotd.la.gov/Pages/default.aspx 877-4LA-DOTD (452-3683)

Louisiana State Police

www.lsp.org 800-469-4828 *LSP (*577) from any cell phone

Louisiana Traveler Information

www.511la.org dial 511 in state 888-762-3511 outside state

Louisiana Department of Insurance

www.ldi.louisiana.gov 800-259-5300 or 225-342-5900

Cleco Corporation

www.cleco.com 800-622-6537

Entergy (www.energy-louisiana.com)

800-ENTERGY (368-3749) Power outages: 800-9OUTAGE (968-8243)

Washington-St. Tammany Electric Cooperative

www.wste.coop 985-839-3562 Power outages: 866-672-9773