National Aeronautics and Space Administration

# LAGNIAPPE

John C. Stennis Space Center

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# Stennis focused for the future


Stennis Space Center Director Rick Gilbrech talks with NASA employees about the state of the center and its future focus during an all hands session June 7. During the session, Gilbrech reviewed center activities from the previous year and presented goals and objectives for Stennis to provide world-class propulsion test services to NASA and other customers, while also fostering an entrepreneur-friendly environment for commercial companies to design, manufacture, assemble and test space launch hardware. Stennis also plans to continue efficient support of site agencies and to provide opportunities for development, testing and operation of unmanned autonomous systems, Gilbrech noted. In addition, Stennis remains one of the top places to work in the federal government, as reflected in annual employee surveys by Partnership for Public Service.

## 2018 Hurricane Season Guide appears at end of this issue

Did you notice Sally Ride was in the news last month? You did if you are a philatelist like ol' Gator. (No, that is not what it means – look it up. Ark!)

Ride would have been 67 this May and nearing the 35th anniversary of her historic STS-7 flight on space shuttle Challenger in 1983. As any space enthusiast knows, Ride made that mission historic as the first American woman to fly to space.

Ride died in 2012, having flown to space twice. The second STS-41G flight also was historic as she and astronaut Kathryn Sullivan became the first pair of American women to travel together into space.

History-making continued after those flights. Ride was the only person to serve on both investigative panels after the losses of shuttles Challenger and Columbia. She then led a group to chart a new strategy for NASA. The subsequent plan became known as the *Ride Report*.

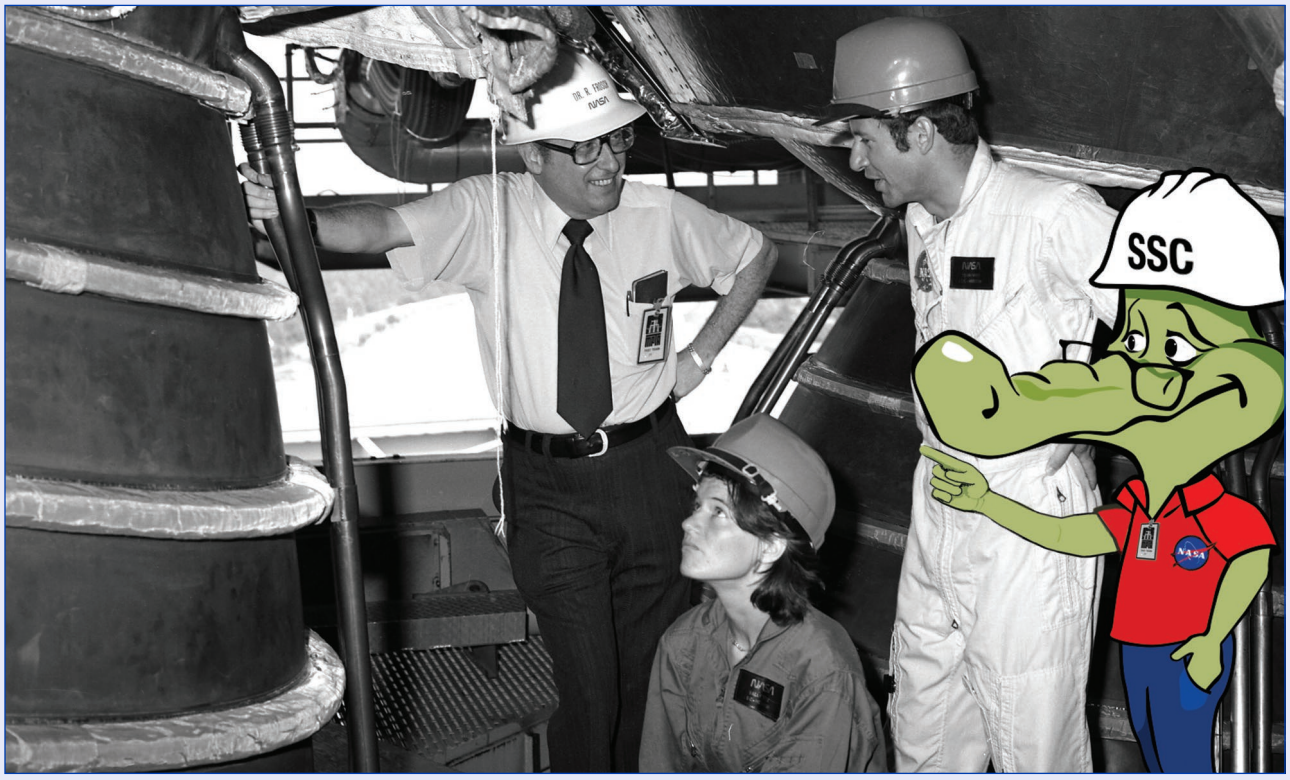
Last month, Ride made history again, becoming only the second individual astronaut – and the first female astronaut – to be featured on a U.S. postage stamp.

The stamp uses a representation of Ride's official 1983 mission photo. But did you know that Stennis has its own special photo of Ride from a few years earlier?

Ride was a member of the 1978 astronaut class, the first class to include women (six in all). About a year-and-a-half after announcement of the class, Ride came to Stennis. During the visit, she toured the B-2 Test Stand to view a space shuttle main engine.

In the photo, as a fellow astronaut candidate and a NASA administrator stand and talk, Ride kneels in front of the engine, gazing up at it. She has just turned 28 and, though the first shuttle has yet to launch, Ride is only four years from her own record-setting flight.

Millions around the world will see – and collect (which is what we philatelists do!) – the postage stamp image of a smiling Ride, ready to fly into history. But the image this ol' Gator will always carry is Ride in front of that engine at Stennis, silent with her thoughts, head and gaze lifted above, perhaps dreaming of what might come. But how could she possibly have imagined all the history she would not just be a part of, but create.

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FULFILLING NASA'S EXPLORATION MISSION

# Lunch-and-learn reviews Stennis' role with SLS

Gary Benton (top photo), project management chief in the NASA Engineering and Test Directorate at Stennis Space Center, talks with site employees about the new Space Launch System (SLS) rocket being built to carry humans deeper into space than ever. Benton and two other NASA leaders presented information about the SLS rocket and Stennis' role supporting it during an onsite lunch-and-learn session June 6. The session was the second to focus on Stennis and SLS. Stennis is testing RS-25 engines that will help power the SLS at launch. It also is preparing to test the flight core stage for the first SLS launch, Expedition Mission-1, as well as the exploration upper stage (EUS) that will be used on the rocket. Barry Robinson (center photo), SLS core stage test project manager at Stennis, updated employees about work under way at the B-2 Test Stand to prepare for the testing. Chip Ellis (bottom photo), EUS project manager at Stennis, reviewed plans to test the upper stage unit on the B-2 stand following completion of core stage testing. "It's very important that this hardware gets tested thoroughly," Benton said, emphasizing Stennis has the unique facilities and capabilities to accomplish the work. "It takes a whole team effort (to test), ..." he added. "It's really a tremendous team effort."



# NASA unveils Apollo 50th anniversary logo

NASA recently unveiled a logo to commemorate the 50th anniversary of the Apollo Program that landed a dozen Americans on the moon between July 1969 and December 1972. The logo is available for download from the NASA Images and Video Library. Created by NASA graphic artist Matthew Skeins, the logo features a few elements borrowed from the original program emblem, incorporated with a graphic depiction of NASA's vision for the next half-century of deep space exploration. The arc through the word "Apollo" represents Earth's horizon, as seen from a spacecraft, as a reminder of how the first views of Earth from the Moon – one of NASA's crowning achievements – transformed the way human beings see themselves.

# *NASA in the News*

## NASA finds organic material on Mars

NASA's Curiosity rover has found new evidence preserved in rocks on Mars that suggests the planet could have supported ancient life, as well as new evidence in the Martian atmosphere that relates to the search for current life on the Red Planet. While not necessarily evidence of life itself, these findings are a good sign for future missions exploring the planet's surface and subsurface. The new findings – "tough" organic molecules in three-billion-year-old sedimentary rocks near the surface, as well as seasonal variations in the levels of methane in the atmosphere – appear in the June 8 edition of the journal Science. Organic molecules contain carbon and hydrogen, and also may include oxygen, nitrogen and other elements. While commonly associated with life, organic molecules also can be created by non-biological processes and are not necessarily indicators of life. Curiosity has not determined the source of the organic molecules. For video and images regarding the announced findings, visit: https://www.nasa.gov/mediaresources. For more on NASA's Mars activities, visit: https://www.nasa.gov/mars.

## NASA puts Earth data at one's fingertips

Powerful Earth-observing instruments aboard NASA's Terra and Aqua satellites, launched in 1999 and 2002, respectively, have observed nearly two decades of planetary change. Now, for the first time, all that imagery – from the first operational image to imagery acquired today – is available for exploration in Worldview. Detailed views of volcanoes fuming, hurricanes flooding, dams being built and wildfires sweeping across landscapes are just some of the data accessible. Thanks to the efforts of several NASA teams, the public can now interactively browse all global imagery from the Moderate Resolution Imaging Spectroradiometer (MODIS) instrument quickly and easily from the comfort of a home computer. This achievement is the result of more than a half-decade of work and represents the longest continuous daily global satellite observation record of Earth ever compiled. For researchers, the ability to rapidly access and explore all MODIS global imagery greatly improves their use of these data. View two decades of planetary change online at: https://worldview.earthdata.nasa.gov/.

# Stennis employees ‘meet’ new NASA administrator

Stennis Space Center employees listen to new NASA Administrator Jim Bridenstine during a live simulcast May 16. Bridestine used the simulcast to address NASA employees, following his confirmation as agency leader April 23. Bridenstine serves as the 13th NASA administrator. A veteran of the U.S. Navy, Bridenstine also served as executive director of the Tulsa Air and Space Museum and Planetarium. He was elected as a U.S. representative from Oklahoma in 2012 and served on the Armed Services Committee and the Science, Space and Technology Committee in the U.S. House.

# NASA ‘roadshow’ focuses on mission support


Dan Tenney, associate administrator of the NASA Mission Support Directorate, talks with Stennis Space Center employees during a “roadshow” event May 15. Tenney presented information about NASA’s new Mission Support Architecture Program (MAP) to streamline and optimize agency capabilities and operations. The MAP plan is being implemented in upcoming years as part of the directorate’s overall focus on providing “effective and efficient institutional support to enable successful accomplishment of NASA mission objectives.”

# NASA selects small business projects for development

NASA has selected 304 proposals from U.S. small businesses to advance research and technology in Phase I of its 2018 Small Business Innovation Research (SBIR) program and 44 proposals for the Small Business Technology Transfer (STTR) program, totaling $43.5 million in awards. The selections support NASA's future space exploration missions, while also benefiting the U.S. economy.

The selections include nine projects tied to Stennis Space Center.

The selected proposals will support the development of technologies in the areas of aeronautics, human space exploration and operations, science, and space technology. Awards cover a breadth of research and development needs.

The five selected SBIR proposals being monitored by Stennis are:

- "Balanced Floating Piston Valve for Ultra-High Pressure, High-Volume Liquid and Gaseous Flow Control," developed by C-Suite Services, LLC of Metairie, Louisiana.
- "Additively Manufactured Dynamically Adjustable Venturi," developed by Parabilis Space Technologies Inc. of San Marcos, California.
- "Additive Manufacturing of Integrated Sensor System," developed by RC Integrated Systems, LLC of Torrance, California.
- "High Performance Solver for Coupled Cavitation and Fluid-Structure Interaction in Cryogenic Environments," developed by Streamline Numerics Inc. of Gainesville, Florida.
- "Advanced Coating to Mitigate Hydrogen Embrittlement in High Temperature Environments," developed by Summit Information Solutions Inc. of Glen Allen, Virginia.

The four selected STTR proposals being monitored by Stennis Space Center are:

- "Multi-Function Fluid Measurement System using High-Definition Fiber Optic Sensing," developed by Luna Innovations Inc. of Roanoke, Virginia, and Edison Welding Institute of Columbus, Ohio.
- "Wireless Networked Cryogenic and Minimum Pressure Sensors," developed by Nanosonic Inc. of Pembroke, Virginia, and Virginia Tech of Blacksburg, Virginia.
- "Multi-Band Software Defined Radio Sensor System," developed by Pegasense, LLC of Winter Springs, Florida, and the University of Central Florida of Orlando, Florida.
- "Wireless Passive Nanoparticle-based Intelligent Sensor System for Extreme Environments," developed by Sensatek Propulsion Technology Inc. of Tallahassee, Florida, and Florida State University of Tallahassee, Florida.

The SBIR Phase I contracts last for six months and STTR Phase I contracts last for 13 months, both with a maximum funding of $125,000.

For more on the SBIR/STTR program, visit at: https://sbir.nasa.gov/. For more information about NASA's investment in space technology, visit: https://www.nasa.gov/spacetech.

## NASA officers visit Stennis

Members of the NASA Office of the Chief Financial Officer stand at the B-2 Test Stand during a visit to Stennis Space Center on June 12. Chief Financial Officer Jeff DeWitt and Deputy Chief Financial Officer Joe McIntyre joined others in touring Stennis facilities, including the B-2 stand and the Aerojet Rocketdyne engine assembly facility. Members of the group also had a chance to view an AR-22 rocket engine test on the A-1 Test Stand. The visit was DeWitt's first trip to Stennis since he was confirmed as NASA chief financial officer in March.

# ‘Hazards hunts’ help Stennis company work safely

*Note: The following is part of a regular focus on safety and health at Stennis Space Center. It was submitted by Shane Mendel, a safety specialist with A²Research at Stennis Space Center.*

It has been said many times that new, inexperienced employees can be great assets in identifying workplace hazards. They serve as “a fresh set of eyes” and often identify hazards that many experienced workers walk by every day. For the experienced worker, these hazards may have been present for extended periods and blended into the workplace. Sometimes, the hazards remain because employees have become numb to their presence or comfortable and complacent in regards to hazard recognition. You may even hear employees say, “It’s always been that way.”

A²Research established a 2018 Voluntary Protection Program goal requiring an employee from each lab/department to conduct a documented weekly hazard hunt in a lab other than his or her own. The idea behind the hazard hunt is to combine the best of both worlds – experience and a fresh set of eyes – to look for hazards in each area each week. The goal is to identify and eliminate any existing hazards or potential hazards.

The guidelines for conducting hazard hunts at A²Research are as follows:

1. Let the supervisor/lead know that you will be in the area conducting the hazard hunt (this is a brief 10 – 20 minute walk through).
2. Share your findings of the hazard hunt with the supervisor/lead when you have finished (transparency and open communication to resolve the issues; not a “gotcha” game; correct it now before someone gets hurt, etc.).
3. Aid in making on-the-spot corrections if a hazard is identified and can be easily corrected.
4. Complete the hazard hunt form and drop it off to the safety office.

The hazard hunt form initially was created to provide evidence that A²Research is doing what it says it is doing. The hazard hunt form has also provided A²Research with data that can be tracked, such as what types of hazards are present, in which labs, what the reoccurring hazards are and the total number of hazards identified and corrected. Below are some examples of hazards typically identified during A²Research hazard hunts.

| Hazard | Corrective Action |
|---|---|
| Broken sink flooded floor | Cleaned floor & reported |
| Chem bottle left out unattended | Spoke with area employee, non-issue |
| K-bottle chain loose | Tightened chain |
| Syringe on desk | Used to prime pump, non-issue |
| Cabinet drawer keeps opening by itself | Leveled table, drawer stays closed |
| Printer power cable possible trip hazard | Hung cable under desk, eliminated hazard |
| K-bottle strap loose | Tightened strap |
| Drawer left open on sample storage bin | Closed drawer |
| Dry erase board leaning against wall, could fall | Mounted to wall |
| Lysol, no labeling but has SDS# written on it. | Spoke to Safety, consumer use items are ok. |
| Network cables hanging off bench | Lab lead said IT was coming back to correct the issue |
| Soft drinks on bench | Asked employee to tidy up work bench area |
| Brush for procedure out of place | Placed in proper place |

**An engaged safety culture keeps Stennis Space Center rocketing forward!**

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# 1987 – Mississippi Technology Transfer Center opens

*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.*

The then National Space Technology Laboratories (NSTL) was booming in the 1980s. The test stands were being used to full capacity in testing space shuttle main engines, and new commercial applications enterprises and technology transfer programs were being developed.


The Mississippi Technology Transfer Center opened at Stennis Space Center in 1987 and continues operations on site.

As part of such efforts, the state of Mississippi committed to build a $4 million Technology Transfer Center at NSTL and then donate the building to NASA. Mississippi wanted to benefit from the technology that NASA was developing at the center and wanted a way to transfer the new technology to the state government and schools.

The main plans discussed was satellite technology that could help farmers and emergency planners. The Technology Transfer Center also hoped to help private companies and medical institutions.

On June 11, 1987, the dedication ceremony for the center was held, and the building was turned over to NASA. Since that time, it has been home to many organizations, including the U.S. Department of the Interior, the U.S. Navy, the Environmental Protection Agency, Mississippi State University, and the state of Louisiana.

## Stennis supports STEM outreach to Louisiana students

A young participant prepares a "rocket" for launch during NASA-sponsored education activities in the Baton Rouge area last month. Members of the Stennis Space Center Office of STEM (science, technology, engineering and mathematics) Engagement collaborated with employees from Marshall Space Flight Center in Huntsville, Ala., and Michoud Assembly Facility in New Orleans in conjunction with NASA Day at the Louisiana Capitol on May 3. Students from several area schools had the opportunity to build and launch "stomp rockets" as a way of learning about rocketry and Newton's Laws of Motion. Some students also had a chance to participate in a question-and-answer session with astronauts Col. Mark Vande (U.S. Army, ret.) and Joseph Acaba, both of who recently completed missions on the International Space Station. The effort provided Stennis educators a chance to continue support of Baton Rouge-area students. The educators also sponsored education activities following devastating floods in the area in 2016.

## Office of Diversity and Equal Opportunity

# How to be an ally and a friend to LBGT individuals

For a lot of people, learning that someone they know and care about is lesbian, gay, bisexual or transgender (LGBT) can open a range of emotions, from confused to concerned, awkward to honored. It may be hard to know how to react, leaving you with questions about what to say and how to talk about being LGBT, as well as wanting to know what you can do to be supportive.

An LGBT ally is an individual with the awareness, knowledge and skills to confront injustice and to advocate for equality while supporting all persons, regardless of perceived or actual sexual orientation, gender identity or gender expression, who are experiencing discrimination.

Here are five ways to be an LGBT ally:

1. Be honest. It is important to be honest with yourself – acknowledging your feelings and coming to terms with them. It also means being honest with the person who came out in your life – acknowledging you are not an expert, asking them what is important to them and seeking resources to better understand the realities of being an LGBT individual so you can be truly informed and supportive.

2. Send gentle signals. Showing and sharing your acceptance and support can be very easy. Many people often do not realize that LGBT people watch for signs from their friends, family and acquaintances about whether it is safe to be open with them.

3. Have courage. Just as it takes courage for LGBT people to be open and honest about who they are, it also takes courage to support your LGBT friends or loved ones. Prejudice still exists in this society, and discrimination is still far too common. Recognizing these facts and giving support to the LGBT person will take your relationship to a higher level and is a small step toward a better and more accepting world.

4. Be reassuring. Explain to someone who came out to you that their sexual orientation or gender identity has not changed how you feel about them. Even though it might take a little while for you to digest what they have told you, assure them that you care for and respect them as much as you ever have, or even more. Invite them to tell you if anything you say or do is upsetting.

5. Let your support inform your decisions. It is about working to develop a true understanding of what it means to be LGBT in America and trying to do your part to help break down the walls of prejudice and discrimination that still exist – for example, by supporting businesses with appropriate anti-discrimination policies, saying you do not appreciate "humor" that demeans LGBT people when it happens or learning about where political candidates stand on issues that have an impact on the LGBT community.

The Human Rights Campaign Foundation, in partnership with Parents, Families and Friends of Lesbians and Gays National, have developed a resource pamphlet titled "Coming Out as a Supporter." The resource is intended to be a welcoming guide for supporters to build bridges of understanding when someone they know comes out to them as LGBT.

The guide answers initial questions and shares facts, strategies and ways to show your support as an ally to the LGBT community. The guide is available at the Human Rights Campaign website at www.hrc.org where information for this article was obtained.

## Hail & Farewell

**NASA bids farewell to the following:**

| | | |
|---|---|---|
| Keith Brock | Director | Center Operations Directorate |
| Kenneth Human | Associate Director | Office of the Director |
| Aster Pastoral | AST, Electrical Experimental Equipment | Engineering and Test Directorate |

**NASA welcomes the following:**

| | | |
|---|---|---|
| Brian Eller | Student Trainee | Engineering and Test Directorate |
| Darryl Gaines | Assistant to the Director | Director's Support Staff |

# Hurricane Guide

The 2018 hurricane season has arrived – and NASA's John C. Stennis Space Center has prepared this four-page 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 whatever the 2018 storm season may deliver.

## Stennis Space Center
## WILL NOT
## serve as a shelter
## to any workers or families
## (to include 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 both 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 on weekdays, 8 a.m. to 5 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.

## Severe weather terms

**Storm surge**
An abnormal rise of sea/gulf water along a shore as the result, primarily, of winds from a storm.

**Watch**
Adverse conditions are *possible* in the specified watch area, usually within 48 hours. A watch may apply to thunderstorms, tornadoes, floods or hurricanes.

**Warning**
Adverse conditions are *expected* in the specified warning area, usually within 36 hours. A warning may apply to thunderstorms, tornadoes, floods or hurricanes.

## Public shelter information

Shelters are operated by trained individuals and are designed to ensure the safety, security and basic needs of sheltering residents are met.

**What to bring to a shelter**
Residents should bring a change of clothing, a blanket and a pillow for each person. Residents also should bring their disaster supply kit, including food, medications, comfort items and needs for infants or elderly persons.

**What not to bring to a shelter**
No weapons, illegal drugs, alcohol or pets are allowed (service animals are permitted).

## Hurricane Facts and Trivia

- The Atlantic Ocean hurricane season extends from June 1 through November 30 each year, hitting its peak from mid-August to late October. Of the 64 major hurricanes (Category 3-5) that made landfall in the United states during the 20th century, 36 hit in September. The next busiest month was August with 15 storm strikes.

- The terms "hurricane," "typhoon" and "cyclone" all refer to the same storm tropical cyclone phenomenon. Storms in the Atlantic and eastern Pacific Oceans are called "hurricanes." Western Pacific Ocean storms are referred to as "typhoons." Storms in the Indian Ocean and Bay of Bengal are "cyclones." Australians refer to a tropical cyclone as a "willy-willy."

- Tropical cyclones spin counterclockwise in the northern hemisphere and clockwise in the southern.

- The word "hurricane" comes from "Hurican" or "Huracan," the name of an evil Caribbean god. It also has roots to Hunraken, the Mayan god of wind, fire and storm who is said to have caused a great flood on Earth as an act of divine retribution against humans.

- A hurricane has remarkable power. It can reach as high as 40,000 to 50,000 feet into the sky, stir up millions of miles of air and produce more than 2.4 trillion gallons of rain a day. During its lifespan, a hurricane produces as much energy as several thousand atomic bombs.

- The first European report of an Atlantic Ocean hurricane dates back to 1495, when a storm struck Hispaniola during Christopher Columbus' second voyage to the region.

- Hurricanes spin around a low-pressure center known as an "eye." The eye may be 20-30 miles wide and remains calm and without clouds. It is surrounded by a thick "eye wall," which represents the strongest part of the hurricane, while spiral rain bands extend out from the wall to represent the largest portion of the storm. A hurricane makes landfall when its eye crosses a coastline, not when the spiral rain bands arrive.

- The right side of a northern hemisphere hurricane is typically stronger in terms of winds, tornado potential and storm surge.

- Project Stormfury was an effort by the U.S. government from 1962 to 1983 to weaken hurricanes by flying aircraft into them and "seeding" them with silver iodide. Scientists thought the silver iodide would disrupt the inner composition of the hurricane. However, this proved not to be the case. The final seeding flight was flown in 1971, and the project was canceled the following decade. Despite its lack of success, the aircraft flights did provide valuable observation data and research that helped meteorologists better understand and predict the storms.

- Hurricanes kill more people than any other type of storm. By one estimate, the storms have killed almost 2 million people worldwide during the past two centuries.

- For hundreds of years, hurricanes were not named or named on a local and random basis. The United States began using female names for storms in 1953, adding male names in 1979. Six lists of 21 names each now are maintained and rotated. The lists are in alternating (male/female or female/male) and alphabetical order (with no names used for the letters q, u, x, y and z).

- Names of powerful or destructive hurricanes are permanently retired (by decision of a world committee) from the naming lists and replaced as needed. Since the 1950s, 87 names have been retired, including four in 2017 (Hurricanes Harvey, Irma, Maria and Nate).

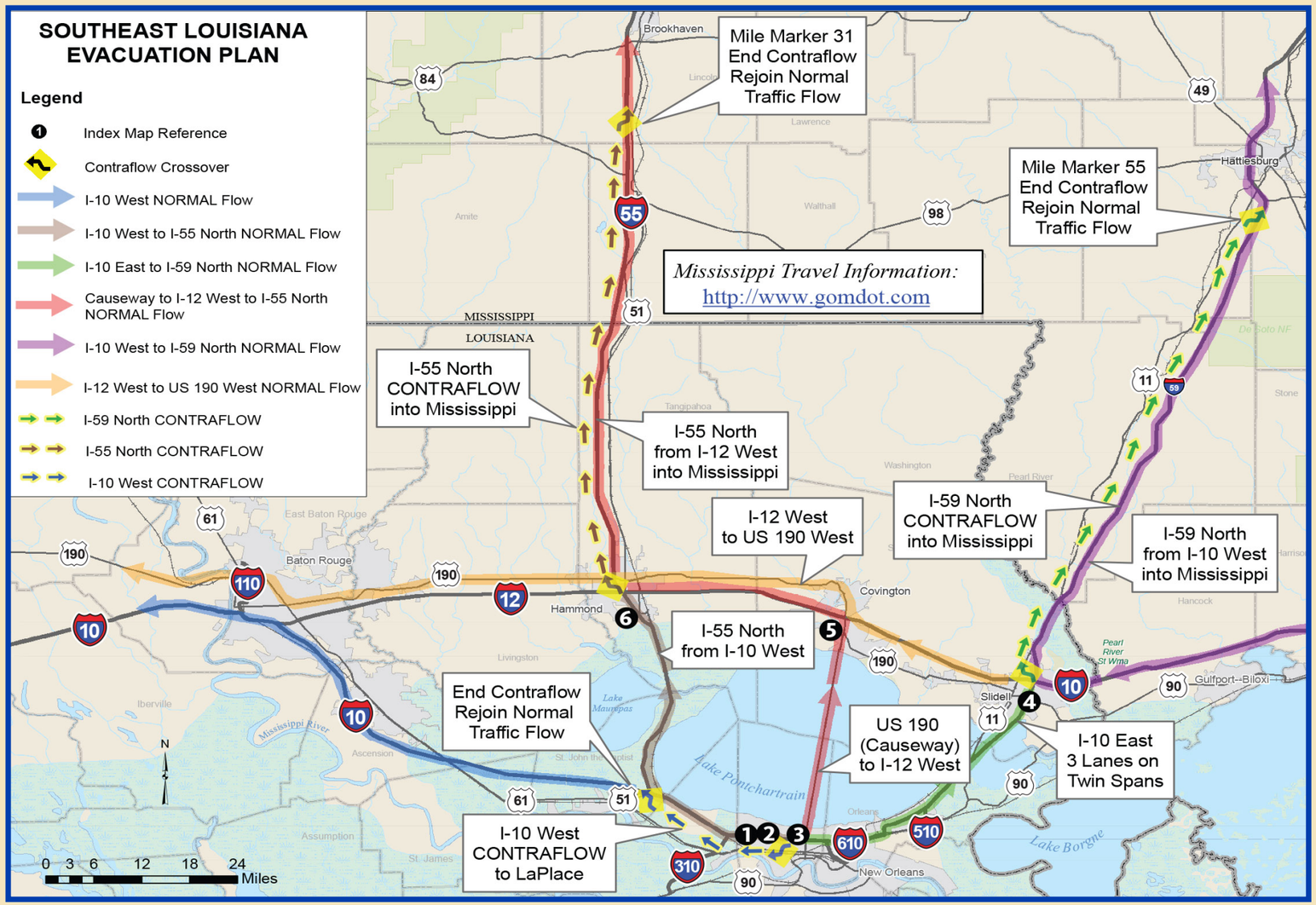
- Names for 2018 Atlantic Ocean hurricanes are – Alberto, Beryl, Chris, Debby, Ernesto, Florence, Gordon, Helene, Isaac, Joyce, Kirk, Leslie, Michael, Nadine, Oscar, Patty, Rafael, Sara, Tony, Valerie and William. The six current rotating naming lists can be viewed at: http://www.nhc.noaa.gov/aboutnames.shtml.

- Scientists believe Jupiter's "red spot" is a raging storm (for at least 150 years) larger than the size of Earth.

# 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.




## Louisiana resource information

**American Red Cross**
www.redcross.org 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 (email)

## Mississippi resource information

**Mississippi Emergency Management Agency**
www.msema.org 866-519-MEMA (6362) (24 hrs) 800-222-MEMA (6362)

**Mississippi Department of Transportation**
www.mdot.ms.gov and www.mdottraffic.com 866-521-MDOT (6368)

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

**Mississippi Public Broadcasting**
www.mpbonline.org (24-hour hotline) 601-326-1184

**Governor's Office**
www.governorbryant.com 601-359-3150

**Mississippi Insurance Department**
www.mid.ms.gov 800-562-2957

**U.S. Coast Guard - Sector Mobile**
www.uscg.mil/D8 251-441-5720

**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 225-925-7500

**Louisiana Department of Transportation**
www.dotd.louisiana.gov 877-4LA-DOTD (452-3683)

**National Weather Service Forecast Office**
(New Orleans/Baton Rouge) 985-649-0357 or 504-522-7330

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

**Louisiana Traveler Information**
www.511la.org dial 511 in state 88-ROAD-511 (888-762-3511) outside state

**Louisiana Governor's Office**
www.gov.louisiana.gov 866-366-1121

**Louisiana Department of Insurance**
www.ldi.louisiana.gov 800-259-5300 or 225-342-5900

**U.S. Coast Guard - Sector New Orleans**
www.uscg.mil/D8/sectNOLA/ 504-365-2200 or 800-874-2153

**Cleco Corporation**
www.cleco.com 800-622-6537

**Entergy (www.entergy-louisiana.com)**
800-ENTERGY (368-3749) Power outages: 800-9OUTAGE (968-8243)

**Washington-St. Tammany Electric Cooperative**
www.wste.coop 985-643-6612 Power outages: 866-672-9773