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### Stennis announces senior leadership changes

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Mary Byrd



John Bailey

**Randy Galloway** 

was sitting down by the bayou the other evening, enjoying a warm campfire and a cold glass of secret recipe eggnog while also reflecting on the topsy-turvy nature of the past year. The holidays are a good time for looking back and taking stock of where one is and how one managed to get there.

In 2020, it is easy to let the big ticket items of the year – COVID-19 and the presidential election – absolutely eclipse everything else. However, by the time I was on my second – or was it my third? – glass of eggnog, my thoughts had taken a different direction. Ark!

Just a year ago, the folks at Stennis were gearing up for a very big 2020. In mid-December 2019, Stennis conducted a sitewide "stress test" to make sure everything was ready for delivery and testing of the new Space Launch System (SLS) core stage. Excitement was understandably high. After all, Stennis would be testing the core stage of the new super rocket that would carry humans, including the first woman, back to the Moon and, eventually, to Mars.

Every test complex facility was involved, as well as support teams in multiple areas. For 24 hours, they put themselves and their systems through the paces – and clearly demonstrated Stennis was, indeed, ready to help power the next great era of space exploration.

Of course, one can never anticipate every detail – and in December 2019, no one could have predicted or tested the site's ability and readiness to withstand a COVID-19 pandemic or the most-active hurricane season in history. Fast forward a year, however, and Stennis not only is enduring but prevailing.

Despite the obstacles, employees have settled into a new telework routine to continue full operation of the site. Stennis teams also have joined with others to persist in Green Run testing of the SLS core stage. In mid-December 2020, NASA stands on the brink of completing the comprehensive test series with a hot fire of the stages four RS-25 engines.

It all adds up to a pretty impressive chapter for the history books – and if ever there was a year for Santa to put a little something extra in the stockings of every member of the Stennis family, it surely is this year. As for me, I will just offer an old-fashioned eggnog toast – to the simply remarkable Stennis family. Ark!



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### Stennis annouces senior leadership changes

ASA's Stennis Space Center has announced senior leadership changes with the retirement of one executive team member and the appointment of two others, including the first female to hold one of the site's top three leadership positions. The changes are effective Jan. 2, 2021.

John Bailey, who currently serves as the center's associate director, has been selected as the site's new deputy director. He will be succeeded by Mary Byrd, who currently serves as director of the Center Operations Directorate at Stennis. The moves were necessitated by the announced retirement of current Deputy Director Randy Galloway.

Bailey, a native of Mobile, Alabama, has more than 31 years of federal service, which includes almost 22 years with NASA. He has served in several roles at Stennis, including as director of the Engineering and Test Directorate prior to his selection as associate director in 2018. In the Engineering and Test Directorate role, he provided leadership and management of the Stennis rocket propulsion test complex and managed projects totaling more than \$221 million. This included restoration of the B-2 Test Stand for testing the core stage of NASA's new Space Launch System rockets, being built to carry humans back to the Moon and, eventually, to Mars.

"John has established extensive leadership experience," Gilbrech said, noting Bailey has received numerous awards for leadership and service. "His strong, diverse background spans a broad range of experiences across multiple organizations, which has given him a thorough understanding of the agency's mission and strategic goals and how they relate to the work performed at Stennis."

Byrd, a native of Lafayette, Louisiana, has served in several roles at Stennis, including as Center Operations director since 2018. In that role, she has managed comprehensive and integrated program of institutional services for the site, including protective services, environmental program management, construction management, facility design, facility operations, and maintenance.

Byrd also has served in roles related to the Space Shuttle Program, space operations and facility maintenance and operations. She also has received awards and recognitions for leadership and service.

Galloway, a native of Kemper County, Mississippi, concludes a distinguished career of 34 years of service to NASA. At Stennis, he served as director of the Engineering and Test Directorate at Stennis from 2007 until 2015, when he moved into the deputy director role.

Gilbrech credited Galloway for outstanding leadership and guidance, noting that he leaves "indelible marks" behind. During his career, Galloway received various awards, including NASA's Exceptional Achievement Medal, the Outstanding Leadership Medal and Stennis Space Center's J. Harry Guin Leadership Award.



John Bailey



Mary Byrd



**Randy Galloway** 



# Anyway you describe it, for Stennis Space Center, 2020 was one for the history books

n article about a year as tumultuous as 2020 surely deserves an opening line befitting a great work of literature, especially considering the story line of these 12 months would strain anyone's sense of credulity.

"Call me COVID-19" comes to mind as a clever play on the opening of *Moby Dick*. The opening line of the dystopian novel *1984*, with its clocks striking 13, also captures the completely unexpected – and somewhat mind-bending – nature of the current year. In the end, however, perhaps the best choice is the one that needs no explanatory context – "It was the best of times, it was the worst of times."

There is plenty not to celebrate or miss about 2020, but when it comes to Stennis Space Center, there also is plenty to mark down as immensely memorable. Reading the history of the site, one marvels at the resilience and persistence the early site employees displayed in overcoming weather, wildlife and working conditions to fashion Stennis Space Center out of a patch of rough south Mississippi ground.

Years from now, readers of this era of Stennis history will marvel as well at the resilience and persistence of the current Stennis employees in overcoming a worldwide pandemic, a record breaking hurricane season, and a list of distracting news and life events to forge ahead with critical space exploration work.

The year began with edge-of-the-seat excitement as NASA delivered the first Space Launch System core stage to Stennis for a series of groundbreaking Green Run tests on its integrated – and highly sophisticated – systems. As dawn broke on the morning of Jan. 22, framing the suspended SLS core stage at the B-2 Test Stand in beautiful sunrise colors, 2020 loomed busy and bright (facing photo).

Just a couple of weeks later, NASA affirmed the central role Stennis would play during the year by holding its annual State of NASA event at the propulsion test site. "I cannot think of a better place to roll out NASA's 2021 budget request than right here, where we are ushering in a civilization-changing era of human spaceflight," Bridenstine said, following an introduction by Stennis Director Rick Gilbrech.

Days after that, Stennis leaders visited the Mississippi capital, delivering the message that the state once more stood at the forefront of the nation's human space program in testing the future of deep space exploration.

A mere month later, though, activity at Stennis and many other places around the world ground to a near halt as the COVID-19 pandemic broke out full force. Employees scrambled to convert to telework status and continue Stennis operations. The site's computer support and information technology teams led the way in helping employees make the office-to-home transition.

By mid-May, essential site operations were continuing full force. Work in key areas – procurement, communications, safety, test technology, human resources, STEM (science, technology, engineering and mathematics) engagement, legal counsel and finance – was transformed but ongoing.

Onsite activity was resuming within the Stennis test complex as well, with new COVID-19 restrictions and practices in place to protect the safety and health of returning employees. Critical maintenance work resumed at the A-1 Test Stand. Meanwhile, at the B-2 Test Stand, Stennis crews worked with other partner teams to resume Green Run test activities on the SLS core stage. Although the most active hurricane season in memory forced multiple standdowns in the activities in ensuring months, teams were quick to resume work following the weather events.

One-by-one, the Green Run tests were completed. By early December, only two of eight tests remained, including a final hot fire of the core stage's four RS-25 engines, just as during an actual launch. Pending outcome of these final exercises, the SLS core stage figured to head to Florida in preparation for the Artemis I test mission fairly early in 2021.

In the end, in a year that threatened to disintegrate before one's very eyes, the discipline, creativity, determination, and focus of Stennis employees not only kept critical work and activities on track but moving forward. In other words, just as the year deserves a notable opening line, it merits a fitting and memorable closing one as well.

Perhaps, some of the final words from the same *A Tale of Two Cities* novel that offered the most appropriate opening choice would suffice – "It is a far, far better thing that I do than I have ever done."

Certainly, Stennis employees would agree. Ask them to reflect on the meaning of their work and the chance to be part of the SLS project during this past year, and they respond with phrases like – "immensely exciting," "highlight of a career," "greatest source of pride," "real privilege," "oncein-a-lifetime opportunity," "awesome," "something to tell my children and grandchildren."

The list goes on, but perhaps NASA Center Operations Director Mary Byrd (soon-to-be Stennis associate director) put it best early this fall with words that can be applied both to the core stage activity and the performance of Stennis employees during the past eight-plus-and-counting months. "Mere words cannot express the excitement and energy, ..." she said. "Imagine – to be involved is to be making history!"



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stage for NASA's new Space Launch System (SLS) rocket arrived at Stennis Space Center on Jan. 12, setting the stage for a Green Run test series prior to launch of its maiden Artemis I test flight. The core stage, aboard the Pegasus barge, traveled from Michoud Assembly Facility in New Orleans, through the Stennis locks and canal system to the B-2 Test Stand dock. Within hours of arrival, the stage was rolled off of the barge onto the B-2 Test Stand tarmac. On Jan. 21-22, crews lifted and installed the core stage in the B-2 stand. Operations required crews to lift the massive core stage from a horizontal position into a vertical orientation, a procedure known as "break over." Once the stage was oriented in a horizontal position on the night of Jan. 21, crews tied it in place to await favorable win conditions. The following morning, a beautiful south Mississippi sunrise framed the core stage (page 4 photo) as crews began the process of raising, positioning and securing the stage on the stand. Once in place, a series of tests began on the core stage systems to ensure all was ready to go. Once fully tested, the core stage will be removed from the B-2 Test Stand and shipped to Kennedy Space Center to be joined with other SLS rocket stages and components. It then will be used to launch the Artemis I test mission to the Moon, the first of a series of Artemis program flights that will return humans, including the first woman, to the Moon.





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Stennis Space Center was the center of activity in the first two months of 2020, particularly with the arrival and installation of the first Space Launch System (SLS) core stage for a series of Green Run sys-tems tests. Before COVID-19 necessitat-ed a pause in activity, Stennis also hosted NASA Administrator Jim Bridenstine and other agency leaders for the annual State of NASA event (top photo). "The milestones we hit this year ... will place us on the cusp of era-defining space exploration," Bridenstine told guests gathered for the event. "And the science and technology we are working on right now will prepare us in this new exploration to take humanity's next giant leap to Mars. ... We are the Artemis generation, and we are going." Stennis Director Rick Gilbrech (left photo) introduced Bridenstine during the event. Though COVID-19 did pause those test activities in mid-March, just two months later, limited work was resuming with new safety and health restrictions in place (far left photo). Despite a historically busy hurricane season, crews persevered in ensuing months to complete tests of various core stage systems, setting the stage for the final hot fire test of the core stage's four RS-25 engines.

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In addition to hosting the annual State of NASA event in the opening months of 2020, Stennis leaders and representatives also traveled to the Mississippi capital to share the story and significance of Stennis. Stennis Day at the Capitol activities featured astronaut Doug Wheelock, who visited individual legislators and addressed members of the state Senate as well (top left photo). Weeks later, despite COVID-19 disruption, Stennis celebrated an astronaut of its own, native son Fred Haise. Haise was a member of the Apollo 13 mission in April 1970 that suffered an in-flight explosion and captivated the attention of the world as it made a perilous return to Earth. April 2020 marked the 50th anniversary of the mission, and Stennis highlighted Haise and his fellow astronauts in site publications. Meanwhile, spring was returning to Stennis (top right photo), even if many employees had converted to telework status due to the COVID-19 pandemic. Essential personnel continued onsite activities (bottom photos), although with new safety and health restrictions in place, including the use of face masks.



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Although work continued in all areas of Stennis operations in 2020, the Space Launch System (SLS) core stage commanded the lion's share of attention. Prior to the COVID-19 restrictions, media traveled on site to learn about core stage activities from such people as Stennis Director of Test Operations Maury Vander (top left photo). Following resumption of limited activities on site, rotating crews worked to complete tests of core stage systems (top right photo). In early October, Green Run Test Conductor Ryan McKibben (bottom left photo) and others completed a simulated countdown exercise, moving NASA ever closer to the final hot fire test of the core stage and its four RS-25 engines. Throughout the year, the installed core stage stood as beacon day and night to nearby interstate travelers, as a time-lapse video of the B-2 Test Stand released in late fall beautifully revealed (bottom right photo). Meanwhile, Stennis embraced its frontline role in the nation's space exploration program as it headed into its 60th anniversary year in 2021. A new site graphic (page 9) proclaimed the critical work in simple fashion -"We test the future."







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NASA John C. Stennis Space Center



### Hubble releases images of celestial gems

The Hubble Space Telescope turned 30 this year, and for the occasion, it's sharing a present. NASA has just released dozens of newly processed Hubble images featuring 30 dazzling galaxies, sparkling star clusters, and ethereal nebulae. There is something extra special about these 30 celestial gems: All of them can be seen through backyard telescopes. Some of them can also be spotted with binoculars or even the naked eye. These new images join a Hubble gallery first published in December 2019. For each listing, a basic star chart shows observers when and where they can find that object in the night sky, and a description suggests what type of observing equipment can be used to view it. The individual articles also explain Hubble's images for those who prefer to just enjoy the telescope's exquisite views. To see all of the new images in Hubble's Caldwell catalog, click here.

### NASA in the News

#### NASA defines Artemis III science priorities

NASA has identified the agency's science priorities for the Artemis III mission, which will launch the first woman and next man to the Moon in 2024. The priorities and a candidate set of activities are included in a new report. The Moon often is referred to as the cornerstone of the solar system, and these high-priority investigations will help scientists better understand fundamental planetary processes that operate across the solar system and beyond. In addition, the team prioritized investigations that will help NASA understand the risks and potential resources of the Moon's South Pole, where the agency hopes to establish its Artemis Base Camp concept by the end of the decade. Artemis III has the potential to enable the science community to make significant progress on many of the identified priority science goals, including increasing HUMAN understanding of how the Moon formed and evolved, how it interacts with the Sun, and how water and other resources arrived at the Moon, are transported, and currently are preserved. To read the full report, visit here. For more about NASA's Artemis program, visit here.

### Asteroid Ryugu dust returned to Earth

Earlier this month, Japanese spacecraft Hayabusa2 dropped a capsule to the ground of the Australian Outback from about 120 miles above Earth's surface. Inside the capsule is some of the most precious cargo in the solar system: dust that the spacecraft collected earlier this year from the surface of asteroid Ryugu. By the close of 2021, samples of Ryugu will be dispersed to six teams of scientists around the globe. The researchers, including scientists from the Astrobiology Analytical Laboratory at NASA's Goddard Space Flight Center, will prod, heat, and inspect the ancient grains to learn more about their origins. Ryugu is an ancient fragment of a larger asteroid that formed in the cloud of gas and dust that spawned the solar system. It is an intriguing type of asteroid that is rich in carbon, an element essential to life. Dust from Ryugu will be among the most immaculately preserved space material scientists have studied. It is only the second sample of an asteroid that has ever been collected in space and returned to Earth. Astrobiology is the study of the origin, evolution, and distribution of life in the universe. To learn more about astrobiology at NASA, visit here.

### Safety professional enjoys 'caring culture' at Stennis

arrin Steber was ready for a change. Little did he know the change he was looking for was in his own backyard at Stennis Space Center.

A native of Gretna and Harvey on the west bank of the Mississippi River from New Orleans, Steber worked 25plus years in the metropolitan area as a paramedic. This included an eight-year stint with the St Tammany Fire District #4 on the Northshore of Lake Ponchartrain after he and wife Gina had relocated to Slidell.

At one point, Steber agreed to serve as a paramedic for a turnaround operation at a Chalmette refinery. It provided a chance to work alongside safety professionals, which opened his eyes to an entirely new way to help people. trative reports, writing work authorization documents for the heavy equipment group, and supervising safety critical lifts on the test stands to ensure proper procedures are followed and all safety measures are in place.

It also means working to ensure safety engineers are in place on the B-2 Test Stand to assist S3 technicians and other team members as they test the first core stage of NASA's new Space Launch System (SLS) rocket. Once tested, the rocket will launch the next great era of space exploration, including Artemis program flights that return humans to the Moon and an eventual mission to Mars.

The significance of the work is not lost on Steber, whose earliest space memory is of the space shuttle Challenger

Steber made the career change and soon was being sent to work short stints at refineries around the country.

Eventually, the travel became a hindrance, so Steber accepted a post as safety coordinator for an area construction company. When he was laid off from that job in 2012, it took Steber just a matter of days to find a brand-new position at Stennis, just a short daily



Safety professional Darrin Steber enjoys both the caring culture he had found at Stennis Space Center and the chance to participate in space exploration history.

tragedy in 1986. "The opportunity to be a part of this historic (SLS) testing is phenomenal," he said. "I have been involved with this project since the B-2 stand was being outfitted for the core stage. This is something that I will be able to tell my grandchildren and, God willing, my great grandchildren. It is certainly a blessing to be a part of history."

commute just inside Mississippi from his Slidell home.

Originally hired as a Safety Engineer, Steber recently became the safety manager/lifting devices and equipment manager for Syncom Space Services (S3), which holds the operations contract at Stennis. Eight years in and counting, Steber remains excited about the opportunity and the "caring culture" he has found at the site.

"There are many people that work at Stennis, and it still amazes me that everyone here is like a close family," he said. "The talent of the employees here is outstanding. The workplace culture at Stennis inspires diversity and inclusion, and with that achievement, everyone is respected and their voices heard."

Steber's role calls for him to manage S3 safety engineers, which includes scheduling personnel, compiling adminis-

In addition to historic significance, Steber remains acutely aware of the importance of his safety efforts across the Stennis site. Earlier this year, he helped acquire state-ofthe-art atmospheric meters to protect employees in the Stennis test complex. "Their safety is my top priority," Steber emphasized. "I want them to have the best equipment to provide the safest work environment possible."

The work is both professional and personal for the Louisiana native. One of his three grandchildren, Elijah, was born profoundly deaf. He received cochlear implants at 12 months and, at age five, remains what Steber calls a thriving SuperHEARo. Steber shares the story often to remind people to focus on safety and not to take the gift of hearing for granted because once it is gone, it does not return.

It is a message one can trust – after all, it comes from a safety professional who knows what it means to care.

### 1972 – the future of Stennis begins to take shape



Note: NASA's John C. Stennis Space Center has played a pivotal role in the nation's space program. The following offers a glimpse into the history of the space program and the rocket engine test center.

n Dec. 7, 1972, Apollo 17, the final mission of the Apollo Program, launched. Even as the last

Propulsion Co. of Sacramento, California; and United Technology Center of Sunnyvale, California.

With bids submitted, a delegation of elected officials, community leaders and business people from Louisiana and Mississippi began lobbying for the work to come to their states. In late 1973, the award was given to Thiokol Chemical Co. The local community around Michoud and MTF were angered by the announcement since just a few

most propulsion test site."

mission of the Apollo Program, it had a few firsts: the first night launch of a U.S. human space flight, the first mission to be commanded by a person with no test pilot background, and the first mission not to have a test pilot on board. It was also the third time the Lunar Roving Vehicle developed and managed by Marshall Space Flight Center was used and the final launch of the Saturn V rocket, with which Stennis is very familiar.

The year 1972 saw the end of an era for the then-named Mississippi Test Facility (MTF). The new year of 1973 seemed grim for the few employees left at the center. After the Apollo Program ended, work forces were cut as the facility faced tough times. However, an engine test project was on the horizon - the space shuttle. The space shuttle was designed as a reusable



Apollo 17, the final of seven lunar missions during the Apollo Program, launches on Dec. 7, 1972.

vehicle to carry humans to low-Earth orbit following the Apollo Program.

MTF jumped at the chance to test the engines that would power the shuttle fleet. An effort to have shuttle engines manufactured at Michoud Assembly Facility in nearby New Orleans and tested at MTF went into motion. One of the companies entering bids for the project was Lockheed Propulsion Co. of California, which embraced the idea of using Michoud and MTF to perform the work. Other companies putting in bids for the work were Thiokol Chemical Corp. of Brigham City, Utah; Aerojet Solid

by NASA and other federal agencies [would] now be more successful than ever before." Site Director Jackson Balch was quite pleased with the changes, saving that "it will be kind of nice to be a member of the club."

Just a year later, on June 24, 1975, a brief, but very important event occurred at the newly independent site, the first ignition test of a space shuttle main engine. It lasted just a second but marked the return to propulsion testing for NSTL and opened the door for testing projects to follow, including the current testing of engines that eventually will carry humans further into space than ever.

years earlier, MTF had been named "the nation's fore-

The announcement set off a series of events that would shape the future of MTF: the protest of the solid rocket motor contract award to Thiokol; calls for "full utilization of MTF" by U.S. Sen. John C. Stennis, U.S. Rep. Trent Lott and other Mississippi and Louisiana officials; and a campaign for renaming the facility and establishing it as an independent NASA installation no longer under direction of Marshall Space Flight Center in Huntsville, Ala.

Sen. Stennis spearheaded the movement, and on June 14, 1974, Mississippi Test Facility was renamed the National Space Technology Laboratories (NSTL) and became an independent installation of NASA, reporting to NASA Headquarters. Stennis said the "efforts to increase the use of NSTL

# Office of Diversity and Equal Opportunity NASA finds strength through focus on unity

n September 6, 2019, the National Aeronautics and Space Administration (NASA) launched a Unity Campaign. The goal of the NASA Unity Campaign is to power and propel NASA organizations and people to work together even more effectively to accomplish their mission.

mercial Crew Program. The Crew-1 astronauts named the spacecraft *Resilience*, highlighting the dedication the teams involved with the mission have displayed and to demonstrate that when we work together, there is no limit to what we can achieve. It was named in honor of NASA families, colleagues, and fellow citizens.

When this campaign was launched, no one could have anticipated how vital the core value of unity would become. The emergence of the CO-VID-19 pandemic in early 2020 brought the world to a screeching halt. Suddenly, life as all knew it was being shut down amidst illness, panic and fear.



As 2020 draws to a close, it is important to remain focused on unity. This year has certainly taught everyone about resilience. While the challenges have been tremendous, so too are the opportunities for change and growth.

A poem by Leslie Dwight perfectly cap-

Many people went into crisis mode and looked to leadership for guidance and direction how to proceed.

Almost overnight, the majority of the NASA workforce transitioned into a remote work environment. Leadership provided timely updates and weekly checkins with the workforce. There were conversations that went beyond the work and focused on the well-being of everyone.

Managers ensured that employees were taken care of and offered flexibilities to accommodate family needs. Amazingly, during a time that the workforce was physically forced apart, it created a unique and valuable opportunity for unity.

Despite the global pandemic and a host of other stresses and challenges, being unified allowed NASA teams to achieve success. To achieve this success, unity had to go beyond just leadership. It had to be embraced by everyone in the organization.

One such recent success was again launching of astronauts on an American rocket from American soil to the International Space Station as part of NASA's Comtures the positive aspects and silver lining of 2020:

What if 2020 isn't canceled? What if 2020 is the year we've been waiting for? A year so uncomfortable, so painful, so scary, so raw – that it finally forces us to grow. A year that screams so loud, finally awakening us from our ignorant slumber. A year we finally accept the need for change. Declare change. Work for change. Become the change. A year we finally band together, instead of pushing each other further apart.

2020 isn't canceled, but rather the most important year of them all.

American poet Mattie Stepanek once said, "Unity is strength...when there is teamwork and collaboration, wonderful things can be achieved." The resilience and successes at NASA during this difficult year are proof that unity is strength and the NASA family is now stronger than ever.

Excerpts from: https://www.today.com/news/what-if-2020-isn-t-canceled-inspiring-poem-message-change-t183397.

### Hail & Farewell

NASA bids farewell to the following:

AST, Technical Management

Engineering and Test Directorate

## **Online Resources**

# Listen to BizTalks podcast interview with Stennis Associate Director John Bailey interview here.

### Stennis Emergency Management



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### NASA Coronavirus Response



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Stennis Artemis Resources page



NASA STEM@Home for Students



How to Draw Artemis