



National Aeronautics and Space Administration



LAGNIAPPE

John C. Stennis Space Center

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Getting closer!

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Things are heating up around here – and I am talking about more than the leather seats of my green '63 Plymouth convertible after sitting in the sun all afternoon. Ark!

With NASA committed to Green Run testing of the Space Launch System (SLS) core stage, work crews at the B-2 Test Stand have kicked it into high gear. During the recent lift and installation of the core stage pathfinder simulator (a size and weight replica of the actual core stage), teams worked two shifts around the clock. They will resume that same schedule later this year as the SLS flight core stage arrives for testing.

Two lifts of the pathfinder simulator originally were planned in preparation for handling the actual core stage when it arrives later this year. However, only one was conducted before the pathfinder was removed from the stand for transport to Kennedy Space Center.

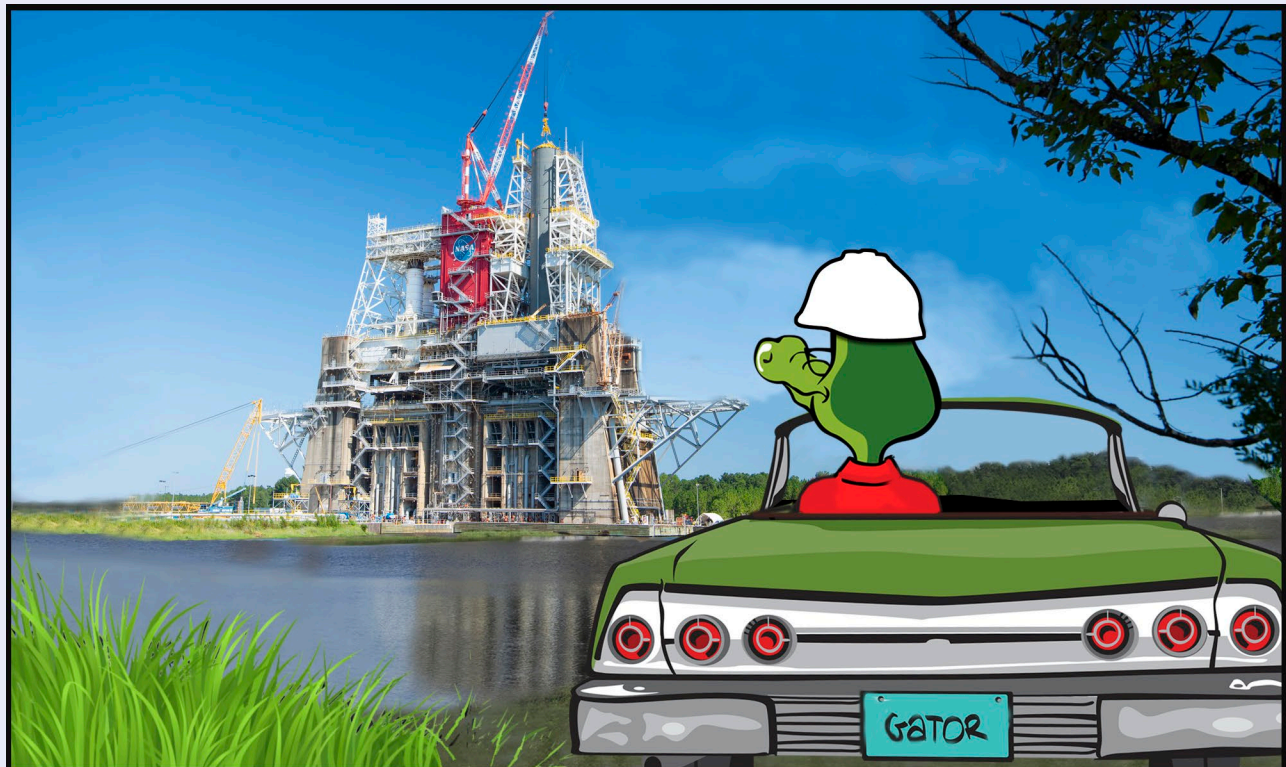
There were several reasons for the decision to forgo an additional lift, including the fact that the Stennis team performed the first exercise so well. Of course, when you think about it, what else would anyone expect from the experienced folk around here.

The test crews at Stennis remind me of the story of Ben Hogan, the great golf legend. Hogan was unlike many other golfing greats – by his own admission, he did not possess an innate gift for the game. Instead, he practiced and practiced and practiced. Then, he practiced even more.

Stories tell of him hitting hundreds of golf balls a day, working his way through each club in his bag. Along the way, he studied the golf swing and, in the eyes of many, perfected it to a level of consistency and purity that has never been equaled.

When it comes to propulsion testing, the Stennis teams are much the same. They have studied and performed and honed their skills to an incredible level, just as Hogan did with his golf swing. No matter the pressure, hogan knew his swing could perform. In that same manner, Stennis test teams have responded – and met – every challenge set before them.

Green Run core stage testing is their newest challenge, and if the pathfinder exercises are any indication, it will be met as well. After all, folks around here know a thing or two about dealing with all kinds of heat. Ark!



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NASA clears milestone in preparation for Green Run testing

NASA cleared a milestone in preparation for Green Run testing of its Space Launch System (SLS) core stage with an Aug. 23/24 lift and installation of the core stage pathfinder simulator onto the B-2 Test Stand at Stennis Space Center.

The lift and installation of the core stage pathfinder – a size and weight replica of the SLS core stage – is helping teams at Stennis prepare for the Green Run test series. For this test of the new core stage, Stennis will lift the flight core stage for Artemis 1, the first SLS mission into the stand. SLS and the new Orion spacecraft being built are the foundation for NASA's Artemis Program, which will send the first woman and next man to walk on the Moon by 2024.

Stennis modified the B-2 Test Stand for the core stage Green Run testing. The procedure involved lifting the core stage pathfinder from its horizontal position on the B-2 Test Stand tarmac with the facility boom crane line attached to the forward end and a ground crane line attached to the aft end.

The pathfinder then was “broken over” into a vertical position. Once the ground crane line was disconnected, the core stage pathfinder was lifted into place by the stand boom crane. This “fit test” validated auxiliary lift equipment, procedures, and verified that stand modifications and preparations are in place and prepared for delivery and testing of the SLS core stage flight hardware.

To prepare for the test, Stennis modified or upgraded every major

area and system of the test stand, as well as the high-pressure industrial water system and high-pressure gas facility that support test operations.

NASA is building the SLS flight core stage at its Michoud Assembly Facility in New Orleans and is scheduled for transport to Stennis by the end of the year. The stage recently completed a critical review in preparation for adding the last piece of the core stage structure: the engine section. After this piece is added, the four RS-25 engines can be connected to the stage.

When the stage is completely assembled, NASA's Pegasus barge will deliver it to Stennis. For the Green Run test, the core stage flight unit will be lifted and installed onto the B-2 stand, using procedures developed and practiced during the recent core stage pathfinder lift.

NASA then will conduct a series of tests to check out stage systems and make sure all are working as needed. Once systems are checked, NASA will conduct a full hot fire test of the stage, firing its four RS-25 engines simultaneously, just as during an actual launch.

The hot fire test will generate more than 2 million pounds of combined thrust and provide critical performance data needed to demonstrate the core stage design is flightworthy and ready for launch.

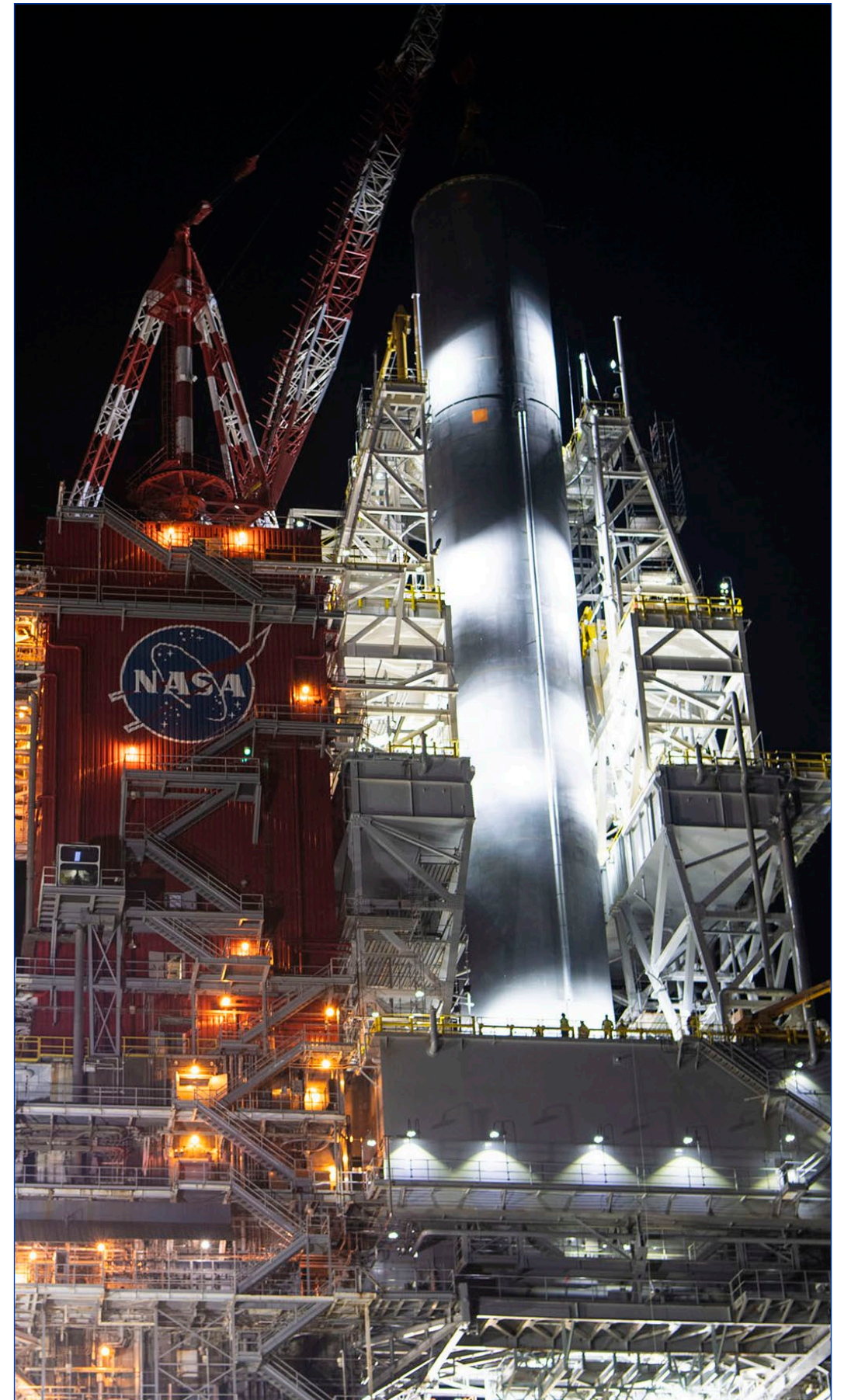
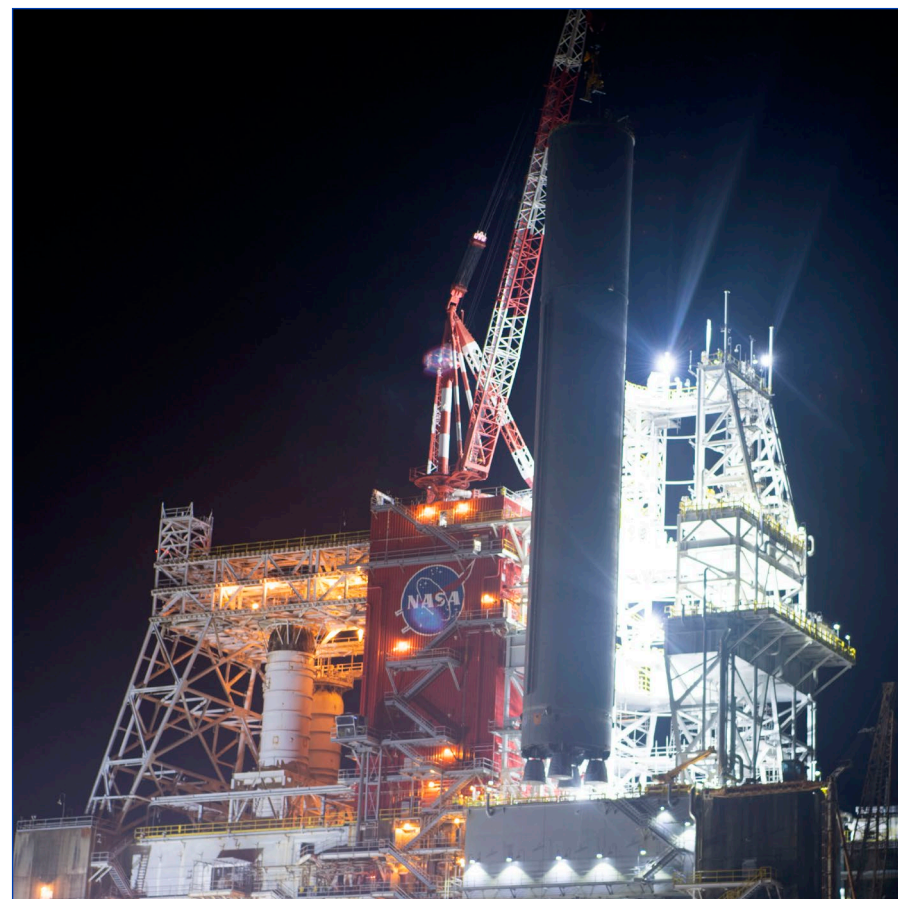
Following necessary refurbishment of the stage, it will be transported by barge to Kennedy Space Center in Florida. At Kennedy, the stage will be mated with other SLS major elements and prepared for launch of the Artemis 1 mission.



B-2 Test Stand operators perform a lift and installation of the Space Launch System (SLS) core stage pathfinder through the night of Aug. 23-24. The procedure marked yet another milestone as Stennis prepares to install and test the actual core stage that will help power the maiden SLS flight – Artemis I. As photos on this and the following page show, operators used two cranes to lift the pathfinder from its horizontal position, “break” it over into a vertical position and hoist it up and into place on the stand. The exercise allowed operators to practice the procedure and helped confirm the test facility is ready to receive the core stage when it is delivered later this year.



NASA's MOON to MARS MISSION





Learning to track water using NASA satellite data

Students use real data from NASA's GRACE satellites to track water mass changes in the U.S. With schools resuming across the country the last several weeks, NASA has STEM activities to keep students motivated. Student

activities related to tracking water mass changes include estimating water resources using heat-map data, creating a line graph for a specific location, assessing trends and discussing implications.

NASA in the News

NASA looks to understand space weather

For the first time, researchers have detected water vapor signatures in the atmosphere of a planet beyond our solar system that resides in the "habitable zone," the region around a star in which liquid water could potentially pool on the surface of a rocky planet. Astronomers at the Center for Space Exochemistry Data at the University College London used data from NASA's Hubble Space Telescope to find water vapor in the atmosphere of K2-18b, an exoplanet around a small red dwarf star about 110 light-years away. If confirmed, this will be the only exoplanet known to have both water in its atmosphere and temperatures that could sustain liquid water on a rocky surface. Liquid water would only be possible if the planet turns out to be terrestrial in nature, rather than resembling a small version of Neptune. Given the high activity of its red dwarf star, K2-18b may be more hostile to life as we know it than Earth, as it is likely to be exposed to more high-energy radiation. Its surface gravity would be significantly higher than on our planet. K2-18b is one of hundreds of "super-Earths" – exoplanets with masses between those of Earth and Neptune – that has been found by Kepler.

Goddard visualizer creates CGI Moon kit

A new NASA out-of-this-world animation allows humanity to experience their closest galactic neighbor as never before through an online "CGI (computer-generated imagery) Moon kit." The new resource uses data from NASA's Lunar Reconnaissance Orbiter (LRO), which has been orbiting the Moon for 10 years. One of the primary goals for the LRO is to accurately map the topography of the Moon to prepare for safer landing to sights of interest for NASA's Artemis Program. Using data and imagery from the reconnaissance orbiter, Ernie Wright brings the Moon to life in unprecedented detail. Wright is a science visualizer who works at the Scientific Visualization Studio at NASA's Goddard Space Flight Center in Greenbelt, Maryland. He created the online CGI Moon kit in order to make NASA's data more accessible to 3-D artists. However, as NASA prepares for Artemis flights, including one that will carry the first woman and the next man to the Moon by 2024, Wright's animations will assist in planning for safer, more successful missions. For more about LRO, visit: <https://www.nasa.gov/lro>. To access the Moon kit, visit: <https://svs.gsfc.nasa.gov/4720>.

2019 NASA Honor Awards

Stennis Space Center Director Rick Gilbrech and NASA Science Mission Directorate Associate Administrator Thomas Zurbuchen presented annual NASA Honor Awards to Stennis employees during an onsite ceremony Sept. 10.

Two Stennis employees received NASA's Outstanding Leadership Medal. This medal is awarded to government employees for notable leadership accomplishments that significantly influenced the NASA mission.

Richard J. Gilbrech received a NASA Outstanding Leadership Medal for strong leadership skills as director of Stennis Space Center, which has resulted in lasting contributions to NASA priorities and programs. Since his appointment in 2012, Gilbrech has led in delivery of top-quality engineering products and services that meet expectations on schedule and within budget. Stennis also has improved and sustained a premier safety culture and established itself as a top center in terms of workforce culture and satisfaction.



Barry E. Robinson received the NASA Outstanding Leadership Medal for sustained leadership as the B-2 Test Stand core stage test project manager at Stennis Space Center. The project goal was to ready the B-2 facility for testing the Space Launch System core stage. Robinson coordinated work across six separate facilities and involving 29 separate B-2 stand systems. By February 2019, he had



led 100 percent of work to completion and activated all 29 systems, preparing Stennis for a new chapter in rocket propulsion testing.

Three Stennis employees received NASA's Exceptional Service Medal. This medal is awarded to government employees for sustained performance that embodies multiple contributions to NASA projects, programs or initiatives.

John W. Bailey received the NASA Exceptional Service Medal for a 20-year agency career (plus 10 with the Department of the Air Force) that spans such areas as technology development and commercialization, applied science, communications, propulsion testing and strategic development. Bailey has served in various roles, including as director of the Stennis Engineering and Test Directorate. He was named Stennis associate director in June 2018. His professionalism, leadership and dedication reflect NASA's highest traditions of service.



Michele Campbell received the NASA Exceptional Service Medal for more than 20 years of agency service. Campbell began her career at Stennis in the Office of Human Capital, before joining the Office of the Chief Financial Officer as a payroll/labor analyst in 1999. Her in-depth knowledge and expertise has benefited several areas of work at Stennis and across the agency. Campbell's career reflects a history of exceptional support to NASA/Stennis operations,



as well as improvements to agency payroll and labor processing.

Rachel Harrison-Woodard received the NASA Exceptional Service Medal for more than 18 years of support and distinctive accomplishments to the Stennis Space Center propulsion test mission. Harrison-Woodard worked as a contractor before joining the NASA team as a safety and quality engineer in 2013. Her work has helped improve organizational efficiency and reduce center costs while ensuring safety and data quality. She also has focused on human performance to help prevent human error or injury during test projects.



Five Stennis employees received NASA's Exceptional Achievement Medal. This medal is awarded to government employees for a significant specific achievement or substantial improvement in operations, efficiency, service, financial savings, science or technology that contributes to the mission of NASA.

Ronald J. Bald received the NASA Exceptional Achievement Medal for accomplishments as an attorney adviser in the Office of the Chief Counsel at Stennis and across the agency. His work has raised the quality of the NASA legal team's performance and substantially improved operations, efficiency and the implementation of best practices. He was a key catalyst in development of a "best in class" on-line system



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that has enabled greater unification of the NASA legal community for more effective delivery of services.

Dao

Kooamphorn

received the NASA Exceptional Achievement Medal for significant accomplishments as a senior contracting officer in the Stennis Office of Procurement. She provided critical support in awarding and managing contracts for the B-2 Test Stand restoration and modification project. Kooamphorn also is responsible for the Financial Resources Planning Programing and Control contract. She is recognized as a subject matter expert in her field and has developed a reputation exemplifying NASA core values.



John T. Pazos

received the NASA Exceptional Achievement Medal for contributions to significant infrastructure improvements as a senior mechanical design engineer in the Stennis Engineering and Test Directorate. Pazos provided key contributions to the project to replace Stennis' high-pressure industrial water system piping. Throughout his work, Pazos always looks for innovative and cost-effective design approaches and is adept at applying new technologies. Such a focus contributed to saving millions during the piping project.



Christine Q. Powell received NASA's Exceptional Achievement Medal for her work as assistant director in the Stennis Engineering and Test Directorate. Powell was a guiding force in development and growth of the Systems Engineering/Project Management Program at

Stennis. Since its launch in 2015, the program has been recognized across NASA as an extremely effective approach to ensuring workforce development and growth. Powell's impeccable leadership and expertise have been critical to the success of the program.



Ryan E.

Roberts received NASA's Exceptional Achievement Medal for extensive efforts that were critical to the successful activation of the modified B-2 Test Stand. As B-2 Test Stand director, Roberts provided invaluable influence and strong technical leadership during the activation process. Work included a range of activities, including tests of various stand systems. As issues were encountered, Roberts directed efforts to implement strategies to mitigate each one, providing leadership essential to project success.



One Stennis employee received NASA's Exceptional Public Service Medal. This medal is awarded to individuals who are not government employees but have made exceptional contributions to the mission of NASA.

Timothy J.

Jones received the NASA Exceptional Public Service Medal for his dedication and expertise as the most senior SaiTech computer programmer on the Information Technology Services contract at Stennis Space Center. For 28-plus years, Jones has contributed



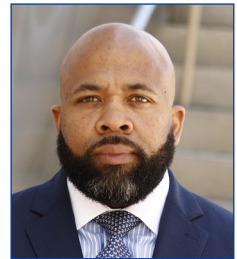
innovations that have shaped Stennis information technology capabilities and services. His expertise has helped elevate Stennis services to an exceptional level of excellence, consistency and modernization.

Two Stennis employees received the NASA Early Career Achievement Medal. This medal is awarded to a government employee for unusual and significant performance during the first 10 years of an individual's early career in support of the agency.

Michael J. Vallan

received the NASA Early Career Achievement Medal for significant contributions

as an attorney adviser in the Stennis Office of the Chief Counsel. His efforts include skillfully pursuing a patent application over a number of months, leading to a successful outcome. He has worked with the legal community and Stennis personnel to find outcomes to pressing issues, as well as with intellectual property attorneys across NASA to promote language consistency in that area.



Melissa R. Wagner

received the NASA Early Career Achievement Medal for critical support to both NASA and commercial rocket propulsion test projects as a contract specialist in the Stennis Office of Procurement. Wagner is responsible for every facet of five Stennis propellant contracts and is the center's focal point for all issues involving propellants. She has provided significant support to other centers as well. Her performance has a direct impact on the center's ability to achieve mission success.



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Four Stennis employees and two groups received the NASA Silver Achievement Medal. This medal is awarded by NASA center directors to individuals or teams for a stellar achievement that supports one or more of NASA's core values.

Kristie Foster

received the NASA Silver Achievement Medal for her exceptional quality assurance work as a support contractor for Bastion Technologies at Stennis. Her efforts were critical during the B-2 Test Stand restoration and high-pressure gas facility upgrade projects. She also provided environmental management support to the prior Stratolaunch Jupiter test projects at the E-1 Test Stand. Foster's distinctive accomplishments exemplify NASA's commitment to safety, excellence and integrity.



Timothy S. Stiglets

received the NASA Silver Achievement Medal for his leadership of the product data lifecycle management team for Saitech Inc. at Stennis. Recognized as a subject matter expert for the design and data management system, Stiglets has led significant accomplishments for system operation and planning, helping the center as it transitions from a manual paper process to an efficient, automated one. His contributions are preparing center systems to support the next generation of propulsion testing.



Peter V. Tran received the NASA Silver Achievement Medal for his outstanding support as a mechanical operations engineer in the Stennis

Engineering and Test Directorate. Tran provided key knowledge and support during the high-pressure gas facility upgrade project, helping to modify existing systems and activate new technical systems. Tran demonstrated teamwork and a commitment to excellence in helping address multiple challenges and supported the 24-hour facility demonstration that culminated the upgrade project.



Derek B. Zacher

received the NASA Silver Achievement Medal for his outstanding leadership and technical expertise as a mechanical engineer in the Engineering and Test Directorate at Stennis. Zacher has helped to address various technical challenges on the A-1 Test Stand, including one concerning the liquid hydrogen run tank, a virtually irreplaceable asset to the stand and its ability to perform testing. His lasting contributions to ensure the future effectiveness of the stand are a reflection of every NASA core value.



The Bastion Technology Inc. Construction Safety Team at Stennis received the NASA Silver Achievement Medal for providing exceptional construction safety support during the B-2 Test Stand restoration project and all across the Stennis test complexes. The team has supported multiple direct construction projects, performing numerous formal and informal inspections to ensure safety compliance. It is a sought-after safety resource with years of hands-on construction experience. The Stennis safety program is a model for NASA due in large part to support provided by the Bastion team. Its dedication exemplifies NASA's uncompromising commitment to safety, excellence, teamwork and integrity.

Team members included:

Support Team
Mark Bridenbeck
Donald Smith

The XSP Project AR-22 Test Team received the NASA Silver Achievement Medal for outstanding performance during the AR-22 "10 Tests in 10 Days" campaign. Completion of the project marked the first time a large liquid oxygen/liquid hydrogen engine had been tested so often in such a short period of time. The project team – which

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Bastion Technology Inc. Construction Safety Team

AWARDS

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included test stand personnel as well as individuals in Stennis finance, procurement, legal and human capital offices – met a variety of challenges, including a lightning strike that impacted test systems, with innovation and determination. The outstanding work led to a historic “first-ever” achievement and marked a major milestone in development of the XS-1 spaceplane.

Team members included:

NASA

Angelica Baker
 Cory Beckemeyer
 John Bourgeois
 Gregory Carmouche
 Thomas Carroll
 David Carver
 Jack Conley
 Howard Conyers
 Armando Delgado
 Robert Drackett
 Brian Eller
 Robert Gargiulo
 Daniel Goad
 Christine Grapusa
 Joshua Greiner
 Jared Grover
 James Hamilton
 Mark Hancock
 Rachel Harrison-Woodard
 Aaron Head
 Jeffery Henderson
 Michael Holmes
 John Hornor
 Melissa Huggins
 Scott Jensen
 Lester Langford
 Hooper Lavigne
 Jeffrey Lott
 Ryan McKibben
 Kristopher Mobbs
 Ke Nguyen
 Raymond Nichols
 Jeffrey Renshaw
 Ronald Rigney
 James Ryan
 Ryan Seals
 Dwayne Stockstill
 Gary Taylor
 Neil Toupin
 Nyla Trumbach



XSP Project AR-22 Test Team

Maury Vander
 Eugene Wiggins
 Derek Zacher
 Christina Zeringue

Support Team

Mathew Adams
 Ryan Adams
 David Armbruster
 Michael Atkinson
 William Averill
 Jeffrey Barros
 James Bennett
 David Bogdan
 Van Bolden
 Chelsea Boone
 Byron Bordelon
 Roger Bridges
 Vincent Buffington
 Marvis Burkett
 Terrence Burrell
 James Cain
 Kirby Campbell
 Cheley Carpenter
 Michael Carr
 Christopher Coogan
 Buford Cooper
 Devin Cousins
 Eric Cranford
 Deanna Dartez
 Ronald Dartez
 Taylor Davie
 Billy Davis
 Christopher Davis
 John Davis
 Kyle Deckwa
 Jordan Dedeaux
 Robert Delcuze

Bradley Denmark
 George Drago
 Jerry Duggan
 Shelton Dunn
 Leland English
 Noah English
 Daniel Ezell
 Bradley Favre
 Dan Fillette
 Brandon Fleming
 Blake Ford
 William Fowler
 Paul Fuller
 Kerry Gallagher
 Willard Gallagher
 Jonathan Gallaway
 Dillon Goss
 Patrick Guidry
 Kenneth Hancock
 Aaron Hart
 Steven Helmstetter
 Robert Herrin
 Rubin Herrin
 Petter Hobgood
 Hans Holzinger
 Jeret Howard
 Micah Jones
 Yancey Jordan
 Clarence Kennedy
 Travis Kennedy
 Robert Kenny
 Caleb Kimble
 Stephen Koch
 Dustan Ladner
 Lavell Ladner
 Roger Ladner
 Aaron Lancaster

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Ray Leblanc
 Dion Lee
 Jesse Luc
 Cade Malley
 Derek Martin
 Bruce Matthews
 Kevin McCaleb
 Jimmy Meitzler
 William Mitchell
 Kent Morris
 Patrick Morris
 Don Necaise
 Ke Nguyen
 Chad Nicholas
 Carley Odom
 Todd Pearson
 Mark Powe
 Christopher Quinn
 William Ritchie
 Stephen Rose
 Timothy Roson
 Harold Ross
 Travis Rubio
 Mounir Sabbagh
 Clinton Saucier
 John Searles
 Craig Shaw
 Grant Shaw
 Michael Shaw
 Robert Sheaffer
 Michael Sheffield
 Marcus Shoemake
 John Shupe
 John Simon
 Michael Slade
 Donald Smith
 Hunter Smith
 Trevor Smith
 Jared Spiers
 Stephen Steelman
 Travis Thomas
 Gillion Thompson
 Christopher Thoms
 William Vaughn
 Terry Wactor
 Ryan Weir
 Eugene Wilkerson
 Rodney Wilkinson
 Donald Wilson
 Mark Wittorf
 Thomas Wolfe

were recognized for years of service and other noteworthy contributions.

Length of Service Awards**35 years**

Thomas R. Galloway

30 years

John W. Bailey Jr.
 Don H. Beckmeyer
 Gary L. Benton
 Anthony J. Goretski Jr.
 Bartt J. Hebert
 Brain M. Hey
 Joseph W. Lacher
 Amy M. Langdale
 Anne H. Peek
 Kenneth E. Volante

25 years

Jenette B. Gordon
 Mary V. Kennedy
 Mark M. Moody
 Barry E. Robinson

Group Achievement Award**SACOM (Synergy-Achieving Consolidated Operations and Maintenance) Contract Administration Team****NASA**

James Cockrell
 Tammy Bissell (MSFC)
 Gregg De Felicibus
 Angela Hall
 Carol Kellar

Alicia Kidd (MSFC)
 Sarah Maine
 Bradley Messer
 Charla Pledger (MSFC)
 Cynthia Spraul (MSFC)
 Patricia White

Support Team

Delunzo Bartee
 Margaret Snowden-Foozer
 Candice Talley
 Sara Stuart

Stennis Microsoft Office 365 Implementation Team**NASA**

Rae Anderson
 Cory Beckemeyer
 Michele Beisler
 Christopher Carmichael
 Phillip Hebert
 Bridget Jones
 Allecia Kimble
 Joseph Ladner
 Linh Lam
 William Miltier
 Bonita Oliver
 Jennifer Rolison
 Debra Rushing
 Karen Seals
 Diane Sims
 Robert Southers
 Ashley Speed
 Kevin Stiede
 Melissa Wagner

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SACOM Contract Administration Team

In addition to medal recipients, various Stennis individuals and groups

AWARDS

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Support Team

- Tammy Bridenbeck
- James Brown
- David Bunales
- Jonathan Campista
- Deborah Duke
- Shannon Ellis
- David Glasenapp
- Christine Hanna
- Christina Jones
- Susan Langdon
- Kimberly Lawson
- Caroline Necaise
- John Pitalo
- Charity Potter
- Donna Rubio
- Clyde Sellers
- Jennifer Stevenson
- Timothy Stiglets
- Kevin Wingate
- Jeffrey Johnston

High-Pressure Gas Facility Space Launch System Upgrades Team

NASA

- Rae Lyn Anderson
- John Bakker
- Andrew Bracey
- Greg Carmouche
- Craig Chandler
- Jasper Cook



High-Pressure Gas Facility Space Launch System Upgrades Team

- Bridget Jones
- Son Le
- Chris Mulkey
- Huy Nguyen
- Nicholas Nugent
- Kevin Oramous
- Stephen Rawls
- Robbie Randall
- Barry Robinson
- Mark Robinson
- Robert Simmers
- Dwayne Stockstill
- Peter Tran

- Mark Turowski
- Melissa Wagner
- Casey Wheeler
- Rachel Harrison-Woodard

Support Team

- Scott Andres
- David Armbruster
- Jeff Barros
- James Biles
- David Blansett
- Byron Bordelon
- Mark Bridenbeck
- Roger Bridges
- Marvis Burkett
- Terrence Burrell
- James Cain
- BJ Cooper
- Devin Cousins
- Ronnie Dartez
- Billy Davis
- Jordan Dedeaux
- Jerry Duggan
- Jason Evans
- Susan Fendley
- Kristie Foster
- Adam Fulks
- Colby Fulton
- Shannon Hariel
- Ruth Hextall
- Petter Hobgood



Stennis Microsoft Office 365 Implementation Team

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AWARDS

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Micah Jones
 James Jordan
 Miran Kapidzic
 Philip Kopfinger
 Lisa Ladner
 Catriona Ladner Shaw
 Daniel Levens
 Hannah Lynch
 Paul Lusich
 Benjamin McGrath
 Jonathan Mirandy
 Nicole Narvaez
 Eugene Necaice
 David Olson
 Ty Proffitt
 Alvin Richard
 Travis Rubio
 Grant Shaw
 Donald Smith
 Paul Stevens
 Adam Stockstill
 Bradley Tyree
 Trevor Wagoner
 Perry Waller
 S Kristen Weyenberg
 Charles Wilder
 Rhonda Wolfram

B-2 Test Stand High-Pressure Industrial Water (Firex) Team

NASA
 Elizabeth Calantoni



B-2 Test Stand High-Pressure Industrial Water (Firex) Team

Aaron Mannion
 Nicholas Nugent
 Timothy Rustine
 Barry Robinson
 Cheryl Timko

Contractor Support

Scott Andres
 Jo Anthony
 David Armbruster
 Jeff Barros
 Mark Bridenbeck
 Melissa Carver
 BJ Cooper
 Kristie Foster
 Ruth Hextall
 James Jordan

Miran Kapidzic
 Lisa Ladner
 Daniel Levens
 Hannah Lynch
 Benjamin McGrath
 David Olson
 Ty Proffitt
 Donald Smith
 Ronald Snyder
 Paul Stevens
 Dale Tutor
 Trevor Wagoner
 Perry Waller
 S Kristen Weyenberg
 LeRoy Wilson

SpaceX Raptor Full-Scale Oxygen Pre-Burner Team

NASA

Christoffer Barnett-Woods
 John Bourgeois
 Jack Conley
 Armando Delgado
 Robert Drackett
 Melissa Huggins
 Bridget Jones
 Justin Junell
 Michael Kersanac
 Truc Le
 Christopher Mulkey
 Kevin Oramous
 Aster Pastoral
 Peyton Pinson
 Benjamin Powell



SpaceX Raptor Full-Scale Oxygen Pre-Burner Team

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AWARDS

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Robbie Randall
 Stephen Rawls
 Jason Richard
 Robert Smith
 Dwayne Stockstill
 Janice Tasin
 Richard Wear
 Charles Wilder

Contractor Support

Justin Alison
 David Blansett
 Van Bolden
 Jace Boudreaux
 Roger Bridges
 Samuel Clay
 Jesse Crawford
 Joni Dumas
 Susan Fendley
 Dan Fillette
 Ford Blake
 Adam Fulks
 Paul Fuller

Kerry Gallagher
 Jonathan Gallaway
 Dillon Goss
 Patrick Guidry
 Kenneth Hancock
 Mack Hester
 Darwyn Hilsher
 Petter Hobgood
 Howard Jeret
 Dion Lee
 Eric Lichtenstein
 Paul Lusich
 Bruce Matthews
 Kenneth McCormack
 Jimmy Meitzler
 Kenneth Morgan
 Carley Odom
 Randy Overton
 Christopher Quinn
 John Searles
 Grant Shaw
 John Shupe
 Bryan Vieages
 Terry Wactor
 Raymond Williams
 Anita Wilson

B-2 Test Facility Activation Team

NASA

Rae Lyn Anderson
 Angelica Baker
 John Bourgeois
 Elizabeth Calantoni
 Belfield Collymore
 Jack Conley
 Jasper Cook
 Dawn Davis
 Jason Edge
 Brian Eller
 Alex Elliot
 Daniel Goad
 Pablo Gomez
 Christine Grapusa
 Phillip Hebert
 Charles Heim
 Andrew Henken
 Dao Kooamphorn
 Lester Langford
 Aaron Mannion
 Bryon Maynard
 Ryan McKibben
 Raymond Nichols

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B-2 Test Facility Activation Team

AWARDS

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Nicholas Nugent
 Ryan Roberts
 Barry Robinson
 Debra Rushing
 Timothy Rustine
 Ryan Seals
 Karma Snyder
 Dwayne Stockstill
 Cheryl Timko
 Nyla Trumbach
 Mark Turowski
 Darrel Varner
 Kenneth Volante
 Melissa Wagner
 Casey Wheeler
 Burnley Wigley

Contractor Support

Scott Andres
 David Armbruster
 Jeff Barros
 James Bennett
 Brett Bossier
 Jace Boudreaux
 Mark Bridenbeck
 Cheley Carpenter
 BJ Cooper
 John Davis

Kyle Deckwa
 Tony Dilorenzo
 Shelton Dunn
 Bradley Favre
 Kristie Foster
 Ruth Hextall
 Gerald Howard
 Micah Jones
 Miran Kapidzic
 Brandon Ladner
 Byron Ladner
 Chadwick Ladner
 Lisa Ladner
 Jeff Lawson
 Ray Leblanc
 Daniel Levens
 Curtis Lockwood
 Hannah Lynch
 Gary Marshall
 Derek Martin
 Benjamin McGrath
 Jimmy Miles
 Thomas Mitchell Jr
 Tuan Ngo
 Chad Nicholas
 David Olson
 Alan Peterson
 Ty Proffitt
 Mark Robinson
 Stephen Rose
 Mounir Sabbagh

Catriona Shaw
 Craig Shaw
 Michael Shaw
 John Shupe
 Michael Slade
 Billy Smith
 Robert Smith
 Tammy Smith
 Donald Smith
 Frances Songy
 Larry Southern
 Jared Spiers
 Paul Stevens
 Chad Tournillon
 Dale Tutor
 Trevor Wagoner
 Perry Waller
 S Kristen Weyenberg
 LeRoy Wilson
 Jesse Yarbrough

Safety and Mission Assurance

Crystal Ball Team

NASA

Dinna Cottrell
 Karen Davis
 Charles Hallal
 Carmen Ramirez-Pagan
 Timothy Rustine
 Kamili Shaw
 Sandeep Shetye (ARC)
 Irene Wirkus (GRC)

Contractor Support

Charles Broussard
 Nhi Cmerk
 John Dunn
 Anastasiya Glyantseva
 Guy Bruce
 Mark Holmes
 Bertha Jackson
 Rashaad Jackson
 Christopher Jones
 Thang Le
 Matthew Muir
 Tuyet-Anh Nguyen
 Lamar Nicholson
 Carolyn Owen
 Laura Pair
 Irina Patrikeeva
 Ryan Rivas



Safety and Mission Assurance Crystal Ball Team

NASA science leader visits

Thomas Zurbuchen (second from right), associate administrator of the NASA Science Mission Directorate, stands atop the B-2 Test Stand during a visit to the site Sept. 10. Zurbuchen visited Stennis to participate in annual NASA Honor Awards presentations but also toured site facilities, including the B-2 stand and met with various Stennis personnel groups. He was hosted during the stand tour by Maury Vander (l to r), head of the Test Operations Division in the Stennis Engineering and Test Directorate; Stennis Deputy Director Randy Galloway; and Ryan Roberts, B-2 Test Stand director.



AWARDS

Cont. from Page 14

Special Recognition Awards

J. Harry Guin Outstanding Leadership Award

Bartt J. Hebert

Director's Certificate of Appreciation

Rhonda M. Lavigne

Space Flight Awareness Award

Michael Panell
Neil Toupin

Silver Snoopy Award

Adam Murrah

Chief Financial Officer University Peer Award-Leadership

Deborah Norton



Armstrong officials visit Stennis

Stennis Chief of Staff Anne Peek (l to r) and Stennis Associate Director John Bailey stand in front of the Space Launch System (SLS) core stage pathfinder simulator at the B-2 Test Stand with officials from NASA's Armstrong Flight Research Center on Aug. 22. During their visit, Armstrong leaders toured the B-2 Test Stand, which is preparing to test the SLS core stage, and other facilities and met with site leaders. Armstrong visitors included (r to l): Center Director David McBride, Associate Center Director Sean McMorro, Chief of Staff Roberta Sherrard and Deputy Center Director Patrick Stoliker.

Stennis retains VPP Star status for safety and health

Note: The following is part of a regular focus on safety and health at Stennis Space Center. It was written by Karen Patton with the Stennis Safety and Mission Assurance Directorate.

Stennis Space Center began its journey to become an OSHA Voluntary Protection Program (VPP) Star status site in 2007.

NASA and its five major NASA contractors at Stennis first underwent individual OSHA reviews and audits to receive Star status. Throughout that process, Stennis officials worked to educate the center workforce of the importance of good safety and health practices.

Stennis received VPP Star Site status on April 8, 2011. Stennis underwent a second VPP recertification audit June 10-14, 2019 and was recommended by the audit team for continued participation in VPP. Synergy Space Services (S3), which holds the Synergy-Achieving Consolidated Operations and Maintenance (SACOM) contract for Stennis and Michoud Assembly Facility, also participated in a VPP certification audit July 22-26, 2019, and was recommended for participation in the program.

The Occupational Safety and Health Administration established VPP in 1982 as a proactive safety management model so organizations and their employees could be recognized for excellence in safety and health. Since then,

more than 2,000 organizations, including several NASA centers, have been designated VPP Star sites.

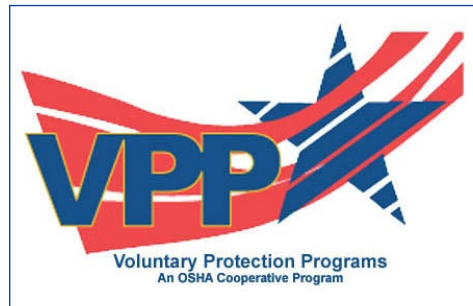
To reach that goal, an organization must demonstrate comprehensive and successful safety and health management programs in the workplace. This includes achieving injury and illness rates at or below the national average of their respective industries.

In the evaluation process, OSHA reviews an organization's safety and health policies and conducts onsite visits. Once VPP Star status is achieved, OSHA returns at regular intervals to make sure designated sites are continuing in their safety and health efforts.

VPP Star status is more than a mere designation for organizations. NASA and its prime contractors have seen an overall decline

in injuries and lost time since 2011. Leaders also say the safety and health emphasis promotes a deeper sense of teamwork, especially at a site like Stennis, where multiple agencies must coordinate efforts.

The VPP elements provide NASA and its prime contractors a common way to define and maintain their individual safety and health programs. Each organization's commitment to VPP ensures all personnel at Stennis work in an environment where safety and health is held in the highest regard.



Stennis promotes women's equality

U.S. Sen. Cindy Hyde-Smith of Mississippi, the first woman to represent the state in Congress, speaks to Stennis employees during an onsite Women's Equality Day Program on Aug. 28. Women's Equality Day is observed each August to commemorate the certification of the 19th Amendment to the Constitution granting American women the right to vote in 1920. This year's theme focused on "Celebrating Woman's Equality."



Women have long history of support to NASA



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

In July 1958, President Dwight Eisenhower signed the National Aeronautics and Space Act that established the National Aeronautic and Space Administration. The United States was on its way to space, and a woman by the name of Eilene Galloway was instrumental in the creation of NASA, researching and writing space legislation and policies for the burgeoning fields of space law and international space law.

Galloway may have been the first woman to help NASA and the United States reach its goal of exploring space and putting a human on the Moon, but she was definitely not the only woman.

Many women worked behind the scenes at NASA to accomplish the task of reaching space. The public tends to hear primarily about the women who became astronauts. The first woman in space was Russian Valentina Tereshkova who entered orbit in 1963. America did not put a woman in space until 20 years later. Sally Ride was the first American woman to fly to space.

Women like Eilene Galloway were always in the shadow of their male counterparts. For instance, in the 1950s and 1960s women were the “calculators” who did the

complex math calculations for the trajectories of orbits around the Earth.

Katherine Johnson was one of these women. She is an African American woman who worked for NASA as a mathematician for more than 30 years. Her calculations helped Apollo 11 fly to the Moon. Margaret Hamilton, a programmer, and Thora Halstead, a space biologist, worked alongside Katherine Johnson. These women worked in the background to help the United States win the space race in the 1960s.



Women who provided critical support during the early years of NASA included (l to r): Dorothy Vaughn, Katherine Johnson and Mary Jackson

Many other women worked alongside them. Even more were lost to history, along with their accomplishments because of their work being in the background and because they were women.

In 1967, NASA established the

Federal Women’s Program to promote equal opportunity for women in federal government positions and to recruit woman who are technically trained. Stennis Space Center embraced that program and established programs like Science Engineering Career Days to show high school girls the different career paths women can take and how to accomplish those goals.

Such programs have encouraged girls and women to take non-traditional career paths. In 2016, more women are going into science and engineering careers, but encouragement is still needed. Women are an important part of the space program, and as the United States make its way to Mars and beyond, it will need scientifically minded women and men to lead the way.

Hail & Farewell

NASA welcomes the following:

Trevor Brownlow

Student Trainee

Office of Communications

Alison Dardar

Management and Program Analyst

Office of the Chief Financial Officer

NASA bids farewell to the following:

Roger Simpson

Manager

Rocket Propulsion Test Program Office

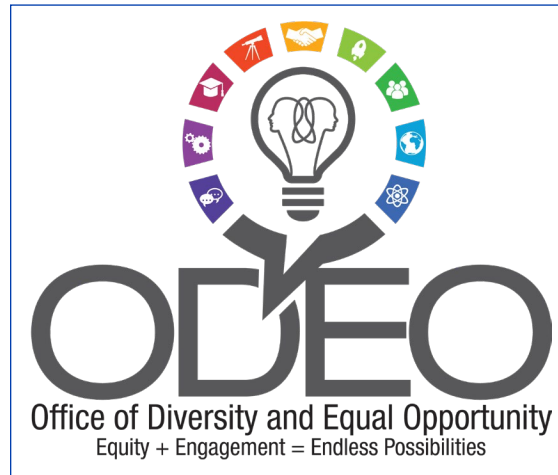
Office of Diversity and Equal Opportunity

Honoring Hispanic Americans: Essential to the blueprint of our nation

The tradition of observing Hispanic heritage began in 1968, when President Lyndon B. Johnson designated a week in mid-September as National Hispanic Heritage Week. Twenty years later, in 1988, President Ronald Reagan extended that week to a month-long observance.

The heritage month's dates refer to Independence Day anniversaries of Latin American countries – Sept. 15 is the anniversary of independence for Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua. Mexico declared its independence Sept. 16, and Chile on Sept. 18.

The federal government is strengthened by the diversity of its people as it underlines that patriots of Hispanic American Heritage continue to build legacies of freedom and diversity.



NASA's First Female Hispanic Astronaut

Dr. Ellen Ochoa was born in Los Angeles, Calif., in 1958. She was the first female Hispanic astronaut to fly in space. NASA selected Ochoa as an astronaut in 1990. She spent nearly 1,000 hours in space during four shuttle missions: STS-56 in 1993, STS-66 in 1994, STS-96 in 1999, and STS-110 in 2002.

Ochoa then went on to serve as the 11th director of NASA's Johnson Space Center from 2012 until she retired on May 25, 2018. She was Johnson's first Hispanic director and its second female director. Ochoa is the recipient of numerous awards, including the Harvard Foundation Science Award, Women in Aerospace's Outstanding Achievement Award and the Hispanic Heritage Leadership Award.

She is a classical flutist and pilot, and she also enjoys volleyball and bicycling. Ochoa received a bachelor's degree in physics from San Diego State University in 1980, followed by a master's degree and doctorate in electrical engineering from Stanford University in 1981 and 1985, respectively.

NASA's First Male Hispanic Astronaut

Dr. Franklin R. Chang Díaz was born in 1950 in San José, Costa Rica. Chang Díaz became the first Hispanic astronaut when NASA selected him in 1980. He is a

veteran of seven space flights: STS-61C in 1986, STS-34 in 1989, STS-46 in 1992, STS-60 in 1994, STS-75 in 1996, STS-91 in 1998, and STS-111 in 2002. He logged more than 1,500 hours in space, including 19 hours during spacewalks.

Díaz received a bachelor's degree in mechanical engineering from the University of Connecticut in 1973 and a doctorate in applied plasma physics from the Massachusetts Institute of Technology in 1977.

The Navy's First Admiral

Admiral David Glasgow Farragut was born in 1801 and died in 1870. He was the son of a Spanish American immigrant and Revolutionary War veteran. He served in the American Navy from 1810-1870 and was the first person to achieve the rank of admiral. Farragut began his career in the Navy at

nine years old as a midshipman. He remained on active duty until his death.

Farragut is perhaps most famous for his victory at the Battle of Mobile Bay in 1864, where he led his fleet through a field of "torpedoes" – submerged explosives – while they took Confederate fire from the shore. According to Loyall Farragut's biography of his father, as the fleet moved through the bay, the admiral knew it was too late to turn back, so he shouted, "Damn the torpedoes! Four bells! Captain Drayton, go ahead! Jouett, full speed!" In popular culture, he is often quoted as saying, "Damn the torpedoes! Full speed ahead!" The Union fleet lost one ironclad ship to the explosives, the USS *Tecumseh*, and 335 men, but Farragut took Fort Morgan and secured the blockade.

Farragut was the first person to hold the ranks of vice admiral, rear admiral, and full admiral in the U.S. Navy. In the years following his leadership, five U.S. Navy ships have been named in honor of Farragut.

Honoring Hispanic Americans

Please join the Stennis Space Center community in honoring Hispanic Americans on October 8, 2019 in the Logtown Conference Room in the Roy S. Estess Building (Bldg. 1100) at 11 a.m. with a panel discussion celebrating the histories, cultures and contributions of Hispanic Americans at Stennis.