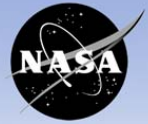


National Aeronautics and Space Administration



LAGNIAPPE

John C. Stennis Space Center

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NASA begins 5th RS-25 test series



NASA conducts a successful hot fire test of RS-25 developmental engine No. 0525 – featuring a new flight controller unit – on the A-1 Test Stand at Stennis Space Center on Aug. 14. The test was viewed by new NASA Administrator Jim Bridenstine and other guests. (See page 3 article)

It is estimated somewhere between 500 million to 600 million people around the world watched Neil Armstrong step onto the surface of the Moon in July 1969. It was the largest television audience at the time, although they were not all in the same room. Ark!

Probably nowhere near that many folk watched the NASA-TV and social media live broadcast of the RS-25 rocket engine test here Aug. 14 – but it is safe to say an awful lot of attention is focused on Stennis Space Center these days.

Stennis is at the forefront of NASA's work to build and launch its new Space Launch System (SLS) rocket that will carry humans deeper into space than ever, to such destinations as the Moon and Mars. The RS-25 engines that will help power SLS at launch are being tested here – and the core stage that will be used for the first SLS flight will be tested on site as well.

Stennis did the same work for Apollo and space shuttle missions. However, for years, its remote location and low profile led many people to view it as one of NASA's – and Mississippi's – “best-kept secrets.”

It was only fitting, then, that new NASA Administrator Jim Bridenstine wasted little time in making his first visit to the site as agency leader. More fitting, he was able to view the Aug. 14 test and see firsthand the Stennis blended test team of NASA, Aerojet Rocketdyne and Syncom Space Services engineers and operators at work. He also got a firsthand look at site facilities, including the Aerojet Rocketdyne Engine Assembly Facility, the E Test Complex and the B-2 Test Stand.

More importantly, the new NASA leader was able to visit with center and resident agency leaders, local media members, community representatives and site employees. In doing so, he certainly discovered that the Stennis team approach does not just extend to engine testing. It is the very idea on which the center is built.

From the start, Stennis was a team effort of agency, companies and community working together, supporting one another, believing in one another, enabling one another to do more. Therein lies the true secret about Stennis – it believes the old adage that “teamwork makes the dream work,” even when those dreams promise to carry one to the deep reaches of space.



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FULFILLING NASA'S EXPLORATION MISSION

NASA administrator visits Stennis, views RS-25 engine test

Stennis Space Center showcased what it does best for new NASA Administrator Jim Bridenstine on Aug. 14, hosting the agency leader for the first in another series of RS-25 rocket engine hot fire tests in support of NASA's Space Launch System (SLS) Program.

Operators conducted a successful test of RS-25 developmental engine No. 0525 – complete with a new flight controller unit – on the A-1 Test Stand as Bridenstine and other agency officials watched. The visit was Bridenstine's first to the south Mississippi center since he was confirmed as administrator in April.

"I have witnessed rocket launches before, but this was a new and unique experience," Bridenstine said following the test. "It was like watching a launch, but it never leaves the ground, and you can feel the power of the engine within your body. And what the power of this RS-25 engine represents is America's ability to fly deeper into space than we ever did before. This was a great test."

"It was an honor to host Administrator Bridenstine and to provide him an opportunity to see the Stennis test team work," Stennis Director Rick Gilbrech said. "It also is an honor to be part of the effort under way to help move this nation to the Moon again, then on to Mars."

The Aug. 14 hot fire was the first RS-25 test at Stennis since February, when operators powered the engine to its highest operating level ever. It also was the first test of developmental engine No. 0525 since August 2015. It marked the first in a series of nine scheduled tests on engine No. 0525 through the rest of the year and into 2019. Each will feature an RS-25 flight controller for use on an actual SLS mission, as well as testing engine components made with innovative manufacturing designed to reduce the cost of future engines. All test objectives were met during the hot fire.

NASA is building the SLS rocket as the largest, most powerful space vehicle in history to return humans to deep space missions. The SLS rocket will launch crews of up to four astronauts aboard the Orion spacecraft to explore various deep-space destinations, including the Moon and Mars.

Each SLS rocket will be powered at launch by four RS-25 engines firing simultaneously to provide a combined 2 million pounds of thrust and working in conjunction with a pair of solid rocket boosters to provide more than 8 million pounds of thrust. RS-25 engines are being built by Aerojet Rocketdyne for the SLS flights.

The initial RS-25 engines are former space shuttle

(Right photo) NASA Administrator Jim Bridenstine (second from right) views an RS-25 engine test at Stennis Space Center on Aug. 14. Joining the new agency leader were (l to r) Mississippi Gov. Phil Bryant, U.S. Sen. Roger Wicker of Mississippi, U.S. Rep. Steven Palazzo of Mississippi, Stennis Space Center Director Rick Gilbrech and U.S. Rep. Trent Kelly of Mississippi.

(Left photo) The RS-25 test at Stennis Space Center on Aug. 14 was viewed by a number of guests, including NASA officials, astronauts, elected officials, community leaders and representatives of key companies involved in the construction of NASA's Space Launch System rocket.



main engines. For initial SLS flights, the engines will be operated at 109 percent of rated power. For subsequent SLS flights, designed to carry larger, heavier cargos and the crew vehicle to deep space, the engines have been modified to operate at 111 percent of rated power. To date, Stennis has conducted 22 tests running with engines operating just over 10,000 cumulative seconds for SLS.

A key component of latest modification is the controller, which operates as the "brain" of the engine to help it communicate with the rocket and to provide precision control of engine operation and internal health diagnostics.

Stennis tested the first RS-25 flight controller in March 2017. For the testing, flight controller units are installed on a developmental engine and fired just as during an actual launch. Once tested and certified, the controllers are removed for installation on an RS-25 flight engine.

To get the most out of each test, NASA is not only testing the flight controllers, but also is test-

ing parts of the engine that can be made using new manufacturing techniques. When new engines are produced, components can be made with these advanced processes, and the engine production cost can be reduced by more than 30 percent. This test featured a main combustion chamber fabricated using a bonding technique called hot isostatic pressing (HIP), which saves considerable time and money over more traditional methods. The HIP process uses high pressure and heat to create bonds that can withstand extreme stress. It already has been used on main combustion chambers in two other Aerojet Rocketdyne engines.

The Aug. 14 hot fire also represented the fifth test of a 3D-printed pogo accumulator assembly, a critical component that dampens potential engine propellant pressure oscillations that can cause a rocket to become unstable in flight. Testing of the 3D-printed component also is part of the ongoing effort to use advanced manufacturing to reduce engine construction costs. NASA and Aerojet Rocketdyne plan to test a number of 3D-printed components for the RS-25 engine.

In addition to testing individual RS-25 engines and components, Stennis is preparing to test the core stage for the first SLS flight – Exploration Mission-1 – which will showcase the new rocket and send an uncrewed Orion spacecraft into space beyond the Moon. For that testing, the flight core stage will be installed on the B-2 Test Stand at Stennis, and all four RS-25 engines will be fired simultaneously, just as will occur during an actual launch.

The first flight will be followed by Exploration Mission-2, which will carry humans aboard the Orion spacecraft, returning astronauts to deep space for the first time in more than 40 years. This mission will also be powered by Stennis-tested engines.

RS-25 tests at Stennis are conducted by a team of NASA, Aerojet Rocketdyne and Syncom Space Services engineers and operators. Aerojet Rocketdyne is the RS-25 prime contractor. Syncom Space Services is the prime contractor for Stennis facilities and operations.



FULFILLING NASA'S EXPLORATION MISSION



NASA Administrator Jim Bridenstine visited Stennis Space Center on Aug. 14 to meet with various leaders and view an RS-25 rocket engine test on the A-1 Test Stand. As shown, Bridenstine spent a full day at Stennis, visiting the E Test Complex and the B-2 Test Stand (right photo), speaking live on NASA TV following the RS-25 engine test (left photo), speaking to site employees during an all hands session (bottom left photo), meeting with area media for a question-and-answer session (bottom center photo) and speaking to guests during a post-test reception at INFINITY Science Center. Bridenstine also visited the Aerojet Rocketdyne Engine Assembly Facility and met with center managers during his first visit to Stennis since he was confirmed as NASA administrator (see page 5 photos).



FULFILLING NASA'S EXPLORATION MISSION



(Top photo) NASA Administrator Jim Bridenstine visits the Aerojet Rocketdyne Engine Assembly Facility to view an RS-25 engine.

(Center photo) NASA Administrator Jim Bridenstine visits with Stennis Director Rick Gilbrech, Deputy director Randy Galloway, Associate Director John Bailey and other senior managers during his Aug. 14 visit to the rocket engine test site.

(Bottom photos) Astronauts Jeff Williams (left) and Butch Wimore (right) talk about their experiences in space flight with RS-25 rocket engine test viewing guests Aug. 14.





Parker Solar Probe launches to ‘touch the sun’

A United Launch Alliance Delta IV Heavy rocket launches NASA's Parker Solar Probe on a mission to touch the Sun, on Aug. 12 from Cape Canaveral Air Force Station, Florida. The Parker Solar Probe is the first-ever mission into a part of the Sun's atmosphere called the corona. Once there,

it will directly explore solar processes that are key to understanding and forecasting space weather events that can impact life on Earth. The probe was launched aboard a Delta IV rocket powered by a trio of Aerojet rocket-dyne RS-68 engines tested at Stennis Space Center.

NASA in the News

NASA names commercial flight astronauts

NASA introduced to the world Aug. 3 the first U.S. astronauts who will fly on American-made, commercial spacecraft to and from the International Space Station – an endeavor that will return astronaut launches to U.S. soil for the first time since the space shuttle's retirement in 2011. The agency assigned nine astronauts to crew the first test flight and mission of both Boeing's CST-100 Starliner and SpaceX's Crew Dragon. NASA has worked closely with the companies throughout design, development and testing to ensure the systems meet NASA's safety and performance requirements. Scheduled Starliner test flight astronauts are Eric Boe, Christopher Ferguson and Nicole Aunapu Mann. Crew Dragon test flight astronauts are Robert Behnken and Douglas Hurley. Starliner first mission astronauts are Josh Cassada and Sunita Williams. Crew Dragon first mission astronauts are Victor Glover and Michael Hopkins. Additional crew members will be assigned by NASA's international partners at a later date. Learn more about NASA's Commercial Crew Program at: <https://www.nasa.gov/commercialcrew>.

NASA completing McAuliffe's lost lessons

Christa McAuliffe made history when she became the first teacher selected to go to space as part of NASA's Teacher in Space project. These educators would fly to space then return to share their experiences with students. McAuliffe's plans included filming several demonstrations to be used in educational packages for students and teachers across the globe. However, as part of the space shuttle Challenger crew, she died tragically on the morning of Jan. 28, 1986, when the orbiter broke apart just 73 seconds after launch. NASA canceled the Teacher in Space project in 1990. McAuliffe's lessons were lost for a moment, but not forgotten. Challenger Center, a leading science, technology, engineering and mathematics (STEM) education organization, worked in partnership with NASA to complete some of the lessons she had planned to perform aboard Challenger. Most of the lessons will be completed as originally planned, but some elements have been reimagined based on materials available aboard the orbiting laboratory. Find the lessons at: www.challenger.org/christa.

2018 NASA Honor Awards

Stennis Space Center Director Rick Gilbrech and Kennedy Space Center Director Bob Cabana presented annual NASA Honor Awards to Stennis employees during an onsite ceremony Aug. 15.

Four 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.

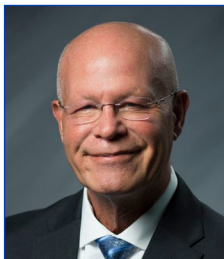
James Bevis

received a posthumous NASA Exceptional Service Medal for 15 years of services as the Stennis chief financial officer until his death in November 2017. Bevis began his NASA career as a budget analyst in 1980. He joined the Stennis team in 1995 and assumed the chief financial officer role in 2002. Bevis contributed extensively to the success of the NASA/Stennis mission by providing expert management and oversight of program and institutional funding of about \$300 million annually.



Hugh V. Carr

received the NASA Exceptional Service Medal for his expertise and service as a NASA environmental specialist since 1988, as well as 11 years of contractor service prior to that time. Carr serves as administrator of the Stennis natural resources program and manager of the NASA-wide Geographic Information System (GIS) Principle Center. His career service has been characterized by exceptional ingenuity and innovation and has contributed greatly to the success of the Stennis mission.



Ralph M. Gonzalez

received the NASA Exceptional Service Medal for 35 years of service, including the last 12 in the Stennis Safety and Mission Assurance Directorate. Gonzalez served as a contractor before joining the NASA team in 2006. As a contractor, he implemented a host of new and improved processes that contributed to the success of the space shuttle main engine test project. For NASA, he has served in a variety of safety-related roles, including as the first NASA audit manager at Stennis. Gonzalez is noted for his range of knowledge and technical experience and has dedicated his career to supporting the NASA missions.



Dwayne K. Stockstill

received the NASA Exceptional Service Medal for his career contributions and his work as deputy chief of the Electrical Branch of the Stennis Engineering and Test Directorate. Stockstill began his NASA career in 2000 and has made key technical contributions to the success of the Stennis propulsion test mission. He has served as the lead electrical engineer for the E-1 Test Stand and A-1 Test Stand facilities and as the data acquisition system subject matter expert. He has contributed to a range of high-profile test projects and initiatives.



Two Stennis employees 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.

Gary L. Bennett

received the NASA Exceptional Public Service Medal for 39 years of contractor service at Stennis, including as a facilitator and mechanical technician. He has provided oversight and technical expertise to a variety of activities and projects across the Stennis test complexes, demonstrating an innate ability to grasp and solve complex technical issues, a commitment to quality and a solid work ethic. Bennett has contributed to virtually every propulsion test project at Stennis since the space shuttle.



Marsha L. Ladner

received the NASA Exceptional Public Service Medal for 38 years of outstanding contractor service in various roles at Stennis. She began her career as a drafter and also served as a facility utilization specialist and the NASA Rocket Propulsion Test Program Office liaison. Since 2008, Ladner has served as propellant coordinator, responsible for fulfilling all propellant requirements for Stennis test complexes. Her diligent work and business knowledge has been key to the success of numerous high-profile test activities and projects.



Four 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.

See **AWARDS**, Page 8

AWARDS

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Kevin D. Camp received the NASA Exceptional Achievement Medal for contributions as a NASA



logistics management specialist and Stennis transportation officer. Camp was the key logistic leader in the relocation of the Stennis warehouse operations to Michoud Assembly Facility in New Orleans. As transportation officer, he has been instrumental in managing Stennis' large fleet of vehicles in an efficient, cost-savings manner. He also has led in Stennis property disposal and equipment yard cleanup efforts.

Aaron T. Mannion received the NASA Exceptional Achievement Medal for his leadership in the project to



upgrade the Stennis high-pressure industrial water system. Mannion has served as a NASA project manager in the Stennis Design and Construction Project Management Division since 2012. His knowledge and expertise enabled the high-pressure industrial water project to be implemented in an efficient and timely fashion critical to maintaining the Space Launch System test project schedule.

Karen B. Patton received NASA's Exceptional Achievement Medal for her efforts to identify inefficiencies in the Stennis audit, inspection and surveillance processes and to implement a new integrated internal audit schedule. Patton serves as a facility system



safety engineer in the Stennis Safety and Mission Assurance Directorate. Her leadership in developing a new audit schedule has helped eliminate duplication and reduce the number of audits and hours spent on audit activities. Her efforts have received numerous accolades across NASA.

Jeffrey A. Renshaw received NASA's Exceptional Achievement Medal for his work as lead attorney for the mission-critical Regional Multiple Award Construction Contract Two (MACC-II). The MACC-II vehicle encompasses 24 individual contracts for work at Stennis and various other agency locations. It has been recognized as a groundbreaking success that provides a model for future procurement efforts. Renshaw provided critical legal support to the contract team throughout the effort.



One Stennis employee received NASA's Exceptional Public Achievement Medal. This medal is awarded to individuals who are not government employees but have performed exceptional service in support of NASA's mission.

William B. Ritchie received the NASA Exceptional Public Achievement Medal for his efforts



in modification of the B-2 Test Stand derrick crane, as well as his emergency response and work to repair a damaged natural gas line in a timely and safe fashion. Ritchie helped identify and resolve several issues during the critical derrick crane project. He has provided 11 years of contractor safety support at Stennis and Michoud Assembly Facility.

One Stennis employee received NASA's Exceptional Technology Achievement Medal. This medal is awarded to government or nongovernment individuals for exceptional achievements in technology development, transfer or application.

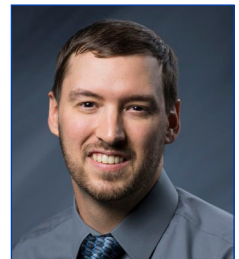
Jorge F. Figueroa received the NASA Exceptional Technology Achievement Medal for his work as



an autonomous systems subject matter expert. A NASA electronic instrumentation systems engineer, Figueroa has led in creation of capabilities now known as the NASA Platform for Autonomous Systems and in the development of autonomous systems at four agency centers. His efforts include guidance of the project to implement autonomous processes in Stennis high-pressure gas operations.

Four 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.

Jack L. Conley received the NASA Early Career Achievement Medal for his contributions as a NASA



mechanical operations engineer since 2011. Conley is an experienced test conductor and propellant transfer engineer, having served in those roles in both the A and E test complexes. He has made major contributions to various test projects and cutting-edge efforts at Stennis and is recognized as an expert in liquid oxygen transfer.

AWARDS

Continued from Page 8

Sarah M. Maine

received the NASA Early Career Achievement Medal for her work as a NASA



contracting specialist and officer since 2011. Maine has contributed significantly to a range of essential services and projects. She currently serves as the CORE contracting officer for the Synergy-Achieving Consolidated Operations and Maintenance contract. Her efforts in that and other roles have contributed significantly to the business goals of the NASA procurement community

Adam W. Murrah

received the NASA Early Career Achievement Medal for his work as a NASA



environmental specialist since 2012. His efforts have been integral to the success of a number of environmental projects at Stennis, including work on the Area 9 Sanitary Wastewater Treatment Facility. He also serves as manager for both the Stennis Cultural Resource Program and the National Environmental Policy Act. He also was tapped to serve a stint as acting NASA federal preservation officer.

Cheryl A. Timko

received the NASA Early Career Achievement Medal for her work as a NASA



contract specialist since 2008. In that time, Timko has provided an outstanding level of contracting competency, gaining a reputation

for quality expertise in construction contracting. She has awarded/administered several construction projects at Stennis and also served as a contract specialist at Wallops Flight Facility. She is a champion of employee involvement and serves on a number of employee teams.

Three Stennis employees and one group 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.

Laurence de Quay

received the NASA Silver Achievement Medal for his substantial contributions to develop-



ment and issuance of several critical and complex technical engineering standards at both the center and agency levels. A NASA theoretical simulation analyst, de Quay has served as the Stennis Engineering and Test Directorate manager of technical standards since 2005. He also serves as the Stennis representative on the NASA Engineering Standards Panel.

Justin Junell

received the NASA Silver Achievement Medal for his leadership of the investigation into the



high-pressure liquid oxygen bleed valve failure on the E-1 Test Stand in July 2017. Junell led all phases of the investigation, creating a comprehensive fault tree and formal lessons learned, which were shared with project stakeholders and the propulsion test community. His efforts were marked by attention to technical detail and exceptional leadership skills.

Karma

K. Snyder

received the NASA Silver Achievement Medal for her work as an aerospace technologist



and support of key projects related to propulsion test and test infrastructure facilities. She previously served as the systems engineer for the Space Launch System core stage test activity on the B-2 Test Stand. She has provided extensive support to the center's range utilization efforts and is one of two people designated as an official range safety officer for unmanned aircraft systems operations at Stennis.

The Rocket Test Facility Co-Location Team

received the NASA Silver Achievement Medal for outstanding collaboration and performance in the execution of a critical test program on the B-1/B-2 Test Stand. The NASA/contractor team was assembled to determine if RS-68 testing on the B-1 side of the stand could safely proceed in conjunction with Space Launch System core stage testing on the B-2 side. The team specifically focused on possible hydrogen and air/oxygen blast overpressure from RS-68 testing negatively affecting the core stage. The team developed a process to test overpressure levels and evaluated resulting data to determine that both test projects could proceed safely. Team members included representatives from Stennis, the Rocket Propulsion Test Program Office, Marshall Space Flight Center, the White Sands Test Facility, Aerojet Rocketdyne, Boeing, Syncom Space Services and Bangham Engineering.

Team members included:

NASA

Andrew Bracey
Thomas Carroll
David Carver
Craig Chandler

See AWARDS, Page 10

AWARDS

Continued from Page 9

- Jonathan Dickey
- Bruce Farner
- Daniel Goad
- Juan Gomez
- Aaron Head
- Michael Holmes
- Scott Jensen
- Michael Kersanac
- Joseph Lacher
- Dwayne Stockstill
- Jacqueline Wall
- Dale Woolridge

Contractor Support

- Cheryl Bennett
- William Bonney
- Byron Bordelon
- Terrence Burrel
- Eric Cranford
- Billy Davis
- Douglas Dike
- Joni Dumas
- Gregory Freudenthal
- Rocket Hoyt
- Anthony Jackson
- Willie Johnson
- Bradley Jones
- Travis Kennedy
- Dion Lee
- Alan Mayne
- Matthew Melerine
- Kevin Parker
- David Poche
- Harold Ross
- Mounir Sabbagh
- Sheena Weyenberg
- James Williams
- Sandra Zar

In addition to medal recipients, several additional Stennis individuals and groups were recognized for service and contributions as well.

Length of Service Awards

40 years

- Patricia H. Fairley

35 years

- Freddie Douglas III
- Wendy T. Holladay
- Dorsie Jones
- David E. Walters



Rocket Test Facility Co-Location Team

30 years

- Beth L. Bradley
- Hugh V. Carr Jr.
- James M. Cockrell
- Dinna L. Cottrell
- David P. Failla
- Thomas Lipski

25 years

- Lavaniel S. Ward

Group Achievement Award

Aerojet Rocketdyne AR-1 Subscale Pre-Burner/ Main Injector and AR-1 Fullscale Pre-Burner Test Projects

NASA

- Christoffer Barnett-Woods
- John Bourgeois
- Gergory Carmouche

- Jack Conley
- Laurence de Quay
- Jonathan Dickey
- Robert Drackett
- Robert Gargiulo
- Glen Guzik
- Rachel Harrison-Woodard
- Tiffany Hawkins
- Paula Hensarling
- Melissa Huggins
- Bridget Jones
- Justin Junell
- Michael Kersanac
- Truc Le
- Thomas Meredith
- Christopher Mulkey
- Raymond Nichols
- Rosa Obregon
- Aster Nino Pastoral

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AWARDS

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Peyton Pinson
Kevin Power
Robbie Randall
Stephen Rawls
David Roberts
Robert Southers
Dwayne Stockstill
Janice Tasin
Peter Tran
Richard Wear
Robert Williams

Contractor Support

Justin Alison
Vicki Ard
Glen Beech
Cheryl Bennett
Gary Bennett
William Berry
Charles Blackmon
David Blansett
Jeffrey Blevins
Van Bolden
Jesse Bourgeois
Roger Bridges
Kenneth Burley
Terrence Burrel
Samuel Clay
Nicholas Coleman
Kenneth Cook
Brian Corr
Mark Corr
Jesse Crawford
Taylor Davie
Horace Davis
Phillip Dossett
Joni Dumas
Willie Ellis
Brian Everett
Jack Fabre
Susan Fendley
Dan Fillette
Anthony Fleming
Rogers Gipson
Jerrick Goff
Dillon Goss
Dale Green
Patrick Guidry
Timothy Gwinn
Leslie Hanna
Josh Hansell
Charles Hariel
Scott Hariel
David Harriel
Kenneth Hawkins

Mack Hester
John-David Hinson
Jason Hobgood
Petter Hobgood
David Hodge
Jeret Howard
Kristi Hurt
Kurt Jarrell
Timothy Jarrell
Gary Jennings
Daniel Jocks
Willie Johnson
Andrew Jones
Marsella Jones
Ricky Jones
Colin Kappe
Raymond Keim
Kyle Kellgren
Austin Ladner
Lisa Ladner
Robin Ladner
Timothy Ladner
Carl Lee
Dion Lee
Eric Lichtenstein
Joseph Lizana
Jeremiah Lumpkin
Paul Lusich
Rickey Lyons
Michael Marodis
Bruce Matthews
Joshua McBeth
Kenneth McCormack
Jacob McKinley
Lori Mills
Mark Mills
Marlon Mitchell
Timothy Mitchell

Vicente Munoz
Dennis Necaice
Chad Northrop
Carley Odom
Curtis Olive
Kevin Oramous
Donald Osborne
Randy Overton
Robert Pair
Kevin Parker
Ralph Penton
Lasonya Pulliam
Christopher Quinn
Tal Raboteau
Mitchell Railey
Bobby Rodriguez
Harold Ross
Travis Sanders
John Searles
Raymond Seymour
Grant Shaw
John Shupe
David Slavinsky
Shane Smith
Timothy Smith
Darrin Spansel
Billy Spence
George Spence
Joshua Spence
Todd Stefanski
Adam Stockstill
Jonathan Strickland
Joshua Tarter
Torey Tarter
Courtney Thoms
Stephen Thoms

See **AWARDS**, Page 12

AR-1 Subscale Preburner/Main Injector and AR-1 Full Scale Preburner Test Projects Team

AWARDS

Continued from Page 11

- Julian Ulloa
- Terry Wactor
- James Wahl
- Curtis Watkins
- Jason Wheat
- Cleveland Whitfield
- Charles Wilder
- Raymond Williams
- Ryan Williams
- Anita Wilson
- Donald Wilson
- Samuel Wright
- Rickie Zerkus



Contract Funding Process Integration and Automation Team

B-2/Space Launch System
Green Run Core Facility
Construction Team

- NASA**
- Katie Kopcsó
 - Elizabeth Calantoni
 - Nicholas Cenci
 - Jasper Cook
 - Dawn Davis
 - Jason Edge
 - Alex Elliot
 - Daniel Goad
 - Juan Gomez
 - Christine Grapusa
 - Mark Hancock
 - Phillip Hebert
 - Charles Heim
 - Andrew Henken
 - Jason Hopper
 - Kanokwan Kooamphorn

- Matthew Ladner
- Jesse Lamonte
- Lester Langford
- Aaron Mannion
- Travis Martin
- Bryon Maynard
- Nicholas Nugent
- Richard Rauch
- Ryan Roberts
- Barry Robinson
- Mark Robinson
- Debra Rushing
- Claude Sanders
- Karma Snyder
- Mark Turowskil
- Darrel Varner
- Casey Wheeler
- Burnley Wigley

Contractor Support

- Anita Anthony
- David Armbruster
- Jeff Barros
- James Bennett
- Brett Bossier
- Mark Bridenbeck
- Jason Brooks
- Terrence Burrell
- Cheley Carpenter
- Chris Carter
- Christopher Carter
- Anna Carver
- Christopher Cloutet
- Buford Cooper
- Joseph Costa
- John Davis
- Randy Dedeaux
- Douglas Dike
- Anthony Dilorenzo
- Bradley Favre
- Brandon Fleming
- Carl Flettrich
- Kristie Foster
- Kerry Gallagher
- Charles Gillis
- Eric Goller
- Dale Green
- Ruth Hextall
- Gerald Howard
- Curtis Hyatt
- Timothy Jarrell
- Erica Jones
- Micah Jones
- William Jones
- James Jordan
- Byron Ladner



B-2/Space Launch System Green Run Core Facility Construction Team

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AWARDS

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Chadwick Ladner
 Gergory Ladner
 Lisa Ladner
 Richard Ladner
 Melissa Lathem
 Angela Lee
 Harlie Lee
 Joseph LeSieur
 Daniel Levens
 Curtis Lockwood
 Hannah Lynch
 Gary Marshall
 Andrew "Sandy" Martin
 Benjamin McGrath
 Gregory McVay
 Jimmy Miles
 Jerry Miller
 Stephen Mugg
 Nicole Narvaez
 Tuan Ngo
 Chad Nicholas
 David Olson
 Kevin Parker
 Ty Proffitt
 Alvin Richard
 William Ritchie
 Rodney Sampson
 Tina Schultz
 Michael Shaw
 John Shupe
 Michael Slade
 Billy Smith
 Donald Smith
 Robert Smith
 Ronald Snyder



Pressure System U&R Stamp Certification Team

Frances Songy
 Jonathan Spence
 Jonathan Strickland
 Daniel Tarter
 Dale Tutor
 Rodney Valdes
 Sutha Vallipuram
 Perry Waller
 Benjamin Wiesel
 Sheena Weyenberg
 Jason Wheat
 Rodney Wilkinson

David Keith
 Leslie Ladner
 Karen Seals
 Steven Taylor

Contractor Support

Angela Cuevas
 Alison Dardar
 Richard Marshall
 Shellie Martinez
 Desiaralle Mendel
 Jennifer Rolison
 Jennifer Stevenson
 Sara Stuart

**Contract Funding Process
 Integration and Automation Team**

NASA
 Kimberly Driebergen
 Angela Hall

**ISO 9001:2015
 Transition Audit Team**

NASA
 Anita Douglas
 Donna Dubuisson
 Rachel Harrison-Woodard
 Jesse Lamonte
 Karen Patton
 Carmen Ramirez-Pagan
 Delton Rodriguez
 James Ryan
 Robert Simmers
 Robert Southers
 Karen Vander

Contractor Support

Jeffrey Barros
 Robert Cales
 Kevin Cognevich
 Stephen Ivanyisky
 Bertha Jackson
 Rhonda Lavigne



ISO 9001:2015 Transition Audit Team

See **AWARDS**, Page 14

AWARDS

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James Mirandy
Todd Sandeman

**Pressure System U&R Stamp
Certification Team**

NASA
Son Le

Contractor Support

Barbara Andres
Glen Beech
Jeffrey Blevins
Jennifer Cardinal
Steven Costello
Scott Curet
William Davis
Richard Ferrill
Dale Heintzelman
Wilmon Henderson
Robert Jones
Stephen Koch
Jackie Ladner
Robin Ladner
Jeremy Lebouef
Benjamin McGrath
Jacob McKinley
Dennis Ncaise
James Ncaise
Aaron Pearson
Nettie Ryan
George Smith
Timothy Smith
Donal Snyder
Michael Theriot



Regionalized Multiple Award Construction Contract Two (MACC-II) Source Evaluation Board

**Regionalized Multiple
Award Construction
Contract Two (MACC-II)
Source Evaluation
Board Team**

NASA
Ronald Bald
Keith Britton (KSC)
Christopher Carmichael
David Christani
Kay Doane
Kimberly Driebergen
Jason Edge
Charles Heim
Heather Hendrix
Veronica Lansey (HQ)
Deborah Lyon (HQ, Retired)

William Miltier
Scott Olive
Todd Pryor (JSC)
Jeffrey Renshaw
Michael Rewis
Claude Sanders
Thad Stripling (MSFC)

**Systems Engineering/Project
Management (SEPM)**

Advocate Team

NASA
Cabrina Bell
Gary Benton
Anita Douglas
Robert Gargiulo
Charles Liberto
Travis Martin
Scott Olive
Christine Powell
Thomas Rich
Joseph Schuyler
Gary Taylor

**Liquid Hydrogen Barge
Vaporizer Repair**

NASA

Henry Bakker
Craig Chandler
Rachel Harrison-Woodard
Tiffany Hawkins
Son Le
Harry Ryan
Richard Wear
Robert Williams



Systems Engineering/Project Management (SEPM) Advocate Team

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AWARDS

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Contractor Support

- Roy Ard
- Marvis Burkett
- Terrence Burrell
- Louis Carrier
- Billy Davis
- Benjamin Gill
- Philip Kopfinger
- Benjamin McGrath
- Mark Powe
- Stacey Smith

Stennis Space Center Office of Education

NASA

- Michele Beisler
- Christopher Copelan
- Katrina Emery
- Mitchell Krell
- Kelly Martin-Rivers
- Joy Smith
- Nathan Sovik

Contractor Support

- Yolanda Anderson
- Rebekah Blair
- Kristy Brunfield
- Stephen Culivan
- Sabrina Edmondson
- Breana Fortenberry
- Seth Johnson
- Maria Lott
- April McIntosh
- Jordan McQueen



Liquid Hydrogen Barge Vaporizer Repair Team

- Marci Rogers
- Stacy Schmidt
- Marquez Singleton
- Louis Thompson
- William Trest

Space Flight Awareness Management Award

- Harry M. Ryan
- Dawn M. Davis

Headquarters Office of the

Chief Financial Officer Award

- Michele Campbell

ACES Reasonable Equitable Adjustment (REA) Team

- Mary S. Horne
- Joseph D. Ladner
- Monica M. Watts

Special Recognition Awards

Peer Award for Diversity Enhancement

- Anthony J. Goretski

Peer Award for Professional Achievement

- Michael J. Vallan

Agency Agreements

Business Process Design and Documentation Team

- Edwad J. Toomey
- Kelly E. Sullivan

Office of the General Counsel Teamwork Award

- Michael J. Vallan
- Ronald J. Bald

Women of Color

STEM (Science, Technology, Engineering and Mathematics) Professional Achievement in Government

- Award**
- Dawn M. Davis



Stennis Space Center Office of Education

Federal official tours Stennis

Lisa August (white jacket), a budget examiner in the U.S. Office of Management and Budget stands atop the B-1/B-2 Test Stand during a visit to Stennis Space Center on July 26. In addition the B stand, August toured various site facilities, including the A-1 Test Stand, E Test Complex and NASA Shared Services Center. The Office of Management and Budget serves the president of the United States in overseeing implementation of his vision across the Executive Branch.



Boeing managers visit Stennis



Boeing senior managers participating in the company's Program Management Develop Program visited Stennis Space Center on July 27 to learn about ongoing work at the site and tour facilities. The group toured the Aerojet Rocketdyne Engine Assembly Facility, as well as the B-2 Test Stand, which is being prepared to test the core stage of NASA's new Space Launch System rocket.



Stennis director honors site retiree

Center Director Rick Gilbrech presents Gail Mitchell with a director's Certificate of Appreciation at her retirement reception July 31. Mitchell retired after 29 years of service at Stennis, including 25 of those years working in the site's Conference Center. "It's been great being out here," Mitchell said. "You're all my friends. I love this place and promote it everywhere I go."

New NASA resource puts world at one's fingertips

A new NASA web resource designed by the Advanced Technology and Technology Transfer Branch at Stennis Space Center places the world at one's fingertips – in very real fashion.

The new NASA Remote Sensing Toolkit puts a myriad of Earth science data sets and tools in the hands of users, including industry, government and academia.

“NASA collects a lot of Earth science data and builds specialized software tools to analyze it,” explained Duane Armstrong, chief of the Stennis Advanced Technology and Technology Transfer Branch. “However, these are not always easy to find. The toolkit is designed to help people find the data and tools they need.”

The user-friendly toolkit is designed like popular web-based tax return services. Once accessed, a simple interface helps guide the user to sources of data or tools.

NASA's Technology Transfer Program executive asked Stennis to design the toolkit. Stennis technology staff searched NASA's Software Catalog, software repositories and hundreds of websites to identify various remote sensing data sets and tools. Stennis also devised and built a framework to organize the diverse information in a way that required only a handful of simple questions to identify the resources for users.

“Stennis is no longer involved in remote sensing, but Stennis' remote sensing tools are part of the new kit,” Armstrong noted.

The Stennis-developed tools include such applications as ForWarn, a satellite-based monitoring and assessment tool to track changes in forest vegetation across the country; and the coastal salinity and temperature application that provides daily access to ocean salinity and temperature information.

Once the data and tools were collected and a toolkit design determined, Stennis personnel worked with the NASA Technology Transfer System programmers at NASA's Ames Research Center in Mountain View, California, to build the system. The resulting toolkit already has garnered praise.

The federal General Services Administration (GSA) has featured the toolkit on its Performance.gov website, which showcases ways to deliver “smarter, leaner and more effective government.”

The GSA identified the Remote Sensing Toolkit as “an example of how a better approach to government data can help drive more effective government and help grow innovation and the economy.”

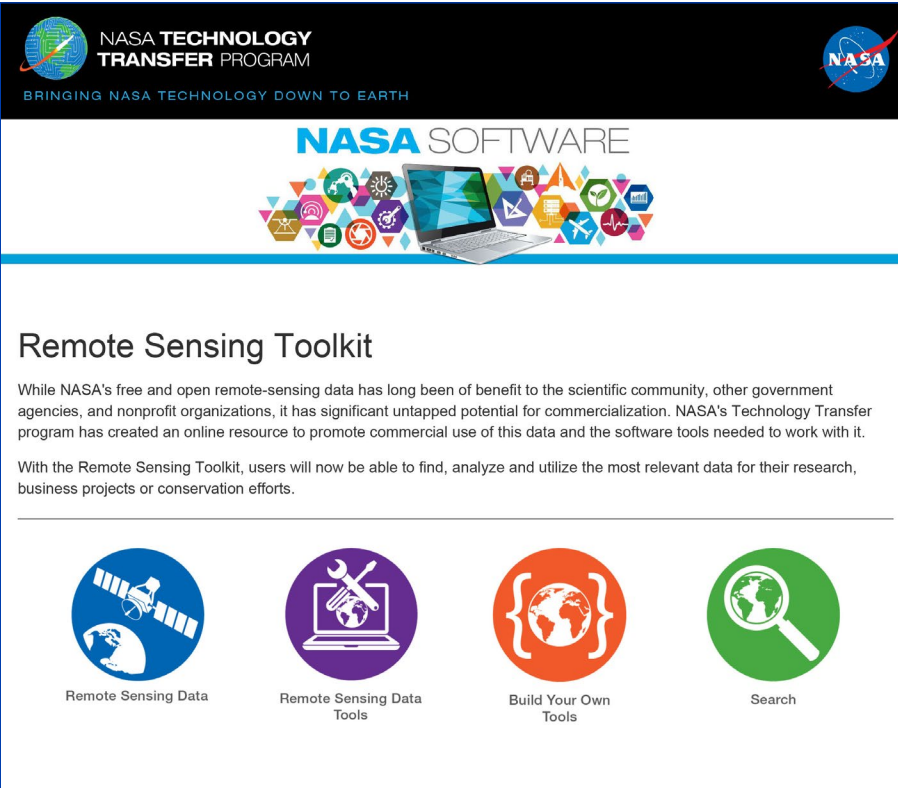
The GSA assessment falls in line with Armstrong's hope that the new toolkit approach becomes a blueprint for organizing information and tools in other areas as well. “The potential benefit of this is not limited

to remote sensing,” he said. “This is an example of how we can adapt and organize data for maximum benefit in other areas.”

The toolkit approach enhances NASA's ability to share information and provide value to a range of users, Armstrong said. He noted that more than 1,000 people already have signed up for upcoming webinars to learn what the toolkit offers and how best to access its data and tools.

To access the new NASA Remote Sensing Toolkit, visit: <https://software.nasa.gov/remotesensing/>

For more information regarding the Stennis Advanced Technology and Technology Transfer Branch, visit: <https://technology.ssc.nasa.gov/>



NASA TECHNOLOGY TRANSFER PROGRAM
BRINGING NASA TECHNOLOGY DOWN TO EARTH

NASA SOFTWARE

Remote Sensing Toolkit

While NASA's free and open remote-sensing data has long been of benefit to the scientific community, other government agencies, and nonprofit organizations, it has significant untapped potential for commercialization. NASA's Technology Transfer program has created an online resource to promote commercial use of this data and the software tools needed to work with it.

With the Remote Sensing Toolkit, users will now be able to find, analyze and utilize the most relevant data for their research, business projects or conservation efforts.

- Remote Sensing Data
- Remote Sensing Data Tools
- Build Your Own Tools
- Search

Astro Camp participants enjoy 'out of this world' visit with NASA astronaut



Participants in the NASA Astro Camp® program sponsored by NASA Stennis Space Center enjoyed an "out of this world" treat July 19, speaking live with astronaut Ricky Arnold aboard the International Space Station. Students from the INFINITY Science Center Astro Camp and 50+ other Human Exploration and Operations-sponsored Astro Camps located in Alabama, Louisiana, Mississippi and Texas engaged in a 20-minute call to the space station as part of NASA's Year of Education on Station, which features Arnold and fellow educator/astronaut Joe Acaba during their stays aboard the orbiting space station. Arnold is a member of the Expedition 55 crew that launched to the ISS earlier this year. Acaba served as a member of the Expedition 53/54 crew last fall and early this year. Linking students directly to astronauts aboard the space station provides unique, authentic experiences designed to enhance student learning, performance and interest in science, technology, engineering and mathematics (STEM). Astronauts living in space on the orbiting laboratory communicate with NASA's Mission Control Center on Earth 24 hours a day through the Space Network's Tracking and Data Relay satellites. Twenty students at INFINITY asked Arnold questions submitted by all camps, which included topics such as use of robotics, physical adjustments to zero gravity, what food he missed the most and whether he "had ever made a mistake in space." Stennis Safety and Mission Assurance Director Freddie Douglas (top right) spoke to students at INFINITY following the call.



Bastion focused on Stennis pressure systems safety

Note: The following is part of a regular focus on safety and health at Stennis Space Center. It was written by Jim Mirandy of Bastion Technologies.

Stennis Space Center works under pressure. Specifically, pressure vessels and systems play a significant part in our rocket engine test program.

Stennis operations use a variety of inert, cryogenic and flammable commodities, each having their own set of risks and dangers when stored under pressure. For many of these systems, there are miles and miles of piping, tubing, tanks and systems that have to be evaluated and maintained.

Keeping these extensive pressure systems safe and operating correctly is a big job and takes a great team. As part of that team, Bastion Technologies supports the NASA Safety and Mission Assurance Directorate by providing engineers and inspectors with over 40 years of combined experience who look at the various pressure systems throughout the site.

In this role, they maintain, and contribute to the sitewide piping and pressure vessel certification program. Bas-

tion personnel perform engineering analysis, participate in audits, perform surveillance, review non-destructive evaluations and provide certification reports and documentation packages.

This system information is shared with NASA and the test and facilities contractor to ensure it accurately reflects the overall health of the system.

The Bastion Technologies Engineers and Inspectors are subject matter experts who maintain an expertise in

pressure system technology that supports Stennis' pressure system certifications, re-certifications, repairs, alterations and re-ratings.

The Bastion pressure vessel system team also works with other NASA centers to share information and methods to ensure best practices are being used within the NASA community.

Maintenance and reliability of the pressure systems at Stennis is of paramount importance to the center's and surrounding community's safety. The Bastion Technologies team is proud to help contribute to the effort of keeping Stennis safe for everyone.



An engaged safety culture keeps Stennis Space Center rocketing forward!

To contribute to this page, contact:

Kamili Shaw at kamili.j.shaw@nasa.gov or Karen Patton at karen.patton@nasa.gov

Carefulness costs you nothing. Carelessness may cost you your life.

Safety starts with awareness. Awareness starts with you.

Knowing safety is not enough. Practice it!

Hail & Farewell

NASA bids farewell to the following:

Jason Hopper

AST, Mechanical Experimental Equipment

Engineering and Test Directorate

NASA welcomes the following:

Hooper LaVigne

AST, Electrical Experimental Equipment

Engineering and Test Directorate

1971 – Space shuttle testing comes to Mississippi



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 Mississippi Test Facility (MTF) was built on rocket testing, and a new program was forming – to build

a reusable space shuttle. Roy Estess, then working as an engineer, was assigned to put together a presentation to convince NASA to select MTF to perform tests on the space shuttle main engines.

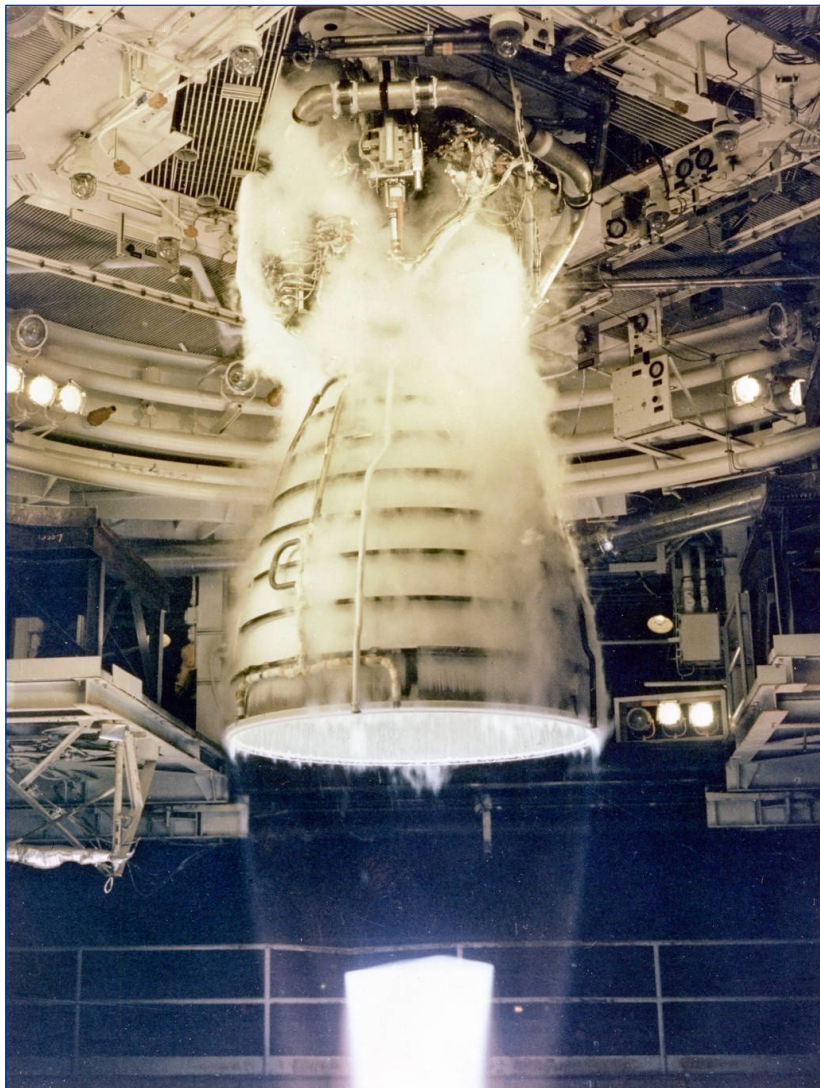
In December 1970, Estess had the presentation ready for NASA Headquarters. He gave the presentation to a board of NASA managers. He spoke of the low cost for facility modifications that would be needed for the space shuttle main engine tests, the test experience already at the south Mississippi facility as a result of Apollo testing and the local communities' willingness to support the program.

The board was very impressed with Estess and his knowledge of the program. One board member told him that his presentation was “the best we’ve had out of all three places” seeking the testing assignment.

Unknown to Estess, a now-familiar name was in the camp for MTF to be selected for the space shuttle engine

test assignment – Jerry Hlass. He was working on his master's thesis at George Washington University. It was titled “Search for a Role for a Large Government Facility,” with the focus on the Space Shuttle Program and the use of MTF.

Hlass, who later led the Mississippi facility as director, had the ear of the NASA Site Evaluation Board. When asked his opinion, he gave his case for MTF.



An in-stand camera offers a look at a 1981 space shuttle main engine test.

After consideration, on March 1, 1971, the Mississippi Test Facility officially was selected for the “sea-level testing of the rocket engines to power the space shuttle.” The roar of rocket engines would be heard again throughout south Mississippi.

Work began on modifying the test stands for the new endeavor. The space shuttle main engine test project officially began on May 19, 1975. The so-called “burp” test did not include full ignition of the engine. The first full ignition space shuttle main engine test occurred on June 12, 1975. Twelve days later, on June 24, 1975, the first full-duration space shuttle

main engine test was conducted.

With single-engine testing under way, attention at the newly-renamed National Space Technologies Laboratory squarely turned to the shuttle's main propulsion test article (MPTA), the three liquid-fueled engines, external fuel tank and simulated orbiter structure to be tested before the shuttle launched from Kennedy Space Center in Florida.

Office of Diversity and Equal Opportunity

Mississippi and the woman suffrage amendment

In the 20th century, Mississippi legislators were called on to act on two U.S. constitutional amendments that had major implications for women. The first was the woman suffrage amendment, ratified in 1920 to become the 19th Amendment. The second was the Equal Rights Amendment (ERA), submitted to the states in 1972 but left unratified when the deadline expired in 1982.

The woman suffrage movement in America began in 1848 after women were left out when the 14th and 15th amendments extended the right to vote to African-American men. In the 1870s, suffragists sought the right to vote through an appeal to the U.S. Supreme Court, as well as through a proposed 16th Amendment. All efforts failed. National suffrage leaders reluctantly concluded that they would have to focus on state suffrage amendments.

By 1890, national leaders, united in a large suffrage organization called the National American Woman Suffrage Association (NAWSA), realized that to achieve all this they would have to “bring in the South.” They were all too aware this might be hard. Many white southerners were hostile to the movement because it was an outgrowth of the antebellum effort to end slavery. They also took pride in women remaining in traditional role as “southern ladies” – which meant staying out of politics except to encourage men to rule wisely for their sakes. Yet, a growing number of women in the South were eager to have the vote, both to improve legal, educational and employment opportunities for women and to promote needed reforms. But they were getting nowhere.

Nellie Nugent Somerville of Greenville, Mississippi, was active in the Woman’s Christian Temperance Union, a national organization that had endorsed woman suffrage. Somerville accepted the presidency of the Mississippi Woman Suffrage Association, lending the social and political reputation of her family, plus her own considerable organizing skills, to this movement.

In 1906, Belle Kearney of Madison County, Mississippi, a traveling professional speaker, returned home long enough to bring the woman suffrage association back to life – but soon left it again in the hands of Somerville. Gradually, the suffragists built support. They established chapters in many towns, made speeches, sponsored booths at the state fair and won over a few newspaper editors and political leaders. However, they never won over the vast majority of state legislators.

Most Mississippi women working for woman suffrage were white, except for Ida B. Wells of Holly Springs. Wells was an African American activist/suffragist known for her relentless work on behalf of the anti-lynching movement. Wells wrote editorials exposing lynching activities and was

forced to flee to Chicago because her life was in jeopardy. There, she became active in suffrage activities and is recognized for her courage in expanding opportunities for women of color in the suffrage movement.

There was one major state suffrage campaign in 1914 that failed, and by 1915, many Mississippi suffragists had concluded the state was unlikely to act on its own. They believed they would only get the vote if an amendment was added to the U. S. Constitution. Kearney and Somerville joined with other southern women who tried to convince fellow southerners that suffrage by federal amendment was not a threat. Somerville accepted a vice presidency in NAWSA and was highly influential in convincing southern suffrage leaders to support the proposed amendment.

National suffrage leaders organized the final push for congressional approval of the amendment. They urged suffragists from “hopeless” states like Mississippi not to campaign for state suffrage amendments since they would probably fail and make the federal amendment seem unpopular. Suffragists in some southern states were furious, but Somerville and other Mississippi suffragists followed the lead without protest.

When Congress sent the woman suffrage amendment to the states for ratification in June 1919, the state’s rights issue was an additional and powerful obstacle to its success. Many southern politicians feared that if the woman suffrage amendment was approved, the federal government would then enforce the 14th and 15th Amendments requiring the states to allow black men to vote.

Nevertheless, Mississippi suffragists formed a Ratification Committee and opened a headquarters in Jackson, the state capital. By this time, the amendment had been ratified by 22 states. The suffragists were aided by national Democratic Party leaders, including President Woodrow Wilson, who thought American women were on the verge of gaining the vote and was eager to win their favor. Mississippi did not ratify the amendment, but in August 1920, it was at last added to the Constitution after Tennessee became the 36th and final state to ratify. It had taken almost 75 years for suffragists to win this victory.

By the 1970s, when Mississippi was debating the proposed Equal Rights Amendment, many regarded the state’s failure to ratify the 19th Amendment as an embarrassment since Mississippi was the only state that had never done so. Thus, on March 22, 1984, the Mississippi Legislature – on a day when few legislators were listening and with no opposition – finally ratified the 19th Amendment.

Information for this article came from the Mississippi Historical Society and suffrage100ma.org.

Stennis hosts Take Our Children to Work Day



Nearly 200 children of Stennis employees visited the site July 19 to take part in the annual Take Our Children to Work Day activities. Participants

enjoyed presentations and an opportunity to visit site facilities and learn about the work performed at Stennis.

NASA selects technology projects for development

NASA has selected 20 research and technology proposals – valued at \$15 million – from 19 American small businesses. Each is partnering with research institutions for Phase II of NASA's competitive Small Business Technology Transfer (STTR) program. The selections include two projects monitored by supporting Stennis Space Center.

STTR supports NASA's future missions into deep space and benefits the U.S. economy. Selected proposals will support the development of technologies in the areas of aeronautics, science, human exploration and operations, and space technology. The awards are for small companies partnering with research institutions from across the country.

“Our STTR program focuses both entrepreneurs and leading research institutions on NASA's long-term goals, bringing the latest in aerospace research to our programs,” said Jim Reuter, acting associate administrator for the agency's Space Technology Mission Directorate (STMD) in Washington. “We are excited to see the results of these latest awardees.”

The two projects supporting Stennis Space Center are:

- **Through Wall Wireless Intelligent Sensor and Health monitoring (Twall-ISHM) System**, developed by American GNC Corporation of Simi Valley, California; and Rensselaer Polytechnic Institute of Troy, New York.
- **High Performance Simulation Tool for Multiphysics Propulsion Using Fidelity-Adaptive Combustion Modeling**, developed by Streamline Numerics, Inc. of Gainesville, Florida; and Stanford University of Stanford, California.

Small businesses have created approximately 55 percent of all jobs in the United States since the 1970s. The STTR program encourages small businesses and research institutions to develop innovative ideas that meet the specific research and development needs of the federal government.

For a complete list of the 2017 STTR selections, visit: https://sbir.nasa.gov/prg_selection/node/60150

For more about the Stennis Space Center Advanced Technology and Technology Transfer Branch, visit: <https://technology.ssc.nasa.gov/>



Faces of Stennis

Each month, Lagniappe will feature employees at Stennis Space Center whose work enables the center to fulfill its mission as the nation's largest rocket engine test center. This month's employee is highlighted on the following page.



Marc Shoemaker



When it comes to space, Marc Shoemaker has two early memories, both from grade school in Birmingham, Alabama. One involves the loss of the space shuttle Challenger. The other came when his school set up a mock space shuttle, and Shoemaker was chosen to command a crew mission. “I was in the mock cockpit, and we had monitors, control panels and headsets that we used while we simulated a mission launch through flight and landing,” Shoemaker recalls. “It was a great interactive way to learn about a lot of different roles and responsibilities that went into manned space flight.” Years later, Shoemaker lives in New Orleans and fills one of those space flight roles as a NASA electrical engineer at Stennis Space Center. He worked as a contractor at Kennedy Space Center in Florida before relocating to Stennis in 2011. At Stennis, he has served as the A Test Complex

controls engineering lead for seven years, supporting a number of engine test projects. Shoemaker now is moving to become the electrical operations lead for the E-3 Test Stand. He also will provide help with control systems buildup and activation on the B-2 Test Stand. “The best thing (about Stennis) is that we get to closely witness and be a part of so many different pieces of the process of going to space,” Shoemaker says, noting everything from engine development testing to facility modification and activation to flight certification hot fires. He likens the entire process to “building the first steps of a stairway to the stars.” Shoemaker is proud to be part of the work, which he hopes will inspire future generations and build momentum for even bigger and bolder space missions. “It is exciting to think that Stennis is – and will continue to be – a big part of that,” he says.