National Aeronautics and Space Administration

John C. Stennis Space Center

LAGNIAPPE

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SSC marks 40th anniversary of first engine test

The Saturn V S-II (second) stage is test fired at the Mississippi Test Facility's A-2 test stand. The stage used five J-2 engines, each producing 200,000 pounds of thrust. The engine used liquid oxygen and liquid hydrogen as its propellants. Both the first and second stages of the Saturn V were tested at the Mississippi Test Facility, which was renamed John C. Stennis Space Center in May 1988.

On the morning of April 23, 1966, the south Mississippi silence was broken by an earth-rattling roar that swept southern Mississippi and Louisiana into the Space Age.

That roar was the sound of the first rocket engine static test-firing on the A-2 Test Stand at what is now NASA's John C. Stennis Space Center. The S-II-T tested April 23, 1966, was a cluster of five J-2 engines, the second stage of the Saturn V moon rocket.

When President John F. Kennedy made his historic 1961 announcement that the United States would put humans on the moon by the end of the decade, the plan called for a place to test the huge rocket engines.

Mississippi's influential Sen. John C. Stennis, for whom Stennis Space Center is named, supported the selection of his home state as the place to build the rocket engine test facility. The site's water access was essential for transporting large rocket stages between the manufacturing plant at Michoud Assembly Facility in New Orleans, Stennis Space Center, Marshall Space Flight Center and Kennedy Space Center. The round trip totaled close to 2,000 miles and took the barges up and down the Tennessee River, the Mississippi River, the Atlantic Coast and across parts of the Gulf of Mexico.

*See **40th ANNIVERSARY**, Page 6*

From the desk of

Dr. Richard Gilbrech

Director,
Stennis Space Center

This month marks a significant milestone in the history of human spaceflight - the 40th anniversary of the first rocket engine test at Stennis Space Center. On April 23, 1966, a cluster of five J-2 engines on the S-II-T, the second stage of the Saturn V moon rocket, roared to life on the A-2 test stand, signaling the beginning of a rich heritage of rocket propulsion testing for Stennis. This was followed by the massive S-1C tested on the B-2 stand with five F-1 engines delivering 7.5 million pounds of thrust. I've always wished I could have been here to feel that kind of power firsthand.

This issue of Lagniappe has a feature story on these significant tests along with some great historical photos both on the cover and on Pages 6 and 7.

In the early 1970s, the A-2 test stand, along with the other large test stands at Stennis, was converted from Saturn V testing to begin a new era in spaceflight – the space shuttle. Both the A-1 and A-2 stands were converted to test a single space shuttle main engine and the B-1 was used to test the main propulsion test article, a cluster of three SSMEs fixed to an orbiter simulator on an external tank. Since 1975, when the first SSME test was conducted, every space shuttle astronaut has ridden on engines tested and proven flight worthy at Stennis.

To mark the 40th anniversary of our center's first engine test, there will be a SSME firing on April 21 that employees, their families and the public are invited to witness. In fact, the test is scheduled to be on A-2 test stand, the same stand where the first test occurred. If you can't make it to see the test in person, it will be broadcast live on NASA TV.

We are now preparing to begin yet another era of spaceflight as part of America's Vision for Space Exploration: to return humans to the moon before the end of the next decade, paving the way for eventual journeys to Mars and beyond. As a result, the space shuttle is scheduled to be retired by 2010.

Stennis Space Center will continue building on our past as we get ready to test components for future-generation launch vehicles as part of this journey. I look forward to the day when you can join me at the B-stand when that raw power is once again unleashed into the flame bucket.

Richard J. Gilbrech

Upgrades complete at A-Complex Test Control Center

Apollo-era consoles in the A-Complex Test Control Center (left) and newly-modernized consoles (right).

Pratt & Whitney Rocketdyne recently completed upgrades to the A-Complex Test Control Center. The control room was upgraded from the Apollo-era consoles that were originally installed, to modern day consoles with computer interfaces. Along with this upgrade, the fire and gas detection system was upgraded so that the alarm now notifies of the location of the fire or leak, and gives instructions on what further action to take.

LAGNIAPPE commentary: A ticket to ride

Editor's note: *The following commentary written by Mack Herring appeared in the Nov. 24, 1982, issue of "Lagniappe" following the successful flight of Space Shuttle Columbia. Herring was SSC's first public affairs officer and later the site's first historian. His popular, long-running columns featured Gator, the cartoon mascot of SSC.*

It's pretty hard to buy a ticket to witness a great historical event, or to ride into a new era. You just have to be there. Another trick is to understand of have some feeling of what you seeing or a part of.

In this mind-boggling Space Age, we are learning to accept fantastic and staggering discoveries and events as commonplace. Sometimes we get upset with ourselves and our machines when things don't go down "perfectly as planned." After all, in the last 20 some-odd years we've been eyewitnesses or participants in some pretty unbelievable happenings.

We are in the midst of a dramatic technological revolution. Sometimes it seems as if we get tangled up so much in the high-tech web that we can't clearly see our way out, or what we are going to do with our prize when we do cut loose. We have to just keep unwinding this high-speed backlash until we have a clean line and can cast it accurately to the right spot.

On November 11 [1982], this country celebrated an American-pie, flag-waving Armistice Day by launching four of our native sons in a spaceship named Columbia into yet a new era of the Space Age. Our team placed two commercial satellites into orbit around the Earth, opening the way for lord knows what.

When commerce and industry discover what is to be gained and can count it out in dollars and cents, or translate it into digits on the stock market, it's easy to see that we have arrived. So, we have now turned the pages of history. We've left the romantic and exciting days of exploration and discovery. The new chapter may say . . . "The Commercialization of Space." or something historically appropriate.

Anyway, it's a brand new ball game and we're long gone on another amazing journey. It's going to be a real trip, so hang on and try to watch the sights flashing by. **– M.R.H.**

Editor's note: The following message is a response to last month's Lagniappe feature on Mack Herring.

I read with great (and emotional) interest, the March issue of Lagniappe with the feature on my dad. He always talked of how proud he was of me, but we certainly had a mutual admiration society as he was definitely my hero, and I strive every day to be half as good and respected as he was in this business.

I grew up on the Coast and frequented the old "test site" many, many times. I attended F-1 engine tests on field trips and fished on the banks of the Pearl with dad just steps from the Rouchon House (still the greatest government office "building" there ever was, I'm convinced).

When he told me he was going to write a book about the history of SSC, I knew he would be the one to do it. I read some of the chapter drafts along the way and he truly knew how to tell a story.

His column was something that not just SSC looked forward to reading each month, but folks all across the agency. He once asked me to write one, which I did, but it didn't have the personal touch that each one of his "stories" had.

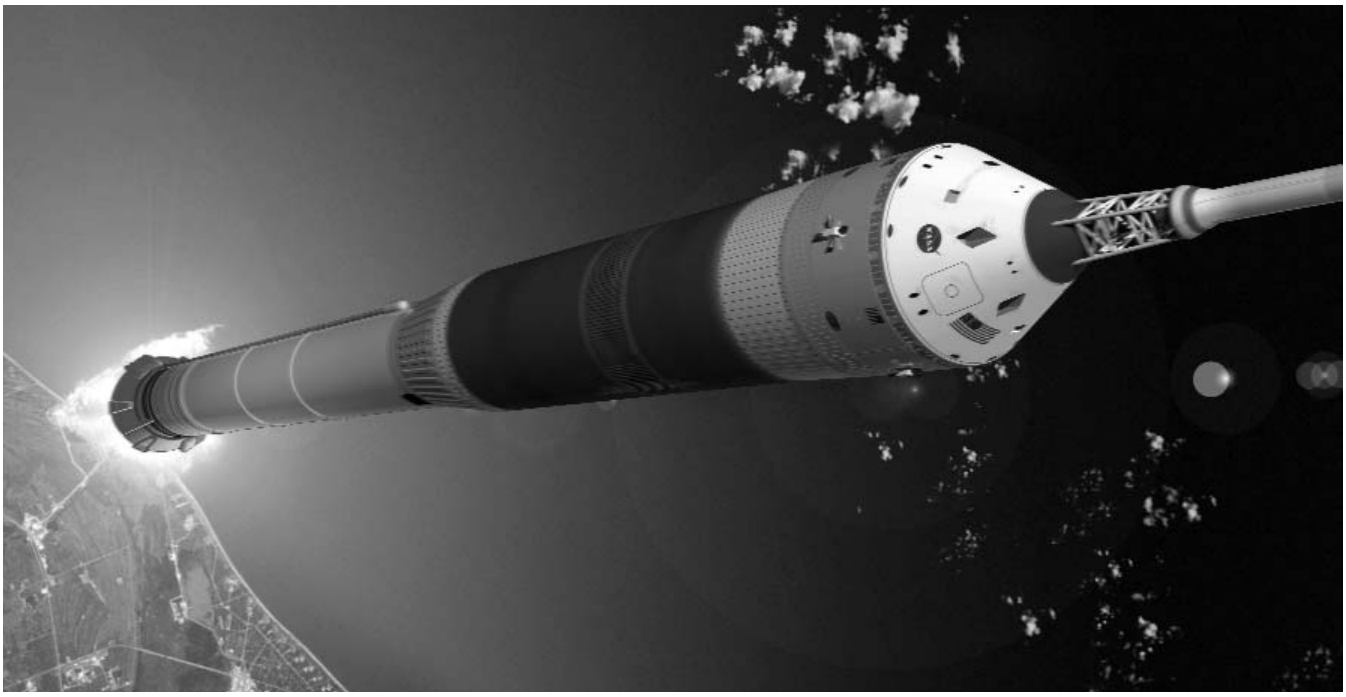
He studied to be a reporter and became a writer. I'm still proud of him every day. Thanks for the tribute.

– Kyle Herring, public affairs specialist
NASA Johnson Space Center.

SSC hosts annual Special Olympics games

At right, Colette Quigley carries the torch to kick off the annual Special Olympics Area III Track and Field Competitions held Saturday, April 1, at Stennis Space Center. Below are pictured some of the 400 SSC employees and community members who volunteered to escort athletes and conduct sporting events at the annual event that drew nearly 130 athletes from the surrounding area.

NASA, SSC launching into new era



This illustration shows the crew launch vehicle. Astronauts will launch on the rocket made up of a five-segment solid rocket booster, with a second stage powered by a J-2X engine.

Take the space shuttle solid rocket boosters and super-size them, then add modified shuttle main engines and an upper-stage engine used in the Apollo program. You now have the heavy-lift propulsion components capable of powering a new cargo vehicle to the moon. By also using these safe and reliable elements on the crew launch vehicle, NASA's launch technology is well on its way to beginning the next phase of space exploration.

While the space shuttle will be retired in the not-too-distant future, the propulsion components that carried it aloft will live on in upcoming missions to explore our solar system.

First up will be the new crew launch vehicle that will ride a first stage made of a five-segment solid rocket booster similar to the twin boosters that now lift the shuttle from the pad. Sitting atop the booster will be a new liquid propellant second stage that sports a J-2X upper stage, like the ones used in the Saturn V Apollo program.

So why not build a new propulsion system from scratch? After extensive study, NASA found the shuttle system to be the best match. The solid rocket boosters and main engines are safe and reliable, and fit into the plans well. The industrial base is already in place, which will lower development costs and support the workforce that will need to transition when the shuttle is retired in 2010.

"Stennis is the last place in the country where we can test large engines or whole rocket stages"

– NASA Administrator Michael Griffin

NASA Stennis Space Center's history of testing the first and second stages of the Saturn V moon rocket for the Apollo program and all the space shuttle's main engines positions the center to play a key role in this bold new mission. With its state-of-the-art test facilities, SSC will continue to test components for future-generation launch vehicles. "Stennis is the last place in the country where we can test large engines or whole rocket stages," said NASA Administrator Michael Griffin during a recent visit to SSC.

Shuttle Program Manager Wayne Hale also has employees in mind, and says his goal is making sure than when the new program gets going, "we have the capability to retain the people that we need to make ourselves successful."

It's been more than 25 years since the transition from the Apollo program to the era of the space shuttle, culminating in the successful launch of STS-1 in April 1981. Now, we're taking the next steps, readying the rockets that will carry explorers back to the moon, paving the way for journeys to Mars and beyond.

40th ANNIVERSARY

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Pictured is an aerial view of S-II (now A-2) Test Stand construction at Stennis Space Center. The dark rim of mud around the excavation is the remains of an old river bed, which some geologists believed was the ancient path of the Mississippi River. At the time, Stennis Space Center was the second-largest construction project in the nation.

The Hancock County site's vast tracts of densely-forested land provided a natural acoustical buffer zone to shield surrounding communities from the rumble of the engine tests. That 125,000-acre buffer zone is now considered a national asset.

"Stennis is the last place in the country where we can test large engines or whole rocket stages," said NASA Administrator Michael Griffin during a recent visit to the center.

The five J-2 engines that comprise the S-II (second stage) at Stennis Space Center. These five hydrogen-fueled en ered the Apollo spacecraft into Earth orbit before depar a multistage, multi-engine launch vehicle standing talle

At the time the Mississippi Test Facility (as it was then called) was built, it was the largest construction project in Mississippi and the second largest in the United States.

That first test in 1966 demonstrated the phenomenal engineering feats achieved in the site's construction. Begun in May 1963, construction was complete and the center was fully operational for rocket engine testing less than three years later.

NASA used barges for transporting full-sized stages for the Saturn V vehicles between the Marshall Space Flight Center, the manufacturing plant at the Michoud Assembly Facility, the Mississippi Test Facility for testing and the Kennedy Space Center. Here, a barge loaded with the Saturn V S-II (second) stage passes through a bascule bridge at Stennis Space Center.

The test facility was charged with testing each of the F-1 rocket engines that powered the first (S-IC) stage of the 364-foot-tall Saturn V launch vehicle for the Apollo missions. The F-1 measured 19 feet tall, produced 1.5 million pounds of thrust, and weighed 10 tons.

The dual-position test stand built to accommodate the mammoth vehicle measured 264 feet tall with an overhead crane reaching more than 300 feet. The stand remains one of the tallest structures in Mississippi.

When the five-engine cluster of F-1 engines was test-fired for the first time March 3, 1967, windows shattered in nearby communities. The engines gave the booster a total thrust of 7.5 million pounds, taking the vehicle to a height of about 36 miles and to a speed of about 6,000 mph.

On July 20, 1969, just three years after that first

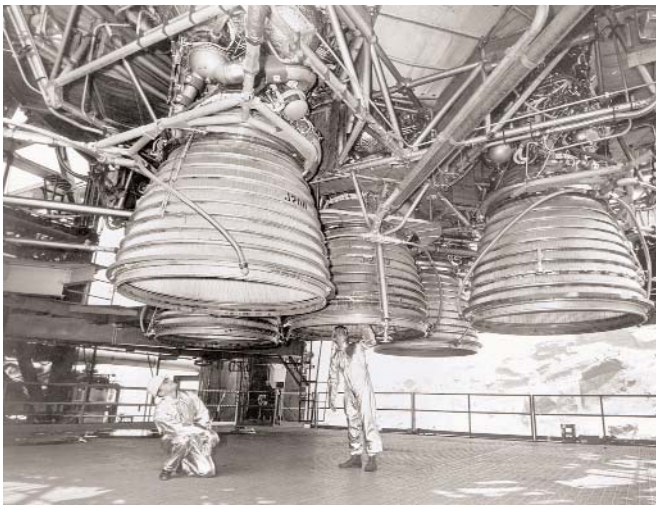
of the Saturn V moon rocket are test fired June 20, 1969, gines produced 1 million pounds of thrust, and pow- rting for the moon. The towering 363-foot Saturn V was r than the Statue of Liberty.

test, Apollo 11 astronauts Neil Armstrong and Buzz Aldrin walked on the lunar surface, safely transported 238,857 miles by the 36-story Saturn V rocket, whose boosters were tested and proven flight-worthy in Hancock County, Miss.

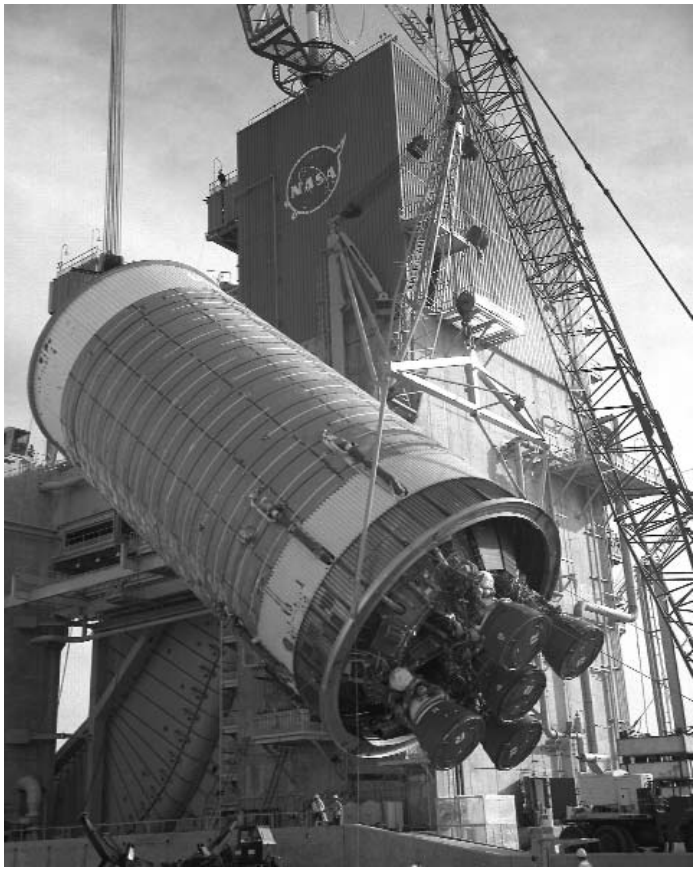
Ten Apollo missions were successfully launched by the engines tested at Stennis Space Center.

Because Stennis Space Center played such a vital role in proving the worthiness of the engines that propelled the Apollo program, the saying was spawned: "If you want to go to the Moon, first you have to go through Hancock County."

Stennis Space Center's primary mission of testing the first and second stages of the Saturn V moon rocket for the Apollo program continued until the early 1970s. Its test stands were then modified to test the space shuttle's main



Two workers are dwarfed by the five J-2 engines of the Saturn V second stage (S-II) as they make final inspections prior to a static test firing.



The first S-II-T booster to be tested at Stennis Space Center is installed on the on A-2 Test Stand. The historic firing took place on April 23, 1966, ushered Mississippi and Louisiana into the Space Age.

engines. Since then, all the space shuttle's main engines have been tested and proven flight-worthy at Stennis Space Center. This month, NASA celebrates the 25th anniversary of STS-1, the first space shuttle flight, which launched April 12, 1981.

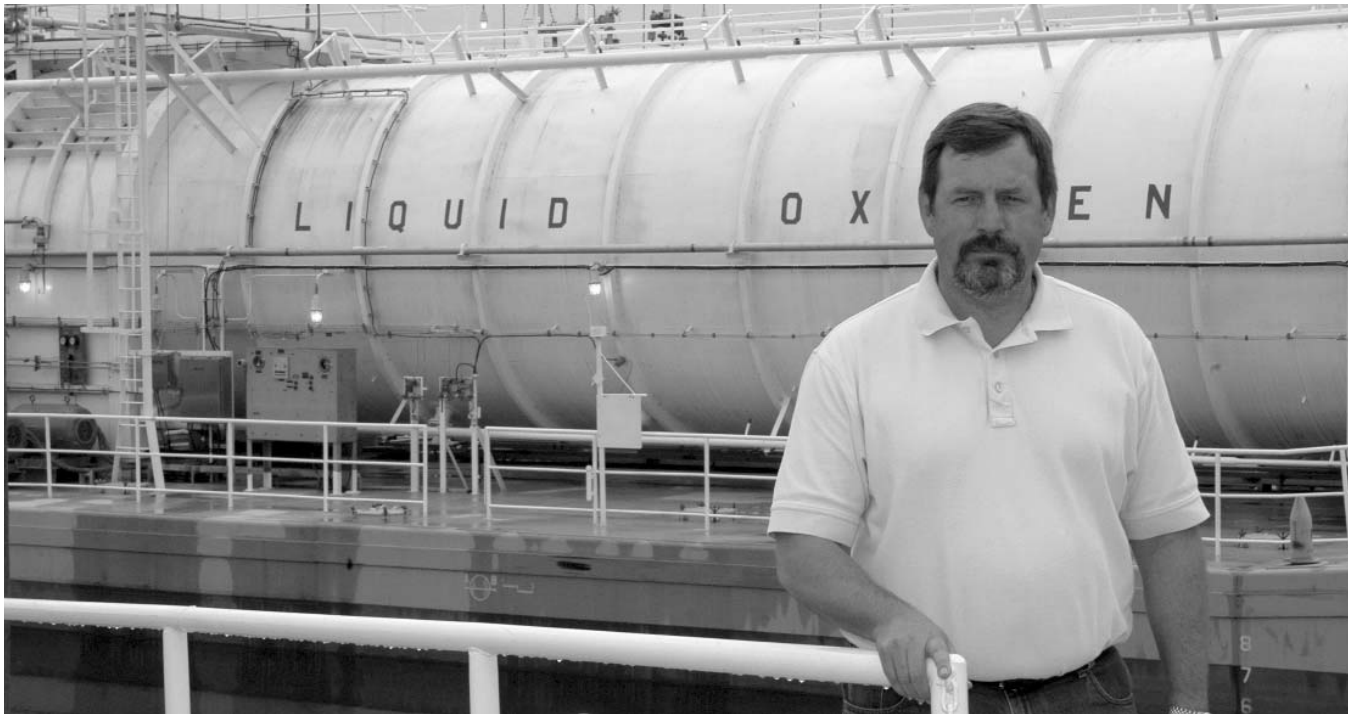
With its state-of-the-art test facilities, Stennis Space Center is testing components for future-generation launch vehicles, maintaining a crucial role in the life cycle of NASA's propulsion systems. The center will continue to play a vital part in the nation's bold new mission to replace the space shuttle with a new spacecraft and its vision to return to the moon before the end of the next decade, paving the way for eventual journeys to Mars and worlds beyond.

Existing facilities at Stennis Space Center will play a key role as the new vehicles are developed. Those same stands where NASA tested the Apollo rocket stages and that launched our first journeys to the moon will be called upon for the next era of space exploration.

For more information, call 1-800-237-1821 or (228) 688-2370 or visit

ww.nasa.gov/centers/stennis/home/index.html

SSC engineer conducted space shuttle main engine test for first shuttle flight



Terry Addlesperger is NASA's lead facilities manager for the propulsion test complex at Stennis Space Center. His duties include management of cryogenic fuels including the liquid oxygen required for rocket engine testing. Addlesperger was the test conductor for the first flight engine for STS-1, the Space Shuttle Columbia's successful maiden voyage. This spring, NASA and SSC will celebrate the 25th anniversary of that mission.

Twenty-five years ago, the nation watched as a new space vehicle, NASA's space shuttle, roared into orbit. The flight, STS-1, launched commander John Young and pilot Robert Crippen on Space Shuttle Columbia's successful maiden voyage.

This first shuttle flight, like each of NASA's following flights, was powered by three space shuttle main engines that were tested and proven flight-worthy at NASA's Stennis Space Center. Terry Addlesperger, now NASA's lead facilities manager for the propulsion test complex at Stennis, was the test conductor for the first flight engine for the historic STS-1 mission.

Stennis began testing space shuttle main engines in 1975, but Addlesperger's test in 1979 was the first on an engine scheduled for spaceflight. "I didn't even know what I had done until it was over, and then they told me" said Addlesperger, who worked for the contractor company Rocketdyne at that time. Rocketdyne builds the space shuttle main engine.

Addlesperger started work at NASA's Stennis Space Center in 1977 as a 23-year-old graduate of the United States Merchant Marine Academy. He began working on test stands and learned alongside the engineers who had tested the stages of the Saturn V rockets that sent Americans to the moon.

"The same people who started the shuttle program were also responsible for ending the Apollo program," Addlesperger said. "They would do whatever it took to get the job done, even sleeping here on cots. We were always working. In the 11 years I worked for Rocketdyne, I averaged a six-day work week."

Those long hours paid off when Space Shuttle Columbia launched from NASA's Kennedy Space Center's Launch Pad 39A on April 12, 1981. "That was extremely exciting," Addlesperger said. "It was like a piece of me went with it."

To date, the NASA/contractor team at Stennis has conducted more than 2,200 tests on the space shuttle main engines, and in the 113 missions since that first flight, the main engine has proven to be one of the most reliable engines ever built.

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ENGINEER

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Now, Addlesperger is ready for NASA and Stennis Space Center to move beyond the space shuttle that started his career. "Americans have an adventuresome spirit," he said. "It's time to get out of low earth orbit."

With its state-of-the-art facilities, Stennis Space Center will help America fulfill its Vision for Space Exploration: to return humans to the moon by before the end of the next decade, paving the way for eventual journeys to Mars and beyond.

NASA's new crew launch vehicle will combine elements from the shuttle and Apollo programs, and engineers at Stennis will use the knowledge gained in both programs to help fulfill the nation's bold new mission.

Like the Apollo engineers who mentored him at the beginning of his career and the space shuttle engineers he works with today, Addlesperger thrives on "taking a design and figuring out how to make it work." He is ready for a new challenge: "We first went to the moon in 1969, and here we are in 2006 – it's time to go back."

For more information about NASA's space shuttle program, visit http://www.nasa.gov/shuttle.

Reception recognizes NASA employees transferring to Shared Services Center

NASA Shared Services Director Richard Arbuthnot (left) and Stennis Space Center Deputy Director David Throckmorton (second from left) spoke at a reception April 6 to recognize NASA's Stennis Space Center employees who have transferred to the NASA Shared Services Center.

The NSSC opened for business March 1 to provide agency centralized administrative processing, human resources, procurement and financial services. Computer Sciences Corp. was awarded the services provider contract, and the center eventually will employ approximately 500 contractors and civil servants in the area.

Carmouche wins George M. Low fellowship

NASA's Gregory Carmouche, an aerospace technologist at Stennis Space Center, received the 2006 George M. Low Memorial Engineering Fellowship at the 49th Annual Goddard Memorial Dinner on March 17 in Washington.

The fellowship was established by the Board of Governors of the National Space Club to provide for the future education, beyond the bachelor level, of a career NASA employee engaged in one of the engineering disciplines.

Carmouche, of Mandeville, La., is the lead analysis engineer for the Integrated Powerhead Demonstrator at SSC. The IPD, a joint venture between NASA and the U.S. Air Force Research Laboratory, is the first reusable hydrogen-fueled advanced engine in development since the space shuttle main engine. Carmouche plans to put the fellowship toward earning his master's degree in mechanical engineering.

The fellowship is awarded annually in the memory of Dr. George M. Low, who served as NASA deputy administrator from 1969 until his retirement in 1976.

Gregory Carmouche

SSC overcame obstacles on the way to site's first engine test

Editor's Note: *Archaeologist Dr. Marco Giardino of NASA's New Business Development Office at SSC provides this LAGNIAPPE column dedicated to the history Stennis Space Center and the surrounding area.*

As Stennis Space Center approaches the 40th anniversary of the first static test firing of the S-II-T, it is a great time to read Mack Herring's "Way Station to Space, A History of the John C. Stennis Space Center." The first S-II-T test, originally scheduled for Jan. 2, 1966, was plagued with problems. Mississippi Test Operation, as Stennis was then called, weathered Hurricane Betsy Hurricane on Sept. 10, 1965, although it ripped a fixed crane from the A-2 stand. Bad weather hampered preparations for the test program as vehicles were constantly getting stuck in the mud while digging the large pits for the test stands. Crews labored through mosquito- and snake-infested terrain since the first tree was cut on May 17, 1963.

After NASA publicly announced Oct. 15, 1961, the selection of the Pearl River site for its Saturn testing program, the road to April 22 was anything but smooth. The day NASA announced its selection, land prices at the selected site were frozen. Local residents from Logtown, Gainesville, Napoleon, Santa Rosa, Bayou LaCroix and Westonia were worried and agitated. Senator John Stennis spoke to them at the Logtown School in November 1961 to begin alleviating concerns.

"There is always the thorn before the rose… you have to make some sacrifices but you will be taking part in greatness," he told them from the back of a makeshift trailer.

There had been plenty of thorns on the road to the first static test, so on April 22, when the test was postponed, the MTO workforce must have felt star-crossed. But the moon beckoned, and those early MTO pioneers worked through the night. At 7:33 a.m. April 23, 1966, when the S-II-T roared to life, Mississippi officially entered the Space Age.

Holocaust Remembrance Day is April 25

From the Office of Diversity and Equal Opportunity

Holocaust Remembrance Day is a day that has been set aside for remembering the victims of the Holocaust and for reminding Americans of what can happen to civilized people when bigotry, hatred and indifference reign.

The United States Holocaust Memorial Council, created by an act of Congress in 1980, was mandated to lead the nation in civic commemorations and to encourage appropriate remembrance observances throughout the country.

Observances and remembrance activities can occur during the week of remembrance that runs from the Sunday before through the Sunday after the actual date. While there are obvious religious aspects to such a day, it is not a religious observance as such.

This year, the Days of Remembrance are Sunday, April 23 through Sunday, April 30, with Holocaust Remembrance Day observed on April 25. The theme for this year's commemoration is "Legacies of Justice," in honor of the courage of, and the precedents set by, those who testified during the trials of Nazi war criminals. The theme also pays tribute to those who tirelessly work for the cause of justice, both then and now. Today, more than ever before, individual and communal willingness to seek justice after the Holocaust serves as a powerful example of how our nation can – and must – respond to unprecedented crimes. We must vigorously pursue justice for the victims of such acts of hatred and inhumanity, not only for their sake but for the sake of present and future generations.

Former President Jimmy Carter said it best: "We must learn not only about the vulnerability of life, but of the value of human life. We must remember the terrible price paid for bigotry and hatred and also the terrible price paid for indifference and for silence… To truly commemorate the victims of the Holocaust, we must harness the outrage of our memories to banish all human oppression from the world. We must recognize that when any fellow human being is stripped of humanity; when any person is turned into an object of repression; tortured or defiled or victimized by terrorism or prejudice or racism, then all human beings are victims, too. The world's failure to recognize the moral truth more than 40 years ago permitted the Holocaust to proceed. Our generation – the generation of survivors – will never permit the lesson to be forgotten."

Expedition 13 docks with International Space Station

The Soyuz spacecraft with the 13th International Space Station crew, Commander Pavel Vinogradov and NASA Science Officer Jeffrey Williams, docked with the orbiting laboratory March 31. With them was Marcos Pontes, the first Brazilian astronaut to go into space, flying under a contract with the Russian Federal Space Agency.

After opening hatches between the Soyuz and the station and the exchange of greetings, the first item on the new arrivals' agenda was a safety briefing by the E12 crew. In extensive handover briefings during their eight days together, they received training on systems and experiments on the station and on the Canadarm2 robotic arm. E13 crew members are scheduled to perform two spacewalks. E12 crewmembers safety returned to Kazahkstan on April 8.

Jim Biles achieves noted certification

Jim Biles, project manager and engineer with Jacobs Sverdrup NTOG, has achieved recognition as a certified maintenance and reliability professional by the Society for Maintenance and Reliability Professionals (SMRP). Biles' strengths in business and management, manufacturing process reliability, equipment reliability, people skills and work management were examined and determined to meet the criteria developed by the SMRP certifying organization.

His certification remains valid for a three-year period, and recertification requires significant involvement in SMRP activities or reexamination. Biles has been officially welcomed as a SMRP member by the society's chairman.

Hail & Farewell

NASA welcomes the following to SSC:

– Michael D. Harbart, attorney advisor, Office of the Chief Counsel

– Jeffrey L. Henderson, AST, propulsion system tech, Systems and Test Integration

– Thomas E. Carroll, AST, propulsion system tech, Systems and Test Integration

AROUND NASA

■ **Astronaut Eileen Collins receives Free Spirit of the Year Award:** NASA astronaut Eileen Collins is the recipient of the 2005 Al Neuharth Free Spirit of the Year Award, named for the founder of the Freedom Forum. The forum gives this award to a person in the news who has inspired the public by demonstrating the capacity to "dream, dare and do." Collins, the first female space shuttle commander and the leader of the Shuttle Discovery's mission last July, traveled to Washington to receive the award and to speak with high school students attending a Freedom Forum conference.

■ **NASA reinstates the Dawn mission:** NASA senior management announced a decision to reinstate the Dawn mission, a robotic exploration of two major asteroids. The mission, named because it was designed to study objects dating from the dawn of the solar system, would travel to Vesta and Ceres, two of the largest asteroids orbiting the sun between Mars and Jupiter. Dawn will use an electric ion propulsion system and orbit multiple objects. The reinstatement resulted from a review process that is part of new management procedures established by NASA Administrator Michael Griffin. The process is intended to help ensure open debate and thorough evaluation of major decisions regarding space exploration and agency operations.

■ **NASA Prepares for Space Exploration in Undersea Lab:** NASA sent three astronauts and a Cincinnati doctor under the ocean April 3 on an 18-day mission to test space medicine concepts and moon-walking techniques. During the mission, called the NASA Extreme Environment Mission Operations project, remote health-care procedures will be tested on a patient simulator. New long-distance medical care procedures, such as telemonitoring and telerobotic surgery, may help maintain the health of spacefarers. The techniques simulated may one day be used to respond to emergencies on the International Space Station, the moon or Mars.

NASA and Zero-G agree on regular shuttle runway use: NASA and Zero Gravity Corp. of Fort Lauderdale, Fla., announced April 4 that the company will begin to regularly use the space shuttle's runway and landing facility at NASA's Kennedy Space Center, Fla. This agreement is the result of a successful pilot program to expand runway access for non-NASA activities. Beginning with its first flight for the public on June 24, ZERO-G will conduct up to 280 weightless flights annually from the Kennedy facility using a modified Boeing 727-200 aircraft, called G-Force One. NASA has agreed to permit as many as seven ZERO-G flights a week under a Space Act Agreement that provides for reimbursement of the agency's runway and support costs.

Local teams excel at FIRST Robotics competitions

NASA and Stennis Space Center awarded $218,000 in grants to local Mississippi and Louisiana high schools for participation in FIRST Robotics competitions this year. All six Mississippi teams advanced to the competition playoffs. Louisiana fielded six rookie teams, two of which advanced to the playoffs. In addition to providing grant money, SSC employees served as mentors to local teams.

The competition is the culmination of a rigorous six-week period in which students and mentors build a robot to complete a challenge. This year's challenge required the robots to score points by shooting, pushing or rolling balls into three goal openings on a 26-by-54-foot playing field.

The combined team of Picayune and Pearl River Central high schools (Team 1421) and Provine High School (462) will represent Mississippi at the national competition in Atlanta on April 27-29.

For more information about FIRST Robotics, call Katie Wallace, NASA's Office of External Affairs and Education, at (228) 688-7744.

Mercy Cross High School team members (from left) Chad Krivanec, Damien McKeown and Gary Hill work on their team's robot between rounds at the FIRST Robotics Competition Peachtree Regional Event in Duluth, Ga., held March 16-18.

NASA mentor Scott Olive (left) and Picayune student Colin Johnson make final adjustments to the Team 1421 robot. The team won the Lone Star Regional, held March 31-April 2 in Houston.

Mississippi teams and awards:
–Team 364: Gulfport High School: DaimlerChrysler Team Spirit Award, Regional Quarterfinalist
– Team 456: Warren Central High School (Vicksburg) Regional Finalist
– Team 462: Provine High School (Jackson), Regional Semifinalist
– Team 590: Choctaw Central High School, Regional Finalist, Motorola Quality Award
– Team 1421: Pearl River County Robotics, Regional Winner, Safety Advisor Special Recognition
– Team 1927: Mercy Cross High School (Biloxi), Regional Quarterfinalist, Rookie Inspiration Award

Louisiana teams and awards:
– Team 1472: Scotlandville Magnet High School (Baton Rouge)
– Team 1818: Southwood High School (Shreveport)
– Team 1858: Salmen High School (Slidell), Regional Quarterfinalist
– Team 1859: Bogalusa High School
– Team 1912: Northshore High School, Gracious Professionalism Award
– Team 1913: Covington High School
– Team 1920: McMain Charter High School, Regional Quarterfinalist

SSC mentors:
– Gulfport High School: Bo Clarke and James Cluff, NASA Shared Services Center; Jim Barnett, NASA; Bonita Oliver, Computer Sciences Corp.
– Choctaw Central High School: Keith Fulton, Engineering Resource Center
– Picayune Memorial High School: Scott Olive, NASA; Dan Olive, Science Systems and Applications Inc.; Allen Forsman, Pratt & Whitney Rocketdyne
– Salmen High School: Michele Beisler, NASA
– North Shore High School: Wendy Holladay, NASA
– Mercy Cross High School: Karma Snyder, NASA; Judy Carter, Computer

LAGNIAPPE

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