

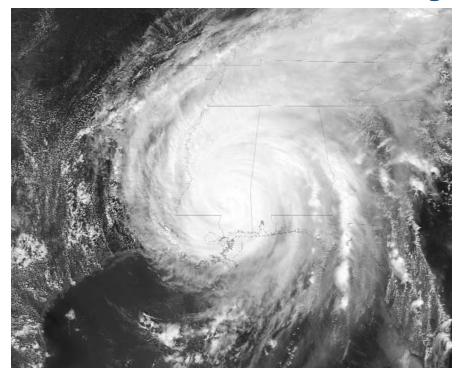
Volume 3 Issue 6

www.nasa.gov/centers/stennis

Be prepared – storm season underway

Hurricanes are nothing new to Stennis Space Center. Since its birth in the mid-1960s, the center has been in the direct path of nine major storms. A tracking map on Page 6 shows the paths of those, but it does not show the paths of the many more tropical storms and hurricanes that have passed within 100 miles of Stennis. With the 2008 hurricane season underway this month, there is the chance of other storms impacting the center, and Lagniappe is focusing on helping Stennis friends and family prepare. Check inside for a brief article on the history of major storms at Stennis and for a four-page, detachable guide that includes a tracking map and helpful storm-related information. Above all else - be prepared and be safe!

Check inside for pull-out storm guide



June 2008

STS-124 enjoys perfect May 31 launch

Space shuttle Discovery and its seven-member crew lifted off from NASA's Kennedy Space Center May 31 at 4:02 p.m., right on schedule to deliver and install a Japanese laboratory to the International Space Station. The mission, designated STS-124, is the second of three flights to launch components to complete the Japan Aerospace Exploration Agency's Kibo (which means "hope") laboratory. Shortly before launch, Commander Mark Kelly thanked the teams that helped make the launch possible. "We're going to deliver Kibo, or hope, to the space station," Kelly said. "And while we tend to live for today, the discoveries from Kibo will certainly offer hope for tomorrow."



LAGNIAPPE

From the desk of Robert Cabana Director, Stennis Space Center



Hurricane season is upon us once again, and I'm sure no one knows more about how important it is to be prepared than the folks who work at Stennis and live on

the Gulf Coast. When you're living on the Gulf Coast, it's not a matter of if we're going to have a hurricane; it's a matter of when.

Shortly after Hurricane Katrina devastated southern Mississippi and Louisiana, another Category 5 hurricane, Rita, was bearing down on the Houston area. Evacuation became a nightmare, and Rita ended up coming ashore east of Houston's populated area. Houston ended up with a lot of minor wind damage but little or no flooding, and most electrical power was restored within three to four days. A lot of folks learned the

wrong lesson from their Hurricane Rita experience. Because damage was minimal and the evacuation troublesome, there are many who will not evacuate next time. Unfortunately, the same was true for the Gulf Coast. Many folks survived Hurricane Camille and felt

"Hurricane season is upon us. ... Be ready, have a plan and don't wait until it's too late (to evacuate)."

is was OK to stay through Katrina. As a result, many lives were needlessly lost. Having stayed in my home through some smaller hurricanes in Houston and observed the damage from Katrina, I've seen firsthand the risk people take by staying behind. I've got a plan and will get my family to a safer area.

I'm sure I'm preaching to the choir in that regard, but we've also had a lot of new folks join the Stennis family in the last two years, and I think it's an important message to bring home. Be prepared. Have all your important papers and irreplaceable keepsakes in a place

> that's ready to go in the event of an evacuation. Don't wait until the last minute to evacuate or until the center closes down. If you're not part of the emergency response team, take some leave and get on the road. Keep your work site at Stennis in a condition that makes it easy to secure when word comes that we have to close the center, and don't wait until the last minute to be ready to leave work or your home.

> With all the improvements we've made at Stennis and at our homes following Hurricane Katrina, I know we'll be much better off. But it could

happen again. Be ready, have a plan and don't wait until it's too late. Be safe.

Stennis hosts launch guests

Stennis Space Center officials played host to various government leaders during the May 31 launch of space shuttle Discovery on its STS-124 mission. Guests included (I to r): Robert Fudickar, director of technology industry with Louisiana Economic Development; Louisiana Sen. Michael Michot, chair of the Senate Finance Committee and representing District 23; Fran Gladden, deputy secretary of Louisiana Economic Development; and Louisiana Sen. John Alario Jr., representing District 8, all shown here by the countdown clock at the Banana Creek VIP launch viewing site.



FULFILLING NASA'S EXPLORATION MISSION Workers remove J-2X power pack

Having completed a successful initial series of J-2X power pack tests, Stennis Space Center engineers are turning their attention to preparing the A-1 Test Stand for the next testing round.

On May 8, engineers successfully completed the first series of tests in the development of the J-2X engine that will power the upper stages of the Ares I and Ares V rockets, key components of NASA's Constellation Program.

The recently-completed series of tests on the A-1 Test Stand at Stennis was designed to gather data from the heritage J-2 engine components as they operated at the higher power levels that the new J-2X will require. The new J-2X engine is based on the heritage J-2 engine that helped power the Saturn I and Saturn V rockets four decades ago. The tests focused on the engine's power pack, comprised of heritage J-2 liquid oxygen and liquid hydrogen turbopumps and gas generator. On a complete engine, these components pump propellants into the engine's main combustion chamber to produce thrust. During the test series, more than 1,300 seconds of operation were accumulated on the hardware.

Information from those tests will be used by NASA and Pratt & Whitney Rocketdyne engineers to refine the design of the new J-2X engine components. The new J-2X power pack will be returned to Stennis for more tests, expected to begin in early 2010.

However, prior to that time, there is considerable work to be done to prepare the A-1 Test Stand. Those preparations began with removal of the J-2 power pack on May 29. After removal, the power pack was prepared for shipment to California for full disassembly and inspection by Pratt & Whitney Rocketdyne engineers.

Even as that work is progressing, engineers at Stennis will be working to install a new thrust measurement system and new run line and discharge piping on the A-1 Test Stand, said Gary Benton, the J-2X project manager at Stennis. Engineers also will be completing upgrades on the liquid hydrogen flare stacks, vent piping and transfer line piping. General maintenance work will be performed as well.

"The purpose of these upgrades is to minimize the likelihood of having facility problems that impact an engine test schedule," Benton explained. "Having a fully-functional facility maximizes the number of test opportunities available for the engine and also ensures we provide the best quality data for the engine."

The work on the test stand will continue throughout this year and much of 2009. Currently, plans are to re-activate the test stand systems and begin facili-



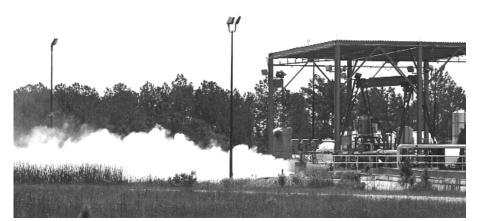
Stennis Space Center workers lower the J-2X powerpack down the side of the A-1 Test Stand.

ty checkouts in the latter half of next year. Final activation preparations are set for late 2009 and early 2010.

The schedule calls for the new J-2X power pack to be installed by March 2010. Engineers then will begin a critical 17-test series. "We want to ensure that we have the test stand ready when the engines are ready to be tested," Benton sasid. "The data we provide must be correct so that NASA can verify the engine will perform as required during flight."

Subscale diffuser tests continue

Stennis Space Center engineers conducted four subscale diffuser tests May 29, designed to gather information regarding a piece of hardware currently planned for use on the A-3 Test Stand being constructed onsite. Preliminary results of the tests were favorable, although data review is ongoing, said Barry Robinson, subscale diffuser project manager. The ongoing subscale program is designed to address design and development concerns before the full-size diffuser is built for the A-3 Test Stand.



2008 NASA Honors Awards

NASA Stennis Space Center Director Bob Cabana and NASA Associate Administrator William Gerstenmaier presented annual NASA Honor Awards during an onsite ceremony June 5.

Three Stennis employees received NASA's Exceptional Achievement Medal. The prestigious medal recognizes a significant, specific accomplishment or contribution that improves operations, efficiency, service, savings, science or technology, contributing to the NASA mission.

Reginald "Chip" Ellis, an aerospace technologist for Engineering Project Management in Stennis' Project Director-



ate, serves as the contracting officer's technical representative for the Hardware Assurance and Test (HAT) contract. He received the Exceptional Achievement Medal for his leadership in restructuring and supporting the renegotiation of the HAT contract with Pratt & Whitney Rocketdyne. The new contract is completely restructured to provide the government increased cost effectiveness, as well as flexible and efficient means to provide support services for the Space Shuttle Main Engine Program, Exploration and other engine development programs into the next decade.

Randolph R. Holland, an aerospace technologist for Engineering Project Management in Stennis' Project Director-



ate, also received an Exceptional Achievement Medal. Holland has served as the Katrina Recovery and Mitigation project manager for the past two years. Under his leadership, 33 recovery repair projects totaling \$83.82 million and 1,379 repair items have been completed, a majority of them ahead of schedule and under budget. Holland also developed and gained headquarters approval for 15 mitigation projects totaling \$98.73 million. The projects are intended to put Stennis in a better posture to deal with another major natural event, such as Hurricane Katrina.

Christine Q. Powell, lead for Systems & Test Integration in Stennis' Engineerng and Science Directorate,



received an Exceptional Achievement Medal for her leadership and work with the System Engineering Group. Powell represented Stennis in the creation, development and subsequent approval of NASA Procedural Requirements (NPR) 7123.1, NASA Systems Engineering Processes and Requirements. This NPR is the first comprehensive systems engineering requirements document ever developed for NASA and is a milestone effort in the history of the agency. Powell now is supporting the implementation of the new NPR at Stennis and is a Subject Matter Expert (SME) team lead for development of the NASA Systems Engineering Application Handbook.

One Stennis employee received NASA's Exceptional Service Medal. It recognizes significant, sustained performance characterized by unusual initiative or creative ability that results in engineering, space flight, administrative or support endeavors that contribute to NASA's mission.

Anita W. Douglas has served as a training officer in Stennis' Office of

Human Capital since 1995, where she has repeatedly demonstrated a strong commitment to the success of Stennis.



Douglas received the prestigious Exceptional Service Medal for various efforts, including her work during Hurricane Katrina to secure critical personnel records from the damaged wing of the Stennis administration building. Douglas also has collaborated with the NASA Shared Services Center on high impact training and development issues. Her leadership also shaped the development and implementation of the Training Certification Records System.

Two Stennis employees received NASA's Distinguished Public Service Medal. It is awarded to an individual who is not a government employee and is granted for exceptional contribution to NASA's mission.

Harold R. Ross received the Distinguished Public Service Medal for his work as lead of the gas and mate-



rial sciences laboratory for Applied Geo Technologies at Stennis. Ross' knowledge of materials and chemicals and the processes necessary to evaluate them have made him an invaluable asset to test and test support activities. He has proven himself as a leader in the area of process improvement efforts. When Stennis began propulsion testing with hydorgen peroxide in 1992, Ross provided the technical guidance and leadership to ensure safe, efficient propellant processing. His ongoing efforts have saved the Space Shuttle Program valuable schedule time and funding.

Public Service

LAGNIAPPE

Ted L. Robinson, a former employee of Mississippi Space Services, received a Distinguished



Medal posthumously. For more than four decades, Robinson played a prominent role in hundreds of special events and conferences hosted by Stennis. He was the cornerstone of safe, timely transportation services, and his professional, courteous manner was noted by senators, governors, NASA executives, astronauts, corporate heads, Stennis employees and the general public alike. Robinson began his career at Stennis in 1966. He maintained perfect work attendance for more than 20 years and retired in 2007 after 41 years of accident-free service.

Several other Stennis individuals and groups also were recognized during the June 5 NASA Honor Awards ceremony for their service and contributions These honors included:

NASA Space Flight Awareness Leadership Award Al Watkins

> Peer Recognition Award Diversity Enhancment JoAnn Larson

Quality and Safety Achievement Recognition Thelma W. Cox

Length of Service Awards

<u>30 years</u> David J. Carstens Susan D. Dupuis Patricia H. Fairley Donald R. Griffith.

25 Years Wendy T. Holladay Mark S. Hughes Dorsie Jones Glen M. Liebig Christel F. McDonald

David E. Walters.

Group Achievement Awards.

E-3 Team NASA Henry John Bakker Daniel A. Brady William J. Camus Craig A. Chandler Robert F. Gargiulo Jared B. Grover Wendy T. Holladay Melissa M. Huggins Scott L. Jensen Justin C. Junell Nathan E. Laborde Christopher A. Mulkey Raymond C. Nichols Wayne North Rosa E. Obregon Barry E. Robinson James E. Ryan Gary O. Taylor Steven A. Taylor Charles C. Thurmm

NASA Test Operations Group

Vickie B. Ard Gary L. Bennett Bryon Bordelon Terrance Burrell Dennis M. Butts Cheley F. Carpenter Sam J. Clay Kent Conn Mark A. Dyle Susan E. Fendley

Scotty R. Gipson Pat J. Guidry Brianne C. Guillot Danny Guin Pete J. Hobgood Butch Howard Robert K. Kelly Travis D. Kennedy Byron D. Ladner Dustan J. Ladner Roger D. Ladner Lester A. Langford Clifford Lee Todd Metzler Jim R. Mirandy Mark Mitchell Ken E. Montgomery Alvin Richards John F. Searles Pete Shaw Rosamond B Shaw Michael E. Slade Kanaly E. Slade Danny R. Tarter Glenn Varner Ben A. Weisel Tom H. Wolfe.

The A-2 Barge Hydrogen Vent Line Repair Team

NASA Son K. Le John T. Pazos David E. 'Roberts Stanley C. Warren

See AWARDS, Page 8



Group Achievement Award: E-3 Team

SSC – in the eye of the storm

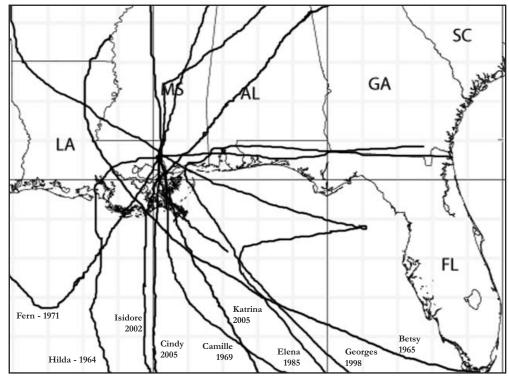
For Gulf Coast residents, every hurricane is a warning – a harsh reminder that while life at the water's edge may be enviable in many ways, it also carries a very high level of peril, especially during the June 1-to-November 30 storm season each year.

For Stennis Space Center, the warning came early in the center's history – and it came hard.

In September 1965, workers were scrambling to build the facilities and test stands that would contribute so significantly to the success of the country's race to the moon. The first static test firing was scheduled for early 1966 –

and even with crews working night and day, the schedule was tight and getting tighter. The last thing anyone involved with the all-out effort needed was a hurricane – but that is exactly what arrived on September 10. Its name was Betsy, a Category 3 storm that would become the first billion dollar natural disaster in the nation's history.

Even though Louisiana received the brunt of the damage, Mississippi was not spared. At Stennis, 100-mileper-hour winds scattered construction equipment and ripped a fixed crane from the A-2 Test Stand. It also wreaked havoc on the evertightening schedule and delivered the clear warning – expect more of the same. However, hurricanes Camille and Katrina were especially devastating to the Mississippi coastal area. In August 1969, Camille arrived as a Category 5 storm. Its wind were estimated at 190 mph, one of only four storms ever to reach that mark. Destruction along the Mississippi coast was almost complete as a result of a 24-foot storm surge. The storm left some areas flooded by 15 feet of water and destroyed an estimated 3,800 homes and businesses. Twenty-five years and 11 days after Camille, the eye of Hurricane Katrina passed directly over Stennis. A massive storm more than 450 miles wide, Katrina blasted the coast for almost 17 hours, spawning tornadoes and a 28-foot storm surge. Flooding reached inland as far as 12 miles.



A tracking map shows the nine major storms that have directly impacted Stennis Space Center. Many other tropical storms and hurricanes have passed near the center as well, delivering high winds, rain and severe weather.

More would come, enough that when one reviews the 14 primary hazards and threats in the Stennis Space Center emergency management plan, hurricanes are one of only three identified as "high" and "worst" threats. The others are HAZMAT incidents – an understandable concern with the various chemicals used at Stennis – and severe thunderstorms with lightning.

But it is hard to exaggerate the dangers of hurricanes at Stennis. The facility has been hit by three of the worst storms in U.S. history – Betsy in 1965, Camille in 1969 and Katrina in 2005. More than half a dozen lesser storms have hit the area immediately surrounding Stennis as well. And for those who had held Camille as the hurricane standard, the history books had to be rewritten. Katrina quickly became the storm by which all others will be judged.

In both 1969 and 2005, Stennis Space Center escaped major damage. Katrina damaged 152 buildings at the facility and forced the site to close for about a month, but the rocket test stands emerged unscathed with no major loss of function.

However, the Stennis workforce was hit hard. A full quarter of workers lost their homes to Katrina or

Hurricane Guide

The 2008 hurricane season has arrived – and NASA's John C. Stennis Space Center has prepared this four-page guide as a resource for Gulf Coast residents.
The guide offers invaluable information – a hurricane tracking map, storm-rating information and contact numbers for emergency situations. It also serves as an important reminder – for every Gulf Coast resident to be prepared and alert for whatever the 2008 storm season may deliver.

Stennis Hurricane Shelter Guidelines

As in previous years, Stennis is partnering with the American Red Cross during the upcoming storm season to maximize effectiveness of the facility and to keep it in line with Red Cross guidelines. Stennis is not equipped to be a primary shelter and only becomes a shelter 12 hours before the impact of any storm. The Red Cross will manage Stennis as a shelter of last resort with meager accommodations. For those who must evacuate to Stennis, the following guidelines will be in place during the 2008 season:

• Employee families must be accompanied by a badged employee.

• Bring a minimum of three days of food, water, medicine and other essential personal items. The Stennis Space Center cafeteria and medical clinic will not be operational during the storm.

• Bring personal bedding, not to exceed single-size bedding; no large, inflatable bedding is allowed.

• Evacuees must register with American Red Cross officials stationed at Stennis shelter buildings. Sign in at the reception desk so accurate records can be kept. This will also allow evacuees to be contacted if there is a message or inquiry about their safety. When leaving, please sign out as well.

• Mark/tag luggage and personal belongings and food containers. Stennis Space Center cannot assume responsibility for personal belongings.

• Parents are responsible for the whereabouts and activities of their children.

• For safety reasons, possession or use of alcohol or other potentially harmful substances in any part of the shelter is strictly prohibited. No firearms or flammable liquids are allowed. Prescribed medication should be noted on the registration card. No smoking is allowed inside the shelter.

• No pets or animals are allowed.

• If evacuees have a medical condition that may present a special problem, please notify the shelter nurse or other staff member. Such conditions should be noted on the registration card.

• Do not leave the shelter until notified that it is safe by a shelter official.

• Immediately after the hurricane, the American Red Cross will make long-term shelters available for individuals who cannot return to their homes. Stennis will not operate as a long-term shelter.

Interstates 59 and 55 Contraflow Plans

In an effort to assist Louisiana in the event of a mandatory hurricane evacuation, the Mississippi Department of Transportation will implement contraflow (lane reversal) for both I-59 and I-55 when requested by Louisiana and approved by the governor of Mississippi. (Contraflow operations cannot be considered on Highway 49.)

• The decision to contraflow is not automatic and will only be used when absolutely necessary. Citizens should not delay evacuation plans in anticipation of contraflow.

• I-59 contraflow operations would begin in Louisiana, extend into Mississippi and end just south of Poplarville.

• I-55 contraflow operations would begin in Louisiana,

extend into Mississippi and end just south of Brookhaven.

• All exits within the contraflowed sections of the interstate highways will remain open as traffic conditions allow. Officers will be present to assist with traffic control.

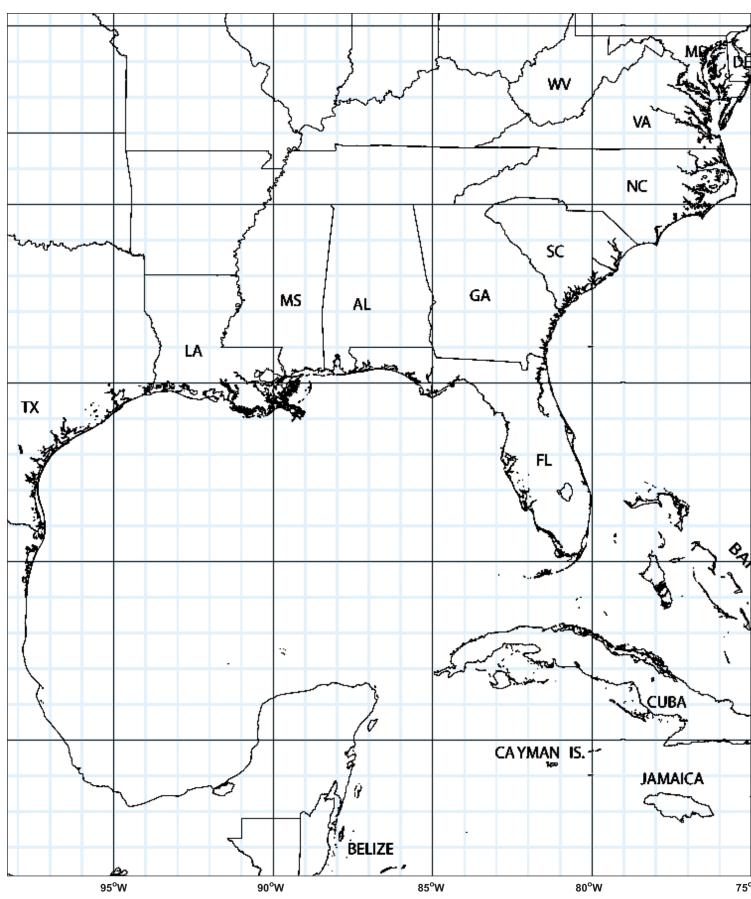
• The shoulders of both Interstates 59 and 55 should be kept clear for emergency vehicles. Motorists needing to stop should use the next available exit.

• Hancock County residents traveling West into Louisiana on I-10 will be routed North onto I-59 at the I-10/I-12 split.

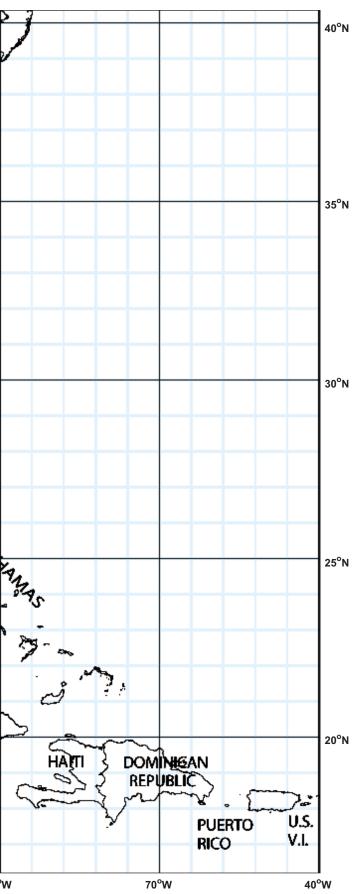
• Tune to Mississippi Public Broadcasting radio stations for emergency information and updated road conditions.

For more information: http://www.gomdot.com/Home/

2008 Hurricane



e Tracking Map



The Saffir-Simpson Hurricane Scale

Category One: Winds 74-95 mph. Storm surge generally 4-5 feet above normal. No real damage to building structures. Damage primarily to unanchored mobile homes, shrubbery and trees. Some damage to poorly-constructed signs. Some coastal road flooding and minor pier damage.

Category Two: Winds 96-110 mph. Storm surge generally 6-8 feet above normal. Some roofing material, door and window damage of buildings. Considerable damage to shrubbery and trees with some trees blown down. Considerable damage to mobile homes, poorly-constructed signs and piers. Coastal and low-lying escape routes flood 2-4 hours before arrival of the hurricane center. Small craft in unprotected anchorages break moorings.

Category Three: Winds 111-130 mph. Storm surge generally 9-12 feet above normal. Some structural damage to small residences and utility buildings with a minor amount of curtainwall failures. Damage to shrubbery and trees with foliage blown off trees and large trees blown down. Mobile homes and poorly-constructed signs are destroyed. Low-lying escape routes are cut by rising water 3-5 hours before arrival of the center of the hurricane. Flooding near the coast destroys smaller structures with larger structures damaged by battering from floating debris. Terrain continuously lower than 5 feet above mean sea level may be flooded inland eight miles or more.

Category Four: Winds 131-155 mph. Storm surge generally 13-18 feet above normal. More extensive curtainwall failures with some complete roof structure failures on small residences. Shrubs, trees and all signs are blown down. Complete destruction of mobile homes. Extensive damage to doors and windows. Low-lying escape routes may be cut by rising water 3-5 hours before arrival of the center of the hurricane. Major damage to lower floors of structures near the shore. Terrain lower than 10 feet above sea level may be flooded, requiring massive evacuation as far inland as six miles.

Category Five: Winds greater than 155 mph. Storm surge generally greater than 18 feet above normal. Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown over or away. All shrubs, trees, and signs blown down. Complete destruction of mobile homes. Severe and extensive window and door damage. Low-lying escape routes are cut by rising water 3-5 hours before arrival of the center of the hurricane. Major damage to lower floors of all structures located less than 15 feet above sea level and within 500 yards of the shoreline. Massive evacuation of residential areas on low ground within 5-10 miles of the shoreline may be required. Only three Category Five storms have made landfall in the U.S. since records began – the Labor Day hurricane of 1935, Hurricane Camille in 1969 and Hurricane Andrew in 1992.

National Resource Information

American Red Cross	-GET-INFO (1-866-438-4636)
	www.redcross.org
Federal Emergency Management Agency (FEMA)	
	www.fema.gov
National Oceanic and Atmospheric Administration (NOAA)	www.noaa.gov
NOAA National Hurricane Center	www.nhc.noaa.gov
NOAA National Weather Service	www.nws.noaa.gov
National Weather Service Forecast Office	
	www.srh.noaa.gov.lix
NOAAWatch - NOAA's All-Hazard Monitor	www.noaawatch.gov
US Department of Homeland Security	www.dhs.gov

Mississippi Resource Information

Mississippi Emergency Management Agency (www.msema.org)
(24 hrs) 1-800-222-MEMA(6362)
Mississippi Department of Transportation (www.GoMDOT.com)
(activated only during a disaster) 1-866-521-MDOT (6368)
Mississippi Highway. Safety Patrol (www.dps.state.ms.us)
Mississippi Board of Animal Health (www.mbah.state.ms.us)
Governor's Office (www.governor.state.ms.us)
Mississippi Insurance Department (www.mid.state.ms.us)
US Coast Guard (Eightth District)
Mississippi Power (www.mississippipower.com)
Coast Electric Power (www.coastepa.com)

Louisiana Resource Information

Office of Homeland Security and Preparedness (www.ohsep.louisiana.gov)	
Louisiana Department of Transportation (www.dotd.state.la.us)	
Louisiana State University Hurricane Center (hurricane.lsu.edu)	
Louisiana State Police (www.lsp.org)	225-925-6325 (*LSP from any cell phone)
Louisiana State Police Road Closure Hotline	
Louisiana Governor's Office (www.gov.state.la.us)	
Louisiana Department of Insurance (www.ldi.la.gov)	
US Coast Guard (Eightth District)	
Cleco Corporation (www.cleco.com)	
Entergy (www.entergy-louisiana.com)	
Pov	wer outages: 1-800-9OUTAGE (968-8243)
Washington St. Tammany Electric Cooperative (www.wste.coop)	
	Power outages: 866-672-97

June 2008

Hurricanes Continued from Page 6

returned to find them uninhabitable. Repair and recovery work continues today, both onsite and offsite. Part of that work includes preparing for the next storm. As the Stennis emergency management plan states, "The return of major hurricanes is expected as expert predictions indicate that the incidence of hurricane events will increase over the next decade."

Stennis officials are taking every precaution to be prepared when the next "hurricane event" does arrive. Emergency preparation and response is a major – and ongoing – effort. "It's a high priority," emphasized Ron Magee, whose duties as assistant in the Center Operations Directorate include working as emergency director for the rocket-testing facility. "And it is not just at hurricane season. We have exercises and training throughout the year."

Part of the training and preparation comes in coordinating with area emergency personnel. As Magee noted, all entities involved are following the National Incident Management System. "And so, we all receive the same training and we all use the same terminology, which helps keep everything coordinated and enables us to talk with one another well," he said.

This year, as in the past, preparation also means conducting an inventory of supplies to make sure everything needed is on hand, Magee added. And it means reminding all Stennis work teams involved to be prepared as well. At Stennis, each area has its own particular steps of preparation needed to protect important equipment and functions. In addition, in the event of a hurricane, about a 100member Emergency Response Team remains on site to make sure critical systems are maintained. Following a



Although Stennis escaped serious damage from Hurricane Camille, the storm did not leave the facility untouched, as this photo shows.

storm, the team also does damage assessments and begins repairs to enable Stennis to reopen as a facility.

Magee and other Stennis officials also devote a lot of time to encouraging facility employees to prepare for what may come. Magee cited the oft-repeated mantra – "Prepare your personal plans now. Do what you need to keep yourself and your family safe."

Officials give employees plenty of warning. With hurricanes – and severe thunderstorms, lightning and tornados as well – levels of warnings are in place. At some point, site-wide radio announcements are made. For instance, a lightning advisory is issued when lightning is 5-10 miles from Stennis. The facility also stays in a

Condition 5 general state of readiness throughout hurricane season. Condition 4 is declared when a storm enters the Gulf of Mexico or poses a potential threat to Stennis within the next 72 hours.

Whether a tornado or lightning advisory or a hurricane condition warning, the signal is for Stennis employees to prepare. Although Stennis has been spared major storm and event damage, center officials know – and history attests – that may not always be the case. And so, they prepare and train and keep watch. Valuable infrastructure and far too many invaluable members of the Stennis family are at stake to do otherwise.



The remains of a seafood cannery in nearby Pass Christian, Miss., shows the force Hurricane Betsy carried into the area in September 1965, just as Stennis facilities were being constructed.

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AWARDS Continued from Page 5

NASA Test Operations Group

Adam J. Fulks Patrick J. Guidry Michael K. Jee Micah L. Jones Dustan J. Ladner Barney Nokes Jerry L. Quinn Fred Vaughn

Jacobs/FOSC

James E. Alexander Glen D. Beech Tommy E. Breaux Don N. Caudill Willie Ellis Jimmy Everett Richard E. Ferrill Ken B. Hawkins Robert V. Hayward David W. Hodge Michael W. Hodge Bill M. Ivey Nathaniel I. Jewell Anthony Jones Marsella E. Jones Kevin Jurich Jerry Knight Richard Ladner Danny Lambert Bill Lizana Ronnie Lyons Roy Malley Michael G. Marodis Adam W. Massarini Robbie D. Miller Mark A. Mills

LAGNIAPPE

Gary W. Mosher Douglas Necaise James Necaise Donald Parker Cleveland J. Pichon, Jr. Tal S. Raboteau Benjamin Robertson Michael Smith Wallace L. Smith Michael P. Tberiot Gregory G. Walls, Sr. Roger L. Walters, Sr.

<u>The A-3 Test Stand System</u> <u>Requirements Development Team</u>

NASA Ken R. Bauer (MSFC) Thomas E. Carroll Robert F. Gargiulo Phillip W. Hebert Jeffery L. Henderson Bryon T. Maynard Bradley P. Messer Karl W. Nelson (MSFC) Thomas G. Nicolaides Doyle K. Pierce Christine Q. Powell Nickey G. Raines Steven A. Taylor

Pratt & Whitney Rocketdyne Kevin Farrah

NASA Test Operations Group Paula L. Hensarling

Samuel E. Wright Rede, Inc. Anissa C. Macauley



Group Achievement Award: Design Data Management System Windchill Programming Team

Design Data Management System Windchill Programming Team

> NASA Elizabeth A. Messer

Computer Sciences Corporation Colby V. Albasini Thang V. Le Lee J. McKinney William D. O'Rourke Timothy S. Stiglets Ted Strain

Special Recognition Award

NESC Engine Cutoff Sensor Data Processing Team

NASA Phillip W. Hebert, Stennis Joseph W. Lacher, Stennis Freddie Douglas, NESC Dr. Christopher Iannello, KSC Mitchell Davis, GSFC Bob Kichak, GSFC

NASA Test Operations Group Fred Abbell Robert S. Drackett George Drouant



Group Achievement Award A-3 Test Stand System Requirements Development Team



Group Achievement Award A-2 Barge Hydrogen Vent Line Repair Team

June 2008

LAGNIAPPE

NASA's Applied Science Program at Stennis Space Center is developing a three-to-five-year plan to provide critical support to efforts to protect and enhance the Gulf of Mexico coastal area.

Thirteen federal agencies – including NASA – have joined to support multi-state Gulf of Mexico Alliance efforts. The applied science team at Stennis has been charged with identifying areas that can benefit from using NASA Earth science and with developing a strategic plan for deploying those resources.

To that end, Stennis team members first identified various areas that could be supported by NASA Earth science, then began gathering input to narrow the focus on which areas could be supported most effectively. A May 12 session in Biloxi provided critical input for that work. The session attracted more than 50 participants from several states and provided them with an opportunity to comment on proposed efforts. Stennis team members now will fine tune their plan so NASA Earth science resources can be put to the

science resources can be put to the best possible use. The subsequent Gulf of Mexico Coastal Strategic



(L to r) NASA Applied Research and Technology Project Office Chief Mark Glorioso from Stennis is joined by Jay Ritchie of the Northern Gulf Institute; Byron Griffith, director of the EPA Gulf of Mexico Program at Stennis; and Bill Dewar of Florida State University during a May 12 conference in Biloxi.

Plan is scheduled to be presented during an August 21 conference in Corpus Christi, Texas.

NASA honors Stennis workers

Fourteen employees of NASA's John C. Stennis Space Center recently were honored by NASA's Space Flight Awareness Program for their dedication to quality work and flight safety.

The honorees traveled to Kennedy Space Center, Florida, for the launch of STS-124. They were honored at an awards ceremony while there.

NASA's Space Flight Awareness Program recognizes outstanding job performances and contributions by civil service and contract workers throughout the year and focuses on excellence in quality and safety in support of human space flight. The award is one of the highest honors presented by NASA to contract employees.



Several John C. Stennis Space Center employees recently were honored by NASA's Space Flight Awareness Program during an Orlando ceremony. Awards were presented by Stennis Space Center Director Bob Cabana and astronaut Charlie Hobaugh. Shown above are (I to r): James Landrum/Jacobs Technology (NTOG), Rocky Pullman/Jacobs Technology (FOSC), Marleen Phillips/NASA, Keith Stockstill/NASA, Frank Pellegrino/Pratt & Whitney Rocketdyne (PWR), Jason Edge/NASA, William "Hamp" Stewart Jr./PWR, Anthony Sones/PWR, Edith Thomas/Jacobs (FOSC), Vincent Moran/PWR, Jack Hode/Applied Geo Technologies, Eugene Necaise/Jacobs (NTOG), Dawn Davis/NASA, Hobaugh and Cabana. Timothy Siglets/Computer Sciences Corporation is not pictured.

Former employees enjoy Old Timers' Day

Stennis Space Center Director Bob Cabana (right) talks with retired Stennis employees Tom Stockstill (left) of Mississippi Space Services and Bob Delcuze of NASA during annual Old Timers' Day activities at the Cypress House on May 16. Retirees are invited back to Stennis for Old Timers' Day activities each year on or near the anniversary of the first tree-cutting for the construction of the rocket-testing facility in 1963. The annual event is sponsored by the Old Timers' Club of Stennis' Recreational Association and features food, fellowship and door prizes for participants.



A look back – Stennis' importance to NASA



Editor's Note: John C. Stennis Space Center has played a pivotal role in the success of the nation's space program. Beginning this month, Lagniappe will look back on important moments in the center's history.

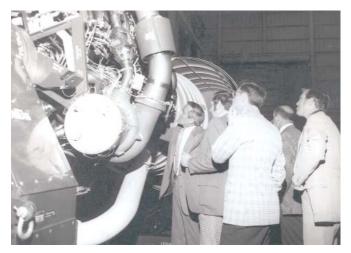
Long before the first space shuttle

main engine test, NASA realized the importance of its south Mississippi facility. Forty-four years ago, on June 14, 1974, then-NASA Administrator Dr. James C. Fletcher announced that the Mississippi Test Facility had been upgraded to the National Space Technology Laboratories (NSTL), a permanent NASA field installation reporting directly to NASA Headquarters in Washington, D.C.

The facility's new status reflected the importance of growth in current and future NASA programs and activities of other agencies that took advantage of the resources available at NSTL.

"NSTL has developed into an installation where highly qualified capabilities exist for conducting remote sensing, environmental and related research and technical activities," Fletcher said during his announcement. "These capabilities have been enhanced in recent years by the location at NSTL of research and technical activities of several other government agencies. The success of this experiment in the collocation of these mutually supporting activities has led me to decide that NSTL will have a permanent role in NASA's space applications and technology programs."

Created by NASA in 1961 as part of Marshall Space Flight



Visitors from Huntsville, Ala., view the first space shuttle main engine in Building 3202 at the National Space Technology Laboratories (now Stennis Space Center). The first static test-firing of the space shuttle main engine test on the A-1 Test Stand was conducted on May 19, 1975.



Eleven months after the Mississippi Test Operations became the National Space Technology Laboratories, the first static test-firing of the space shuttle main engine test on the A-1 Test Stand was conducted on May 19, 1975. In the next month, the first SSME achieved ignition on June 12 and the first SSME went full duration without an early shutdown on June 24.

Center in Huntsville, Ala., the \$350-million facility was first established and used for static testing of the large Saturn V rocket engines used in the Apollo program.

As the Apollo program drew to a close, NASA and several other agencies moved a variety of research and technical activities – primarily related to earth resources and the environment – into the modern facilities available at the 141,000-acre site. One thousand contractors and civil servants were employed at the facility.

NASA's activities at NSTL included developmental testing of the main engine for the space shuttle and the Earth Resources Laboratory, which had been established four years earlier. Other agencies located at NSTL during this time included the departments of Commerce, Interior, Transportation and the Army, along with the U.S. Environmental Protection Agency, the State of Mississippi and various other state and university elements from Mississippi and Louisiana.

"By renaming the facility and elevating its status, it is my intention to recognize the importance of NSTL to current and future programs of NASA and to encourage and facilitate the location at NSTL by other government agencies of additional activities which can both benefit from and contribute to the capabilities which exist there," Fletcher said.

Nearly one year to the day after Fletcher's announcement, the first space shuttle main engine achieved ignition on June 12, 1975, at the National Space Technologies Laboratories, marking the beginning of more than 30 years of successful SSME testing.

Differences are important to understand

From the

Office of

Diversity

and Equal

Opportunity

Malcolm S. Forbes said, "Diversity is the art of thinking independently together." Today, we have generations of people working and interacting together, approaching and solving problems with divergent perspectives and

experience. Dealing with diversity in the workplace means understanding and relating effectively with people who are different than us. A "slice" of diversity that typically is not included in discussions is Generational Diversity. This is the first time in American history that we have had four different generations working side-byside - Veterans (born 1922-1945), Baby

Boomers (1946-64), Generation X (1965-1980) and Generation Y (1981-2000).

At work, generational differences can affect everything, including recruiting, team-building, motivation, managing and productivity. Research indicates that people communicate based on their generational backgrounds. Each has distinct attitudes, habits, values, behaviors, etc. Learning how to communicate with different generations can eliminate many challenges in the workplace.

For instance, while Veterans value conformity, respect for authority and discipline; Baby Boomers value optimism and involvement; Gen Xers value skepticism, fun and informality; and Gen Yers value realism, confidence, extreme fun and social events.

Boomers see it as an exciting adventure, Gen Xers see it as a contract and a difficult challenge and Gen Yers see it as fulfillment and a means to an end.

> In communication, Veterans prefer a formal memo, Baby Boomers want in person communication, Gen Xers want direct and immediate communication and Gen Yers want an e-mail, voice mail or text message.

> And for motivating Veterans, the important message is "your experience is respected;" for Baby Boomers, it is "you are valued and

needed:" for Gen Xers, it is "do it your way; forget the rules;" and for Gen Yers, it is "you will work with other bright, creative people."

All of us bring a unique perspective and different ways of relating. We cannot expect to work with all employees in the same way. Each generation adds value, but each has differences that are important to understand.

Hail & Farewell

NASA welcomes the following:

Samantha Kinard Stephen Rawls

Student/Public Affairs Office of External Affairs & Education AST, Exeprimental Facilities Tech Engineering & Science Directorate

Veterans view work as an obligation, while Baby



What does NASA plans to return to the moon mean to you?

Editor's Note: @ Stennis is a new Lagniappe feature highlighting the views and opinions of Stennis Space Center employees.



"To me, it's an opportunity to contribute to success at Stennis through engineering and project support." Jeff Henderson, NASA

Ted Mason, NASA

"It brings back the glory days of NASA when exploration was key, and I hope it spurs future missions that invlove the rest of the world."





"I am totally jazzed! When humans have no frontier, we stagnate. Space is the next frontier, and we should be in it."

Jennifer Melton, CSC

"It's an exciting and extremely challenging ambition. It demonstrates the vision this country was founded on - that of exploration."



Gary Taylor, NASA

Faculty, students arrive for summer work

NASA summer faculty members and student interns recently arrived at Stennis Space Center to begin their summer weeks of work and research.

The students and visiting faculty members spent the first day attending orientation and briefing sessions. They also viewed a Stennis Space Center video and participated in a bus windshield tour of the rocket testing facility.

The students and faculty members will spend the next eight to 10 weeks working with NASA scientists and engineers at Stennis. They will give final presentations of their work and research at the end of their programs.

Faculty members and students in the top right photo are: (Seated, l to r) Tiffany Spears, Mioshiua Knox, Samantha Owen, Claudia Gallegos, Cassie Li and Angela Dunn; (second row, l to r) **INSPIRE** chaperone Bessie Jeffries, Brian Kaplinger, John Carpenter, Timothy McCleave, Isaac Heim, Leonard Lasecki and faculty member Dr. Jonathan Lambright; (third row, l to r) program Manager Joy Smith, Casey Burnhardt, John Dykes, Carl Scogland and University Affairs Officer Dr. Nathan Sovik.



Tunica Museum features NASA

A visitor to the Tunica (Miss.) Museum examines the NASA exhibit recently provided to the facility by Stennis Space Center. The museum partnered with Stennis and Marshall Space Flight Center in Huntsville, Ala., to commemorate the 50th anniversary of NASA this year. The special NASA exihibit will be featured at Tunica Museum throughout the months of June and July. Stennis provided several items for the exhibit, included a timeline that highlights the accomplishments and achievements throughout the 50 years of NASA history. NASA was established by congressional action in the spring of 1958 and officially opened its doors in October of that same year.



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