



## Stennis recognizes employees with NASA 2002 Honor Awards

Stennis Space Center presented its prestigious NASA Honor Awards on Sept. 12 at ceremonies in the StenniSphere auditorium. NASA Honor Awards are the highest recognition the Agency bestows on employees, contractors and members of the community.

NASA's Honor Awards are presented to carefully selected individuals and groups, both government and non-government, who make outstanding contributions to the NASA mission.

"For more than 41 years, NASA has been advancing U.S. leadership in aeronautics and space activities," said Stennis Space Center Director Bill Parsons.

"Through individual and team efforts, Stennis Space Center continues to play a prominent role in accomplishing NASA's bold mission objectives. The contributions, dedication and commitment of the 2002 Honor Award recipients enhance Stennis' image as a vital link in America's space program."

NASA's General Counsel Paul Pastorek

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## Sept. 11 Commemoration



NASA and the Naval Oceanographic Office at Stennis Space Center held a memorial service for all Stennis employees Sept. 11 in remembrance of the victims of the Sept. 11, 2001, tragedy. The service, held in front of Bldg. 1100, included speeches by Rear Adm. Thomas Donaldson V and Stennis Space Center Director Bill Parsons. Also highlighted in the program were patriotic songs, a devotional led by the NASA Prayer Group, an inspirational reading and a viewing of two trees planted in honor of two of the World Trade Center victims.



NASA's newly appointed Associate Administrator for Space Flight William F. Readdy, center, held his first meeting with members of the Space Flight Leadership Council on Sept. 6 at Stennis Space Center. Members of the council include, from left, Stennis Space Center Director Bill Parsons; Marshall Space Flight Center Director Art Stephenson; Readdy; Kennedy Space Center Director Roy D. Bridges Jr.; and Johnson Space Center Director Jefferson Howell.

## From the desk of

**Bill Parsons**  
Stennis Space Center Director



**I**t is truly an honor and a pleasure for me to have the opportunity to lead and represent the outstanding people of Stennis Space Center.

I prefer talking with each of you individually and will strive to that end. However, we all know that rigorous schedules involved with fulfilling NASA's mission, as well as our center goals, keep us all quite busy. So, I will try to find other forums through which we can communicate as much as possible. I appreciate having the Lagniappe as a major source of communication with employees, and I plan to use it often. To be successful, we must stay connected and focused on our priorities. My goal is to promptly address your issues and concerns so that our efforts as a team succeed.

Some of you are probably curious about what I expect from you. Simply stated, what I look for is that you give your very best every day; that your work and your professional relationships with one another reflect the highest levels of integrity; that you have

respect for others — treat them as you would like to be treated; and that you feel and show a sense of pride in the work and the mission that has been entrusted to us. I pledge to do the same in my service to NASA, Stennis Space Center and to all of you.

During this transition of leadership at our center, I know many of you are concerned about the future. First, let me say there will be changes, but change can be positive. Let me assure you, I will work closely with the Senior Management Team, and these changes will be done in a collaborative manner with the proper respect and professionalism the effort deserves. Recently, I conducted an all-hands meeting to discuss our vision, expectations and organizational changes. Others will follow, and I also plan to take time to listen and answer questions you may have.

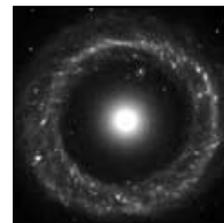
The future is ours to shape. Thank you in advance for your continued hard work and dedication. I sincerely look forward to working with each member of our outstanding Stennis team.

## NEWSCLIPS

**Comets break up far and near:** Researchers with NASA's Jet Propulsion Laboratory, Pasadena, Calif., believe that comets may break up several times before being consumed by the Sun, often taking several orbits to come fully apart. The team analyzed photographs of the region around the Sun and found that comets passed by in clusters or in parallel paths. The pieces are so small that they would have disintegrated if they had passed the Sun on an earlier trip. This means that the parent comet must have broken up after it passed the Sun. The study challenges an earlier theory that the only place these comets break up is very close to the Sun, as the strong pull of its gravity cracks their loosely piled chunks of dust and ice.

**Experts estimate asteroid risk:** At a NASA-sponsored conference, experts have estimated that the Earth is struck once every 1,000 years by an asteroid capable of releasing 10 megatons of energy — not a planet killer, but definitely enough to cause a terrible loss of life. NASA and the astronomical community have been systematically searching for all near-Earth objects larger than 1 kilometer across that are capable of crossing the Earth's orbit. So far they've found 600.

**Hubble captures image of an unusual "wheel" galaxy:** The latest photo taken by the Hubble Space Telescope is of a rare type of galaxy, known as Hoag's Object, in which a ring of stars orbits a nucleus. The outer ring is composed of



of hot, young stars while the heart is made of mostly older stars. It's possible that the gap in between contains star clusters too faint to see. The entire galaxy is about 120,000 light-years wide, which is slightly larger than our Milky Way Galaxy. The Hubble Telescope is managed by the Space Telescope Science Institute under contract with the Goddard Space Flight Center, Greenbelt, Md.



Stennis Space Center took part in a nationwide tribute to the victims of Sept. 11 by planting two blue spruce seedlings Sept. 10 in front of Bldg. 1100. Taking part in the tribute were, from left, Patrolman Moses Hill of Omni-Cube; NASA's Support Services Specialist Clyde Dease; Stennis Space Center Director Bill Parsons; and Fire Chief Ted Clark and Fireman Norman Pavolini of Mississippi Space Services.



# International Space Station Report

## Whitson named NASA's first ISS science officer

Research aboard the International Space Station (ISS) is getting a boost. NASA Administrator Sean O'Keefe recently named Dr. Peggy Whitson the first NASA ISS science officer.

Whitson, who has a doctorate in biochemistry from Rice University in Houston, became the station's first resident scientist when she arrived at the ISS on June 7 as an Expedition 5 flight engineer.

"Dr. Whitson has dedicated her career to the pursuit of scientific knowledge, and she recognizes that some of the problems we face today here on Earth have answers that will be discovered in future activities on the International Space Station," said O'Keefe.

The NASA ISS science officer will work with the U.S. research community to understand and meet the requirements and objectives of each ISS experiment. This will help achieve maximum scientific research returns.



NASA's Rick Gilbrech, far left, newly named deputy director of the Propulsion Test Directorate at Stennis Space Center, met with the Agency's Space Shuttle Program managers at Stennis on Aug. 21. With Gilbrech, from left, are Pat Mooney, project manager of the Space Shuttle Main Engine testing project at Stennis; Ron Dittmore, manager of the Space Shuttle Program at Johnson Space Center, Houston; Jim Halsell, manager of launch integration at Kennedy Space Center; George Hobson, manager of the Space Shuttle Main Engine project at Marshall Space Flight Center, Huntsville, Ala.; and Jim Costello, manager of the Space Shuttle Business Office at Johnson.

## STS-112 launch preparations continue

Final launch preparations are under way at Kennedy Space Center, Fla., for STS-112.

Atlantis is slated to lift off no earlier than Oct. 2. Astronaut Jeff Ashby is commander of the 11-day planned mission, and Astronaut Pam Melroy will serve as pilot. Astronauts Sandy Magnus, David Wolf and Piers Sellers and Cosmonaut Fyodor Yurchikhin are mission specialists.

The mission's delivery of the 45-foot long, 15-ton S-One (S1) Truss to the International Space Station (ISS) will set the stage for expansion. Wolf and Sellers



will conduct three spacewalks to install, activate and outfit the S1, which will be attached to the starboard end of the S-Zero (S0) Truss.

The S1 Truss is the second of 11 such structures that will ultimately expand the ISS to the length of a football field and increase its power through the addition of new photovoltaic modules and solar arrays. A third segment, the P-One (P1) Truss, will be installed during STS-113, scheduled for launch no earlier than Nov. 10.

STS-112 will be the 15th shuttle mission to visit the International Space Station and the 26th flight of Space Shuttle Atlantis.

**Iron workers installed an 80,000-pound, 50-foot diffuser on the A-2 test stand at NASA's Stennis Space Center on Aug. 20. The diffuser simulates altitudes of 38,000 to 70,000 feet. The test stand, a single-position, vertical-firing stand capable of static firing a test article up to 33 feet in diameter, is being refurbished. The first static test firing of the Saturn V rocket at Stennis — then known as the Mississippi Test Facility — was conducted on the A-2 test stand April 23, 1966.**





Stennis Space Center Director Bill Parsons, far right, and NASA's General Counsel Paul Pastorek, far left, present an Exceptional Service Medal to NASA's Susan Dupuis. With Dupuis is her husband, John.



Stennis Space Center Director Bill Parsons, far right, and NASA's General Counsel Paul Pastorek, far left, present an Exceptional Service Medal to NASA's Richard King. With King is his wife, Charley Faye.

## AWARDS . . .

(Continued from Page 1)

was the keynote speaker. He presented awards and praised the recipients for their contributions to NASA's mission. As NASA general counsel, Pastorek is a principal advisor to NASA Administrator Sean O'Keefe.

"Stennis is an extraordinary place," said Pastorek. "This is an incredible organization with outstanding leadership and exceptional team members."

NASA's Susan Dupuis, Richard King and Fred Patterson each received an **Exceptional Service Medal**. NASA's Exceptional Service Medals are awarded for significant sustained performance characterized by unusual initiative or creative ability that clearly demonstrates substantial improvements or contributions in NASA engineering, aeronautics, space flight, administration, support or space-related endeavors.

Dupuis is a contracting specialist in the Stennis Office of Procurement.

King, formerly a project manager for the Propulsion Test Directorate (PTD), retired Dec. 31, 2001, with more than 38 years of service to the Agency.

Patterson directs PTD's propulsion test budget line and serves on the Rocket Propulsion Test Management Board and the National Rocket Propulsion Test Alliance.

NASA's **Exceptional Achievement Medal** was presented to NASA's Dr. Richard Gilbrech, deputy director, PTD. The Exceptional Achievement Medal is

awarded to an individual for a significant, specific accomplishment or contribution clearly characterized by a substantial and significant improvement in NASA operations, efficiency, service, financial savings, science or technology.

**NASA Public Service Medals** were awarded to business and community leader Rod Hartung for his efforts to create a family-oriented attraction in Hancock County, and to Robert Rogers, founder and chairman of BRC Imagination Arts Inc., for his innovative and insightful creation of educational visitor experiences. The award is granted for exceptional contributions to NASA's mission.

A **Group Achievement Award** recognized the efforts of the Environmental Geographical Information System (EGIS) Project team in implementing an Agency-wide EGIS. The system provides a consistent database from which NASA Headquarters can access basic environmental data on all NASA facilities in a user-friendly format. Team members include Headquarters' Odean Serrano; NASA's Ron Magee, Hugh Carr, and Dr. Bruce Davis; Lockheed Martin Space Operations (LMSO), Stennis Programs' Christina O'Connor and James Smoot. Tyrus Cohan and Janette Lovely, both formerly of LMSO, were also members of the team.

Members of the Automated Work Order Development and Implementation Team were recognized with a **Group Achievement Award** for their development and implementation of an automated work request system. Team members include NASA's James Bobinger, Mark

Carley, Bobby Jeffries, Dana Matherly, Debra Rushing, David Walters, Susan Dupuis, Timothy Pierce and Mary Whitehead; and LMSO's Cherie Beech, Charles Broussard, Charles Hallal, Philis Hurd, Helene Jones, Timothy Jones, Elaine Mayo, Phil Meridier, Timothy Parker and Rachel Raines; and Mississippi Space Services' (MSS) Michael Gaudin.

A **Group Achievement Award** was presented to the Project Lift Team. Team members include NASA's Richard Harris and Glen Liebig; Boeing Rocketdyne Propulsion and Power's Carl Guichard Jr.; MSS' William Lipscomb; and LMSO's Roberto Van Peski.

The Stennis Desktop Inventory Verification Team won a **Public Service Group Achievement Award** for implementing the NASA Outsourcing Desktop Initiative contract. Team members include Cimmarron's Rebecca McGehee, Willie Eubanks and Michele Mossbrooks; and LMSO's Betty Baxter, Deborah Bourgeois, Chris Callac, Penny Foret, Michelle Lunsford and Rachel Raines. James Williams, Richard Soldine and the late Rufus Outley, all formerly with LMSO, were also recognized.

NASA's Terry Jackson was recognized with a **NASA Space Flight Awareness Leadership Award**. Jackson is chief, Center Services Division, Center Operations and Support Directorate. The Space Flight Awareness Leadership Award recognizes outstanding leaders who exemplify loyalty, empowerment,

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Stennis Space Center Director Bill Parsons, far right, and NASA's General Counsel Paul Pastorek, far left, present an Exceptional Service Medal to NASA's Fred Patterson. With Patterson is his wife, Tommie.

Stennis Space Center Director Bill Parsons, far right, and NASA's General Counsel Paul Pastorek, far left, present an Exceptional Achievement Medal to NASA's Dr. Richard Gilbrech. With Gilbrech is his wife, Shelly.



Stennis Space Center Director Bill Parsons, far right, and NASA's General Counsel Paul Pastorek, far left, present NASA's Public Service Medal to Mississippi Gulf Coast business and community leader Rod Hartung for his efforts to create a family-oriented attraction in Hancock County. With Hartung is his wife, Evi.

Stennis Space Center Director Bill Parsons, right, and NASA's General Counsel Paul Pastorek, left, present NASA's Public Service Medal to Robert Rogers, founder and chairman of BRC Imagination Arts Inc., for his innovative and insightful creation of educational visitor experiences.



Stennis Space Center Director Bill Parsons, far right, and NASA's General Counsel Paul Pastorek, far left, present a NASA Space Flight Awareness Leadership Award to NASA's Terry Jackson. With Jackson is his wife, Kay.

Stennis Space Center Director Bill Parsons, far right, and NASA's General Counsel Paul Pastorek, far left, present the J. Harry Guin Outstanding Leadership Award to NASA's Dr. David Powe. With Powe is his wife, Brenda.



Stennis Space Center Director Bill Parsons, far right, and NASA's General Counsel Paul Pastorek, left, present the Professional Achievement Peer Recognition Award to NASA's Vicki Zanoni.



The Environmental Geographical Information System (EGIS) Team members, from left, include NASA's Ron Magee and Hugh Carr; former Lockheed Martin Space Operations (LMSO), Stennis Programs' employee, Tyrus Cohan; LMSO's Christina O'Connor; NASA's Dr. Bruce Davis; and LMSO's James Smoot.



The Automated Work Order Development and Implementation Team, seated from left, include NASA's Susan Dupuis, Timothy Pierce, Mary Whitehead, Dana Matherly, James Bobinger, and Mark Carley; Lockheed Martin Space Operations (LMSO), Stennis Programs' Timothy Parker; and NASA's Bobby Jeffries. Standing from left, LMSO's Helene Jones, Charles Hallal, Timothy Jones, Phil Meridier, Cherie Beech, Charles Broussard, and Rachel Raines; NASA's Debra Rushing and David Walters; Mississippi Space Services' Michael Gaudin; and LMSO's Philis Hurd.



Project Lift Team members include Lockheed Martin Space Operations, (LMSO) Stennis Programs' Roberto Van Peski; NASA's Richard Harris; Mississippi Space Services' William Lipscomb; Boeing Rocketdyne Propulsion and Power's Carl Guichard Jr.; and NASA's Glen Liebig.

## AWARDS . . .

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who exemplify loyalty, empowerment, accountability, diversity, excellence, respect, sharing, honesty and integrity.

NASA's Dr. David Powe, acting director, Earth Science Applications Directorate, was presented the **J. Harry Guin Outstanding Leadership Award**. The award recognizes an individual who has provided exemplary leadership and who has significantly enhanced the role, capability or professional recognition of Stennis Space Center within the nation's space, scientific or administrative communities.

NASA's Vicki Zanoni received the **Professional Achievement Peer Recognition Award**. The award was presented in recognition of Zanoni's outstanding service, leadership and extra efforts to go above and beyond the call of duty in support of NASA's Commercial Imagery Validation and Verification program.

The Federal Women's Program Advisory Council received the **Diversity Enhancement Recognition Award**. The award recognizes individuals or groups whose significant achievement has furthered the goals of equal opportunity in all aspects of the center's mission. Members of the Advisory Council include NASA's Sandra Wescovich, Desiree Thompson, Debra Rushing, Kim Guin, Rebecca Dubuisson, Rhonda Foley, Dawn Davis, Dinna Cottrell, Judith Cook, Teri Jackson, Cynthia Bright, Sandra Mitchell, Jeannette Gilreath, Amy Rice, Linda Sharpe and Nancy Sullivan. Stephanie Herring was honored posthumously.

Stennis' Public Affairs Chief Myron Webb received the **Rex Kelly Professional Achievement Award** and the **Practitioner of the Year Award** from the Public Relations Association of Mississippi (PRAM). Webb is a charter member of PRAM's Mississippi Beach Chapter. Both awards recognized her professionalism and efforts to enhance the role of the public relations practitioner.

NASA's **Contract Specialist of Year Award** was presented to NASA's Jason Edge. Edge serves as the focal point for

## Agencies join to create Web-based Gulf warning project

A multiagency partnership has resulted in the implementation of a hypoxia watch project to assist in rapid assessment of hypoxic or dead areas evident primarily in the summer months within the northwest and north-central Gulf of Mexico. Hypoxia occurs when the amount of dissolved oxygen in the water becomes too low to support most marine life, including shrimp, crabs and fish.

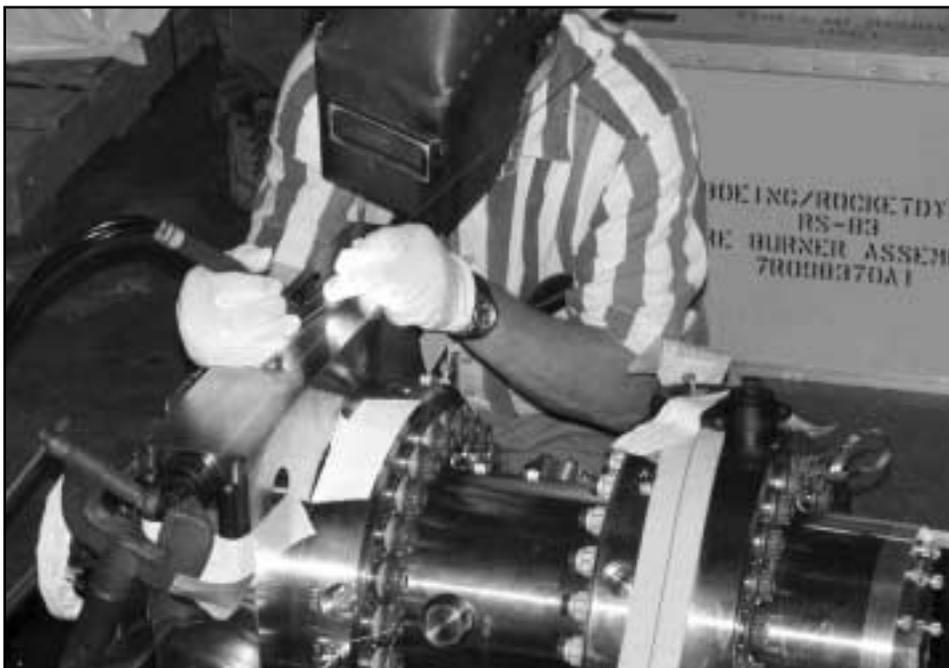
A recently signed Memorandum of Agreement, primarily between the National Oceanic and Atmospheric Administration's (NOAA) National Coastal Data Development Center (NCDDC) and NASA's Earth Science Applications Directorate, both located at Stennis Space Center, combines the expertise of federal and state institutions to address the occurrence of the Gulf of Mexico hypoxic, or low oxygen zone, one of the largest along the nation's coast. The agreement allows agencies involved to share field measurements and remotely sensed coastal data for the purpose of applying such data to coastal problems.

The Gulf of Mexico's hypoxic zone has increased since NOAA first began measuring it in the early 1980s. The increase in Gulf hypoxic areas, attributed in part to increased use of nitrogen fertilizers in the Mississippi River watershed, has led to a need for more information about the causes and effects of hypoxia.

"Hypoxia is a major problem in many of our nation's waters," said NASA's Dr. David Powe, acting director of the Earth Science Applications Directorate at Stennis. "We're pleased to apply NASA's capabilities in remote sensing and field measurements to this multiple partnership team."

Other partners involved in the Gulf of Mexico hypoxia watch effort include NOAA's National Marine Fisheries Service (NMFS) Pascagoula

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Boeing Rocketdyne's Doug Dean welds an instrumentation block onto the near-full-scale RS-83 preburner that arrived Sept. 6 at Stennis Space Center for testing. Stennis is making preparations for hot-fire tests of the first large-scale component of the Boeing Rocketdyne RS-83 engine system.

### Supporting SLI

## Stennis to begin RS-83 preburner testing

Engineers and technicians at Stennis Space Center in the E-Complex are conducting activation tests and final preparations for hot-fire tests of the first large-scale component of the Boeing Rocketdyne RS-83 engine system.

The RS-83 engine is one of four designs competing to meet NASA's Space Launch Initiative (SLI) goal of designing a space transportation system with greatly increased safety and reliability at a much

lower operating cost than that of current systems. The test article, or component, for this test in the Stennis E-Complex is a near-full-scale preburner that develops approximately 65,000 pounds of thrust. The RS-83 preburner powers both of the engine's turbopumps.

"A series of 15 hot-fire tests of the RS-83 preburner component is scheduled to begin early in October," said NASA's

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NASA's Dr. Marco Giardino, right, acting chief of the Applications Engineering Division for the Earth Science Applications Directorate at Stennis Space Center, views an aerial image that is part of the 'Lost Images of Camille' exhibit on display in StennisSphere. Also looking on is GeoTek Management Services Co.'s Daniel Lee, who discovered the lost images.



The Stennis Desktop Inventory Verification Team, seated from left, include Cimmaron's Michele Mossbrooks, Willie Eubank and Rebecca McGehee; Lockheed Martin Space Operations (LMSO), Stennis Programs' Betty Baxter; and Cimmaron's Penny Foret. Standing, LMSO's Deborah Bourgeois, Michelle Lunsford, Chris Callac, and Rachel Raines.



Members of the Federal Women's Program Advisory Council, from left, include NASA's Sandra Wescovich, Desiree Thompson, Debra Rushing, Kim Guin, Rebecca Dubuisson, Rhonda Foley, Dawn Davis, Dinna Cottrell, Judith Cook, Teri Jackson, Cynthia Bright and Sandra Mitchell. Not pictured are NASA's Jeannette Gilreath, Amy Rice, Linda Sharpe and Nancy Sullivan. Stephanie Herring was honored posthumously.



Cmdr. Terry Rea, commanding officer, Naval Station Pascagoula, was keynote speaker at the annual Women's Equality Day, celebrated Aug. 28. The event, "Women Up Front: Heroes on the Line," was sponsored by the Stennis Planning Committee for Women's Equality Day. More than 100 guests and visitors attended the event.

## AWARDS . . .

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Edge. Edge serves as the focal point for all NASA-direct construction contracts issued at Stennis in direct support of PTD.

NASA employees Vincent Andres, Clifton Arnold, Larry Bland, Keith Brock, James Cluff, Susan Dupuis, Linda Freeman, Donald Griffith, Terry Jackson, Donald Kelly, Ron Magee, Theodore Mason, Gerald Meeks, Pat Mooney, Rena Perwien, Linda Sharpe, Mike Smiles, Edward Toomey, Michael Wethington and former staff member Billy Walley were recognized with a **NASA Acquisition Improvement Award** for their contributions to the Hardware Assurance Testing Contract.

NASA's Marina Benigno, chief financial officer at Stennis, recognized staff members Leslie Anderson, Peggy Mosteller and Timothy Pierce for their efforts in implementing a new appropriation structure in fiscal year 2002. Staff member Billie Miller was recognized for implementing NASA's Interactive Planning System (NIPS) that provides monthly obligations, costs and workforce information.

NASA's David Carstens, deputy director, Center Operations and Support Directorate, and Integrated Financial Management Program (IFMP) manager at Stennis, recognized staff members Anita Harrell, Peggy Mosteller, Leslie Anderson, Deborah Clarke, David Keith, Timothy Pierce and Linda Sharpe for their achievements in implementing IFMP modules.

NASA's Vincent Andres received a **Special Recognition Group Achievement Award** for his contributions to the NASA Mail Management Team. The group's efforts resulted in postal cost savings of \$4 million.

The New Orleans Federal Executive Board presented the **Federal Women's Program Manager of the Year Award** for 2001 to NASA's Rhonda Foley.

**Length of Service Awards** were presented to NASA's David Brannon, Rebecca Dubuisson and Susan Dupuis for 25 years; Dana Matherly and Constance Shuler for 30 years; and James Washington for 35 years.

## Stennis bids Roy Estess farewell



◀ Stennis employees honored retiring Center Director Roy Estess with a farewell reception Aug. 21 in the StenniSphere auditorium. Estess' retirement marks 42 years of government service, 35 with NASA.

◀ From left, retiring Stennis Space Center Director Roy Estess visits with NASA's Toni Watkins, Kathy Slade, Cindy Epperson and Debbie Clarke during the reception.

## RS-83 . . .

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Dave Liberto, RS-83 project manager at Stennis. "This is the first in a series of component and engine tests for various SLI projects that will run nearly non-stop at Stennis through 2005."

The RS-83 engine is a fuel-rich staged combustion, liquid hydrogen/liquid oxygen engine system developed by the Boeing Rocketdyne Propulsion and Power Unit of The Boeing Company, Canoga Park, Calif. Taking lessons from the first-generation reusable launch engine — the Space Shuttle Main Engine — also manufactured by the Boeing Rocketdyne Propulsion and Power Unit of The Boeing

Company, the RS-83 engine is simpler to build and maintain. Its improved controllability and increased reliability promises to surpass the mission success of the Space Shuttle Main Engine.

There are currently four competing engine design programs funded under SLI. Boeing Rocketdyne Power and Propulsion has two designs, the RS-83 and the RS-84, a liquid oxygen/kerosene-fueled engine with more than one million pounds of thrust. TRW Space and Electronics, Redondo Beach, Calif., is developing the TR-107 main engine, also a liquid oxygen/kerosene-fueled engine in the one-million-pound-thrust class. The COBRA (Co-Optimized for Reusable Applications) engine, is a liquid oxygen/hydrogen-fueled engine in the

600,000-pound-thrust class developed by a joint venture between Pratt & Whitney, West Palm Beach, Fla., and Aerojet, Sacramento, Calif.

Liberto said component testing for both the RS-83 and the RS-84 has been scheduled. Subscale testing of the RS-84 preburner and main injector will begin in spring 2003. "Stennis will run a series of 12 tests on the sub-scale preburner before joining it to the main injector for a series of 26 tests beginning April 2003," he said.

Modifications to the E-Complex will be made over the next two years to accommodate near full-scale component testing for the RS-84 and TRW's TR-107 programs. Stennis plans to test a near-full-scale, heavyweight RS-84 preburner on the E-1 test stand by 2004.



Space Launch Initiative (SLI) propulsion team members from the Marshall Space Flight Center, Huntsville, Ala., gathered Aug. 14 with SLI team members at Stennis Space Center to learn more about facility operations and testing processes in preparation for upcoming component testing. The group also visited the E-1 test facility at Stennis. Touring the E-Complex were, from left, Bartt Hebert, Stennis; Mike Ise and Dave Sparks, both of Marshall; Robert Lightfoot, Stennis; Jim Owen, Rick Ryan, Danny Davis and Steve Richards, all of Marshall; Don Bechmeyer, Stennis; Garry Lyles, Marshall; Nickey Raines, Stennis; George Young, Marshall; Kerry Klien, Rick Gilbrech and Shamim Rahman, all of Stennis; and Robert Champion and Chad Summers, both of Marshall.



# How to fight and conquer stress

Stress is an inescapable part of modern life. That's the bad news. The good news is that stress isn't altogether bad news. In metered doses, it can be helpful — it can even make you better at what you do and help give you the competitive edge. It's the major-league, non-stop, never-let-up stress that presents a problem.

### Good stress — bad stress

Good stress is a balance of arousal and relaxation that helps you concentrate, focus, and achieve what you want. Bad stress is constant stress and constant arousal that may lead to high blood pressure, cardiovascular disease and worse.

### Master stress

The first step in mastering stress is to define your stressors. To identify these stressors, become more aware of your body in different situations.

Step two is making a concerted effort to avoid these stressors. If that's not realistic, take steps to lessen their effects on you. Learning to relax in the face of your stressors may be your most valuable weapon. Give yourself a break. Give yourself time to meet deadlines and complete your work. Learning to relax takes a little practice, but it's well worth it. Soon you'll know exactly what to do to replace a stress response with a relaxation response.

## QUICK LOOK

■ **The 2002 Combined Federal Campaign**, "Building a Stronger America Together," kicks off Sept. 26 at 10 a.m. in the StenniSphere auditorium. Astronaut Andrew Feustel will be the keynote speaker.

■ **The Stennis Medical Clinic**, Bldg. 1100, Room N180-W, will give the first round of flu shots on Tuesday and Wednesday, Oct. 1 and 2, from 8:30 a.m. until 11:30 a.m. and from 12:30 until 3 p.m. The second round of shots is scheduled at the same times on Wednesday and Thursday, Oct. 9 and 10. Shots are available to all Stennis employees while supplies last.

■ **Hispanic Heritage Month is Sept. 15 to Oct. 15.** This is an opportunity to celebrate the many contributions made by Hispanics across our nation and within NASA. For more information, contact the Office of Equal Opportunity at Ext. 8-2079.

■ **As part of President Bush's New Freedom Initiative**, the Office of Personnel Management has worked closely with key agencies with disability employment responsibilities to develop a new Web site that is a one-stop source of information for applicants, managers and human resource professionals. The site is located on the Web at <http://www.opm.gov/disability>.

## HYPOXIA . . .

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Laboratory and the Louisiana State University (LSU) Coastal Ecology Institute.

The objective of the hypoxia watch partnership was to form a team that could expand NCDDC's hypoxia monitoring efforts to include a more comprehensive hypoxia data portal.

Jeff Jenner and Dr. Tim Orsi, both of NCDDC, coordinated the effort among NASA, NOAA and LSU to provide the public with a visual representation of the summer hypoxic zone in the Gulf of Mexico.

This effort was part of the SEAMAP (Southeast Area Monitoring and Assessment Program) summer ground fish survey conducted by NMFS in the western and north-central Gulf of Mexico.

During a SEAMAP cruise off the coast of eastern Texas and Louisiana, NASA Physical Scientist Callie Hall processed and quality-checked dissolved oxygen data before sending it to the NCDDC office at Stennis. NCDDC then used this data to generate successive maps of oxygen concentrations along the sea floor. The NOAA CoastWatch office then posted the maps, which display the final hypoxia analysis data on its Web page. This display allowed the turnover of shipboard measurements into useful products available to the public.

## LAGNIAPPE

*Lagniappe* is published monthly by the John C. Stennis Space Center, National Aeronautics and Space Administration. Bill Parsons is the director; Myron Webb is the public affairs officer; and Lane Cooksey is the news chief. Comments and suggestions should be forwarded to the Lagniappe Office, Building 1200, Room 208D, Stennis Space Center, MS 39529, or call (228) 688-3585.

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