Volume 26 Issue 1 www.ssc.nasa.gov January 23, 2003



One NASA team members review more than 14,000 ideas, thoughts and suggestions from the recently concluded One NASA survey. Participating in the two-and-one-half-day session were, from left, Roslin Hicks of Marshall Space Flight Center (MSFC), Huntsville, Ala.; John Childress, Dryden Flight Research Center, Edwards, Calif.; Sherry Buschmann, MSFC; Pete Jimenez, NASA Headquarters, Washington, D.C.; and Michele Foster, Kennedy Space Center, Fla.

One NASA Team gathers at Stennis to evaluate, categorize survey results

Team arrived at Stennis Space Center on Jan. 7 for an important two-and-onehalf-day process of reviewing and analyzing inputs from 5,404 respondents to the recently concluded One NASA survey.

"The response to the

Members of the One NASA survey has been exceptional," said Johnny Stephenson, chairman of the One NASA Team. "I can honestly say that every one of more than 14,000 ideas, thoughts or suggestions from the survey has been read, categorized and is being considered for implementation."

In December 2002, NASA Administrator Sean O'Keefe rolled out the One NASA concept by asking employees to help shape the effort through their ideas and suggestions.

"One NASA will

See **ONE NASA**, Page 7

Stennis contributes \$312,399 to 2002 annual charity drive

Stennis Space Center pledges to the 2002 Combined Federal Campaign totaled more than \$312,399, according to Bari Matherne, head of the United Way and the Combined Federal Campaign Office in Gulfport.

'Federal employees donated more than \$207,292, and contractor contributions totaled more than \$105,107," Matherne said. "The center's participation was also recognized in a number of categories during our annual dinner."

NASA earned the Per Capita Giving (Large Agency) Award at the annual Mississippi Coast Association of Federal Administrators awards dinner in Biloxi on Dec. 4. NASA employees made a \$160.69 per capita donation to the center's Combined Federal/United Way 2002 Campaign. The Navy Human Resource Center-Southeast, Stennis, placed third among the large agencies with employees donating \$95.21 per capita.

Resident agencies at Stennis took all three award spots in the per capita giving (small agency) category. The National Data Buoy Center came in first with an average donation of \$337.49 per capita. The National Coastal Data Development Center placed second with employees pledging \$249.75 per capita, and the Naval Meteorology and Oceanography Command placed third with \$246.64 per capita.



The crew of STS-113 visited Stennis Space Center on Jan. 22. The crew met with students and NASA employees, discussed their 14-day mission to the International Space Station and signed autographs.

From the desk of Michael Rudolphi

Stennis Space Center Deputy Director



First Impressions

Prior to going into the holiday break, Center Director Bill Parsons asked me to jot down a note to you regarding my first impressions of Stennis Space Center. Well, here are a few of my observations.

At this writing, I have been with you one month; how time has flown. My first and strongest sense of Stennis was the warm and friendly people. Although I knew a few of you before I arrived, most of you are new to me. I must say, I have found you all to be very supportive and cooperative.

I also feel the spirit of One NASA is alive and well here. Although one of the smaller NASA centers, Stennis has done a great job building coalitions with the larger centers and headquarters to support the ongoing programs.

Now, let me discuss a few areas where I think we can get even better. At a recent staff meeting, it was reported that we had gone 77 days without a lost-time accident. Although this is admirable, I think we should challenge ourselves to go 770 days or more. The suffering and anxiety an injury brings to an individual and the family is significant and long lasting, and we should go to necessary lengths to prevent any injuries.

Our test operations are world-class, and we want to keep them that way. I believe we should move forward to make our test systems the same quality as the flight systems they support. High quality and reliable test data are critical to understanding and qualifying flight systems, and making our systems "flight-like" will assure quality and reliability. Recent events at the Cape with their ground systems further reinforce the need to maintain high quality support systems.

Our Earth Science Applications program is exceptional. We should be proud of our role in improving the quality of life and the environment here on Earth. In this endeavor, I would encourage us to focus on our results in order to make the public more aware of our accomplishments. We have so much of which to be proud, so let's let the world know about it.

Finally, Stennis is a great place with great people. Our strength lies in the synergy among all organizations, contractors and civil servants. I encourage us all to engage in the process, communicate our needs and respect one another. In doing these, there is no limit to what we can accomplish.





Stennis engineers and technicians are critically involved in resolving issues related to small cracks found last June in each of the Space Shuttle orbiter's hydrogen fuel flow liners. Engineers developed a flow liner simulator to determine whether the hydrogen lines can sustain 20 more years of shuttle flight operations without being replaced. Mississippi Space Services welders Edward Dedeaux, left, and Tim Jarrell, right, assist in the initial installation of the simulator on the A-1 test stand Dec. 13.

NEWSCLIPS

NASA technology used to improve health: NASA has developed an innovative technology to help astronauts combat motion sickness during space flight. Dr. Mae C. Jemison, America's first African-American female astronaut, along with the BioSentient Corp., Houston, obtained the license to commercialize the space-age technology known as Autogenic Feedback Training Exercise (AFTE). The technique is a patented combination of biofeedback and autogenic therapy that allows individuals to eliminate or minimize unwanted physical responses to outside stimuli by controlling their autonomic nervous system (ANS). The ANS is responsible for controlling and regulating involuntary bodily functions such as breathing, heartbeat, sweating, blood vessel dilation and glandular secretions. AFTE is 85 percent effective in reducing motion side effects in both men and women. AFTE has been used successfully with U.S. astronauts, payload specialists and Russian cosmonauts. It has also been used successfully to return U.S. Navy pilots suffering severe airsickness to active duty in high-performance aircraft.

NASA begins new year with Arctic Zone study: NASA researchers and more than 350 scientists are working together this winter to measure ozone and other atmospheric gases. The scientists will use aircraft, large and small balloons, ground-based instruments and satellites. Ozone studies are important because the ozone layer prevents the Sun's harmful ultraviolet radiation from reaching the Earth's surface. Ultraviolet radiation is a primary cause of skin cancer. Without protective upper-level ozone, there would be no life on Earth.

CHIPS ready to operate: NASA's Cosmic Hot Interstellar Plasma Spectrometer (CHIPS) satellite, launched Jan. 12, will study the gases and dust in space, which are believed to be the basic building blocks of stars and planets. CHIPS is a secondary payload to NASA's Ice, Cloud and Land Elevation Satellite (ICESat). Our solar system is located in a region of space called the "Local Bubble," which is about 300 light years in diameter. The CHIPS mission is studying this extremely diffuse gas inside the Local Bubble. CHIPS will orbit the Earth at about 350 miles (590 kilometers) altitude and is expected to operate for one year. The Office of Space Science, NASA Headquarters, Washington, D.C., sponsors the project. The project is managed at Wallops Flight Facility and Goddard Space Flight Center, Greenbelt, Md., through the NASA Explorers Program.



ISS faces new year of exciting challenges

2003 will be the most challenging ever for construction of the International Space Station (ISS). Already more than two-thirds of the way through the assembly of the ISS core structure, international crews face a busy construction schedule.

Electricity-generating systems will almost triple in capacity during the next 12 months. Station crews face a unique challenge; while rewiring their orbiting home and laboratory, the electrical work must be done while continuously running appliances and computers.

"The year ahead will be the most complex so far in the history of the International Space Station and its construction in orbit," NASA Station Program Manager Bill Gerstenmaier said. "The station literally becomes a new spacecraft with each assembly mission, and that will be true next year with dramatic changes in the operations of its cooling and power systems as well as in its appearance," he said.

Five NASA Space Shuttle flights are scheduled this year to launch more than 80,000 pounds of components, supplies and experiments to the station. Plans call for astronauts to conduct a world-record 24 spacewalks this year for station assembly — 18 of those while the shuttle is docked to the station and six while the station is flying solo. 2003 will be the third consecutive year to set a single-year record for the number of spacewalks.

Installation of the new truss segments and unfurling of the arrays also will require unprecedented robotic operations from both the shuttle and station arms. The operations will rely heavily on the capabilities of the station's space railway to move the station's robotic arm along the truss to position new components.

Three Expedition crews will live aboard the station during 2003. Also visiting the station in 2003 will be educator astronaut Barbara Morgan, whose mission in late 2003 is expected to be inspirational to students.



STS-107 crew members, seated from left, are astronauts Rick Husband, mission commander; Kalpana Chawla, mission specialist; and William McCool, pilot. Standing, from left, are astronauts David Brown, Laurel Clark, and Michael Anderson, all mission specialists; and Ilan Ramon, payload specialist, representing the Israeli Space Agency.

STS-107 crew engaged in conducting space science research projects around the clock

Space shuttle mission STS-I07, launched from Kennedy Space Center's Launch Pad 39B on Jan. 16 at 9:39 a.m. CST, is the 28th flight of the Space Shuttle Columbia and the 111th shuttle mission to date. The mission is providing more than 70 international scientists and a set of seven human researchers access to the microgravity environment of space for 16 uninterrupted days.

Columbia carried a SPACEHAB Research Double Module (RDM) in its payload bay. The RDM is a pressurized environment accessible to the crew via a tunnel from the shuttle's middeck. Together, the RDM and the shuttle's middeck will contain the majority of the mission's experiments.

In the area of physical sciences, the crew will perform three studies that are isolated inside a large, rugged chamber. These experiments will examine the physics of combustion, soot production and fire quenching processes in microgravity. Another experiment will compress granular materials in the absence of gravity to further our understanding of construction

techniques. This information can help engineers provide stronger foundations for structures in areas where earthquakes, floods and landslides are common.

A commercially sponsored facility will be used to grow two kinds of protein crystals to study possible therapies against the factors that cause cancers to spread and bone cancer to cause intense pain to its sufferers. Two other experiments will grow different types of cell cultures — one used to combat prostate cancer, the other to improve crop yield. Another experiment for forming protein crystals more purely and with fewer flaws than on Earth may lead to a drug designed for specific diseases with fewer side effects.

There are also six experiments in Columbia's payload bay — The Fast Reaction Experiments Enabling Science, Technology, Applications and Research (FREESTAR), which is mounted on a bridge-like structure spanning the width of the payload bay. One FREESTAR experiment is made up of 11 separate student experiments from schools across the country.

NASA's Mulville announces plans to retire

Associate Deputy Administrator Daniel R. Mulville plans to retire in February. Mulville served as one of the most senior advisors to NASA Administrator Sean O'Keefe and was responsible for planning, directing and managing the daily operations and transformation activities of the agency.

"Dan has been the cornerstone of our efforts to move NASA forward into a new era of science and exploration," O'Keefe said.

Mulville became associate deputy administrator in 1999. He served as

NASA's acting administrator from Nov. 19 to Dec. 21, 2001, and directed NASA's daily operations.

Prior to his assignment as associate deputy administrator, Mulville served as NASA's chief engineer from 1995 to 1999.

Mulville was awarded the NASA Distinguished Service Medal, the NASA Outstanding Leadership Medal and the NASA Exceptional Service Medal. He received the Meritorious and Distinguished Executive Rank awards for management and leadership.

Year brings challenges, changes & successes for NASA

NASA completed a monumental and comprehensive shift in management philosophy and structure during a busy and exciting year. NASA is flourishing with the vision of exploration and discovery, as the agency continues to strive to understand and protect the Earth; explore the universe and search for life; and inspire the next generation of explorers, as only NASA can.

Sean O'Keefe, the former deputy director of the Office of Management and Budget, was appointed the agency's 10th administrator, and former Space Shuttle Commander Frederick Gregory became NASA's first African-American deputy administrator.

The agency is realigning strategically and emphasizing the One NASA management philosophy. The philosophy is robust, flexible and research-driven. One NASA focuses all agency elements on collaborative and common missions.

Protecting and understanding Earth

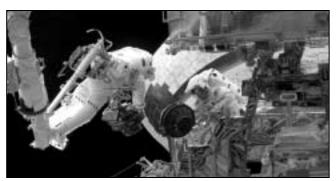
NASA is conducting research that may allow public health officials to better track and predict the spread of West Nile Virus or similar diseases. NASA's goal is to provide people on the front lines of public health with innovative technologies and data from the unique vantage point of space. NASA observed the Antarctic Larsen Ice Shelf and the seasonal acceleration of the Greenland ice sheet. The study indicated glaciers could dramatically affect global ocean currents, marine life, terrestrial productivity and the ocean food chain. NASA is using the data to improve knowledge of how clouds insulate the Earth and reflect heat in our atmosphere.

Better living through space-age technology

NASA scientists helped develop several potentially lifesaving devices. The Child Presence Sensor uses precision materials and electronics to alert parents when a child seated in an automobile infant or booster seat is left unattended in the vehicle. Other technology was adapted to create a portable, non-invasive fetal heart monitor. NASA researchers demonstrated a prototype device to automatically and continuously monitor the air for the presence of bacterial spores. A new high-strength aluminum-silicon alloy promises to lower engine emissions, which will improve air quality.

Integrated Space Transportation Plan (ISTP)

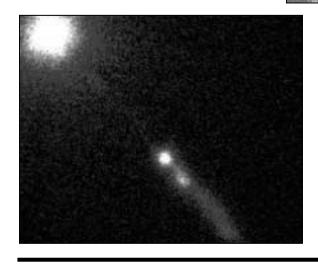
NASA launched a new plan that will dramatically change the way the agency does business. Using existing funds, NASA revised the ISTP to match its new management philosophy. The new plan restructures and improves



Spacewalking astronauts Jim N and Mike Massimino removed thubble Space Telescope's port array during STS-109 and replayith a smaller, more powerful sarray like the one installed on Hubble's Starboard.

Over the past four years, state health departments, in cooperation with the Centers for Disease Control, have kept records of birds infected with the West Nile Virus. Scientists and health officials have combined disease control data and satellite data to determine areas at risk. This map represents relative levels of risk for West Nile Virus in 2001, as determined by scientists with NASA's International Research Partnership for Infectious Diseases (INTREPID).





This Chandra image shows important new details in the powerful jet shooting from the quasar 3C273, providing an X-ray view into the area between 3C273's core and the beginning of the jet.

the existing Space Launch Initiative. It will benefit the International Space Station, Space Shuttle, Orbital Space Plane Program and NASA's science and research objectives.

Space Flight

The International Space Station, the largest and most sophisticated spacecraft ever built, celebrated a second year of continuous human habitation. During 2002, the Space Shuttle fleet turned 21 years old and successfully flew five missions, four to support station expansion and one unique mission to upgrade the Hubble Space Telescope. Astronaut John Herrington, on Endeavour (STS-113), became the first Native American who is a tribal member to walk in space.

Continuous presence . . . continuous results

Astronaut Peggy Whitson, the first NASA Space Station science officer, reflected the agency's increased research tempo. Approximately 48 research and technology development experiments were conducted. Crewmembers conducted the first materials science research, which tested medical procedures for controlling the negative effects of space flight and increased our understanding of changes to

Our quest to go faster an

A new program to develop the future of sion and power, the Nuclear Systems I announced in the FY 2003 budget requate \$1 billion, five-year program sur nuclear reactor technology, nuclear eleother advanced power systems for dee

Hubble gets upgrade ... 250 m The crew of Columbia (STS-109) inst els, a better central power unit and a n increased Hubble's vision tenfold. The Camera for Surveys sent back spectac provided data to help measure the by uncovering the oldest stars. The ments confirmed other methods of of the Universe.



Atlantis, launched Oct. 7 on an 11-day mission to install and activate the S-1 Truss onto the **International Space** Station (ISS), set the stage for the outward expansion of the ISS. The Space Shuttle fleet turned 21 years old in 2002 and successfully flew five missions, four to support station expansion and one mission to upgrade the Hubble Space Telescope.



Astronaut John B.
Herrington, STS-113 mission specialist, works on the P-1 truss on the International Space Station during the mission's second scheduled session of extravehicular activity. Herrington became the first Native American who is a tribal member to walk in space.

that occur in space. sulturing research, namic systems, made (colloids), and they t equipment racks.

ıd farther

of spacecraft propul-Initiative, was juest. The approxipports research of ectric propulsion and ep space exploration.

niles from home talled new solar pannew camera that e new Advanced cular images. Hubble age of the Universe e new measuremeasuring the age

Inspiring the next generation

Barbara Morgan was named NASA's first educator astronaut and assigned as a crewmember on Space Shuttle Columbia (STS-118), a November 2003 mission. Her assignment fulfills the commitment to send an educator into space to help inspire a new generation of explorers. Educator astronauts will be fully trained shuttle crewmembers.

NASA continues to record major discoveries

NASA's Mars Odyssey spacecraft measured enormous quantities of ice buried deep under the poles of the mysterious red planet. NASA planet-hunters found a planetary system, which has some important similarities to our own, with a Jupiter-sized planet at about the same distance from its parent star as our own Jupiter is from our Sun.

For the first time, astronomers tracked the life cycle of X-ray jets from a deep space black hole. A series of images from NASA's Chandra revealed the jets traveled at near light speed for several years before slowing down and fading. Chandra also produced stunning photographs of a high-energy panorama from the central regions of the Milky Way galaxy. The findings are important in understanding the Milky Way and other galaxies.

Scene simulation software may advance satellite imagery data

NASA Engineer Vicki Zanoni oversees projects that measure remote sensing data quality. Now, with the help of new software, her team can better assess some of the projects' results — nearly beyond the shadow of a doubt.

Remote sensing, the gathering of data about the Earth from satellites or aircraft, is useful for decision-makers on issues like community growth, coastal management and agricultural competitiveness. But the users must be able to rely on the results with confidence.

"Remote sensing, like many other measurements, has inherent errors," said Zanoni, who is the validation and verification program manager for the Earth Science Applications (ESA) Directorate at Stennis Space Center. "Validation and verification determines the amount of error — and develops methods to correct errors - in remote sensing instruments, making remote sensing results more useful to NASA scientists and the public who use the images in a wide range of applications."

Atmospheric effects like light and shadows are some of the elements that Zanoni's team measures in remote sensing. "Because the light reflected by other factors in the atmosphere complicates the measure of light reflected by the Earth's surface, the light reflected by factors such as clouds and particles in the atmosphere must also be measured," she said. "Shadows near the area being studied can influence the results."

The use of field measurements — measurements taken by hand on location — for creating validation formulas to measure atmospheric factors in remote sensing is expensive and time-consuming.

But new technology is improving the validation process.

The product is computer software called MCScene, a scene simulator that provides an automated process to validate the accuracy of certain types of



NASA's Vicki Zanoni ESA Validation & Verification Program Manager

remote sensing imagery. Zanoni's validation and verification team is using MCScene to determine whether shadows introduce errors or uncertainties into the validation measurements of certain remote sensing results.

"The MCScene technology proved that the shadows do not significantly affect these measurements and that we can continue to make measurements from that area without introducing a large amount of error," Zanoni said.

The remote sensing results Zanoni's team works with are useful in commercial and government applications including precision agriculture, mineral exploration, forest management, ocean resource mapping and surface pollution detection.

MCScene was developed by Spectral Sciences Inc. of Burlington, Mass., through NASA's Small Business Innovation Research (SBIR) program, a multi-phase program that provides small U.S. businesses with federal funds reserved for research and development, at Stennis' Office of Technology Development and Transfer.

"Working with the people at NASA was extremely beneficial," said Spectral Science's Steven Richtsmeier, principal investigator for the program. "It allowed us to tailor MCScene as it was being developed for the kind of customer we want to reach."



Miguel Rodriguez
Director, Center Operations Directorate

Tenacity is foundation for engineer's successful career path with NASA

Growing up in Santurce, Puerto Rico, Miguel Rodriguez knew at age 17 that he wanted to work in America's space program. Little could he have known then that staying focused on that goal would lead him to become director of NASA's Center Operations Directorate at Stennis Space Center, where he is responsible for the center's institutional services.

Rodriguez recalls being inspired during the Apollo days: "I remember watching, on a black-and-white TV with a snowy picture, the first footstep being made on the Moon. I saw that and said to myself, 'Wouldn't it be nice to work for NASA?""

Staying on course to achieve his goal, Rodriguez studied to become a mechanical engineer, graduating in 1976 from the University of Puerto Rico Engineering College in Mayaguez, Puerto Rico. A year before Rodriguez graduated, NASA representatives visited the university to recruit career candidates.

With one more year ahead of him at the university, Rodriguez took a chance and spoke with the recruiters, only to find that all the interview slots were filled. "I said, 'This is not good."

Determined, he placed his name on the overflow list and was eventually called for an interview. He recalls speaking with representatives from all 10 NASA centers and feeling uneasy about his chances of being selected. "There were three of us interviewed at the same time. I looked at the two others; one was president of the American Society for Mechanical Engineers, student chapter; I was the vice president. I figured if they picked one, it would be him, not me." He and the president of the stu-

See CAREER Page 7

Research project offers validation to ocean-color satellite imagery data

Through a NASA Small Business Innovation Research (SBIR) project sponsored by the Office of Technology Development and Transfer at Stennis Space Center, Wet Labs Inc., Philomath, Ore., is developing a prototype of an instrument that will help validate products produced from ocean-color satellite imagery.

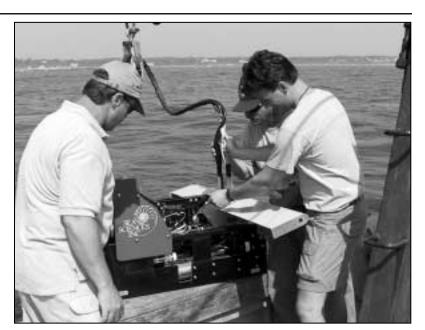
Ocean-color images obtained from instruments in space are used to assess the conditions of the oceans, including pollution transport, water quality and fisheries yield — information valuable to decision-makers. For decisionmakers to rely on this information with confidence, however, the remote sensing instruments and the products generated from their data must be validated. The Earth Science Applications (ESA) Directorate at Stennis Space Center, which conducts remote sensing applications as part of NASA's Earth Science Enterprise, is known for its validation of remote sensing data and instruments, made possible by their research and engineering facilities and expertise.

The Wet Labs product, Dolphin, will be a major advance in the development and validation of ocean-color products. "A major

hurdle in any ground-truthing exercise is to collect sufficient and high quality field data at the time of satellite overpass," said NASA's Dr. Richard Miller, chief scientist of ESA. "If you're trying to relate what the satellite sees to what is actually occurring in the ocean, you must collect data as close as possible to when the satellite goes over. This is particularly important in the coastal environment because it is highly dynamic. Many features quickly change with the tides, winds and river discharge."

The amount of data obtained from traditional techniques to collect water samples by lowering an instrument into the water from a boat at intervals is limited. The time to obtain these measurements and move to a new sampling site may take several hours. The features observed by the satellite instruments have often changed or moved.

The Dolphin will contain a biooptics package towed on a vehicle behind a boat and will enable scientists to gather data over an area much faster, greatly increasing the amount of measurements that can be compared to the ocean-color images. As the Dolphin is towed through the water horizontally, it also rises and falls under water,



From left, Wet Labs President Casey Moore, NASA's Dr. Richard Miller and Wet Labs' Mike Twardowski, principal investigator of the project, prepare to lower a prototype of the Dolphin instrument into waters off the coast of Narragansett, R.I.

collecting data from an entire water column.

Miller recently returned from a cruise off the coast of Narragansett, R.I., where the prototype instrument underwent the second in a series of trials. "All elements of the package worked extremely well," said Miller.

The Dolphin will be used to validate remote sensing results that will help scientists measure marine conditions from satellite imagery. The Dolphin results will be important to the validation of the products and applications of NASA's

ocean-color remote sensing instruments.

"This project with Wet Labs is a prime example of how the Earth Science Applications Directorate works to develop strategic partnerships with private industry and NASA's technology programs," said NASA's Dr. David Powe, director of ESA at Stennis.

For more information about Stennis' SBIR Program, contact Ray Bryant at the Office of Technology Development and Transfer at (228) 688-1929 or visit http://technology.ssc.nasa.gov.



More than 300 truckloads of concrete were poured Dec. 19 to complete the E-4 test stand foundation in the E-Complex at Stennis Space Center.

CAREER...

(Continued from Page 6)

dent chapter, however, were both offered positions.

Upon graduation in 1976, Rodriguez moved to Huntsville, Ala., and went to work at Marshall Space Flight Center as a mechanical design engineer designing parts for the Space Shuttle. In November 1978, he transferred to Kennedy Space Center (KSC), Fla., where he held several key positions working with facilities, providing the capabilities for processing shuttle payloads, and testing experiments as well as communication satellites.

During his career in the payload community, Rodriguez worked as the integration engineer for the STS-31 Hubble Space Telescope payload and worked on several special projects for NASA, including leading the organizational efforts for Strategic Planning and Performance-Based Contracting. He also worked for the chief engineer at NASA Headquarters, Washington, D.C., where he helped implement the Systems Management Office. He co-chaired the Kennedy Space Center 2000 Organizational Team responsible for restructuring the human resources organization.

He moved to Stennis in December 2002 to assume his current leadership position. "I have known and worked with Miguel for a number of years, and he brings a wealth of experience to Stennis," said Bill Parsons, Stennis' center director. "I am pleased to have him on board and to work with him in implementing Administrator Sean O'Keefe's One NASA initiative."

Pursuing the career Rodriguez dreamed of as a teen has been rewarding for him. His parents, both deceased, lived to see their son achieve lofty aspirations.

"It's not very often that we have an opportunity to pay back our parents and see them experience the joy of the effort they spent bringing you up and sending you to college," he said. "I felt that I was able to give them something they could truly enjoy."

To honor his heritage, Rodriguez is active in the Hispanic community, serving as a mentor and frequent speaker. He hopes to see more Hispanics join NASA's ranks.

He said the work is worth the effort: "There is no better agency you can work for. NASA is very proactive. It moves along with changes and trends in management. What entices me the most is having an opportunity to help choose my own career path."

Rodriguez lives in Mandeville, La., with his wife, Zulma. The couple's daughter, Sonia, 25; and son, Jorel, 21; live in Florida.

ONE NASA . .

(Continued from Page 1)

require each of us to consider all decisions within the context of what is best for the agency rather than for any one organization," Stephenson said. "To that end, One NASA will foster greater teamwork through more collaboration across the agency and promote more efficient systems and processes. For example, One NASA will require us to look at the talent we have as agency skills rather than center-specific skills, allowing us to more effectively accomplish our mission."

The team will address issues of competition among the enterprises and among the centers; the lack of a single unified agency-level strategic plan that clearly defines the roles of and relationships among the enterprises; the "divided-pie" and "not-invented-here"

mentality that is sometimes reflected in NASA's decision-making; and the center-centric focus sometimes driven by regional politics.

The One NASA effort sets the stage for even more success in the future.

"The real success of the One NASA effort will be evident in the projects NASA completes, the resulting science, as well as in the more efficient ways we address infrastructure issues and invest more funds in achieving our vision and mission," Stephenson said. "The executive leadership of the agency has high expectations of the benefits of One NASA, and they have challenged us to measure the improvements as we proceed toward the realization of this long-term, worthy goal."

From its Stennis session, the team will produce a report with short-term, intermediate and long-term actions. The report will be delivered to the administrator and his staff in mid-February.



Students from Quarles Elementary School, clockwise from bottom left, Chelsie Thornton, Riley Mason, Kieanis Henry, Will Shivers and V.J. Garcia, track the movements of the Space Shuttle on a monitor in the Space Shuttle Cockpit exhibit at StenniSphere. The Long Beach students visited Stennis Space Center on Jan. 14. The exhibit is a scaled model of the Space Shuttle cockpit and simulates piloting the shuttle.





Fire safety is important business

Fire safety is important business. According to National Safety Council figures, losses due to work-place fires in 1991 totaled \$2.1 billion. Of the 4,200 people who lost their lives due to fires in 1991, the National Safety Council estimates 327 were work-place deaths. Fires and burns accounted for 3.3 percent of all occupational fatalities.

Today's standards require employers to provide proper exits, fire fighting equipment, emergency plans, and employee training to prevent fire deaths and injuries in the workplace.

Fire Exits

- Each workplace building must have at least two means of escape remote from each other to be used in a fire emergency.
- Exit routes from buildings must be clear and free of obstructions and properly marked with signs designating exits from the building.

Portable Fire Extinguishers

- Each workplace building must have a full complement of proper fire extinguishers for the fire hazards present.
- Employees expected or anticipated to use fire extinguishers must be instructed on the hazards of fighting fire, how to properly operate the fire extinguishers available, and what procedures to follow in alerting others to a fire emergency.

Emergency Evacuation Planning

 All employees must be trained in emergency procedures. Employers must review the plan and any changes in the plan with newly assigned employees and all other employees so they know correct actions in an emergency.

QUICKLOOK

- Security practices and the current environment of threat have necessitated the revision of access policies at all NASA centers and facilities. The new policy calls for the replacement of the NASA retiree badge with a wallet-sized retiree identification card. Retirees may retain their old badges as long as the upper right hand corner of the badge is clipped off. Retirees who provide essential support will be issued a site-entry badge in accordance with NPG 1620.2, per direction of the center director and when deemed to be in the best interest of the agency. Retirees with recreational association memberships with organizations such as the Gun and Archery Club and Wellness Center will have badges that expire with their annual memberships. For information, contact Alan Mather at ext. 8-1683.
- NASA is accepting applications for this year's SHARP (Summer High School Apprenticeship Research Program). The program is designed to provide high school seniors in underrepresented categories an opportunity to build a career path in these disciplines. Deadline for applications is Feb. 10. For additional information, contact Joy Smith at ext. 8-2118/2286, or visit the Web site at www.mtsibase.com/sharp.
- The Stennis Spring 2003 Professional Development Training Calendar at Stennis will include the following courses: Managing Multiple Priorities, Feb. 27; Launch Vehicle Sys-tems Design and Engineering, March 11-13; Basic Government Contract Management, April 28-May 2; Dealing with Difficult People, March 27; Space Principles and Operations for Non-Technical Professionals, April 1-2; Stepping up to Supervisor, April 24; and Microsoft Certified Systems Engineer, beginning June 2 (30-week course). Professional development is sponsored by USM Gulf Coast and the Center of Higher Learning. For more information, call (228) 867-8777.



Wilbur and Orville Wright made their historic first flight Dec. 17, 1903. In support of NASA Quest's Centennial of Flight Project, the Lagniappe offers trivia questions each issue during the year-long celebration.

When and why was the National Aeronautics and Space Administration (NASA) created? What was the name of the agency that preceded it?

A From March 3, 1915, until Oct. 1, 1958, the National Advisory Committee for Aeronautics (NACA) provided advice and carried out much of the cutting-edge research in aeronautics in the United States. This agency was the precursor to NASA, which was formed largely in response to Soviet space achievements. NACA became the nucleus of the new agency, and all NACA activities and facilities were folded into NASA.

LAGNIAPPE

John C. Stennis Space Center, National Aeronautics and Space Administration publishes Lagniappe monthly.

Comments or suggestions should be forwarded to the Lagniappe Office, Bldg. 1200, Rm 208D, Stennis Space Center, MS 39529, or call (228) 688-3585.



National Aeronautics and Space Administration

John C. Stennis Space Center Stennis Space Center, MS 39529

Official Business Penalty for Private Use \$300 PRESRT STD U.S. POSTAGE PAID Permit No. G-27