



Message from the NASA Administrator

Daniel Goldin

What a difference a year makes. The year 1999 tested our character and our spirit of exploration. Each of you responded in 2000, answering those challenges with a diverse string of impressive achievements. I couldn't be more proud.

Today, you can look into the sky at one of our bright new stars and literally catch a glimpse of our future as the International Space Station orbits overhead. The arrival of the Expedition One crew ushered in a new era of international cooperation unprecedented in the history of space exploration. Through international partnerships, commercial ventures, and customer-driven projects, we will do things in space not possible here on Earth.

How did the universe evolve? Are we alone? We're trying to answer these fundamental questions of science and technology. Some of the answers may be unfolding before our eyes. NASA's scientific research was recognized as world class this year. Science Magazine credited NASA-led teams with three of the 10 most important scientific breakthroughs of the year 2000: Mars Global Surveyor's evidence of liquid water on Mars; creation of the most detailed map of the early universe, developed by BOOMERANG data; and the NEAR Shoemaker spacecraft's rendezvous with the asteroid Eros.

And not only is NASA's work earning kudos from the scientific community, but also from the general public. This year, NASA's Customer Service Rating, as measured by the National Partnership for Reinventing Government, rose from 80

See MESSAGE, Page 7



The Common Core Booster for Boeing Rocketdyne's Delta IV Launch Vehicle arrives at Stennis Space Center in Hancock County, Miss., from Decatur, Ala., via the center's 7.5-mile canal system. The RS-68, which will power the Delta IV, is assembled and tested at Stennis. See related story Page 4.

Stennis Combined Federal/United Way campaign raises \$313,290 for charities

Final tallies in the Stennis Space Center's Combined Federal/United Way Campaign for 2000 exceeded expectations.

According to Judy Dauro of the Naval Meteorology and Oceanography Command at Stennis Space Center, who served as site-wide coordinator for the federal campaign, the joint effort raised \$313,290. Leo Ponder, project manager for Mississippi Space Services, served as site-wide coordinator for the industrial contractors.

Organizations and charities from Hancock, Harrison and Pearl River counties in Mississippi, as well as the Greater New Orleans area, including St. Tammany and Tangipahoa parishes in Louisiana, will benefit from contributions of Stennis employees.

"This is the first year that the two programs have been completely combined and conducted with a unified effort," Dauro said. "The results were very positive."



Mississippi Space Services Project Manager Leo Ponder, left, and Judy Dauro of the Naval Meteorology and Oceanography Command served coordinators for the Combined Federal/United Way Campaign.

Director's Dialogue

from Center Director
Roy Estess



2001: Busy year for rocket propulsion testing

In 2001, the Stennis rocket propulsion test team faces many challenges and opportunities — in safety, quality, engineering, operations, business, procurement, legal, training, staffing and public relations. Continued success with the existing and planned test programs, augmentation of staff and capability, and further establishment as the Agency's Lead Center for Rocket Propulsion Test are key goals for the upcoming year.

As the Agency embarks on an exciting Space Shuttle flight manifest to continue the International Space Station assembly, Stennis will continue to provide Space Shuttle Main Engine (SSME) acceptance and certification testing. Ensuring the SSME hardware is available and ready for flight is our number one priority test program. Also, the NASA/contractor team will perform critical propulsion systems testing in support of X-33 and Delta IV.

In the E complex, several advanced component and system tests are planned. These programs will be critical in the development of the next generation rocket engines. Numerous NASA programs, such as the X-34 and X-37, will benefit from this testing. Initial construction efforts on E4, a facility to perform sea level static testing of the Rocket Based Combined Cycle engine, will be a key milestone in 2001. Safe integration of numerous upgrade and modernization efforts while performing day-to-day test programs will be the most significant challenge faced by the test team this year.

For the first time ever, Stennis has received a propulsion test budget line item from the Agency which recognizes our role as NASA's Lead Center for Rocket Propulsion Testing. This awesome responsibility requires us to manage and continually assess the health and future of NASA's critical rocket test facility assets.

To meet these challenges, Stennis will continue augmentation of our staff and infrastructure capability. We will seek to hire at least 20 new civil servants to work not only in the Propulsion Test Directorate, but in the critical safety and business support areas. Efficiency will be gained as our test teams become more experienced and incorporate the discipline and rigor required to safely and consistently provide propulsion test services. We will also continue regular public test firings to successfully engage the public in NASA's mission.

Clearly, the Stennis propulsion testing team is faced with a very challenging year. In light of these challenges, we must not forget that safety of our visitors, employees, test facilities and test hardware continues to be our highest priority. Together, we can meet the challenges before us to efficiently operate the nation's premier rocket propulsion test site and lead to a safe, successful 2001.

NEWSCLIPS

Global diagnosis completed of ocean regions most sensitive to an iron rich diet — Adding iron to the diet of marine plant life has been shown to boost the amount of carbon-absorbing phytoplankton in certain parts of the world's oceans.

A new study by researchers at NASA's Goddard Space Flight Center, Greenbelt, Md., and the Department of Energy's Oak Ridge National Laboratory, pinpointed iron-limited regions by seeing which phytoplankton-rich areas were also areas that received iron from wind-blown dust. Iron is one of the essential nutrients needed for microscopic marine plant life to flourish. Identifying the location and size of nutrient-limited areas in the open ocean has challenged oceanographers for nearly a century.

NASA robotics may soon help spinal cord patients take first steps — NASA engineers and the Jet Propulsion Laboratory in Pasadena, Calif., along with University of California, Los Angeles neurophysiologists, are creating a robot-like device that could help rehabilitate thousands of Americans with spinal cord injuries.

NASA and UCLA researchers emphasize the device is still in the development phase. However, it could be part of clinical trials at UCLA in about three years.

NASA space technology shines new light on healing — Doctors at the Medical College of Wisconsin in Milwaukee have discovered the healing power of light with the help of technology developed for NASA's Space Shuttle. Using powerful light-emitting diodes, or LEDs, originally designed for commercial plant-growth research in space, scientists are examining how this special lighting technology helps hard-to-heal wounds. The project is funded by a NASA Small Business Innovation Research contract through the Technology Transfer Department at Marshall Space Flight Center in Huntsville, Ala.

Space Station crew members wait for arrival of Destiny lab

As preparations on Earth stepped up for STS-98, which will deliver the U.S. Destiny Laboratory to the International Space Station, the three-member Expedition 1 crew reported that everything on board the station is running smoothly.

Recent activities for the crew include conducting biomedical and engineering experiments, performing systems maintenance and exercising. The crew will review flight plans for the arrival of STS-98, which at Lagniappe press time was scheduled for launch Jan. 19 at 1:11 a.m. CST.

The primary objective of STS-98 is to deliver and install the U.S. Destiny Laboratory onto the International Space Station. Destiny is the centerpiece of the station and the site where unprecedented science experiments will be performed. Also, the STS-98 astronauts will relocate the Pressurized Mating Adapter 2 from the Unity Node to the forward Common Berthing Mechanism on Destiny. While at the station, the astro-

nauts will conduct three space walks and use Space Shuttle Atlantis' robotic arm to complete these tasks.

U.S. Destiny Laboratory

The laboratory module is where unprecedented science experiments will be performed in the near-zero gravity of space.

The aluminum module is 8.5 meters (28 feet) long and 4.3 meters (14 feet) in diameter. The lab consists of three cylindrical sections and two end cones with hatches that will be mated to other station components.

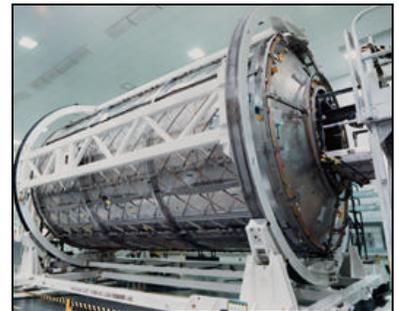
A 50.9-centimeter- (20-inch-) diameter window is located on one side of the center module segment. This pressurized module is designed to accommodate pressurized payloads. It has a capacity of 24 rack locations. Payload racks will occupy 13 locations especially designed to support experiments.

The laboratory module was shipped to Kennedy Space Center, Fla., in November 1998 to begin final preparations for its launch.



STS-98 crew members include, front row from left, Mark Polansky, Marsha Ivins, and Kenneth Cockrell, mission commander. Back row, Robert L. Curbeam, Jr. and Thomas Jones.

The U.S. Destiny Laboratory module for the International Space Station is shown under construction in the fall of 1997.



STS-98 crew patch depicts ISS Destiny

This is the insignia for STS-98, which marks a major milestone in assembly of the International Space Station (ISS). Atlantis' crew will deliver the United States Laboratory, Destiny — a weightless laboratory where expedition crews will perform unprecedented research in the life sciences, material sciences, Earth sciences and microgravity sciences. Earth sciences and microgravity sciences. The laboratory is also the nerve center of the space station, performing guidance, control, power distribution and life support functions. With Destiny's arrival, the ISS will begin to fulfill its promise of returning the benefits of space research to Earth's citizens. The crew patch depicts the Space Shuttle Atlantis with Destiny held high above the payload bay just before its attachment to the ISS. Red and white stripes with a deep blue field of white stars border the shuttle and Destiny to symbolize the continuing contribution of the United States to the ISS. The constellation Hercules, seen just below Destiny, captures the shuttle and station's team efforts in bringing the promise of orbital scientific research to life. The reflection of Earth in Destiny's window emphasizes the connection between space exploration and life on Earth.

Saturn company turns to NASA Technology Assistance Program

As a result of NASA's Technology Assistance Program at the John C. Stennis Space Center, Saturn's Electrical Switch Production Facility in Marks, Miss. avoided the potential loss of a contract to a major car manufacturer and the possibility of having to lay off more than three-fourths of its work force.

For more than two years, Saturn had been plagued with an intermittent failure problem of the under-the-hood lamp switches produced by the Mississippi company. Some switches worked, while other switches experienced random failures.

The mysterious problem had been investigated by Saturn's engineering department and private material testing laboratories. In addition, Saturn audited their supply vendors for compliance to design specifications and checked for surface contaminants.

"Our program provides assistance to companies with unique technical problems or questions relating to Stennis expertise and capabilities," said NASA's Kirk Sharp, technology transfer officer at the space center. "We took the problem to GB Technology Material and Contamination Analysis Group in the Sciences Laboratory Section of the Lockheed Martin Test and Engineering Directorate located here at Stennis Space Center."

GB Technology scientists H. Richard



Concentric wear rings in the hopper bowl at the Saturn plant were the clue in solving company's problem.

Ross and Beth Hammer received batches of both the working and non-working switches for analysis. They explained that the switch consists of a brass capsule with an opened end, a copper contact pin, a silver plated ball and a plastic insulator that fits into the opened end of the brass capsule. When the hood is opened, the silver plated ball rolls down raised rails inside the brass capsule and strike the copper pin. This closes the circuit and allows current to pass through the light and illuminate the engine compartment.

Using an electron microscope, the team found their X-ray findings consistently showed a higher level of carbon deposits on the silver plated ball of failed switches than on the good ones. The carbon deposits on

the silver plated ball were causing the failures; however, the study did not show from where the carbon was coming.

Ross went to the facility in Marks and followed the assembly path of the switch. At one point, before the silver plated balls travel down a PVC tube and are automatically plunged into the brass capsule, they are gathered in a mechanical hopper which drops them, one by one, into the tubing for insertion into the capsule. Further examination showed that wear rings in the liner of the hopper were the potential problem.

"The hopper bowl was lined with

See SATURN, Page 7

RS-68 ready to move into next series of tests at Stennis

Now that Boeing Rocketdyne's RS-68 has proven that it can reach full power, engineers at Stennis Space Center are ready to put the powerful engine through a new series of tests aimed at proving flight readiness.

Art Weiss, Boeing's RS-68 deputy program manager for development, said plans for the new year call for longer engine tests, as well as tests that demonstrate the engine's other capabilities.

"Now that we have demonstrated that we can run at 100 percent thrust, the next step is to build duration on our tests and start clicking off the test objectives that we're required to meet before we can go into certification of the engine," Weiss said.

The RS-68 will power the U.S. Air Force's

Evolved Expendable Launch Vehicle program. It is the first large liquid-fueled rocket engine developed in the U.S. in the past 25 years. A liquid hydrogen/liquid oxygen engine capable of producing 650,000 pounds of thrust, RS-68 will propel Boeing's Delta IV evolved expendable launch vehicle.

As testing continues, one of the first objectives will be to demonstrate the RS-68's gimbaling capability. Weiss said the engine must be able to gimbal for thrust vector control of the vehicle. A scheduled test series is intended to demonstrate how the engine gimbals through all the profiles it must execute, he said.

Other test objectives include the ability of the engine's control system, demonstrating precision in maintaining 100 percent power

level and the ability to control the mixture ratio between the amount of oxygen and hydrogen being burned.

The engine tests will also last longer. The longest test to date has been 160 seconds, but that could double in the near future. Also, the duration of the tests will vary depending on the engine configuration, Weiss said.

"For example, in a medium configuration vehicle, you're talking about approximately 250 seconds," he said. "If you look at a heavy vehicle, the core engine and the core stage runs about 340 seconds. So we're going to be building up to show durations anywhere between 250 and 340."

Stennis is playing an integral role in the RS-68's rigorous test schedule.

Winnie Johnson finds ‘Don’t Worry, Be Happy’ a good motto

Folks describe NASA’s Winnie Johnson as efficient, sharp and reliable. They say she has a happy personality and a patient disposition. But one doesn’t go very long when speaking of Johnson without commenting on her fantastic memory!

“She’s got the best memory in this office,” co-worker Toni Watkins said. “She’s a rare type of person — just good-hearted all the way around.”

Johnson, an office automation assistant, with the Geospace Applications and Development Directorate (GADD) is accustomed to being a rare type of person.

Born deaf, Johnson was once featured in the Feb. 10, 1955 edition of the Picayune Item during a major milestone in her life — the acquisition of equipment that granted her the ability to hear outside the realms of doctor’s offices and laboratories. Johnson had received a headset that allowed her to listen to television, a feat which at that time seemed impossible to achieve.

Johnson continued to achieve new heights in her academic and life endeavors. She attended the Chinchuba Institute for the Deaf, a private non-profit school for deaf, hearing-impaired and lingual-impaired children,

which focuses on language development techniques and professional training.

She graduated from Pearl River Central High School and attended Delgado Community College and then Gallaudet University.

In July of 1983, Johnson began her career at Stennis in the NASA Center Director’s office. She then transferred to the Science and Technology Laboratory.

In her current position with GADD, she is responsible for keeping timecards, travel vouchers, general typing, filing, ordering supplies and a range of other office duties. Johnson, who uses sign language and reads lips, admits that while talking with secretaries is sometimes challenging, she enjoys filing and tries to live by the motto, ‘Don’t worry, be happy.’

Johnson has seen many changes during her 18-year career at Stennis, including the expansion of the center, the addition of contractors and subcontractors, and the increasing number of Stennis Center employees. She cites the upgrade of computers from



Winnie Johnson



Stennis Employee Profile

DECmate (now Compaq Corporation) which was an early make of minicomputers, to Microsoft and the Internet as one of the most beneficial changes she has seen during her career.

Aside from a fulfilling work environment Johnson also enjoys an active social and community life. A resident of the Caesar community, near Picayune, she is a past secretary for the Mississippi Association of the Deaf, Gulf Coast Chapter. Johnson continues to be an active member and often participates monthly with de l’Epee Deaf Center, where she and her husband participate in recreational activities.

She also bowls but is the first to point out that her husband is the avid bowler in the family.



Chief Pilot Bill Colliver bids farewell as he boards the NASA/Stennis Lear 23 for its final flight to Glen Research Center. The jet, used since 1980 to collect digital imagery for a wide variety of projects in support of the space center’s remote sensing mission, was decommissioned in December 2000. Colliver, with the same flight, celebrated his retirement after 36 years of service at Stennis Space Center. Colliver has logged more than 14,000 as pilot in command.

NASA employees nominated for 2000 MCAFA award honors

NASA’s Jenette Gordon and Robert Bruce were nominees for the Outstanding Civilian Employee of the Year awards sponsored annually by the Mississippi Coast Association of Federal Administrators (MCAFA).

“We are delighted to participate in this annual awards program that showcases the talents of our 20,000 or so federal employees along the Mississippi Gulf Coast, and Jenette and Robert are truly representative of our outstanding work force at the John C. Stennis Space Center,” Roy Estess, center director said.

Gordon, an environmental specialist for Stennis, has been with NASA for six years. She recently received a Group Achievement Award for participating in the development of the Environmental Impact Statement for the Advanced Propulsion Technology Program. She presently serves as a member of the ISO 14001 Environmental Management System Core Team. She played an instrumental role in the rewrite of the Stennis Safety Manual.

Robert Bruce, chief, New Business Development Office in the



NASA's Office of Education at Stennis Space Center, in partnership with Mississippi ETV, celebrated the opening ceremony of the Choctaw Tribal School Interactive Classroom Jan. 9 in Philadelphia. The video network classroom allows for full interactive two-way video, audio and data communications to be shared among participants. Taking part in the ceremony, from left, were Lucy Ferron, director, Distance Learning, Mississippi ETV; NASA Astronaut John Herrington; Terry Ben, director of schools, Choctaw Tribal School; Choctaw Indian Princess Latisha Stephens; Randy Hodges, principal, Choctaw High School; Phillip Martin, tribal chief, Mississippi Band of Choctaw Indians, and NASA's Dr. David Powe, manager, Stennis Office of Education.



The Stennis Environmental Management System (EMS) Core Team has been diligently preparing for an ISO 14001 registration audit scheduled for March 26 and 27. Members of the team recently met with consultants to finalize plans. Standing, from left, are: Craig Ruberti, project manager for Global Environmental and Technology Foundation, Annadale, Va.; Anthony Taconi, Safety Reliability & Quality Assurance manager, Lockheed Martin Space Operations; and Marcia Stewart, Safety & Environmental Services supervisor, Mississippi Space Services. Seated are: NASA Environmental Officer Ron Magee (who also serves as the center's EMS installation representative); Marie Dunkle of Quality System Registrars, Herndon, Va. (the ISO 14001 Registrar); and NASA's Jenette Gordon, environmental specialist. An internal audit to determine readiness for the ISO 14001 registration is scheduled for Jan. 24-26.

Stennis gives first awards to 11 small business projects

An advanced multispectral imager for marine and coastal remote sensing is just one of the 280 research proposals NASA has selected for Phase I contract awards as part of its Small Business Innovation Research Program (SBIR). The combined total of the awards is expected to be more than \$19 million.

The goals of the SBIR are to stimulate technological innovation, increase the use of small business — including women-owned and disadvantaged firms — in meeting federal research and development needs, and increase private sector commercialization of federally funded research results.

Stennis received 43 proposals submitted by small, high technology businesses from across the country. The selected firms will be awarded fixed-price contracts valued up to \$70,000 each to perform a six-month Phase I feasibility study.

Firms to negotiate projects with Stennis include:

- AJT and Associates Inc., Cape Canaveral, Fla., Low Cost Engine Test Stand for 500-Pound Thrust Class Engines;
- American GNC Corporation, Simi Valley, Calif., Real-Time Centimeter-Accuracy GPS Based Location Revisiting in Open Water;
- Apex Systems Inc., New Orleans, La., Automated Map Generalization in Mobile Geographical Information Systems Water;
- Barber-Nichols Inc., Arvada, Colo., A Reliable, Long Life, LOX Compatible Seal;
- Duncan Technologies Inc., Auburn, Calif., An Advanced Multispectral Imager for Marine and Coastal Remote Sensing;
- MEDECO Inc., Clayton, Mo., Transition Zone Hyperspectral Sensors Suitable for Remote Piloted Vehicles;
- Orbital Technologies Corporation, Madison, Wis., Universal Mapping System;
- Physical Optics Corporation, Torrance,

Spring workshop schedule set for Stennis Educator Resource Center

The Stennis Space Center Educator Resource Center Spring 2001 Workshop schedule has recently been announced as follows:

- Interdisciplinary Learning Through Music, Storytelling, and Drama, Jan. 29 for teachers grades K-2;
- Science Fair Projects, Jan. 30 for teachers grades 3-9;
- How to Use a Global Positioning System Receiver in Your Classroom, Feb. 2 for teachers grades 4-8;
- Weather Wise, Feb. 5 for teachers grades 2-5;
- Brown Bear, Brown Bear, What Do You See?, Feb. 8 for teachers grades Pre K-1;
- Introduction to Microsoft Excel 97, Feb. 15 for teachers grades K-12;
- Teaching Topography, Feb. 19 for Grades 3-5;
- Remote Sensing with Echo the Bat, Feb. 20 for Grades 4-8;
- Introduction to Microsoft Access, Feb. 22 for teachers grades K-12;
- Simple Science Experiments, March 5 for teachers grades K-5;
- Developmental Appropriate Practices for Infants, March 15 for teachers grades Pre K-1;
- This Land is My Land, March 19 for teachers grades 2-5;
- Introduction to Microsoft PowerPoint, March 21 and April 3 for teacher grades K-12;
- Make Math Mine, April 2 for teachers grades 3-5;
- Something's Fishy, April 16 for teachers grades K-2;
- SkyMath, April 18 for teachers grades 5-8;
- A Day on the International Space Station, April 24 for teachers grades 3-5;
- Book-A-Mania, April 26 for teachers grades Pre K-1;
- Near Earth Achievable Remote Sensing (N.E.A.R.S.) Project Activities, May 8, for teachers grades 6-12.

The workshops are free, but reservations are required because of limited seating. To sign up for a workshop or for more information, call in Mississippi (800) 237-1821 (select option 2); outside Mississippi, call (228) 688-3338.

SATURN . . .

(Continued from Page 4)

polyurethane-based polymer that contained approximately 1 percent carbon black," Ross said. "Saturn told us the liner was regularly cleaned with various solvents. The repeated cleaning, combined with wear to the liner from the rotation of the silver plated balls, released carbon particles onto the silver balls. Because the balls rolled around in the hopper, some of them picked up more carbon than did others. That's why some of the switches worked well, and others failed."

NASA's recommendation to Saturn was to remove the hopper bowl liner or to install an inert liner made from materials similar to Teflon.

Because of the implementation of NASA's recommendation, the failure rate of the switches has been reduced, and the facility's contract, as well as the jobs of nearly 150 employees in Marks, have been retained.

NOMINATIONS . . .

(Continued from Page 5)

Propulsion Test Directorate, joined NASA at Stennis Space Center in 1983. During his 17-year tenure, he has earned a reputation as a seasoned manager with a willingness to take on critical project tasks, as well as administrative duties. Bruce's responsibilities include marketing the capabilities of Stennis Space Center and the Mississippi Gulf Coast to private industry, academia and government customers.

MESSAGE . . .

(Continued from Page 1)

percent in 1999 to 86 percent in 2000. NASA received the highest score of any federal agency, higher even than the U.S. Mint's rating among coin collectors.

In 2001, we face a new frontier of possibilities and opportunities. It is hard to think of this new year and not be reminded of Arthur C. Clarke's literary epic. In 1968, Clarke gave us a glimpse of a fantastic future — a world that took for granted artificial intelligence, video telephones, multimedia communications and private companies exploring the commercial potential of space.

Clarke's prophetic observations inspired a mission of discovery for researchers determined to turn science fiction into science fact. In 2001, our space odyssey is just beginning.

We lost some of the best and brightest members of our NASA family this year. It reminds us to cherish each other and to do the most with each day we have on Earth. We mourn their loss, but honor their memory with renewed commitment to safety, teamwork and excellence. We should also use this time at the beginning of a new year to take a personal inventory of our lives, paying closer attention to our health, our family and our friends.

Early in the 17th Century, Galileo said the universe could not be read until we learned the language.

As we enter the 21st Century, NASA will continue to look up at that same starry empyrean open the doors of discovery, and learn the language of the universe.

SBIR . . .

(Continued from Page 6)

- Calif., EP Division, Low Cost True 3-D Virtual Reality System for Scientific Data Visualization;
- Southwest Sciences Inc., Santa Fe, N.M., Two-Dimensional Interferometric Temperature Sensor;
 - Spectral Sciences Inc., Burlington, Mass., Crop Stress Algorithm Using Hyper/Multispectral Thermal Infrared Remote Sensing; and,
 - WET Labs, Philomath, Ore., An Integrated Optical System for Synoptic Remote Sensing Validation: The DOLPHIN.

QUICK LOOK

■ **The Rotary Club of Stennis Space Center** will sponsor three people who wish to compete for Rotary Foundation Ambassadorial Scholarships to study abroad during the 2001-2002 school year. Applicants must have completed at least two years of university or college work when the scholarship begins. Completed applications must be received by May 1. For more information or an application, please contact Al Lewando at (228) 689-8002, or e-mail lewandoa@navo.navy.mil. The Rotary Club of Stennis Space Center meets every Tuesday from 11:30 a.m. to 12:30 p.m. in the Conference Center of Bldg.1100. New members are always welcome.

■ **Black History Day program** is scheduled for Thursday, Feb. 8 in the StenniSphere auditorium. For additional information, call Marilyn Donald Ext. 2079.

■ **The Blood Center**, serving Louisiana and the Mississippi Gulf Coast counties, has scheduled the 'Krewe of Lifesavers' blood drive Feb. 20 and 21 in the Conference Center of Bldg. 1100.

Door prizes, popcorn and King Cake will be available to participants. demands for blood.

Safety Corner

Drivers put on alert for deer

Stennis security records indicate that 25 deer-vehicle collisions have occurred recently. Highway safety advocates emphasize that the best way to avoid deer-vehicle crashes is vigilance.

In daylight hours, the watchful motorist can often see a deer soon enough to avoid a collision. However, in darkness or near-darkness motorists frequently do not see an animal until it is too close to avoid. For this reason, and because deer are most active during the evening and early morning hours, 90 percent of all accidents occur between dusk and dawn. At Stennis, the highest risk months are from October through February, with another peak in the spring when young, tender vegetation is abundant.

To reduce collisions between vehicles and deer, the following precautionary tips are recommended:

- Maintain heightened awareness, especially during high-risk months and in the

highest-risk time periods.

- If you see one deer on or near a roadway, expect that others may follow. Slow down and be alert.
- After dark, use high-beams when there is no oncoming traffic. The high beams will provide better visibility and allow for greater reaction time. However, lights tend to immobilize deer. If that happens flip your lights off and on, and honk your horn in an effort to get the deer to move off the road.
- Report any deer-vehicle collisions at Stennis. Deer-vehicle collisions should be immediately reported to security at Ext. 3636.



Mississippi Space Services' Wendy McQueen waves a hello and warning to motorists entering Stennis Space Center's North Gate.

LAGNIAPPE

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