



Lockheed to bring high-tech operation, 270 jobs to Stennis

Lockheed Martin Corporation is establishing an advanced Propulsion, Thermal and Metrology Center at Stennis Space Center that will add about 270 new jobs here.

Lockheed Martin representatives, Stennis officials and Mississippi political dignitaries announced the plan in ceremonies at Stennis on Sept. 1.

Lockheed Martin's Space Systems and Technology Services companies teamed with the State of Mississippi, Hancock County and NASA to develop the planned center.

Construction of the 220,000-square-foot facility will begin soon. It will house the propulsion and thermal, as well as the metrology portions of the center.

Lockheed Martin Chief Executive Officer Dr. Vance Coffman said the planned center represents a mutually beneficial partnership between his company, Stennis and the state.

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Numerous dignitaries gathered at Stennis Space Center on Sept. 1 to take part in the announcement of Lockheed Martin Corporation's Propulsion, Thermal and Metrology Center to be built at Stennis. Here, joining hands at the announcement ceremony are, from left, Rocky Pullman, president of the Hancock County Board of Supervisors; District 5 Rep. Gene Taylor, D-Miss.; Mississippi Gov. Ronnie Musgrove; Senate Majority Leader Trent Lott, R-Miss.; Dr. Vance Coffman, chairman and chief executive officer of Lockheed Martin Corporation; and Stennis Space Center Director Roy Estess.



Following a recent keynote address at the Women's Equality Day program at Stennis Space Center, from left, Mississippi Lt. Gov. Amy Tuck greets NASA's Susan Dupuis, NAVOCEANO's Eleanor Schroeder and NASA's Mary Lou Matthews. The annual event, hosted by the Sitewide Planning Committee at Stennis, highlights accomplishments of women and focuses on challenges facing them in the workplace. During Lt. Gov. Tuck's visit, she took advantage of an opportunity to tour Stennis, NASA's lead center for rocket propulsion testing and commercial remote sensing.

Director's Dialogue

from Center Director
Roy Estess



CFC/United Way: Together, Anything is Possible

Late last month, many of our Stennis Space Center employees gathered on the lawn of Bldg. 1002 to help kick off this year's agencywide Combined Federal/United Way (CFC/UW) Campaign. This year's event was hosted jointly by the Naval Meteorology and Oceanography Command, representing the federal agencies at Stennis, and by Mississippi Space Services, representing our industrial contractors. Also joining us were representatives from many of the charitable organizations who are assisted annually by your generous donations to this very worthwhile effort.

I continue to be delighted but not amazed at the response from our Stennis employees each year you are called upon to contribute to this effort. Time after time you have all reached deeper into your pockets — not merely to help us reach a goal, but to show your sincere care and concern for families and individuals in our local communities.

This year's sitewide goal is set at \$317,000, which is comprised of \$227,000 for participating federal agencies at Stennis and \$90,000 for the Industrial Contractors Campaign goal. The campaign runs through Dec. 31, but the majority of agencies at Stennis are working toward an Oct. 15 deadline for meeting their goals.

Soon your area or division coordinator will be contacting you to ask for your support. Contributions to the CFC/UW can be made through payroll deductions or by check. I feel confident that our Stennis team will once again surpass our goal. Thank you in advance for any contribution you can make. Together, anything is possible.

The Naval Oceanographic Office hosted a picnic Sept. 1 to begin this year's Combined Federal/United Way (CFC/UW) Campaign fundraising drive. One of the most popular attractions at the event was the dunking booth. Here, Ted Strain of NOLA Computer Services makes his pitch to dunk Rear Adm. Kenneth Barbor and Capt. Larry Warrenfelz. More than 30 local organizations and charities benefit from United Way and CFC contributions. Last year the two campaigns raised more than \$300,000.



NEWS CLIPS

Astronomical honeymoon continues — NASA's Chandra X-ray Observatory celebrates its initial year in orbit with an impressive list of firsts. Through Chandra's unique X-ray vision, scientists have seen for the first time the full impact of a blast wave from an exploding star, a flare from a brown dwarf, a small galaxy being cannibalized by a larger one and, most recently, a new class of black hole that could represent the missing link in astronomers' search for these objects. Chandra is the third in NASA's family of great observatories, complementing the Hubble Space Telescope and the Compton Gamma Ray Observatory. Marshall Space Flight Center in Huntsville, Ala., manages the Chandra program for the Office of Space Science, NASA Headquarters.

NASA plans to send Rover twins to Mars — The traffic on Mars is expected to double in the near future. NASA plans to launch two large scientific rovers to the red planet in 2003. The first mission is targeted for May 22, with the second launch slated for June 4. Both rovers should enter Mars' atmosphere in January 2004. The Mars 2003 Rover projects will be managed at NASA's Jet Propulsion Laboratory in Pasadena, Calif., for the Office of Space Science.

New view on the culprits of climate change published — Since climate change affects everyone on Earth, scientists have been trying to pinpoint its causes. For many years, researchers agreed that climate changes were triggered by what they called "greenhouse gases," with carbon dioxide from burning of fossil fuels such as coal, oil and gas playing the biggest role. NASA-funded research at the Goddard Institute for Space Studies in New York suggests that climate change in recent decades has been caused mainly by air pollution containing non-carbon dioxide greenhouse gases. Black carbon emission is not an essential element of energy production, and it can be reduced or eliminated with improved technology.

Program at Stennis funds development of new sensor to monitor plant health

Growers and foresters alike have another potential source for monitoring and improving the health of their crops due to a Billerica, Mass., company's work funded through the NASA Small Business Innovation Research (SBIR) Program at Stennis Space Center.

Aerodyne Research Inc. has successfully developed the Plant Fluorescence Sensor (PFS), a real-time sensor that monitors plant health by remotely sensing energy lost from the plant during the process of photosynthesis.

Field tests of the sensor are being conducted by the Earth System Science Office (ESSO) at Stennis, under the direction of ecophysiologicalist Dr. Greg Carter, ESSO deputy chief, and National Research Council Senior Research Associate Dr. Arnold Theisen.

The Aerodyne sensor measures the intensity and spectral band ratio of chlorophyll fluorescence in green plants. This measure provides a good indication of the general health of the plant.

"The most unique aspect of this sensor is that it enables us to measure fluorescence from plants while they remain exposed to full sunlight," Carter said.

Stennis Technology Transfer Officer Kirk Sharp said officials expect passive remote sensing of plant fluorescence to prove a reliable and readily available tool for the early detection of plant stress. Among the benefits which include improvements in crop yield, forestry management practices and environmental monitoring by remote sensing.

"Historically, most research on plant fluorescence has taken place under special lighting conditions in the laboratory. This instrument will enable us to evaluate the fluorescence that occurs naturally in outdoor environments and the information it contains about plant health," Theisen said. "The general principles by which the PFS operates will ultimately allow fluorescence to be measured from aircraft and satellites. This would add tremendously to NASA's remote sensing capabilities."



Space Shuttle Atlantis appears to burst forth from a cocoon of smoke in the Florida marsh lands as it rockets toward space on mission STS-106. The perfect, on-time liftoff of Atlantis on Sept. 8 occurred at 7:45:47 a.m. CDT. On the 11-day mission to the International Space Station, the seven-member crew performed support tasks on orbit, transferred supplies and prepared the living quarters in the newly arrived Zvezda Service Module. The first long-duration crew is due to arrive at the station in late fall.



An MC-1 Engine, formerly known as Fastrac, fires on a recent 24-second hot fire test at NASA's Santa Susana Field Lab (SSFL) Alfa 1 test stand in Chatsworth, Calif., where it is being tested for an interim period. The MC-1's name change was prompted by the transition of the project from a technology development to a flight program. The 60,000-pound-thrust engine is currently planned for use on the powered flights of NASA's X-34 technology demonstrator, a rocket plane being built by Orbital Science Corporation. The X-34, a suborbital winged vehicle, will be launched at an altitude of 38,000 feet from a modified L-1011 airliner. There were 30 hot fire tests — including altitude temperature simulated conditions — on the engine at Stennis before the move. Nine hot fire tests have been conducted at SSFL to date, including a flight duration 159-second test.

NAVO's speedy new IBM supercomputer is rated among the top four in the world

An IBM RS/6000 supercomputer, code-named "Blue Wave," has been installed in the Department of Defense/Naval Oceanographic Office's (NAVOCEANO) supercomputer center at Stennis Space Center.

"This new IBM RS/6000 SP system is the most powerful supercomputer within the Defense Department and is currently ranked among the top four fastest computers in the world," Steve Adamoc, the NAVOCEANO supercomputer center's director, said.

"The addition of this system boosts the total computational capability of the center to over three trillion calculations per second. Utilization of those full capabilities will permit assembly of the most detailed global-scale oceanographic models ever constructed, as well as the most complex models of their kind in other key science and technology areas within the Defense Department."

"We are extremely pleased with the significant computational capability of this system," Landry Bernard, NAVOCEANO technical director at Stennis, said. "High performance computing technology of this magnitude gives us unparalleled capabilities in the daily ocean- and global-scale modeling we perform to support worldwide Defense Department operations. The benefits to defense research and development will be enormous, enabling substantive advances in the science areas which are critical to the nation's defense."

Computers are ranked on a standardized speed test that measures how many calculations they perform in a second. This one was judged the fourth most powerful in early June by groups at the University of Tennessee and the University of Mannheim in Germany, which publish the rankings twice a year. The three that ranked faster were Intel's ASCI Red at Sandia National Laboratory in New Mexico; IBM's ASCI Blue Pacific, Lawrence Livermore National Laboratory, Calif.; and SGI's ASCI Blue Mountain at Los Alamos Laboratory in New Mexico.



Stennis Space Center is taking a lead role in a national pilot program aimed at implementing an environmental management system. Shown discussing the start-up effort at Stennis are, from left, NASA's Ron Magee, Stennis environmental officer; Department of Environmental Quality (DEQ) Executive Director Charles Chisolm; Bill Bass, DEQ Office of Pollution Control; and NASA's Hugh Carr, Stennis environmental specialist. The pilot program is intended to encourage all federal agencies to implement an environmental management system.

Stennis a leader in national pilot program that aims for cleaner, greener environment

NASA's John C. Stennis Space Center was selected in April as one of five NASA centers to participate in a national pilot program to implement an Environmental Management System (EMS) based on ISO 14001 standards. The program came as a result of an executive order signed earlier this year directing all federal agencies to implement an environmental management system.

"The Environmental Management System provides a comprehensive way for federal agencies to effectively manage and measure the impacts of their operations on the environment," said Stennis Environmental Officer Ron Magee, who will serve as the center's EMS installation representative. "Our system will be similar to the quality management system we now have in place at Stennis with ISO 9000."

Charles Chisolm, executive director of the Mississippi Department of Environmental Quality — the agency responsible for oversight of state environmental efforts — praised the center's initiative in implementing a program which will vastly increase employee awareness and participation in environmental procedures.

"We have always had an excellent working relationship with NASA," Chisolm said. "Over the years, we have found the Agency to be a

leader in the area of environmental management. And, we are very excited, but certainly not surprised, that Stennis Space Center is once again displaying its environmental leadership, this time by implementing this environmental management system."

Stennis created an EMS Core Team representing NASA, Mississippi Space Services, Lockheed Martin Space Operations, Stennis Programs, and The Boeing Company, Rocketdyne. Magee said the group has been meeting over the past several months to review all activities at Stennis and determine their potential impact on the environment.

The core team has determined environmental aspects and impacts for every Stennis activity and has evaluated those activities in terms of risk to the center. Risk is determined by the impact to natural and cultural resources; the cost to NASA for fines or environmental damage; the impact due to NASA mission delays, damage to NASA's reputation and stakeholder relationships; and violations of legal requirements or agreements.

Magee said that employee awareness briefings are scheduled to begin near the first of October. The process of implementing new policies and procedures needed to meet the ISO 14001 standards will begin then.

International Space Station Status Report

The space shuttle Atlantis gave the International Space Station (ISS) a big boost on STS-106. Commander Terry Wilcutt and Pilot Scott Altman's hour-long series of thruster firings raised the station's orbit by several more miles. Thirty-six pulses of Atlantis' reaction control system thrusters boosted the station another 3½ miles. The third reboost of the mission placed the ISS in a 237-by-229 statute mile orbit.

A fourth reboost maneuver was scheduled before the shuttle was to undock from the station.

Mission Specialists Ed Lu and Yuri Malenchenko installed power converters in the Zvezda module. These will allow current from U.S. solar arrays to be used in the Russian modules. The first set of these large arrays is scheduled to be installed on the station in early December.

The crew took a closer look at the connections on one of Zvezda's eight batteries that is not working properly. Mission managers have elected to disconnect cables from the battery and do no further work since seven of the eight batteries are working fine. As few as five can supply enough electrical capability when a crew is stationed on the ISS.

Lu and Malenchenko also installed components of the Elektron system in Zvezda. That equipment, sent into orbit aboard the Progress, separates water into oxygen and hydrogen and will be used to replenish the air in the station.

Astronauts also transferred thousands of pounds of gear aboard the Progress cargo spacecraft that is docked to the aft end of the Zvezda module.

Among the hardware and supplies moved into the ISS were six 100-pound bags of water, all the food for the first resident crew, office supplies, onboard environmental supplies, a vacuum cleaner and a computer and monitor.



A TRW 650K Low Cost Pintle Engine undergoes hot fire testing at Stennis' E-1 test stand recently. The test article achieves a high level of power without a high cost because of the simplicity of its design.

TRW's 650K engine second largest tested

Stennis personnel have begun testing the TRW 650K Low Cost Pintle Engine (LCPE) at the E-1 Component Stand under a cooperative agreement with NASA's Marshall Space Flight Center in Huntsville, Ala., under program sponsor Gary Lyles.

This LOX/LH2 engine, with a chamber outside diameter of 68 inches, is one of the physically largest engines ever tested in the U.S., second only to the Aerojet M-1 tested in 1965. TRW has scaled up the pintle injector design and provided an injector, combustion chamber and GOX/GH2 torch igniters for hot fire testing. Future development will include integrating and testing the associated propellant pumps, gas generator and hot gas ducting. The pumps and gas generator would be tested at a component level prior to full engine testing. In comparison to other

large scale rocket engines being tested at Stennis, the TRW 650K LCPE produces thrust similar to Boeing's RS-68 engine. As the name implies, the Low Cost Pintle Engine is designed to be much lower in both recurring and non-recurring costs, which aligns it with NASA's goal of reducing costs for future access to space.

The objectives of the test program are to demonstrate scalability (from a previous 40,000-lbf pintle engine to the current 650,000-lbf article), performance (with parametric characterization) and stability (with bomb testing). The engine is currently in the performance optimization stage of the hot fire test program at Stennis' E Complex under the direction of NASA's Program Manager at Stennis Dave Liberto and TRW's Program Manager Kathy Gavitt.

StenniSphere goes to fall-winter schedule

StenniSphere has initiated its new fall hours. The newly redesigned visitor center is now open seven days a week from 9 a.m. to 5 p.m., with no charge for admission.

Stennis Space Center operates the interactive visitor center for expanded hours during the summer to accommodate increased traffic through the facility, StenniSphere Manager Cheryl Bennett said.

"After Labor Day, school is back in ses-

sion, and the demand for later hours is greatly reduced," Bennett said.

The new hours will remain in effect until Memorial Day.

StenniSphere opened to the public May 26. Since then, the facility has seen more than 92,346 visitors in its first three months of operation, which is a 227 percent increase over the 40,625 visitors for the same period last year.

Stennis finds out that two Kellys are better than one

Don and Larrie Kelly came from opposite ends of the country but met and fell in love at Stennis Space Center.

A native of Bear River City, Utah, Larrie came to work in Hancock County some 30 years ago. When her sister and brother-in-law, Jeanette and Wallace Brown, transferred to Stennis, Larrie came to visit and decided to stay. It was then that she took a position with NASA as a secretary in the Range Operations Office but soon transferred to Facilities Engineering. "I worked for many years with Jack Rogers and just followed him wherever he went," she said. Rogers retired, and now Larrie works with the real property and space utilization functions within the Institutional Services Division of NASA.

It was a fateful day in January 1974 when Larrie met a young man in the Human Resources Department checking in as a co-op student from the University of West Florida.

"I met Don that day, but it was later when we both joined the bowling league that we got to know each other," Larrie said. "We began dating after that."

A native of Pensacola, Fla., Don first came to Stennis as a co-op student in the Finance Department and two years later became a full-time budget analyst for NASA. Today, he is a resource analyst with the Resource Management Office.



Don and Larrie Kelly



Stennis Employee Profile

"Stennis has really come a long way in the last 30 years," Larrie said. "When we first came to work here, there were about 50 NASA people on the payroll. The Apollo era was ending, and Jackson M. Balch, the former center manager, was encouraging other federal agencies to locate at the test site. We have seen many changes to NASA's programs over the years and look forward to many more changes in the future."

Those early days of their romance and careers seem very long ago to the three-time grandparents.

"Our lives changed nine years ago," Don said.

That's when their first grandchild was born. Their daughter Marla and her husband Wade Chauvet have three children who take center stage in the Kelly's lives.

"Our grandkids are our number one priority," Don said. Weekend trips to the west side of New Orleans to pick up the grandchildren for weekends back home in Diamondhead are common.

Jonathan, 9, Nathan, 2, and Madison, 6

weeks, are frequent visitors and enjoy doing the typical activities of children in summer, Don said.

"Swimming is the boys' number one activity," he said.

"You'll see Don and Nathan on many an afternoon riding around the yard on the riding lawn mower, mainly to get Nathan to take a nap," Larrie added.

"Whatever works," Don said with a smile.

Don also likes to read with Jonathan, and they both scrambled to see who would read the latest Harry Potter book first.

Don likes to get the children involved in his backyard vegetable garden, too.

"Give a kid a shovel and some dirt and they're right with you," he said.

Larrie spends some of her off-hours working with stained glass. She has professional quality panels of her work hanging in her cubicle on the third floor of Bldg. 1100.

Both Larrie and Don believe they would like to travel in the not-so-distant future. Once they retire, Don has plans to visit Germany.

"Not for the Oom-pah-pah thing," he said with a laugh, but perhaps to take in Oktoberfest and sample the culture. Larrie sees Ireland as an eventual destination.

Meanwhile, both are content with their frequent trips over to New Orleans to pick up precious cargo and retire to their Diamondhead home and vegetable garden.



Eight Long Beach High School students spent their summer participating in the first Remote Sensing Summer Student Enrichment Experience. The program is a joint venture between NASA's Education and University Affairs Office and the Commercial Remote Sensing Program at Stennis Space Center. At Stennis, the students were paired with personnel from the Commercial Remote Sensing Program. Program participants are, front from left, Hutch Gregory, student internship coordinator Roxzanna Moore, Cindy Reese and Ben McCreary; back row, Jonathan Hart, Kim McManus, Matt Ladner and Ryan DiLorenzo.

Fall workshops for educators set

The Stennis Educator Resource Center has announced the fall workshop schedule. All workshops begin at 8:30 a.m. in one of three locations at Stennis: the TREND 2000 facility, the Little Red Schoolhouse or the e-SPACE Collaboratory.

The workshops are free, but reservations are required due to limited seating. For reservations, call the NASA Educator Resource Center at 1-800-237-1821 (option 2) in Mississippi or Louisiana or (228) 688-3338.

WORKSHOP SCHEDULE

Intro to Home Page Development
Sept. 27, Grades K-12

**When I Grow Up,
I Want to be an Astronaut**
Sept. 28, Oct. 25 and 26
Grades K-6

**Brown Bear, Brown Bear,
What Do You See?**
Oct. 5 and Oct. 11, Grades Pre K-1

**Introduction to
Microsoft Power Point**
Oct. 10 and Nov. 7, Grades K-12

Magical Metamorphosis
Oct. 12, Grades 1-3

Introduction to Microsoft Excel
Oct. 24, Nov. 28 and 29
Grades K-12

**How to Use a GPS Unit
in the Classroom**
Nov. 1 and 2, Grades 4-8

Astronomy for Kids
Nov. 3, Grades 2-5

Mission Mathematics
Nov. 16, Grades 2-5

Does Gray Matter?
Nov. 3, Grades K-2

Remote Sensing — Not so Remote
Dec. 6, Grades 4-8

Introduction to Microsoft Access
Dec. 7, Grades K-12



During the NASA Honor Awards ceremony last month, NASA Patent Awards were presented to Dr. Greg Carter and Bruce Spiering for their "Plant Chlorophyll Content Meter." NASA's Deputy Associate Administrator of the Office of Space Flight Joseph Rothenberg and Stennis Space Center Director Roy Estess presented the awards. From left are Rothenberg, Paulette Carter, Emily Carter, Dr. Greg Carter, Gaines Carter, Bruce Spiering, Danny Spiering, Kate E. Spiering and Estess.

LOCKHEED . . .

(Continued from Page 1)

"We're pleased to contribute to the State of Mississippi. This is a win, win, win situation for all involved," Coffman said.

"We are a proud partner with the State of Mississippi in creating new jobs for the 21st century," he said. "This center of excellence will allow the corporation to achieve economies of scale by serving multiple sites with standard processes and strategic partnerships with our suppliers. I want to thank all those involved in making this a reality."

Senate Majority Leader Trent Lott, R-Miss., noted that bringing the center to Stennis would have been impossible without extraordinary participation and cooperation between many parties — Lockheed, Stennis, Mississippi and Hancock County.

"I want to start off by saying, 'Oh, happy day,'" Lott said. "We're beginning to think big, and this is big. There's nothing bigger anywhere."

Lott added that the work performed at the center will be critical for the nation's future defense and space needs.

Stennis Space Center Director Roy Estess said the center will mean more to Stennis and the state than just additional jobs. Luring such a facility is also an indication of how much progress the state has made in becoming

attractive to high-tech companies.

"I am proud to be a Mississippian today," he said. "This is a world-class success story."

Mississippi Gov. Ronnie Musgrove said determination and a progressive approach were keys to the agreement.

"What you see truly is a result of a lot of people finding a way to say 'yes' and not finding a way to say 'no' at every turn. That makes all the difference," he said.

"Mississippi has become a player, not just nationally, but internationally."

District 5 Rep. Gene Taylor, D-Miss., stressed the importance to the local economy and said it illustrates what local officials are willing to do to attract jobs and industry to the area.

"Today proves Hancock County is open for business," he said.

The state and Hancock County will join Lockheed to provide the specialized training required for those who work at the center.

Lockheed's new Stennis facility will produce propulsion systems, such as thrusters, used for satellites and other spacecraft the company makes. The thermal control systems produced at the facility will protect space vehicles from the extreme temperatures of the space environment. Metrology refers to the science of measurement, and this center will be responsible for the highest level of "primary standards" in the extremely precise calibration of test equipment and tools.

**Safety
Corner**

Hurricane season still lurking, so be ready just in case

Hurricane season is upon us, and we must all plan ahead to ensure preparedness during this season. We need to protect not only our families and homes, but also the areas in which we work.

Start now planning for a hurricane threat. All employees need to inspect the areas in which they work to ensure any loose material outside the building is secured or provisions are made in the event of a hurricane. At home, organize hurricane supplies such as:

- Batteries
- Flashlights
- Radio (battery operated)
- Food and water
- Manual can opener
- First aid kit and essential medicine
- Extra cash
- Fuel in car

Investigate safe evacuation routes; brief family members on how to respond; teach young children about emergency information such as police, fire department and radio stations to tune in to for emergency information.

For site status information in a hurricane condition, call the Stennis Emergency Control Center Information Hotline at Ext. 3777.

QUICK LOOK

■ **Stennis' Fifth Annual Annual Mission Fall Family Picnic** is Oct. 21 at Jazzland Theme Park in New Orleans. It is open to NASA and mission contractor employees and their immediate family. Tickets are \$8 and include food and drinks. Parking decals are \$3 per vehicle. Posters in each building provide details.

■ **Stennis is celebrating National Hispanic Heritage Month** through Oct. 15. Activities will include a literary/art contest for kids and adults. For more details or to volunteer, contact Carmen Ramirez at Ext. 2339.

■ **October is Breast Cancer Awareness Month.** The NASA Federal Women's Program Advisory Council at Stennis is hosting a "Lunch and Learn" program every Wednesday in October from 11:30 a.m.-12:15 p.m. in the Bldg. 1100 atrium. For details, call Diane Sims at Ext. 2164.

■ **Volunteers are needed for the Pine Burr Area Council Scout-O-Ree** Oct. 27-29 at Stennis Space Center. For details, contact Eric Ross at Ext. 3571.

■ **The NASA Environmental Office** has implemented an aluminum can recycling program in Bldg. 1100. Receptacles will be placed near soft drink vending machines in the building.

Course on the future of biology, its role with NASA open to Stennis employees

NASA Administrator Daniel S. Goldin recently asked life science educators at Colorado State University to develop a course to assist both technical and non-technical NASA employees to gain a better understanding of biology's role in tomorrow's world, with a specific connection to NASA's operational and science missions. The intent of the live, interactive multimedia course is to renew and increase our appreciation of biology.

This course, entitled *Biology — The Incredible, Evolving Science of Life*, will be made available to all NASA and Stennis employees in October.

Part I of the course will be available twice on Oct. 18 in either the morning session from 8:30 a.m. to noon or from 1 p.m. to 4:30 p.m. Part II will be available twice on Oct. 19th at the same times.

Classes will be taught in the StenniSphere auditorium.

NASA employees should submit SSC Form 648 to Anita Douglas in NASA's Human Resources and Management Office by e-mail or fax.

Other Stennis employees interested in the course should call Douglas directly at Ext. 3698 for more details.

LAGNIAPPE

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