



MARSHALL STAR

Marshall Space Flight Center

Oct. 11, 2001



Photo by Emmett Given, NASA/Marshall Space Flight Center

Edward Martin, a band member with the National Association for the Prevention of Starvation (NAPS) from Oakwood College, plays the saxophone during the all-hands meeting Oct. 3.

Center Director advises patience as NASA reviews strategic resources

by Debra Valine

At the all-hands meeting Oct. 3, Center Director Art Stephenson discussed NASA's Strategic Resources Review, Deputy Director Jim Kennedy reviewed Balancing the Marshall Workforce, and Tereasa Washington, director of Marshall's Customer and Employee Relations Directorate, outlined upcoming events for Center personnel.

Stephenson urged Marshall employees and contractors to be patient until NASA makes firm decisions regarding the recommendations received during the Strategic Resources Review.

"President Bush asked government agencies to examine the way we do business — not just NASA, but all agencies," Stephenson said. "Our goal was to think out of the box — think of new ways to do business — and I think we have done that.

"Some of the things you may read or hear about the Strategic Resources Review might scare you," Stephenson said, "but that is because we were thinking outside the box. We looked at how to do business best at NASA. We are looking at a lot of ideas."

But he assured the audience that no decisions have been made, and that Marshall missions are considered critical by

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Student Launch Initiative

Randolph top team in first reusable rocket competition

by Lynnette Madison

Huntsville's Randolph High School took the top award in a close contest among three area high schools to build and launch a reusable rocket. The contest was the first competition in the Student Launch Initiative, an educational program sponsored by the Marshall Center.

The three schools launched 8-foot tall rockets they designed and built to heights of more than one mile at a Redstone

Arsenal test site Saturday morning, Oct. 6, culminating a yearlong project for the students.

Sparkman High School placed second and Johnson High School placed third in the competition. Johnson — the only school that chose to take on both the development of a science payload, or cargo, and the design and building of a launch vehicle — also takes home first place for its payload.

The winning teams will also participate

in Space Camp and Aviation Challenge activities sponsored by the U.S. Space and Rocket Center in Huntsville, Ala. Each team will receive a trophy.

The team awards were based on results from design and presentation phases modeled after NASA's Flight Readiness Reviews. A panel of NASA scientists and engineers heard students' presentations.

The rockets reached the following

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Marshall Center observes Disability Awareness Month

by Shelvie Miller
Disability Program manager
Equal Opportunity Office

The Marshall Center is observing National Disability Employment Awareness Month in October. The theme for this year is "Win with Ability."

To recognize the great potential of people with disabilities and to encourage all Americans to work toward their full integration into the workforce, Congress has designated October of each year as "National Disability Employment Awareness Month."

Employment is the best path to economic security and to personal and professional fulfillment.

This month is a special time for all organizations to recognize the tremendous value and potential of our employees and to highlight the abilities and skills of those with disabilities, and to recommit and dedicate ourselves to the empowerment, integration, employment and full inclusion of every one of our citizens with disabilities.

As we reshape and reorganize our civilian workforce, I urge each of you to review your commitment to employment and advancement of Americans with disabilities. The employment rate of people with disabilities has historically been the lowest of any minority in the nation. Recent polls indicate that almost three out of every four individuals with

severe disabilities are not employed, even as the country enjoys its lowest unemployment rate for the general population in several decades. These individuals represent a skill pool and a national resource that is largely untapped, even though newspapers and Web sites are full of want ads. If we don't utilize the abilities of all citizens, including those with disabilities, American business and industry's leadership and competitiveness in the expanding global economy will evaporate.

Let's win with ability and put qualified people with disabilities to work.

Marshall technician puts pieces in puzzle to make Space Station a laboratory and home

by Lynnette Madison

The green, yellow and red lines on the computer screen look more like a child's scribbling than a schematic for a miniature circuit board that one day will control science experiments on the International Space Station.

With the click of his mouse, NASA engineering technician James Harper fits another piece on the circuitry puzzle in his office at the Marshall Center.

"We didn't design the Space Station — just some of the things that go on it," says Harper, as he guides his wheelchair to a table and points to a stack of blueprints.

Although Harper works with the electronics packaging team in the Marshall Center's Avionics Department, he doesn't make boxes. Instead he focuses on the transistors, capacitors, diodes and relays that make up NASA's electro-mechanical flight hardware.

During his 18 years at Marshall, he's been involved with virtually every type of major Marshall Center project, including launch vehicles, spacecraft and flight experiments. Harper has worked on everything from a digital clock for the Space Shuttle's astronauts to a urine processing assembly for the Space Station.

The Avionics Department, within Marshall's Engineering Directorate, develops and tests low-cost, lightweight electronic devices for launch vehicles, spacecraft and flight experiments. Harper and his co-workers are responsible for ensuring circuitry on NASA's flight and ground support systems works.

Harper's portfolio of handiwork is like a NASA "Who's

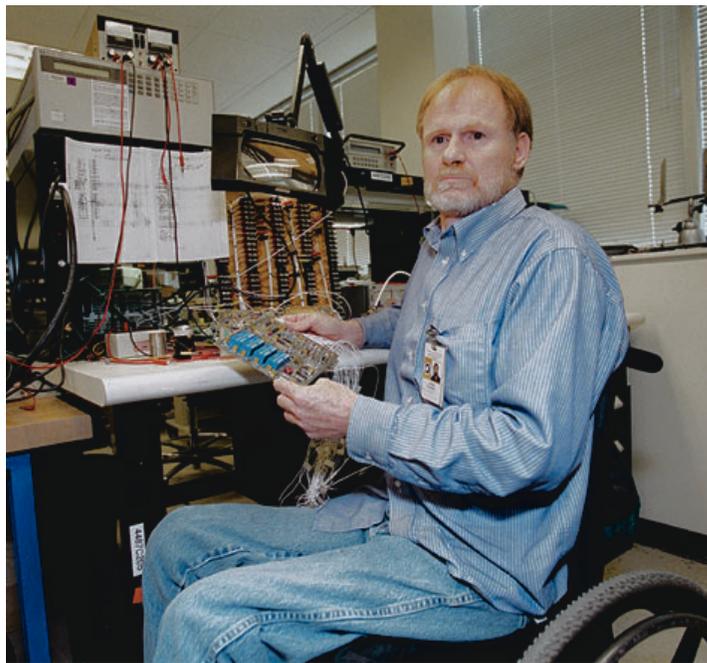


Photo by Doug Stoffer, NASA/Marshall Space Flight Center

James Harper at work.

Who" list of projects. He's worked on the Space Station's Environmental Control and Life Support System; on NASA's Chandra X-ray Observatory, the world's most powerful x-ray telescope; on the Fastrac engine, one of the world's simplest turbopump rocket engines; and on the Propulsive Small Expend-

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Technician

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able Deployer System, or ProSEDS, a demonstration of a propellant-free space propulsion system that uses an electrodynamic tether.

For instance, on board the Space Station today is a controller board for which Harper meticulously laid out the web of circuitry. The board is similar to a mini-computer, and controls the operation of the Protein Crystal Growth Facility, where crystals grow in low-gravity to better understand their applications in the areas of medicine, agriculture, the environment and other biosciences.

"The engineers come up with the ideas, but we put it on the board," says Harper. "In most cases, we have a certain size board that it has to fit on — and, when we finish, it has to work. It's like putting a puzzle together."

Solving the puzzle is one of the things Harper enjoys most about his job. Once the puzzle is complete, Harper develops the assembly drawings and the parts list.

Harper can claim many firsts at Marshall, says his boss Jerry Hudgins, leader of the electronic packaging team.

Harper was the first at Marshall to design multi-layered and multi-wired printed circuit boards in-house, a cost-savings to NASA. The boards were used on the Burst and Transient Source Experiment, an instrument used to detect gamma rays discharged when stars explode or when one star rips away part of another; BATSE — pronounced "bat-see" — is part of NASA's Compton Gamma Ray Observatory. And Harper was the first at Marshall to use microelectronic surface mount

technology, the same technology used on a computer's memory board.

In the early 1980s, Harper also was the first at Marshall to adopt computer-aided drafting on the job — another time and cost-saving effort that he taught himself to use. He admits he never gave rocket science a thought while growing up in Albertville, Ala. — about 50 miles southeast of the Marshall Center. Even after a stint in the U.S. Navy as an aircraft electrician, Harper returned home and began his own business, contracting as an electrician for local homebuilders.

But in 1978, a wall collapsed on Harper as he was wiring a house. The accident broke his back, leaving him paralyzed.

Harper's spinal cord injury made him re-think his career options. "I knew I couldn't go back to work as an electrician, so I had to go forward and find something else. After all, I had a family," he says. Harper has one son, James Christopher Harper, and two granddaughters who today live in Huntsville.

So, Harper headed to school at Alabama Technical College in Gadsden to win certification as a draftsman. Once certified, he sent out more than 1,000 resumes, ultimately landing a job with Teledyne Brown Engineering in Huntsville.

A year later, a cousin suggested he try NASA. In retrospect, Harper says it was a good move.

"Not many folks say they love their job, but I do. Each day brings something new," says Harper. Harper is the son of Ruth Harper and the late James Leon Harper of Albertville.

The writer, employed by ASRI, supports the Media Relations Department.



Photo by Doug Stoffer, NASA/Marshall Space Flight Center

Moore named 'Employee of the Year'

Dr. Craig Moore, left, a senior research scientist and expert technical adviser in the Microgravity Science and Applications Department of Marshall's Science Directorate, receives the Employee of the Year Award from Sue Payne, chairwoman of the Huntsville Area Committee on the Employment of People with Disabilities.

Safety Day 2001

Marshall Center Safety Day activities set for Oct. 17

Marshall's Safety Day 2001 will be held from 10 a.m.-3 p.m. Oct. 17 in Morris Auditorium. Employees may attend the program in Morris or view it via Marshall Centerwide TV.

The day's events include a presentation on "the safety myth," appearances by astronauts and safety award presentations in the morning. Following lunch, activities resume in Morris with the Safety Bowl finals and Safety Bowl award presentation.

Supervisors are requested to provide one hour of organization-specific safety day activities for employees at a time that does not conflict with the above activities.

Donald H. Theune, a vice president and major project manager for the Topf Organization of King of Prussia, Pa., will speak on, "The Safety Myth: It Won't Happen to Me" at 10:20 a.m. His undergraduate work was in psychology and his graduate work was in applied and theoretical statistics. He spent more than 30 years working with Fortune 500 companies prior to joining Topf.

Theune has successfully managed behavioral safety processes in chemical, petro-chemical, pharmaceutical, packaging, paper, utility and research and development companies.

For more information on Safety Day, visit the Web at: <http://safetyday.msfc.nasa.gov>

Medical services on Safety Day

The Medical Center will be seeing patients for emergencies only from 9:30 a.m.-2:30 p.m. Oct. 17 to allow medical personnel to participate in Safety Day. All non-occupational/non-acute first aid visits should be before 9:30 a.m., or between 2:30 and 3 p.m., or on Oct. 16 or 18.

MSAT safety badges

Marshall's Safety Action Team would like to make an "I Think Safety Because..." badge for you during the 2001 Safety Bowl Competitions and on Safety Day — so don't forget to bring your favorite photo. Badges will be made from 10 a.m. to 3 p.m. Thursday and from 8 a.m.-noon Oct. 17 in the Morris Auditorium lobby area. For more information, call Cathy Fletcher at 544-7752.

Barbecue lunch

On Safety Day, employees may purchase a box lunch for \$4, payable at the time of pickup. Lunch includes a barbecue sandwich, chips, drink, and cookie or brownie. If the weather is nice, lunch will be served on the patio outside Morris Auditorium. If not, lunch will be served in conference room 1201, Bldg. 4203. The barbecue lunch special also will be available via regular serving lines in the cafeterias in Bldgs. 4203, 4610 and 4471. Volunteers are needed to help with the food service. For more information or to volunteer, call May Wales at 544-5552.

Safety Bowl results

Oct. 9: Sweet 16

Do-It-Right/Do-Rights (Center Ops) beat TD Safety Titans; Safety & Health Juggernauts (Center Ops) topped the CFO Allocators; Procurement Negotiators bested FD Safety Operators and the ED All-Stars won over the SMO Lawyers.

Oct. 11: Elite 8

Do-It-Right/Do-Rights meet ED Exceptional at 9 a.m., Morris Auditorium
Safety & Health Juggernauts challenge the Shuttle Launchers at 10 a.m., Morris Auditorium
Procurement Negotiators take on SOS Science on Safety at 1 p.m., Morris Auditorium
ED All-Stars play against CaERacters at 2 p.m., Morris Auditorium

Oct. 15: Final 4 at 2 p.m. and 3 p.m., Morris Auditorium

Oct. 17: Dynamic Duo semifinals and championship game, Morris Auditorium

Rockets

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altitudes: Randolph High School, 6,110 feet; Johnson High, 3,270 feet; and Sparkman, 1,651 feet. The payload — a fertilized chicken egg — was successfully retrieved by Randolph and Johnson High.

The goal of the Student Launch Initiative is to get students in high schools and universities excited about and more directly involved in science, math and engineering. The project is modeled after a similar and highly successful program at Fredericksburg High School in Fredericksburg, Texas. Two university teams participating in the Marshall Center program will launch rockets in December.

NASA uses its unique resources, whenever possible, to support educational excellence, since education is a key element in NASA's overall mission. The space agency participates in education outreach programs through its field centers around the country.

The writer, employed by ASRI, supports the Media Relations Department.

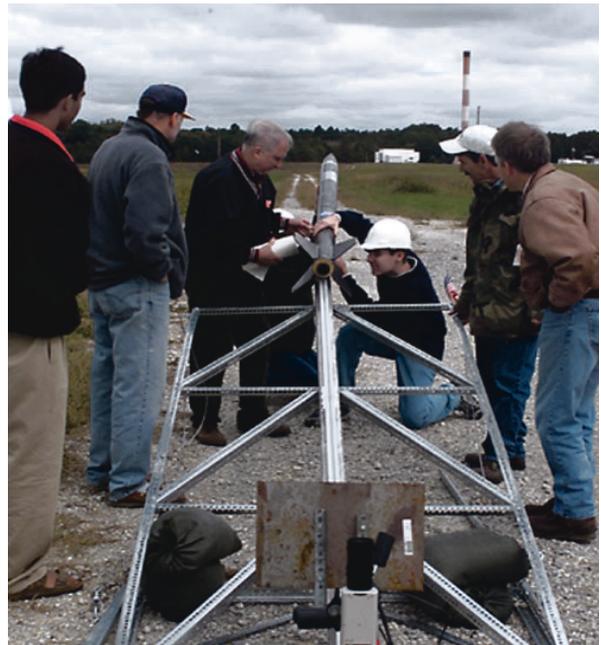


Photo by Emmett Given, NASA/Marshall Space Flight Center
The Randolph High School team readies its rocket for launch.

The Crew

The STS-105 crew members are, in front from left, Pilot Frederick W. Sturckow, Mission Specialists Patrick G. Forrester and Daniel T. Barry, and Commander Scott J. Horowitz, a veteran of three previous space flights.

Expedition Three crew members are second row from left, Mikhail Tsurin, Commander Frank L. Culbertson Jr. and Vladimir Nikolaevich Dezhurov.

Expedition Two crew members returning aboard Discovery are, back row from left, James S. Voss, Commander Yury V. Usachev and Susan J. Helms.

Primary Objective

Mission STS-105 is the 11th Space Shuttle flight to the International Space Station. The primary objective is to fly members of the Expedition Three crew up to the Station aboard Discovery and return the Expedition Two crew members back to Earth. Discovery will also carry the Italian-built Multi-Purpose Logistics Module Leonardo and an Early Ammonia Service (EAS) tank in its payload bay. Mission STS-105 crew members will attach the EAS to the Space Station during two spacewalks.

The STS-105 crew will visit Marshall Center Tuesday.

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NASA and will continue.

“We may have to outsource more, do more with contractors, and move things traditionally done at the Center outside to universities and industry,” Stephenson said. “That is what we are doing with the NSSTC (National Space Science and Technology Center). The NSSTC is held up as a model of government working with universities and industry for the rest of NASA to emulate.”

Stephenson said briefings with the Office of Management and Budget, the NASA Advisory Committee and NASA Administrator Dan Goldin would occur before recommendations are finalized. At that time, Goldin — working with the Office of Management and Budget — will make decisions.

“I think the Marshall Center is in good shape,” Stephenson said. “We are critical to what’s going on and we will continue to play a critical role in the agency. Some Centers are fighting turf battles to keep projects. We are not fighting a turf battle. We already have enough work to do — that is why we are striving to balance the workforce. We are just looking at doing the things we do now in a better way.”

Under current budget projections, NASA does not have sufficient funds to fully fund the International Space Station or microgravity research. But, Stephenson said, the Space Launch Initiative, led by the Marshall Center, looks solid.

Stephenson said there is a possibility of privatizing Space Shuttle Operations. “Whatever we do, we have to do it right,” he said. “We must do it safely.” He added that Marshall will continue to support the Space Station and microgravity research.

Stephenson sees Marshall continuing to improve access to space through the Space Launch Initiative. “Propulsion research, Earth and space science, and optics development will continue over the next few years.

“It is important for us to do a good job of staffing up the Space Launch Initiative while we continue to do good work on our other missions like the Space Station and Shuttle,” Stephenson said.

In-space propulsion efforts need to be increased, he said. “We are working on the next generation vehicle, but not on the upper stages. We need to look at the upper stages and develop a way to reduce the weight associated with in-space propulsion.”

Administrative services for the agency is an area where the Center Director sees Marshall becoming more involved. He cited such administrative areas as information technology, human resources and finance as a few of the administrative areas where NASA looks to Marshall for development.

“Our educational programs are considered some of the best in the agency,” Stephenson said.

“There has been some talk about moving the Payload Operations Center to Johnson Space Center (JSC),” Stephenson said. “I asked for the opportunity to search for the best solution for the agency whether it be at Marshall or JSC. If sending the POC to



Photos by Emmett Given, NASA/Marshall Space Flight Center

Marshall Deputy Director Jim Kennedy reiterates the importance of Balancing the Marshall Workforce.

Johnson will save the agency money — I am all for it. We are looking at ways to cut costs of the POC. The answer may well be to keep doing payload operations at Marshall while finding ways to cut our cost of operations.”

Balancing the Marshall Workforce

Staffing for Space Launch Initiative (SLI) is a part of Balancing the Marshall Workforce (BMW).

“We have to live with the civil servant workforce we have — 2,760 — that number is not going to go up,” Jim Kennedy said. “some of our people are overworked and some of our projects are under-served. We cannot continue to overstress our people.”

He said nobody needs to fear the Balancing the Marshall Workforce initiative; there will be no reductions in force.

“It is the people value that is at the heart of BMW,” Kennedy said. “BMW applies only to the government workforce.”

“We transferred thousands of workers to Marshall Shuttle propulsion 30 years ago, now we need to transfer several hundred to meet BMW needs,” Kennedy said. “Shifts in manpower go on in industry every day. It is all about keeping up with the changing times and it is in our best interest.

Steps we are taking

There is an up-front, immediate need to staff SLI. There are 162 vacancies. “Sixty-five people have agreed to go to SLI,” Kennedy said. “I want all of you to know if you are asked to go, it is an honor. We still have 97 vacancies to go.” Employees can go to the Web site that identifies skills for SLI to identify requirements.

To achieve BMW needs we may have to reduce the workload by eliminating lower priority tasks/projects. “We want to have organization allocation numbers by Friday. Once skill deficiencies are identified, there will be a job fair” he said. “We want to

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complete the job fairs by Thanksgiving.”

Upcoming events

Tereasa Washington emphasized important upcoming events such as the Hispanic Heritage Month events through Oct. 15; the Combined Federal Campaign, Oct. 8-Nov. 19; the Student Launch Initiative, Oct. 6; Safety Bowl competitions beginning Oct. 9; and Safety Day, Oct. 17.

She also introduced band members of the National Association for the Prevention of Starvation (NAPS) from Oakwood College. The band went to New York City shortly after the Sept. 11 terrorist attacks to play inspirational music on the streets of New York and to lift spirits of the grieving.

NAPS played songs and was presented with a Director's Commendation from Stephenson.

The writer, employed by ASRI, is the Marshall Star editor.



Center Director Art Stephenson, left, presents Dr. Anthony Paul and the National Association for the Prevention of Starvation (NAPS) from Oakwood College with a Director's Commendation for their work in New York City following the Sept. 11 terrorist attacks.

Obituaries

Flake, Harry M., 82, of Clarksville, Ohio, died Sept. 11. He retired from Marshall in 1973 where he worked as chief engineer of the second stage of Saturn V and also worked on Skylab. He is survived by his wife, Helen Flake.

Gilbert, Ward T., 84, of Madison, died Sept. 28. He retired from Marshall in 1990 where he worked as a configuration management specialist. He is survived by his wife, Mary Elizabeth Ward.

Student humanitarians receive Marshall award for mission to New York

by Jonathan Baggs

It wasn't solely the music itself, but the spirit of the musicians that moved many to tears when members of the National Association for the Prevention of Starvation — NAPS, headquartered at Oakwood College — marched through the streets of New York City Sept. 15.

And it was the group's spirit that brought them to the Marshall Center last Wednesday to accept the Director's Commendation — the Marshall Center's highest award.

Center Director Art Stephenson said the members of NAPS serve as "a role model for the Huntsville community."

The NAPS band, made up of primarily Oakwood College students, drove for 24 hours from Huntsville to New York, where they played patriotic songs and hymns to the appreciation of spontaneous neighborhood crowds.

National publications and news networks soon were lauding their efforts to soothe a troubled city.

NAPS is a non-profit, volunteer relief organization formed in 1978. For nearly a quarter century, the group has helped bring relief and ministered to thousands around the world and across the United States.

Tereasa Washington, director of Marshall's Customer and Employee Relations Directorate, said NAPS members "brought a little bit of hope, inspiration and love to people who needed it. They have a mission, and that mission is to alleviate global suffering. How wonderful it is that these young people are doing this."

During the award ceremony at Marshall, the NAPS band played "The Star Spangled Banner," "America the Beautiful" and "Amazing Grace" — receiving a standing ovation.

Said Marshall Director Stephenson, in presenting the award: "It is our honor, and a privilege, to have you here. And I thank you."

NAPS President Dr. Anthony Paul, chairman of the Oakwood College Department of Biological Sciences, accepted the award from Stephenson.

"We don't feel like we are heroes of any type," Paul said. "I feel very appreciative mainly for the students — that it will provoke them and influence others to do more good works for those in need."

NAPS is planning another mission trip to New York City in November. For more information on the organization, visit their Web site at: www.napsoc.org

The writer, employed by ASRI, supports the Media Relations Department.

CFC bus tours, community service days highlight six-week campaign



The Marshall Center's Combined Federal Campaign (CFC) officially started Monday and runs through Nov. 19. Employees may make contributions on the Web at: <http://cfc2001.msfc.nasa.gov> or through section CFC solicitors. Contractors may make one-time contributions through section solicitors; retirees may make contributions by calling Lowell Newton at 544-7285.

Bus tours

Bus tours to participating CFC agencies get under way Thursday, taking Marshall team members to the American Red Cross and the Huntsville Botanical Gardens.

The remaining tour schedule follows: Oct. 16 — Children's Hospital and the Community Free Clinic; Oct. 18 — Boys and Girls Club and the Senior Center; Oct. 23 — Pathfinders and Habitat for Humanity; Oct. 24 — The Ark and United Cerebral Palsy; and Oct. 25 — Land Trust and Bount Hospitality House

The bus will pick up at Bldg. 4610 at 8:10 a.m. and drive to Bldg. 4203 north

loop where it will depart at 8:20 a.m. It will depart the second location at 11 a.m. and return to Bldgs. 4203 and 4610. Please be at the bus pickup locations 10-15 minutes prior to departure.

For more information, call Karen Dugard at 544-0037.

Community Service Days

Community Service Days will be from Oct. 22-Nov. 2. Sign-up continues through Monday on the Web at:

<http://cfc2001/commsignup.html>.

Center Director Art Stephenson has granted four hours of administrative leave to employees who volunteer. Employees are responsible for their own transportation to and from the work sites and safety should be the priority when volunteering.

Participating agencies include:

Union Hill Personal Growth Center — Layout of athletic fields (softball, baseball, volleyball and horseshoe courts, and children's play area). Dates: Oct. 29 and 30, Nov. 1 and 2 from 1-5 p.m.

Huntsville Botanical Gardens — Pansy planting and Galaxy of Lights setup. Dates:

Oct. 22, 24, 26, 29, 30 and Nov. 1 from 8:30 a.m.-noon

CASA of Madison County — Build and paint ramps. Supervisor will be provided by CASA for building ramps. Dates: Oct. 23, 26 and Nov. 1 from 8:30 a.m.-noon

Downtown Rescue Mission — Serve lunch, sort clothes in thrift store and maintenance type work. Dates: Oct. 24, 25, 30, 31 and Nov. 1 from 9 a.m.-1 p.m.

Huntsville Hospital Foundation — Gift Cart, Video Cart, Transport, Congestive Heart Failure Clinic, and Child Life. Dates: Oct. 29, 30, 31 and Nov. 1 from 10 a.m.-2 p.m.

Big Brothers/Big Sisters — Paint playground equipment at schools in after-school program at Colonial Hills Elementary and make bookmarks and book covers at Rolling Hills Elementary. Dates: Oct. 23, 24, and Nov. 1 from 2-5 p.m.

For more information, call Teresa Foley, executive vice-chairperson for Community Service Days, at 544-0335.

Imaging Services Department goes digital

Marshall Center's Imaging Services has taken a step into the 21st century. As of Oct. 1, almost all Marshall produced photographs will be made using digital cameras.

This transition is being made to provide customers with state-of-the-art products, as well as an attempt to eliminate wet processing of photographic materials at the Center. All photographs will be produced from a digital file rather than from a negative. In addition, this change will help archive and manage images and get customers what they need even more quickly than in the past. Photographs will be placed on Zip disks, CD's, floppies or electronically transmitted for the customer's convenience.

In keeping with NASA's goal of reducing handling of hazardous chemicals, effective Monday, a number of products will be outsourced to a local vendor, and funding for these services will be required from the customer.

Imaging Services will no longer produce these items on-site after Oct. 15: Photographs larger than 8x10 inches (this includes display prints), transparencies, color slides and film processing. Turn-around times will depend on the work being requested. Rapid turn-around will incur higher costs to the customer. Outsourced products will be clearly identified throughout the Service Request System. When customers order these products, they will be notified of those estimated costs. They can then supply a funding code through the SRS and upon approval their order will proceed. They will be notified upon completion of their order.

Only images up to 8x10 inches will initially be available from original digital files. Archived images currently in our film vault are available in house up to 8x10 inches and prints up to 30x40 inches in size will be available depending on format size and condition. But remember, all images larger than 8x10 inches will be outsourced and require a funding code.

Center completes annual training survey

More than 1,030 participants entered 4,260 training instances representing 784 unique programs during the Marshall Center's Fiscal Year 2002 training and organizational development survey. Organizations also requested 66 special events.

The online survey ran from Aug. 28 to Sept. 21.

"This year's survey represents a significant advance in the way we collect and project training and organizational development requirements," said John Heath, employee development specialist with the Marshall Institute. "The online tool allows us to quickly request, consolidate and analyze center requirements."

Reports summarizing the survey results have been prepared for each directorate and staff office. Once organizations validate and prioritize their requirements, the Marshall Institute will finalize the FY2002 training schedule.

"The online survey provides several new tools," said Heath. "When a program has been scheduled, we now have the ability to contact individuals that have requested the course. This increases the likelihood that employees will receive training they have identified. We also have the ability to generate one-year development plans for each survey participant with no additional effort on their part."

Work is already under way for next year's survey. "We received some excellent feedback on ways to enhance the tool," said Heath. "Next year we intend to make the survey even more robust and easier to use."

For more information, call Heath at 544-2622.

Ethics training tops list of training requests

The following are the top 20 training requests identified in the FY2002 training and organizational development survey.

No. Requests	Program
2000	Live Ethics Training for the Center
308	Work Breakdown Structure
214	Hazard Communication for Office Workers
200	Qtrly: Center Wide Pgm Planning & Control Forums
195	Cryogenics Safety
119	Personal Protective Equipment
115	Decontamination Procedures
113	Chemical Inventory Reporting
110	Liquid Nitrogen Handlers Safety, NSTC 314
110	Chemical Hygiene for Laboratories
95	Project Leadership/Management
87	Team Building/Team Leadership
85	Oxygen Safety
83	Ergonomics – Office
83	The Human Element
78	PowerPoint – Beginning
78	Excel – Beginning
60	Building Emergency Action Plan
60	USDA Performance Based Srvc Contr & Writing SOWs
60	Auditing Service Contract Results

Limited flu shots for high-risk employees available

from the Marshall Medical Center

Beginning Thursday, the Marshall Medical Center will begin giving flu shots to the first 300 individuals who meet the guidelines established by the Centers for Disease Control (CDC). Guidelines have been issued due to limited availability of the vaccination.

The CDC has issued the following guidelines for the issuance of flu shots during phases 1 and 2: Only high-risk individuals should receive flu vaccinations during October (phase 1):

For the Marshall Center population, this means only:

- employees 65 or older,
- personnel with chronic pulmonary and cardiovascular problems, such as asthma, COPD, heart transplant or by-pass surgery patients
- personnel with chronic metabolic diseases (including diabetes)
- personnel with renal dysfunction or immunosuppression (e.g., chemotherapy or radiation treatment, lupus, CMV)

The Medical Center has 300 doses on hand. The original order was for 2,700 doses. It is unknown if the total order will be received.

If more vaccine is received in November (phase 2), guidelines from the CDC will continue to be followed, if the order is not fully

filled. This means immunizations for personnel that are: 1) at risk because of contact with high-risk persons (those in the categories above), 2) healthy persons aged 50-64, and 3) all others — in that order.

Employees should contact the Medical Center at 544-2390 after 10 a.m.) or email: Mary.jones@msfc.nasa.gov or Maureen.waldrop@msfc.nasa.gov for an appointment to receive the shot. This will give the medical personnel an opportunity to review medical charts to confirm each individual meets the guidelines established by the CDC. Contractors who do not have a medical file at the Medical Center will need to provide reasonable proof that guidelines are met. Appointments will be from noon-3 p.m. Tuesdays and Thursdays.

Further information concerning November availability will be provided, as the situation evolves.

Please do not call the Medical Center for a shot if you do not meet the CDC guidelines. As reasonable and prudent medical practice, the Medical Center is bound by these guidelines, and nonadherence would compromise its ability to provide the vaccine to the most vulnerable.

For more information, call Joyce Eagan at 544-3996.

Fire Prevention Week, Oct. 7-13

Cover bases, strike out fire

from Marshall's Safety Office

Oct. 7-13 is Fire Prevention Week. The national slogan for 2001 combines American's favorite pastime with public safety. The "Cover the Bases & Strike Out Fire" campaign brings baseball and fire safety together to teach children and their families simple steps they can take to strike out the risk of home fires.

This year's campaign urges you to "Cover the Bases" by protecting yourself in four areas: kitchen safety, heating safety, electrical safety and home escape plans.

Activities during the week include fire prevention booths and Centerwide fire drills. Fire prevention booths will be open from 11 a.m.-1 p.m. Thursday at Bldg. 4610 and Friday at Bldg. 4471. Fire drills will also be included as part of the activities.

Stop by the booth and register to win one of several fire extinguishers and carbon monoxide detectors. There will be fire prevention handouts, plus fire safety gifts for children, including fire hats and tattoo stickers.

High School Senior Day at Alabama A&M set Nov. 17

The annual High School Senior Day at Alabama A&M University in Huntsville will be Nov. 17. This is a NASA buyout game. Tickets are available through the Government and Community Relations Department, in conjunction with the NASA Exchange.

George Reese, NASA's associate administrator for Equal Opportunity, will be here for the coin toss to start the game at 1:30 p.m. at Louis Crews Stadium between Alabama A&M and University of Arkansas-Pine Bluff.

Volunteers representing the diverse culture at the Marshall Center are needed for the event. Volunteers do not have to be graduates of A&M. Beginning at 8 a.m. at T.M. Elmore Gymnasium, volunteers will speak with the potential A&M students and accompany them on tours.

To volunteer for High School Senior Day, call Efreem Hanson at 544-6340 or send an e-mail to: efrem.hanson@msfc.nasa.gov

Inventor offers insights into fuzzy logic

Lotfi Zadeh, the acknowledged father of fuzzy logic, addressed a group of Marshall employees

this week as part of Marshall's ongoing advanced computing technology initiative. Professor Zadeh is the director of the Berkeley Initiative in Soft Computing (BISC) at the University of California.

Fuzzy logic is widely used in industry to control subway systems, elevators, consumer electronics and manufacturing processes.

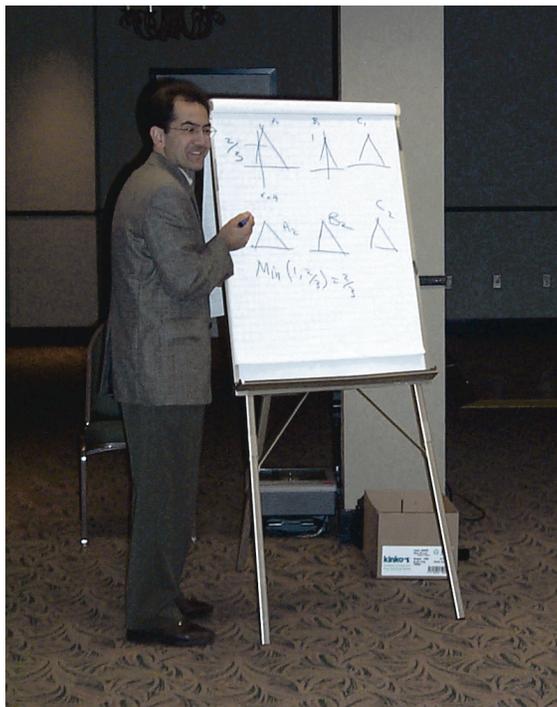
"This program was put together in response to the Administrator's challenge to Marshall to become a leader in the field of soft computing," said John Heath, Employee Development Specialist with the Marshall Institute. "Some of the nation's leading authorities were brought together to conduct this program."

In addition to Zadeh, Dr. Hamid Berenji, chief scientist with IIS Corporation at the

Ames Research Center and Dr. Reza Langari of Texas A&M University described hybrid systems of fuzzy logic controllers, neural networks, and artificial intelligence learning systems. These included applications to Space Shuttle rendezvous and attitude control, the Shuttle Training Aircraft, and space tethers.

"This program was one of several that focuses on topics presented in May by Dr. Peter Norvig of Ames' Information Sciences and Technology Directorate," said Jim Steincamp of Marshall's Advanced Computing Technologies Team. "Additional programs are being developed with Ames, the Jet Propulsion Laboratory, and universities."

The Advanced Computing Technologies Team was chartered to bridge the gap between promising new computing technologies and Marshall project needs. Individuals interested in these technologies and participation in future programs should call Steincamp at 544-0544 or Heath at 544-2622.



Dr. Hamid Berenji, of Intelligent Inference Systems, addresses center employees on soft computing issues.

Center Announcements

Marshall 2001 inventory

The Marshall Center's annual 100 percent inventory is under way. All equipment in file cabinets, desks, etc., should be available to be inventoried/scanned when the Inventory teams arrive. Schedules showing the approximate month your area will be inventoried are posted on the following Web site: <http://inv2001.msfc.nasa.gov> For more information, call Jaclee Smith at 544-4765 or William Hargrove at 544-8662.

Employee assistance available

Marshall's Employee Assistance Program (EAP) psychologist, Dr. Bruce Mather, will be available for appointments 6:30 a.m.-6 p.m. Monday through Thursday to assist employees in dealing with the aftermath of the Sept. 11 terrorist attacks. Mather is located in the Medical Center, Bldg. 4249, room 126. To make an appointment, call 544-7549 or send an e-mail to: bruce.mather@msfc.nasa.gov

FIRST Robotics needs volunteers

The Marshall Center is sponsoring four teams in the 2002 For Inspiration and Recognition of Science and Technology (FIRST) Robotics program. Volunteers are needed. For more information, call Vicki Smith at 544-1798 or Barbara Long at 544-0774.

Upcoming Classes

Global Leadership seminar

The live seminar, Madeline Albright: Global Leadership, will air from 10-11:30 a.m. Oct. 16 on Marshall Continual Learning Channel 14. This seminar may be viewed in Bldg. 4200, room G13 or on any Center television that receives MCLC 14. For a list of televisions with this capability go to: http://eodd.msfc.nasa.gov/EDTeC/chn13_14/msfctvcap.html. To register for this seminar and receive materials, e-mail the name of the seminar, your full name, and

phone number to edtec@msfc.nasa.gov.

Passionate leadership

The seminar, Passionate Leadership: The Future is Now!, live with Dr. Cherie Carter-Scott, will air from noon-2 p.m. Oct. 18 on Marshall Continual Learning Channel 14. This seminar may be viewed in Bldg. 4200, room G13 or on any Center television that receives MCLC 14. For a list of televisions with this capability go to: http://eodd.msfc.nasa.gov/EDTeC/chn13_14/msfctvcap.html. To register for this seminar and receive materials, e-mail the name of the seminar, your full name, and phone number to edtec@msfc.nasa.gov.

Clubs and Meetings

Genealogy society meets

Stephen Lomax will present "Digital Images and Archival Retrieval" at 7 p.m. Oct. 15 at the Huntsville-Madison County Library auditorium on Monroe Street. Visitors are encouraged.

Miscellaneous

Small business opportunities

Business Partnering and Opportunities Conference and Exhibition will be held Oct. 24-25 at the Von Braun Center. During the conference, industry and government experts will present multiple seminars in a five-track forum: Track 1 – The Latest in Small Business Contracting Programs; Track 2 – Federal Update; Track 3 – Strategic partnerships and Growth Strategies for Large and Small Business; Track 4 – Sustaining Small Business Successes; and Track 5 – Electronic Commerce Resources for Small Business. Cost for the conference is \$100 (\$125 after Oct. 14); \$20 to attend the Oct. 24 Exhibition only; and \$250 for booth space. For more information and to register, visit the Web at: www.intergraph.com/govt/bpoc

Rocket City Day

James (Gene) Thomas, Challenger Space Shuttle launch director, will speak at Rise and Shine Rocket City Day at 9:30 a.m. Oct. 28 at Whitesburg Baptist Church on Whitesburg Drive in Huntsville. Thomas will share his personal struggle through those days following the Challenger disaster and hope for the days ahead of us all following the Sept. 11 terrorist attacks on America. A special drop-by reception, with light breakfast fare, will begin at 8:30 a.m. If you plan to attend the reception, please contact the Rev. Carlton Berry at 881-0952 or fax him at 880-5304.

Harvest Ball Dinner Dance

Tickets for the Oct. 20 MARS Harvest Ball — at \$15 for members and \$18 for guests — are available through Oct. 16. The formal event will be from 6:30-11 p.m. at the Von Braun Center West Hall and will feature ballroom music by the Little Big Band. Tickets can be purchased from Linda Kinney at 544-0563, Tamara Landers at 544-6818, Pat Sage at 544-5427, Ed Ogozalek at 837-1486, Bob Williams at 544-3998, Hugo Berry at 544-3525, Woody Bombara at 650-0200, Joyce Davis at 880-2270, and Earl Herndon at 534-7408. Reservations for a table of eight can be made by calling Woody Bombara at 650-0200.

Rumba, samba lessons

Rumba and samba dance lessons will be taught Monday nights in October at Saint Stephen's Episcopal Church on Whitesburg Drive. Intermediate lessons will be from 7-8 p.m.; beginners from 9-p.m. Jeff Wilbourne, a certified Fred Astaire dance instructor, will be teaching. Cost is \$6 per person per class. The classes are small, enabling instructors to give individual attention to each couple. If you have any questions, please call Woody Bombara at 650-0200.

Employee Ads

Miscellaneous

- ★ Microwave, \$30; loveseat, \$50; chest freezer, \$75; semi-waveless waterbed mattress, \$275. 694-8267
- ★ HB 12-speed blender, \$10; Optimus 5-disc CD changer and speakers, \$100; encyclopedias, \$30. 722-9483
- ★ Honda lawn mower, self-propelled, aluminum housing with bagger, \$100 obo. 650-5895
- ★ Stratford sectional sleeper sofa, 4-piece, chair section reclines, \$300. 837-2122
- ★ Six football tickets for Purdue Homecoming game w/Northwestern, Oct. 27, \$36 each. 256-582-0663
- ★ Liriope, monkey grass, solid green leaves, \$1 per plant. 426-4325
- ★ ISA flatbed color scanner, 4800 DPI, 30 bit true color, new, \$80 obo. 882-0469 or 337-1084/Adrian
- ★ 2000 Suzuki Intruder LC1500 motorcycle, black/green windshield, leather-like bags, Jardine light bar, garaged, \$7,995. 882-2973
- ★ Engagement ring, .77 carat, pear shaped diamond w/baguettes, \$2,200 obo. 259-5140
- ★ Nordic Track cross-country ski exercise machine, \$100. 533-9683
- ★ Carpet, light tan, 50-ounce, new, with 8-ounce pad, 43 sq. yards, \$325. 722-8116
- ★ Hospital bed, electric in all directions, \$500 obo. 864-0155/Brock
- ★ Kingsize waveless waterbed, light-colored oak frame and headboard, \$150. 772-2061
- ★ Cherry dining table w/six chairs, two leaves, \$900 obo. 881-4701

- ★ Kubota push mower, blade brake, bagger, low hours, ohv. 21" deck, \$250. 961-7727
- ★ VW Beetle tow bar, \$20. 851-0893
- ★ Yamaha Grand Piano, 5'7" polished ebony, \$10,000; HP540 Jornado Pocket PC keyboard, charger, \$150. 880-1921.

Vehicles

- ★ 1993 Dodge Grand Caravan SE, one-owner, service records available, \$3,995. 895-9520
- ★ 1987 GMC Suburban, 350 V-8, auto, new paint, brakes, shocks, 132K miles, chrome wheels, \$1,975 firm. (256) 753-2278
- ★ 1989 Chevy Cheyenne, rebuilt engine, less than 100 miles on engine, new clutch, 5-speed transmission, many new parts, \$4,800. 337-4205
- ★ 1968 Ford pickup, \$1,000. 720-8606
- ★ 1995 Dodge Neon Sport sedan, automatic, green, new am/fm/CD, a/c, air bags, tilt, \$2,800. 509-0196
- ★ 1981 Volkswagen Rabbit convertible, manual, white w/red interior, new black top, new tires, \$1,650 obo. 256-489-6091
- ★ 1994 Montego motor home, 28.5', Class C, 25K miles, Ford V-8, generator, propane furnace, Duo-Therm a/c, \$23,500. 256-772-7631
- ★ 1996 Impala SS, black, performance modifications, high-end audio system, tinted windows, garage kept, 97K miles, \$20,000 obo. 721-0917
- ★ 1999 Honda Accord LX, V-6, auto, 2-door, CD, alloy wheels, spoiler, fog lights, 39K miles, \$16,500 obo. (256) 536-3390

- ★ 2000 Montero Sport, Limited, white, sunroof, CD, rear H&A, chrome wheels, \$18,230 miles. (256) 586-8836

Wanted

- ★ Large pet carrier with latching wire door in reasonable condition. 828-4502/leave message
- ★ Tickets, 2 or 4, to Alabama vs. Tennessee game, Oct. 20. (931) 433-4788
- ★ Two tickets to Alabama-Mississippi State. 961-9650

Lost

- ★ Prescription glasses in black case, in or near Bldg. 4200 on Tuesday, 10/2/01
- ★ Checks made out to Cub Scout Pack 83, in or around Bldg. 4487. 544-3323

Venturing Crew needs mentors

Volunteers are needed for Venturing Crew members. Venturing Crew is the co-ed young adult division of the Boy Scouts of America. Venturers are young men and women, aged 14 through 20, who join Venturing Crew posts sponsored by business, industry, professional societies, government, labor, sports, clubs and various community organizations. The aim is to link the career interests of youth with the experience of the professionals at the Marshall Center. Due to an increase in enrollment, more volunteers are needed. To volunteer, call Barbara Long at 544-0774.

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