

# MARSHALL STAR

Serving the Marshall Space Flight Center Community

Sept. 18, 2003

## Combined Federal Campaign kickoff set for Tuesday

by Jonathan Baggs

To raise money on behalf of charitable organizations, federal agencies in the fall of each year pull together for the Combined Federal Campaign.

The Marshall Center begins its annual participation in the six-week campaign with a kick-off ceremony Tuesday at 10 a.m. in Morris Auditorium. This year's campaign, with the theme of "You are not alone," has a goal of \$500,000.

"We know Marshall employees are caring individuals, and that they will live up to their tradition of generous giving," said Carolyn McMillan, Marshall's Combined Federal Campaign chairperson. "The Marshall team not only acknowledges a need, they take action to

resolve that need."

Linda Spalla, former president and chief executive officer of Huntsville CBS affiliate WHNT-TV, and chairperson of the Madison County United Way Board of Directors, will speak at the kickoff ceremony. She also is the author of "Leading Ladies: 30 Tips for Dynamic Female Leaders." She serves on the boards of several Huntsville community civic organizations.

A reception in the Bldg. 4200 lobby will follow the ceremony.

Marshall also will host an Agency Fair from 1-3:30 p.m. Tuesday at the Center Activities Bldg. 4316. More than 50 agencies that depend on charitable giving will participate in the event. This will provide Marshall team members the



Photo by Gil Brady

Spalla

opportunity to visit agency representatives. Door prizes and refreshments also

See Campaign on page 2

## NASA response to the Columbia Accident Investigation Board report

*Editor's note: The following message was sent from NASA Headquarters to Center team members from Michael A. Greenfield, co-chair of the Space Flight Leadership Council; William F. Readdy, co-chair of the Space Flight Leadership Council; and Jim Halsell, Space Shuttle Lead, Return to Flight Planning Team.*

The Columbia Accident Investigation Board has provided NASA with a very helpful roadmap for returning to safe flight activities.

As NASA Administrator Sean O'Keefe has pledged, we will not only implement the Board's recommendations to the best of our ability, but we will also seek ways to set the bar even higher as we emerge from the Columbia accident as a safer, stronger and smarter Agency.

To do this, the "NASA Implementation Plan for Return to Flight and Beyond" outlines the path that NASA will take in

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Photo by Doug Stoffer, NASA/Marshall Center

### NESSC Director Ralph Roe visits Marshall

Ralph Roe, director of NASA's Engineering and Safety Center, talks about the startup of the facility to senior managers last week during a visit to the Marshall Center. The new Center, based at Langley Research Center in Hampton, Va., will provide technical expertise and resources for independent review of major NASA programs. The safety center is seeking employees from across the Agency's field centers. For job opportunities, go to <http://nesc.nasa.gov>.

# Campaign

*Continued from page 1*

will be available.

For a detailed list of Marshall's Combined Federal Campaign kickoff events, including bus schedules to the events, see "Inside Marshall."

The Marshall Center is one of 37 government agencies in the North Alabama and Southern Tennessee area whose employees participate in the Combined Federal Campaign.

Last year, the Marshall Center raised 31 percent of the \$1.6 million total from the participating federal agencies in the area, and placed second in overall contributions for the area. The Marshall Center's average gift per contributor was \$274, with a 77 percent participation rate.

Bus tours to allow Marshall team members to visit various agencies will begin Wednesday and run through Oct. 2.

Community Service Days will be Oct. 3-Nov. 14. Marshall team members can volunteer to help at one of several designated agencies. To sign up for bus tours or Community Service Days, go to <http://cfc2003.msfc.nasa.gov/>.

McMillan encourages employees to sign up for the bus tours and Community Service Days. "Giving and caring is not a one-time event," she said. "It is a part of living."

Since 1961, the Combined Federal Campaign remains the only authorized charitable fund-raising campaign for federal employees. Conducted under the U.S. Office of Personnel Management, the

campaign operates in more than 430 locations throughout the United States, Puerto Rico, the U.S. Virgin Islands and in overseas military bases. It continues to be the largest and most successful workplace fund-raising model in the world.

Donations through the Combined Federal Campaign can be designated to charitable agencies that provide meals for hungry children, relief for families in need of counseling, further work on cures for diseases, comfort for the dying, access to water in the Third World, environmental protection, and better lives and renewed hope for millions of people in the global community.

*The writer, an employee of ASRI, is the Marshall Star editor.*

# Response

*Continued from page 1*

implementing and building upon the Columbia Accident Investigation Board's recommendations. The plan will also address the activities necessary to sustain safe flight operations for as long as the Space Shuttle's unique capabilities are needed in the future. Both the Board's report and the Implementation Plan can be found on the NASA Web site at: <http://www.nasa.gov>.

Our Plan is not some kind of sacred text whose words are set in stone. It is a 'living document' that will be continually updated to reflect your good ideas for how we may best accomplish our return to flight goals, as well as to record our tangible progress toward safe return to flight.

In the spirit of One NASA, we encourage all NASA employees to read both reports and provide us with your specific feedback. We really want to hear from you about how we can best get the job done and we will carefully consider all your comments. They can be submitted in a number of ways. You can send them to a new e-mail address: [RTFsuggestions@nasa.gov](mailto:RTFsuggestions@nasa.gov).

As co-chairs of the Space Flight Leadership Council, we would be pleased to review any comments you may wish to send to us directly at: [Michael.Greenfield@nasa.gov](mailto:Michael.Greenfield@nasa.gov), [William.F.Readdy@nasa.gov](mailto:William.F.Readdy@nasa.gov), and [James.D.Halsell-1@nasa.gov](mailto:James.D.Halsell-1@nasa.gov). Finally, you can make your suggestions to any member of the NASA management team, as we will all be working together throughout the daily Return to Flight planning process.

With your help and support, we will embark on this new chapter in NASA's history with a renewed commitment to excellence in all aspects of our work, a strengthened safety ethos throughout our culture and an enhancement of our technical capabilities.

— **Michael A. Greenfield, Co-Chair, Space Flight Leadership Council**

— **William F. Readdy, Co-Chair, Space Flight Leadership Council**

— **Jim Halsell, Space Shuttle Lead, Return to Flight Planning Team**

## Accident prevention safety site available online at Marshall

*from the Industrial Safety Department*

**T**he Marshall Industrial Safety Department has a new Web-based accident prevention Safety Observation Survey to allow anonymous reporting of unsafe acts at the Center.

The survey will allow trends in unsafe behavior to be analyzed and corrective actions taken to minimize

accident risk.

The survey will allow the entire Marshall team to serve as safety observers.

Employees do not need to know the name or organization of the person engaging in a potentially hazardous behavior. When filling out the survey, they can select the category of behavior that best describes the unsafe act they observed or enter a brief description of the act under

the "Other" category of the survey.

Every Marshall team member has the responsibility for protecting their own safety and that of co-workers.

To access the survey, go to the SHE Web site by clicking on the menu button for "File A Report" and then choosing "Safety Observation Survey." For more information, see "Inside Marshall."

# Latina scientist keeps an eye on smallest inhabitants of space

## Marshall celebrates Hispanic Heritage Month

by Tracy McMahan

**W**hen microbiologist Monserrate “Monsi” Roman came to the United States from Puerto Rico, she never dreamed she’d be a scientist working to ensure safe water and air for the crew of the world’s largest space laboratory — International Space Station.

As the chief microbiologist for the Environmental Control and Life Support Systems (ECLSS) project at the Marshall Center, Roman works to ensure safe water and air for the crew of the International Space Station. She studies microbes, living organisms including viruses, bacteria, fungi and parasites — only visible under a microscope. Her job is like a detective, checking the tiny beings to see how they will behave on the Space Station.

“My job is to be a detective, to determine how microbes will behave under different situations and in different locations, such as the nooks and crannies of the Space Station,” Roman said.

Everyone who visits the Station comes with his or her own unique set of microbes. And since crewmembers, visitors, experiments and hardware hail from 15 Station partner countries, Roman must study an international, multicultural group of the microbes. She often collaborates with scientists and engineers from other countries.

“Microbes were the first inhabitants of the Space Station — hitchhiking into orbit on equipment before people ever arrived,” Roman said. “Each microbe is unique, and if left unchecked, some will thrive and could eventually eat many materials.”

The Station was designed with materials that are microbe-resistant. Temperature and humidity are controlled to discourage microbe growth. Roman helps ensure microbes aren’t a threat by monitoring the Station’s air and water system. She works closely with Marshall engineers who are designing and testing the Oxygen Generation and Water Recovery equipment, a more sophisticated air and water recycling system to be installed on the Station. It will dramatically reduce the amount of water supply vehicles deliver to the Station.



Photo by Doug Stoffer, NASA/Marshall Center

**Monsi Roman, left, mentors summer student Coral Blanche, right, at the Marshall Center.**

Roman’s fascination with science and living organisms blossomed when she was a child. Her science teachers nurtured her curiosity, encouraged her to participate in science fairs, and provided opportunities for her to work with real scientists. Roman carries on that tradition, helping with classes at NASA’s Challenger Learning Centers and at the Agency’s Educator Resources Center in Huntsville. Every summer, she mentors a student who works by her side as an intern at the Marshall Center.

Roman earned her bachelor’s degree at the University of Puerto Rico, where she became so fascinated with microbiology that she washed dishes in the lab before finally being hired as a research assistant. She earned her master’s degree in microbiology at the University of Alabama in Huntsville, and joined NASA in 1989.

“As I always tell my three sons and the students I mentor: ‘Don’t listen to anyone who says you can’t,’” said Roman. “As a little girl, I never dreamed I would be helping NASA build part of a Space Station. It has been fascinating watching the Station go from paper drawings to a real home and workplace in space.”

*The writer, an employee of ASRI, supports the Media Relations Department.*

### Hispanic Heritage Month activities

*from the Equal Opportunity Office*

**H**ispanic Heritage Month is celebrated from Sept. 15–Oct. 15.

This year the Marshall Center’s Equal Opportunity Office is co-sponsoring a number of activities in the Huntsville area, including:

☛ Oct. 3-4 - The second annual Hispanic Youth Conference for Hispanic school students in Alabama at the Huntsville Marriott hotel and the U.S. Space & Rocket Center. Marshall team members who want to volunteer as mentors for the conference should call Elia Ordonez at 544-6658 or Jose Matienzo at 544-1545.

The conference is sponsored by the Marshall Center and Stillman College in Tuscaloosa to inspire Alabama’s Hispanic high school students to continue their education.

☛ Oct. 15 - Hispanic Heritage celebration at the Marshall Center in the Bldg. 4200 courtyard.

# NASA opens new chapter in supersonic flight

Dryden Flight Research Center release

Flight tests completed by NASA, with government and industry partners, may have demonstrated a way to reduce the window-rattling impact of sonic booms.

In flights conducted Aug. 27 on the same test range where Chuck Yeager first broke the sound barrier nearly 56 years ago, tests showed that modifying an aircraft's shape could also change the shape of its sonic boom, thereby reducing loudness. This theory had never been demonstrated in actual flight.

The Defense Advanced Research Projects Agency's Shaped Sonic Boom Demonstration (SSBD) program is a \$7 million cooperative agreement supported by the Langley Research Center in Hampton, Va.; Dryden Flight Research Center in Edwards, Calif.; and Northrop Grumman Corp. In El Segundo, Calif. The program has also received support from other government and industry organizations.

"This demonstration is the culmination of 40 years of work by visionary engineers," said Richard Wlezien, program manager for Vehicle Systems in NASA's Office of Aerospace Technology in Washington, D.C. "They foresaw a way to solve the sonic boom problem, and to enable a generation of supersonic aircraft that do not disturb people on the ground. It is but one of many frontiers in aeronautics that remain to be explored," he said.

An aircraft traveling through the atmosphere continuously



NASA photo/Marshall Imaging Services

Dryden's modified F-15B aircraft serves as a testbed for a variety of flight research experiments, including the Shaped Sonic Boom Demonstration Program.

produces air-pressure waves similar to waves created by the bow of a ship. When the aircraft exceeds the speed of sound — approximately 750 mph at sea level — the pressure waves merge to form shock waves, which are heard as a sonic boom, when they reach the ground. The flight tests showed that by designing the aircraft to a specific shape, the pressure waves could be kept from merging. When these weaker waves reach the ground, the loudness of the sonic boom is greatly reduced.

"The team was confident the SSBD design would work, but field measurements of sonic booms are notoriously difficult," said Peter Coen, Supersonic Vehicles Technology manager at Langley. "We were all blown away by the clarity of what we measured." For the demonstration, Northrop Grumman modified an F-5E fighter aircraft that was provided by the U.S. Navy's Naval Air Systems Command. The company designed and installed a specially shaped "nose glove" and added aluminum substructure and a composite skin to the underside of the fuselage.

During the experiment, the modified F-5E aircraft flew through a test range at Edwards Air Force Base, Calif., at supersonic speeds. NASA and industry sensors on the ground and in Dryden's F-15B measured the shape and magnitude of the sonic boom. Shortly thereafter, an unmodified F-5E flew through the same airspace. Comparison of the data confirmed the modified shape of the test aircraft altered the sonic boom as expected. Repeated tests verified these results.



Photo by David Higginbotham, NASA/Marshall Center

## X-37 team celebrates successful proof testing

Dan Dumbacher, X-37 project manager at the Marshall Center, congratulates X-37 team members during a Sept. 5 celebration of the conclusion of successful Approach and Landing Test Vehicle structural proof testing. The testing concluded July 14 at Boeing's Huntington Beach, Calif., facility and validated airframe structural integrity in accordance with technical requirements. The testing marked a major milestone as the project moves toward the operations phase, beginning in 2004, where flight data will reduce the risk of developing the X-37 Orbital Vehicle for missions in 2006.

# Students feel the thunder during motor test firing

## Inspiring the next generation

Students from Huntsville's Whitesburg Academy and Rainbow Elementary School in Madison got to see a 100,000-pound thrust M-NASA Reusable Solid Rocket Motor-16 test

firing at the Marshall Center last week.

Held at the Solid Propulsion Test Facility in the East Test Area of Redstone Arsenal, the goal was to evaluate performance instrumentation on the propellant

grain surface and protective strap designs for instrumentation positioned through the nozzle.

The one-sixth scale motor was being tested for ATK/Thiokol.



Photo by Emmett Given, NASA/Marshall Center

Matthew Chandler, a seventh-grader at Whitesburg Academy in Huntsville, helps locate the test stand before the rocket firing for his principal, Anna Lee Dunn, left.



Photo by Terry Leibold, NASA/Marshall Center

The eruption of fire and smoke begins.



Photo by Emmett Given, NASA/Marshall Center

It's the Fourth of July on steroids as students and educators cover their ears as the blast continues.



Photo by Emmett Given, NASA/Marshall Center

After the firing, a mixture of applause, smiles and awe spread through the students from Whitesburg Academy in Huntsville and Rainbow Elementary School in Madison.

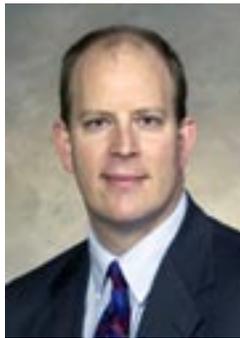


## 30 Marshall team members receive Space Flight Awareness honor

As part of its ongoing motivation program, NASA will honor 30 Marshall team members at a Space Flight Awareness event in Washington, D.C., next week. The event celebrates the 40th anniversary of the Space Flight Awareness Program. The Marshall honorees are part of 225 outstanding employees from industry and government who have performed exemplary work in support of the space program.



Kenneth Albrecht, AD50



Dean Alhorn, ED17



Hugh Brady, TD03



Janice Burrough, PS20



Marcia Cobun, ASRI



Janie Crawford, CD40



Alan Davis, Pratt & Whitney



Gordon DeRamus, III, Hernandez Engineering



Karen Dugard, RS60



Thomas Engler, MP04



Amy Floyd, UP05



Pat Guillebeau, Lockheed Martin



Buddy Guynes, SD41



Kenneth Johnson, Hernandez Engineering



Owen Johnson, AD50



Randal Lycans, Jacobs Sverdrup Technology



Angela Marsh, FD42



James McMahon, Lockheed Martin



Dan Mullane, QS20



Daniel O'Neil, FD02



Diane Pearson, MP31



Glenda Pulley, Mainthia



Barry Roberts, ED44



Clay Robertson, TD53



Greg Schunk, ED26



Marie Semmel, ED34



Douglas Stoffer, ARCATA



Jim Turner, TD60



Dr. Marcus Vlasse, SD45



Dennis Wooten, Coastal International Security

## Tilt rotor aircraft joins National Air and Space Museum collection

*NASA Headquarters release*

The XV-15 tilt rotor aircraft took its place in what could be called "aviation's hall of fame" Sept. 16 when NASA and the U.S. Army transferred the vehicle to the National Air and Space Museum's new Steven F. Udvar-Hazy Center near Washington Dulles International Airport in Virginia.

"The XV-15 was one of NASA's most successful research aircraft and is a prime example of the cutting-edge aerospace research NASA is known for," said Dr. Victor Lebacqz, acting associate administrator for NASA's Office of Aero-

space Technology.

Tilt rotors are unique aircraft that possess the take-off, hover and landing capabilities of a conventional helicopter with the range and speed of a turboprop aircraft. Tilt rotor flight research began in the 1950s with the Bell XV-3 convertiplane. The first of two XV-15s took its maiden flight on May 3, 1977.

The success of the XV-15 has led to the development of the V-22 Osprey and the world's first civil tilt rotor, the nine-passenger Bell Agusta 609, now under development and scheduled for deliveries in 2007.

# Galileo to go out with a bang

## *Spacecraft to take controlled dive into Jupiter on Sunday*

From JPL's "Universe"

**G**alileo, the venerable spacecraft launched in 1989 and in orbit about Jupiter and its moons since late 1995, will come to the end of its mission with a controlled dive into the planet Sunday.

Among Galileo's bountiful science return is the discovery of likely subsurface water oceans on Europa, which has fueled speculation about the possibility of life on the icy Jovian moon. Galileo was not designed for such a search, so it was not subjected to the rigorous sterilization procedures such as those mandated for Mars-bound spacecraft. To prevent any possible future biological contamination of Europa, the decision was made to provide a final resting place — Jupiter itself — for Galileo that guarantees it will never collide with any of the Jovian moons.

"It's sad to see the mission end. It has been fabulous for planetary science," said Project Manager Dr. Claudia Alexander. "It certainly seemed like we would never arrive and do the mission, and it seemed like, with the high-gain antenna not opening, we wouldn't do half the things we set out to do, but in the end, with a little ingenuity, the spacecraft proved to be resilient, and the mission has been incredible."

Rather than an impact, Galileo's demise will actually be a gradual, but very rapid, immersion in the gas giant's vast atmosphere. At 10:49 p.m. CDT Sunday, the spacecraft will reach the point in the atmosphere where the pressure reaches one bar, the equivalent of Earth's atmospheric pressure at sea level. For reference, this point is 44,423 miles from the center of the planet, at the point where Galileo enters.

If observers were able to observe Galileo's final journey, they could see the spacecraft steamrolling in from a point about 22

degrees above the local horizon. The speed of the craft relative to observers would be nearly 108,000 mph. That is like traveling from Los Angeles to New York City in 82 seconds.

Galileo will rapidly burn up through friction with the atmosphere, returning to its constituent atoms as it makes its unnoticeable impact on the vast weather systems of Jupiter.

Following its arrival at Jupiter in December 1995, Galileo circled the solar system's largest planet 35 times. From launch to impact, the stalwart spacecraft has traveled about 2.9 billion miles, returning more than 30 gigabytes of data, including 14,000 photos.

Following launch, Galileo flew past Venus (February 1990) and then twice past Earth (December 1990 and December 1992). The highlights of its observations and discoveries would fill volumes.

Also en route to Jupiter, Galileo flew close to two asteroids — the first such visits by any spacecraft — encountering Gaspra in October 1991 and Ida in August 1993. Galileo also discovered Dactyl, the first confirmed moon of an asteroid, orbiting Ida. During the latter part of its interplanetary cruise, Galileo was used to observe the collisions of fragments of Comet Shoemaker-Levy with Jupiter in July 1994.

In addition to discovering strong evidence that Europa has a melted saltwater ocean under an ice layer on its surface, Galileo also found indications that two other moons, Ganymede and Callisto, may have layers of liquid saltwater as well. Other major science results from the mission include details of varied and extensive volcanic processes on the moon Io, measurements of conditions within Jupiter's atmosphere, and discovery of a magnetic field generated by Ganymede.

## ***First overhauled Space Shuttle oxidizer turbopump delivered***

*Pratt & Whitney release*

**T**he first overhauled Space Shuttle Main Engine (SSME) high-pressure liquid oxidizer turbopump, which flew on six Space Shuttle flights over seven years, was delivered to the Boeing Co., NASA's primary SSME contractor, by Pratt & Whitney Space Propulsion in August.

The turbopump was delivered to the Boeing office at NASA's Kennedy Space Center in Florida following a meticulous overhaul and repair

process.

Periodic overhauls, in addition to the design and hardware characteristics, allow turbopumps to operate during 30 or more Shuttle flights. The specified service duration before overhaul is required for Pratt & Whitney's LOX turbopump is the equivalent to 11 Shuttle missions.

The first overhauled pump, known as LOX 8015, completed five ground tests in addition to its Shuttle flights — accumulating more than 5,000 seconds of operation.

During the 15-month overhaul and repair process, the turbopump was completely disassembled and inspected. Where needed, components were refurbished, upgraded or replaced, but most major parts were re-used, producing substantial life cycle-cost benefits to the program.

Three pairs of high-pressure turbopumps serve as key components of the upgraded Block II SSMEs on each orbiter.

# 17th annual Marshall Retiree Dinner a success

**M**arshall retirees, families and current Center team members enjoyed a night of food, camaraderie and entertainment during the 17th annual Marshall Retiree Dinner last week.

Marshall team members showcased their talents with the skit "Last Flight Out" highlighting the story of flight through the experiences of great aviators of the past.

"A great deal of time and hard work created the entertainment for the dinner," said Edwina Bressette, chairperson of this year's event. "A special thanks goes to Angela Storey, Mike Wright, May Wales, the members of the entertainment committee and the cast and technical crew of 'Last Flight Out.'"

## Marshall retirees during 2002 calendar year

Ahlander, Dan H.	AD50	Kinney, Linda H.	FD11
Allen, Genenne S.	ED35	Kirby, Clifton A.	ED27
Bencaz, Harold R.	MP31	Laney, Edna S.	ED40
Blocker, James.R.	SD02	Lynch, Thomas J.	FD31
Brandon, Larry B.	TD54	Medal, Edward D.	CD70
Campbell, Jeffrey L.	ED42	Mueller, Charles W.	FD31
Castleman, Murray W.	FD11	Parker, James W.	ED41
Chassay, Roger P. Jr.	SD31	Partain, Mary E.	DA11
Crowell, Clifford S. Jr.	ED15	Ralls, Glenda A.	DA01
Dickerson, Sandra O.	CD20	Ray, Charles D.	FD21
Gibson, John C.	ED24	Sanders, Fred G. III	SD20
Godwin, Connie H.	TD60	Seymour, David C.	TD53
Green, John M.	TD15	Thompson, Bobby J.	FD23
Haney, Beverly K.	FD10	Thurman, Donald W.	SD02
Hudgins, Jerry L.	ED16	Travis, Woodrow J. Jr.	MP21
Ito, James (NMN)	QS21	White, John K.	MP31
Jamison, Glenn T.	ED22	Wilmer, Glenn E. Jr.	TD61
Kennedy, Bobby W.	ED16	Wood, Gordon A.	FD42
		Worlund, Armis L.	MP21



Enjoying the retiree dinner are, from left, Robert Lindstrom, Millie Moore, Joyce Smith and Gerald Smith.

Photos by Doug Stoffer, NASA/Marshall Center



Jennifer Simmons, left, portrays a NASA traveler talking about the history of flight with Ketchel Jordan, right, who played the role of an airport janitor, during the "Last Flight Out" skit.



Marshall team member Gloria Betts portrays Bessie Coleman during the "Last Flight Out" skit at the retiree dinner. Coleman was a world-renowned aerobatic pilot who, in 1921, became the first African-American to receive an international pilot's license from the Federation Aeronautique Internationale in France.



Peggy Counts, left, reminisces with Bill and Linda Kinney.

## Obituaries

**Billy L. Knight, 71**, of Guntersville, died Aug. 30.

He retired from the Marshall Center in 1986 where he worked as a program analyst.

Knight is survived by his wife, Shirley Knight.

**Johnny F. Robinson, 71**, of Madison, died Sept. 13. Funeral services were held at Whitesburg Baptist Church with Dr. Jimmy Jackson officiating. Burial was in Huntsville Memory Gardens with Laughlin Service Funeral Home directing.

Robinson was a U.S. Army veteran, a graduate of Mississippi State University and worked at the Marshall Center as a configuration management manager until he retired in 1999 and began working for Pace and Waite Inc. He was a member of Whitesburg Baptist Church.

Robinson is survived by his wife, Jacqueline Robinson; two sons, Brian Robinson of Oakland, Calif., and Mark Robinson of Pelham; two brothers, David Robinson of Tishomingo, Miss., and Lawrence Robinson of Chicago; and two sisters, Virginia Lingelbach of Michie, Tenn., and Evelyn Hampton of Memphis, Tenn.

**Brenda Sue Sickler, 55**, of Owens Cross Roads, died Sept. 8. Funeral services were held at Berryhill Funeral Home in Huntsville with the Rev. Wallace Green officiating. Burial was in Maple Hill Cemetery.

Sickler was a native of Madison County and attended Meadow Drive Baptist Church. She was employed at the Marshall Center in the Institutional-Integration Office in the Office of the Chief Financial Officer.



Sickler is survived by her husband, Byron Sickler; two sons, William "Danny" Lyle II and Christopher Shaun Lyle; her mother, Grace H. Walker; one brother, Phillip Maurice Walker, all of Huntsville; and one grandson, William Daniel Lyle III.

## Vehicle security passes available for Family Fun Day

Family members of Marshall team members who arrive in separate vehicles at the Redstone Gate for Saturday's Family Fun Day activities must have a one-day security pass.

The pass is good only at Gate 9 on Rideout Road. Passes must be displayed on the driver's side of the windshield. Drivers must have proof of insurance and a valid driver's license.

Passes are available at the Security Desk in the Bldg. 4200 lobby, the Security Office at Bldg. 4312, or the Internal Relations and Communications Department in Room 101, Bldg. 4200.

Family Fun Day activities include a 5K Fun Run at 8 a.m. and a Children's Parade at 9:45 a.m. Regular fun day activities including games, food and music are from 10 a.m.-2 p.m. at the MSFC Picnic Area. For a complete schedule of activities, see "Inside Marshall" or last week's issue of the Marshall Star.

## Seat belt enforcement program at Marshall part of 'Click It or Ticket' campaign

NASA and Redstone Arsenal policy require the use of seat belts for drivers and front seat passengers in all vehicles while in motion on Arsenal property.

The Marshall Center Protective Services Department will conduct an awareness campaign for seat belt use from Sept. 22-Oct. 6. During this period, anyone driving or riding in the front seat of a vehicle, whether privately owned or a service vehicle, will be cited with a warning ticket for the first offense. Multiple offenders during this time will be issued a citation taking points off of their driving privileges, which may affect their motor vehicle privileges on Redstone Arsenal or Marshall Center property.

After the two-week period, all violators of the seat belt restraint law will be issued traffic tickets costing two points against their driving privileges at Redstone or Marshall.

## Job Announcements

**MS03C0180**, AST, Engineering Project Management. GS-0801-15, Science Directorate, Microgravity Science & Applications Department. Closes Sept. 19. Contact: Debbie Longeddy at 544-2308.

**MS03D0186**, Contract Specialist. GS-1102-12, Procurement Office. Closes Sept. 18. Contact: Allan Day at 544-4079.

**MS03D0189**, Contract Specialist. GS-1102-11, Procurement Office. Closes Sept. 18. Contact: Allan Day at 544-4079.

**MS03D0196**, AST, Flight Vehicle Atmospheric Environments. GS-0861-11, Engineering Directorate, Environments Group. Closes Sept. 24. Contact: Dana Blaine at 544-7514.

**MS03D0197**, AST, Flight Vehicle Atmospheric Environments. GS-0861-09,

Environments Group, Engineering Department, Engineering Directorate. Closes Sept. 25. Contact: Dana Blaine at 544-7514.

**MS03D0199**, AST, Structural Mechanics. GS-0861-09/11, Environments Group, Engineering Systems Department, Engineering Directorate. Closes Sept. 26. Contact: Kevin Plank at 961-0157.

# Center Announcements

## SEE Program to host Spacecraft Charging Technology Conference

NASA's Space Environments & Effects Program will host the eighth Spacecraft Charging Technology Conference Oct. 20-24 in Huntsville. The conference is an international forum to present and discuss spacecraft charging issues and mitigation techniques. For more information, go to <http://see.msfc.nasa.gov/sctc>.

## ViTS Software Engineering Telecon will be Tuesday

AViTS Software Engineering Technology Infusion Telecon will be from 2:30-3:30 p.m. CDT Tuesday. Marshall team members, civil servant and contractor, who have the responsibility and authority to collaborate on infusing software engineering tools and technology into new or existing software development or maintenance activities are invited to attend. To register, go to <http://ic.arc.nasa.gov/reg/>.

## Return to Flight T-shirts available

Return to Flight T-shirts for use with Family Fun Day activities are on sale at the NASA Exchange Space Shop in Bldg. 4203. Adult sizes are \$12 and children's sizes are \$10.

## Shuttle Buddies to meet

The Shuttle Buddies will meet at 8:30 a.m. Monday at Shoney's restaurant on University Drive at Memorial Parkway. For more information, call Deemer Self at 881-7757.

## Management Operations retirees to meet Sept. 25

Management Operations Office retirees will meet at 10 a.m. Sept. 25 at the Cracker Barrel restaurant in Madison. For more information, call 539-0042.

**For all GSA repairs and warranty work, call William "W.D." Brewer at 544-4566.**

## Safety team sponsoring fire extinguisher inspections

The Marshall Safety & Health Action Team, in conjunction with Fire Prevention Week, will host Home Extinguisher Maintenance Day from 10 a.m.-2 p.m. Oct. 7 in the Bldg. 4203 lobby. Marshall team members can bring their home fire extinguishers for inspection, recharging and hydrostatic testing. Safety items, including fire extinguishers, also will be available for purchase. Fire Prevention Week is Oct. 6-10. For more information, call Monte Gravunder at 544-1986.

## Fingerprinting booth part of Family Fun Day activities

Marshall's Protective Services Department will be operating a Children's Fingerprinting Booth at the annual Family Fun Day on Saturday. Parents can have their children's fingerprints printed on a card to keep on file at home. Parents also can bring a photo of their child to attach to the card. For more information, see "Inside Marshall."

## Symposium on liquid space propulsion is Oct. 27-30

The Marshall Center is hosting the Fifth International Symposium on Liquid Space Propulsion in Chattanooga, Tenn., on Oct. 27-30. The invitation-only symposium is the principal international forum for all aspects of liquid rocket propulsion. This year's theme is "Long Life Combustion Devices Technology" and will cover all aspects of analysis, modeling and design. Experts from around the world also will conduct forums. For details, go to <http://www.chattanooga.com/5thinternational/index.html>. To inquire about an invitation to the symposium, call Roberto Garcia at 544-4974 by Friday.

## Blood drive is Friday

The American Red Cross blood drive at the Marshall Center will be 8

a.m.-1:30 p.m. Friday in the Center Activities Bldg. 4316.

## MTI luncheon set for Monday

An MTI Employee Appreciation Luncheon will be 11 a.m.-12:30 p.m. Monday at the MSFC Picnic Grounds. For more information, call Sarah Mullins at 544-5161.

## Applied Systems Engineering workshop will be Oct. 14-17

An Applied Systems Engineering workshop will run from 8 a.m.-4:30 p.m. Oct. 14-17 at the Marshall Institute in Room 711. The workshop is a review of the latest principles for systems engineering in the context of NASA and Marshall Center development cycles with realistic practice on how to apply these principles. The workshop is geared for program managers, project managers, systems engineers, technical team leaders and others who participate in defining and developing complex systems. Registration is online through AdminSTAR. For more information, call Jerry Miller at 544-7555

## 'Casual Conversation' with Marshall Director is Sept. 29

Marshall Director David King will host a "casual conversation" with women team members from 12:30-1:30 p.m. Sept. 24 in Bldg. 4200, Room P-110. The event is sponsored by the Federal Women's Program.

## Astrionics Retirees to meet Oct. 6

Marshall Center Astrionics retirees will meet at 9 a.m. Oct. 6 at Gibson's Bar-B-Q at 3319 Memorial Parkway Southwest in Huntsville. The group meets the first Monday of each month. For more information, call Jim Lewis at (256) 353-1557.

**For more Center Announcements, see "Inside Marshall"**

# Classified Ads

## Miscellaneous

- ★ Full-size portable basketball goal, \$25. 880-7490
- ★ White 6-drawer wood dresser, \$40. 890-0755
- ★ Maple table, 6 chairs, \$250. 539-7857
- ★ 1997 Viking pop-up, a/c, sleeps six, \$3,200. 256-828-7013
- ★ Green Naugahyde recliner, \$30. 881-8674
- ★ Cherry chest of drawers w/shelves, brass handles, \$100. 772-4402
- ★ Infant car seat/carrier, \$15; Disney babies wall plaques, \$8. 682-9540
- ★ Pneumatic log splitter; large birdcage, \$50; Ashley wood-burning stove, \$250. 722-8004
- ★ Two used Alpine car CD players, \$80 each; Kenwood car CD changer \$70. 527-0545
- ★ NH tractor TC25D, front-end loader, 60" finishing mower, 5' box-blade, 250 hrs., \$17,000. 679-8041
- ★ Chrome tubular steps for Dodge extended cab, \$150 for set. 508-4503
- ★ Queen waterbed, headboard, pedestal, cushioned side rails, heater, waveless mattress, cover, bedding, \$225. 256-883-6654
- ★ Lab mix puppies, 12 weeks, 2-cream, 1-yellow, 1-black, 1-black & white, \$25 each. 256-683-4207
- ★ 2002 Harley Davidson Fatboy, never driven, full chrome package, 88 cu. in./450cc, burgundy, \$22,000. 772-4912/evening
- ★ Bose 901 speakers w/Equalizer, \$375; Adjustable basketball goal, \$50. 652-6788
- ★ Stainless steel darkroom sink, 70"Lx 21"wide, w/ 2-faucets & countertop, \$250. 256-325-3568
- ★ Yamaha 14" snare drum w/soft case, stand, strike and practice pad, \$100. 852-5092
- ★ 1977 Avion travel trailer, 27', for hunting and camping, \$5,000. 931-427-2059
- ★ Kenmore Ultra-wash dishwasher, white, \$300. 883-9396
- ★ Elliptical exercise machine, new, assembled, \$100. 961-9650
- ★ Two Peugeot matching city bikes, male/female, \$250 pair. 325-6000
- ★ Heil heat pump, 2-ton, split unit, \$150; KitchenAid under-counter dishwasher, \$50. 881-6040
- ★ WW two-horse trailer, bumper pull, older model, \$1,600. 256-685-0308
- ★ Set of 16"x7" Mustang alloy wheels, 5x4.5 lug pattern, \$125. 721-3945
- ★ Two truck tires, 215/70R14, \$10 each; Fertilizer spreader, \$10; Bose AM-5 w/center speaker, \$225. 479-3660

- ★ Alabama vs. Northern Illinois tickets, Sec. U3-P, Row 21, four at \$50 each. 655-3065
- ★ 1990 Bayliner Capri boat, 19', 150 Force motor, trailer, new propeller, \$5,000. 776-3836
- ★ Fiberglass topper for small pickup truck, includes accessories for holding tools, etc., \$225. 772-7845
- ★ Disney's "The Emperor's New Groove" on DVD, never watched. \$10. 774-7675
- ★ Two tickets to Auburn vs. W. Kentucky football game at Auburn on Sept. 27. 536-0846
- ★ Husqvarna YTH180 riding mower, 46", 18HP Kohler twin engine, 265 hrs., new front tires, \$1,075. 461-8369
- ★ Warren & Sweat climbing tree stand, \$65. 256-961-1291
- ★ Two wing back chairs, \$200 each; 2001 VStar, Custom 650, \$4,600. 722-4786
- ★ Two Alabama/Northern Illinois football tickets, in Tuscaloosa, \$60 for pair. 355-8589
- ★ Two Valhalla crypts, side-by-side, all charges included, Masonic Bldg., \$5,800. 860-657-1618
- ★ Farmhouse style table, 36"x60" w/six chairs, \$250 firm. 461-8848
- ★ Two Michelin XC-LT 4 R16 tires, 1-year old, \$75 each. 256-519-7674
- ★ Kenmore refrigerator, 22CF, frost-free, side-by-side, white/black front, \$450; Snapper lawnmower, 6HP, self-propelled, w/mulcher, \$150. 880-9025
- ★ Simmons baby crib w/mattress, \$100. 348-6731
- ★ Solid pine crib and changing station convertible to full-size bed & six-drawer dresser, \$375. 830-5285
- ★ Bear Whitetail EL compound bow, 60 lb. pull, 30" draw, with sights, quiver, hard case, \$190. 851-8085
- ★ French Provincial bedroom, double bed w/ mattress, dresser w/mirror, chest, night table, white w/gold, \$400. 722-2146
- ★ Two used window-unit air conditioners. \$100 for both. 306-0700 Decatur.

## Vehicles

- ★ 1995 Dodge Caravan SE, automatic, 163K miles, blue w/gray interior, V6, \$2,100. 256-880-3337
- ★ 1990 Ford F-250 4x4 truck, tan, 5.8L, EFI/V8, dual exhaust, automatic, LWB, toolbox, \$3,300. 256-614-0707
- ★ 2000 Mazda 626, 4-door, 41K miles, silver w/gray interior, PS/PB/PB/PL, AM/FM/CD cassette, a/c, \$9,950. 256-230-0806
- ★ 2000 Avalon XL, leather, power seats, CD, gray, 63K miles, \$16,000. 256-883-0795
- ★ 1994 Saturn, 4-door, automatic, 135K miles, all maintenance records, \$1,975 firm. 256-753-2278

- ★ 1995 GMC Serria Z71 extended cab, garage kept. 931-937-6518
- ★ 1998 Ford Ranger XLT, extended cab, 4-cyl., 5-speed, CD/AM/FM, 55K miles, \$8,100. 882-5363
- ★ 1993 Dodge 3/4-ton pickup, Cummins Turbo diesel, club-cab, PD/PW, trailer pkg., 89K miles, \$8,900. 423-2321
- ★ 2000 Pontiac Sunfire, 2-door, sunroof 70K miles, one-owner, \$5,500. 256-335-5896
- ★ 1991 Explorer XLT, 63K miles, 4-door, V6, leather, sunroof, some parts recently replaced, \$6,000. 880-6498
- ★ 1991 Crown Victoria, police package, runs but needs work, \$300. 256-723-2462
- ★ 1997 Lincoln Towncar, Signature, white w/ cordovan leather, 62K miles, \$10,000. 536-0311
- ★ 1999 Lincoln Towncar, Signature, 4-door, most options, 67K miles, \$15,000. 256-881-6670
- ★ 2000 Toyota Tundra SR5, V8, CD, keyless entry, 4-door, 49K miles, \$16,900. 233-3407
- ★ 1999 Hyundai Elantra, under warranty, new tires, 39K miles, \$5,500. 883-1693
- ★ 1993 Saturn, 4-door, 78K miles, white, a/c, \$2,995. 882-9361
- ★ 1993 GMC van, V8, 4 captain chairs, 89K miles, one-owner, \$6,000. 539-7857
- ★ 1999 Toyota RAV4, 5-speed, FWD, BBS wheels, many options, 52K miles, \$10,000. 256-729-8089

## Wanted

- ★ Carpool with anyone from Birmingham area, all or 3-days per week. 544-0574
- ★ Used swing/gym set in good condition. 722-8004/lv. msg.
- ★ To buy, bags of pine needles. 881-6077
- ★ Used go-cart, 2 seats. 656-8501
- ★ Fanny lifter used in "The Firm" exercise video. 468-3749
- ★ Guitar for children. 883-1468
- ★ Student desk in good condition. 881-3607

## Free

- ★ Ceramic molds, mostly ducks. 722-8004
- ★ Approx. 150 linear feet of chicken wire, 3 feet wide, you pick up. 256-714-2555

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