MARSHALL STAR

Serving the Marshall Space Flight Center Community Aug. 19, 2004

Marshall Center selected to manage new program

The Marshall Center has been selected as the site of NASA's Discovery and New Frontiers Program Office.

The Discovery and New Frontiers office provides opportunities for the science community to propose full investigations to be conducted under a fixed price cost cap — an initiative designed to address high-priority exploration initiatives in the Solar System.

Discovery and New Frontiers investigations are the responsibility of NASA Headquarters in Washington, D.C. The Marshall program office will assist the Science Mission Directorate at NASA Headquarters with program management, technology planning, systems assessment, flight assurance and public outreach.

"We at Marshall Center are excited about being selected to assist the Science Mission Directorate with the management of the Discovery and New Frontiers Program for NASA," said Marshall Center Director David King. "The program comprises some of the most exciting missions in Solar System exploration. The Discovery and New Frontiers programs provide opportunities for science robotic missions that lay the groundwork for future exploration of the Solar System and beyond," King said.

The Marshall Center will assure the availability of the technical expertise to quickly assess needs and manage the required support structure to provide oversight to these missions, and have access to technical expertise that can be made readily available to principal investigators.

The Discovery initiative includes focused, scientific investiga-

*See **Program** on page 4*

Photo by Emmett Given, Marshall Center

Tutors heat up students' interest in science

Marshall tutors recently visited the Lane Boys and Girls Club in Huntsville to get them excited about science and mathematics through a program called STEAM --- Science, Technology, Engineering, Analysis and Mathematics. Chris McLemore, left, an outreach specialist with the Science Directorate, and a club member show nearly 200 students how the wireless drop tower experiment works. McLemore and fellow tutor Jerry Shelby, a systems engineer at Marshall, also discussed microgravity and the International Space Station with the youth.

Two solar sail systems successfully deployed

By Sheri Bechtel

NASA engineers and their industry partners have successfully deployed two solar sails — each nearly 33 feet in length along one side — reaching a critical milestone in the development of a unique propulsion technology that could enable future deep space missions.

Solar sail propulsion uses the Sun's energy to travel through space, much the way wind pushes sailboats across water. The technology bounces a stream of solar energy particles called photons off giant, reflective sails made of lightweight material 40 to 100 times thinner than a piece of writing paper. The continuous pressure provides sufficient thrust to perform maneuvers, such as hovering at a point in space and rotating the space vehicle's plane of orbit, which would require too much propellant for conventional rocket systems. Because the Sun provides the necessary propulsive energy, solar sails also require no onboard propellant, thus reducing payload mass.

In July, L'Garde, Inc., of Tustin, Calif., successfully deployed a solar sail technology system. Earlier this year, Able Engineering of Goleta, Calif., successfully completed testing of its own solar

*See **Solar sails** on page 4*

Photo by Emmett Given, Marshall Center

Axel Roth receives honor

David King, right, Marshall Center director, awards Axel Roth the NASA Outstanding Leadership Medal during Roth's retirement reception Aug. 12. Roth, the Center's former associate director, retired from Marshall in July after 45 years with NASA.

Transformation Dialogue Show coming to Marshall

By Patricia Dedrick Lloyd

NASA's third Transformation Dialogue Show will be broadcast live at 1 p.m., Aug. 23 from the Marshall Center's Propulsion Research Laboratory.

The discussion will be led by David King, Marshall Center director; Mary Kicza, NASA associate deputy administrator for Systems Integration; Lynn Cline, NASA deputy associate administrator for Space Operations; and Eugene Tattini, deputy director of the Jet Propulsion Laboratory in California.

"Alternative Organizational Models" is the topic for this dialogue session. This session will review the process that the Agency is using to conduct an analysis of alternative organizational models and answer questions from each of the NASA centers.

The event will be shown Agencywide on NASA Television and on the NASA Web site.

Team members may e-mail their questions and comments to the dialogue team before and during the session at transformation@nasa.gov.

Team members are also encouraged to take part in the continuous online conversations about the NASA transformation. These conversations take place at www.insidenasa.gov.

Future Transformation Dialogue broadcast topics will include: Organizational Transformation, Competency Management, Role of Competition, and Sustaining the Vision Long Term.

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

e-Payroll transition tips for Marshall team members

All NASA civil servants are now paid through a new personnel and payroll system provided by the Department of Interior (DOI). Here are some key points Marshall Center employees should remember about the new system:

1. Save your Aug. 17, 2004, NASA-issued Leave and Earning Statement (LES). Since DOI cannot be held accountable for NASA-tracked retirement and pay data, DOI's statements will not include data prior to Aug. 8. Therefore, you should save your Aug. 17 statement as a record of your NASA-tracked, pre-Aug. 8 retirement and pay information.

2. Use Employee Express at https://www.employeeexpress.gov, to make any changes to your payroll and personnel data, including TSP, benefits, tax withholding, and address information. All changes to this data must now be made through Employee Express. A tutorial is available at: http://epayroll.nasa.gov/documents/EmployeeExpressTutorial.ppt.

3. Review your first DOI-issued Leave and Earnings Statement. You will receive your first DOI-issued statements on Aug. 31 at your home address. NASA will no longer distribute these statements at work; DOI will mail them from Denver to your home. On Aug. 26, you will be able to use Employee Express to turn off home delivery of the Leave and Earning Statement. Contact payroll if you do not want any DOI-issued statements to arrive at your home address. These statements can always be viewed online via Employee Express. A sample of the DOI LES format is available at: http://epayroll.nasa.gov/documents/SampleDOILeaveandEarningsStatement.doc.

4. Use both the DOI and NASA W-2s for your 2004 tax filings. In January, you will receive two W-2 statements — one from NASA and one from DOI — covering the portions of the year for which each agency processed NASA's pay information. Both W-2s will be sent to your home address.

5. Enter your time in WebTADS in a timely manner. Data entry into WebTADS will not change as a result of the transition to the Federal Personnel and Payroll System. Continue to enter your time in 15-minute increments. It is even more important now to submit your time before the deadlines.

For more information, go to: http://epayroll.nasa.gov/briefing.html.

Classified Ad deadline to change

Beginning with the Sept. 9 issue of the *Marshall Star*, all classified advertising must be submitted by 5 p.m. on Friday to be included in the next week's issue.

Marshall's Amanda Bryan Alabama 'Co-op of the Year'

By Grant Thompson

Amanda Bryan, a former student in the Cooperative Education Program at the Marshall Center has been named 2004 "Co-op of the Year" by the Alabama Association of Colleges & Employers.

Bryan, a Cleveland, Ala., native, joined the Marshall Center in 2003 as a co-op in the Protocol Office. After receiving her college degree this year, she was hired as a civil servant management support assistant. Assigned to the Marshall Center's Protocol Office, Bryan assists with special guest visits and events, maintains the office calendar, schedules meetings and events, and coordinates travel arrangements.

Bryan

"Working at the Marshall Center as part of the co-op program gave me an opportunity to work with a great staff of professionals," said Bryan. "And interacting with the diverse collection of visitors to the Marshall Center was one of the features that made my co-op position something I looked forward to doing each day."

"Amanda brings great skill and professional ability to our office, and we are lucky to have her as part of our team," said Sandra Turner, protocol officer for the Marshall Center. "The award is well deserved and an indication of her hard work and commitment to her job."

The NASA Cooperative Education Program allows students to combine academic study with paid career-related work experience, alternating periods of classroom study with work at NASA centers. Students enroll in the cooperative education program at their schools and are referred to a NASA center by the school's cooperative education administrator. The program provides students with full-time work directly related to their field of study, and allows them to gain a better understanding of human relations.

"At the Marshall Center, we're lucky to attract some of the best and brightest to our co-op program," said Chrissa Hall, coordinator of Marshall's Cooperative Education Program. "Their work experience, coupled with their classroom curriculum, help develop students to enter the professional world after graduation. Whether a student's field of study is science, engineering, management or other related fields, the co-op program helps cultivate a student's skills for the professional environment."

The Co-op of the Year Award is given annually by the Alabama Association of Colleges & Employers to recognize outstanding achievement in a student's field of study. Founded in 1987, the association is a professional alliance of representatives from schools, career service groups and employers throughout the state. It provides information about opportunities available to students and graduates and promotes high work standards and ethical practices.

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

Two from Marshall get NESC positions

Two Marshall Center employees are filling critical positions in the relatively new NASA Engineering and Safety Center (NESC), formed in response to the Space Shuttle Columbia incident to address engineering concerns.

Danny Johnston, most recently a senior staff engineer in the Engineering Directorate at Marshall, is now one of 10 NESC chief engineers. George Hopson, formerly manager of the Space Shuttle Main Engine Project Office at Marshall, is one of 12 NESC discipline experts.

The NESC is at NASA Langley Research Center, but both Johnston and Hopson will remain at Marshall.

To stay informed on pertinent issues in his or her field of expertise and to continue support of Center projects and institutions, NESC chief engineers and discipline experts support the NESC from their home centers.

The NESC chief engineer at each NASA center ensures that there is a strong link between that center and the NESC.

When a concern is brought to the chief engineer's attention, it is the chief engineer's responsibility to evaluate the technical decisions made by the relevant Center program office and to notify the NESC if an independent technical review is warranted or requested. NESC chief engineers are also voting members of the NESC Review Board.

As the NESC discipline expert for propulsion, Hopson adds technical depth and leadership to NESC program assessments. When conducting an NESC assessment, he reports directly to NESC leadership to maintain the independence of NESC investigations.

NESC discipline experts establish Super Problem Resolution Teams for each discipline using experts from the Agency and industry, academia and other government agencies. They also assemble catalogs of resources and facilities available for their area of study.

The NESC has approximately 40 full time employees with immediate access to another 200-250 "ready experts" throughout the country. Since its official kickoff on Nov. 1, 2003, it has received 63 requests.

The NESC most recently assisted Hubble Space Telescope and Shuttle Return to Flight programs. It can provide programs with independent technical assessments, consultations, support, and/or inspections.

Solar sails

Continued from page 1

sail design. The work of both contractors is led by the In-Space Propulsion Technology Projects Office at NASA's Marshall Center in Huntsville.

"We are making the stuff of science fiction into reality," said Les Johnson, manager of the In-Space Propulsion Technology Projects Office at the Marshall Center. "It has been a tremendous engineering challenge, and I'm pleased and proud of the teams that have made it happen."

L'Garde's sail deployment was conducted in a 100-foot-diameter vacuum chamber at NASA's Glenn Research Center Plum Brook Station in Sandusky, Ohio. The tests included temperatures as cold as minus 112 degrees Fahrenheit to simulate the conditions of open space.

The sail technology used an inflatable, thermally rigidized boom system, which inflates and becomes stiff in space environment conditions. The boom is the core of the support structure for the thin, reflective solar sail itself — merely a fraction of the thickness of a human hair — and includes a stowage structure and built-in deployment mechanism. Engineers used a computer-controlled boom pressurization system to initiate deployment of the boom and sail system.

In May, Able Engineering also successfully completed testing of a solar sail design at NASA's Langley Research Center in Hampton, Va. This sail employed a "coilable" graphite boom, which is extended or uncoiled via remote control — much the way a screw is rotated to remove it from an object.

The boom supports the lightweight sail, which is made of an aluminized, temperature-resistant material called CP-1. Named NASA's 1999 Invention of the Year, CP-1 was invented by the Langley Research Center and is produced under exclusive license by SRS Technologies of Huntsville. The boom system also includes a central stowage structure and deployment mechanism.

Tests of the coilable boom were conducted in a 50-foot-diameter vacuum chamber. Engineers remotely initiated deployment of the boom and sail in April, then spent the next five weeks studying its shape and system dynamics — or how the solar sail functions in relation to force, weight and tension.

Data from both tests will be used to make improvements to future solar sail design and modeling. In March 2005, NASA plans a laboratory deployment of a sail more than 65 feet in length.

Solar sail technology is being developed by the In-Space Propulsion Technologies Program, managed by NASA's Office of Space Science and implemented by the In-Space Propulsion Technology Projects Office at Marshall. The program's objective is to develop in-space propulsion technologies that can enable or benefit near and mid-term NASA space science missions by significantly reducing cost, mass and travel times.

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

Leadership symposium registration closed

Registration is closed for the daylong Marshall Center leadership symposium Aug. 24 at the Von Braun Center in Huntsville. The event will be presented by the Marshall Center with participation from its partners and the local community.

Marshall's Vanessa Suggs, a coordinator of the event, said more than 480 civil servants and 230 people from the community have registered for the symposium, called "Leading in a Time of Change." Details of the symposium are at http://mi.msfc.nasa.gov/Leadership/index.html. The Web site includes information about speakers, an agenda and map.

Marshall Center Director David King, executive chairman of the symposium, said the event is for current and future leaders. It will focus on developing strong leaders who have the knowledge and skills to positively impact society.

Parking for the event at the Von Braun Center is $4. Those who have registered are encouraged to carpool and arrive early at the North Hall for check-in and refreshments. Doors open at 7 a.m. and the symposium starts at 8:30 a.m.

Program

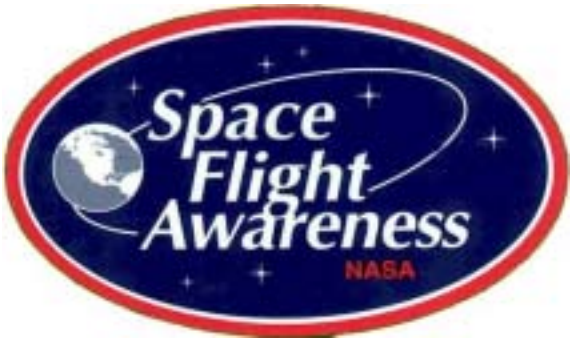
Continued from page 1

tions that complement NASA's larger planetary exploration. Its goal is to launch numerous small missions with a faster development phase — each for considerably less than the cost of larger missions. The Discovery program has launched numerous missions to date, including the Mars Pathfinder, Near Earth Asteroid Rendezvous-Shoemaker, and Genesis missions.

The New Frontiers initiative addresses high-priority investigations identified by the National Academy of Sciences. NASA's first New Frontiers mission is called New Horizons, which will fly by the Pluto-Charon system in 2014, and then target other Kuiper belt objects. NASA recently selected two mission proposals under the New Frontiers program for pre-formulation study, leading to a selection of the second New Frontiers mission in May 2005.

33 selected for Space Flight Awareness honors

Thirty-three Marshall Center employees and contractors are being honored for their significant contributions to the space program. The honorees will attend a NASA Recognition Return to Flight event in Orlando next week. They will receive a tour of the Kennedy Space Center and attend an awards ceremony in their honor.




John D. Allen - ED38


Tenina A. Bili - ED41


Frank M. Bugg, MP51


Joseph Cianciola - QD21


Brian W. Collins - MP02


Catherine DeFiore - ASRI


William Dobbs - AD40


Timothy C. Driskill - ED27


Michael R. Effinger - ED34


Darrell E. Gaddy - ED25


Jason Glasgow - CH2M Hill


Joseph Grant - SD70


Carolyn Greenwood - EG&G


Julian S. Hamilton - AD20


Mark L. Hill - MP41


Jennifer Holmes - QD50

Bennie A. Jacks - TD02

Georgia James - FD11

Edward Johnson - TD71

Vann R. Jones - PS30

Jeffery Kolodziejczak - SD30

Cheryl Kromis - Raytheon

Walter Lindblom - UNITeS

Rita Evans-McCoy - CD10

Robert McKemie - QD02

Stephen Miner - COLSA

Robert Moldt - Pratt & Whitney Liquid Space Propulsion

Sandra A. Nixon - FD26

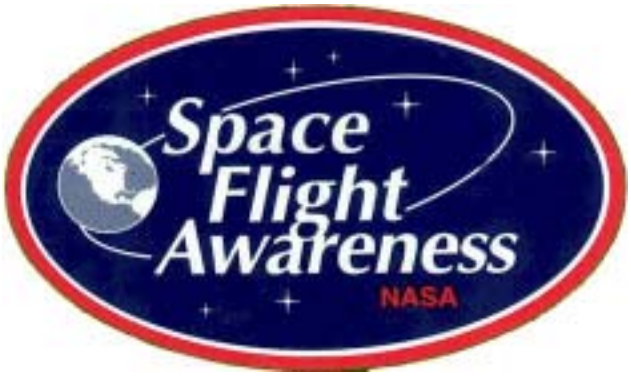
Jennifer Romine - RS01

Tammy Rowan - CD60

Mary Spaulding - DE01

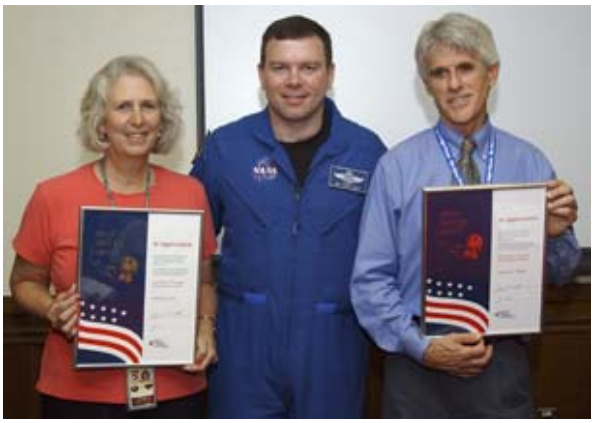
Jennifer Spurgeon - HEI

Patrick Whipps - MP31



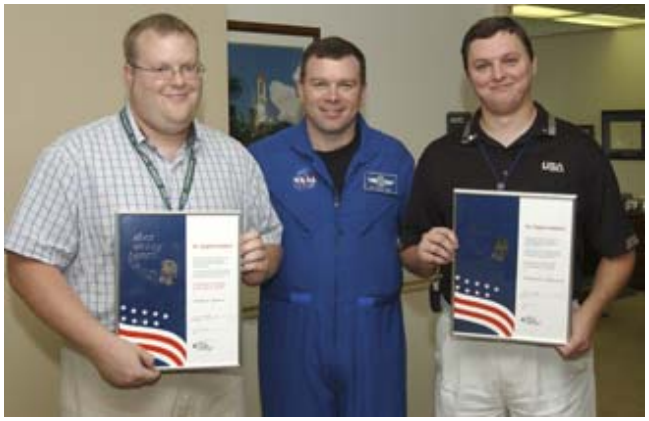
Silver Snoopys awarded to four at Marshall

Lt. Col. James M. (Vegas) Kelly surprised four Marshall Center team members with Silver Snoopys on Aug. 4. The employees earned the award for their professional dedication to the U.S. space program. Kelly was the pilot on STS-102 Discovery, the eighth Shuttle mission to visit the International Space Station.



Photos by Doug Stoffer,Marshall Center

Judy Guin, QD03, left; and Dennis Davis, QD50, on right, show off their Silver Snoopy awards with astronaut Kelly in center.



Lt. Col. James M. Kelly, center, congratulates Jeremy Turner, USA, left; and Brandon Whitworth, USA, after presenting them Silver Snoopy awards.

Sexual Harassment Policy reiterated by Center director

In a July 28 letter to Marshall Center team members, David King, center director, reiterated the Center's no tolerance policy regarding sexual harassment.

The letter read as follows:

The Marshall Space Flight Center is committed to implementing NASA's policy that discrimination on the basis of color, race, religion, sex, national origin, age or disability (mental or physical) is unlawful and unacceptable. Sexual harassment is a form of sex discrimination and, thus, is a prohibited personnel practice. Disciplinary action in accordance with federal regulations will be taken against those who participate in sexual harassment, as well as any supervisor who knowingly allows such conduct to continue after becoming aware of its existence.

I strongly support this policy and wish to emphasize that sexual harassment, like other forms of discriminatory behavior, will not be tolerated. There are a number of established channels through which employees may raise the issue of sexual harassment, including the director of the Equal Opportunity Office, Center director, the assistant administrator for Equal Opportunity Programs, or the NASA administrator. Other channels are:

- Agency internal grievance system
- Negotiated grievance procedures
- Office of Special Counsel, if a prohibited personnel practice is involved
- Merit Systems Protection Board, if an appealable adverse action is involved
- EO complaints system, if discrimination is alleged
- Agency Inspector General.

If you are a Bargaining Unit employee, you have the option of contacting your respective union representative for additional information and/or representation.

For more information or to view the entire Sexual Harassment Policy, go to http://eo.msfc.nasa.gov/eo pol statement.html

'Star' Gazing

From the MSFC History and Archives Files

Forty years ago this week the *Marshall Star* reported: "The name 'Pegasus' has been chosen by NASA for a new satellite which will investigate the hazard of meteoroids in space. The meteoroid technology satellite is within the programs of the Office of Advanced Research and Technology. Three of them are being built by Fairchild Stratos Corp., Hagerstown, Md."

Obituaries

Marvin C. Gravette, 73, of Arab, died July 5. Mr. Gravette retired from the Marshall Center in 1994 after working as a computer systems analysis supervisor.

Survivors include his wife, Jo Vickers Gravette of Arab; a daughter, Donna Gravette of Huntsville; a son, Scott Gravette of Hartselle; three sisters, Winnette Haynes of Oxford, Ailene Wood of Birmingham and Linda Hampton of Trussville; and a brother, Kenneth Gravette of Ashland.

J. Nathan McCormac, 42, of Huntsville, died July 29. Mr. McCormac worked 16 years for Lockheed-Martin in support of NASA's Shuttle External Tank Program at the Marshall Center.

Survivors include his wife, Cindy McCormac; daughter, Holly McCormac; son, William McCormac; parents, Jesse W. and Ada McCormac; two sisters, Jessie Exum and Jean Chaney; three brothers, Thomas McCormac, Daniel McCormac and Micah McCormac; and several nieces and nephews.

Jack R. Palmer, 80, of Athens, died Aug. 1. Mr. Palmer retired from the Marshall Center in 1988 after working as a financial management supervisor.

He served in the U.S. Army during World War II and during the Korean War.

Survivors include his wife, Ruby Palmer of Athens; a daughter, Kelly Thames of Mobile; a sister, Lois Ann Roush of Lima, Ohio; and a brother, Louis Palmer of Columbus Grove, Ohio.

Eugene C. Ward, 86, of Huntsville, died July 2. Mr. Ward retired from the Marshall Center in 1979 after working as a program analyst.

He served in the U.S. Army during World War II.

Survivors include his wife, Helen McDonald Ward; two sons, Eugene Charles Ward Jr. of Atlanta and Frank Benjamin Ward of Boston; and a daughter, Kate Ward Sexton of Birmingham.

Neil Otte, center, chief engineer for the External Tank Project Office, answers the news media's questions about the tank during a tour of the Michoud Assembly Facility in New Orleans last week. The tour was part of a one-day workshop hosted by NASA and Lockheed Martin Space Systems.

National media learn about tank safety, success

By Lynnette Madison

External Tank Project Manager Sandy Coleman told 24 members of the news media — including representatives of CNN, the Associated Press and ABC News – attending a workshop last week at the Michoud Assembly Facility in New Orleans that the External Tank will be a much safer tank when it returns to flight next year.

"We are going through a very methodical process," said Coleman. "This tank will definitely be safer than any other tank we've produced."

The news media were at Michoud for the one-day session to learn the basics of tank manufacturing and thermal protection systems, and the changes planned to improve the tank for future Space Shuttle flights. Briefings focused on the tank's bipod fitting, the liquid hydrogen tank/intertank flange area, the protuberance airload ramps, the liquid oxygen feedline bellows, and non-destructive evaluation of the tank's thermal protection system.

The workshop was initiated by Marshall's Media Relations Department and Lockheed Martin's Communications Department at Michoud. Marion Lanasa, director of communications for Lockheed-Martin at Michoud, and June Malone, NASA public affairs spokesperson at Marshall, were instrumental in organizing the event.

"We are very pleased to provide an opportunity to not only tell the public about our progress but to show them the flight hardware that will take the Space Shuttle safely back to flight," said Malone.

The in-depth briefings were led by Coleman; Neil Otte, NASA External Tank chief engineer; Wanda Sigur, deputy project manager at Michoud's Lockheed Martin Space Systems; and Hal Simoneaux, Lockheed Martin lead for Manufacturing Operations at Michoud.

During the briefings, Otte told the news media that NASA and Lockheed Martin engineers and scientists have spent the past 19 months testing areas of the tank that could lose foam or shed ice during launch. "We've done some really good detective work to recreate how foam and ice debris is formed and how to dramatically reduce it," said Otte. "Now, we've stopped taking the tanks apart and we're starting to put them back together."

Following the briefings, the news media were provided a tour of the facility and offered a close-up view of work being done on ET 120, the next tank scheduled for flight on Mission STS-114, the next Space Shuttle mission.

ET 120 is scheduled for roll out of Michoud by late October.

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

Shivers named 'Manager of the Year' by safety group

By Grant Thompson

Dr. Herbert Shivers, deputy manager of the Engineering Systems Department at NASA's Marshall Center, has been named "Manager of the Year" by the System Safety Society, an international, non-profit association dedicated to the support and professional development of safety personnel.

Shivers

Shivers was honored for his work and contributions in 2003 when he temporarily served as deputy director of Marshall's Safety & Mission Assurance Office.

In that position, Shivers was responsible for the safety, reliability, maintainability and quality activities of all Marshall Center programs. He was cited for his stable leadership of the office prior to the appointment of its current director while sustaining high levels of employee morale and accomplishment during the investigation that followed the loss of Space Shuttle Columbia and her crew in 2003. Also credited was Shivers' work on Marshall's efforts to return the Shuttle to flight by advising Safety & Mission Assurance managers working on the Shuttle Return-to-Flight teams, and his role in advising Safety & Mission Assurance Director, Dr. Jan Davis, and Marshall Center Director David King about potential management structures for the office.

"I have the pleasure of working with a great organization of people each day who are dedicated to providing a safe working environment," said Shivers. "I consider this an honor – not just for me, but for those who make safety a fundamental mission consideration at the Marshall Center and NASA."

Based in Unionville, Va., the System Safety Society is a professional organization with more than 1,750 members in 18 chapters across the country and around the world. Founded in 1962, the society – whose members have science-based engineering educations and system safety-related work experience – is dedicated to supporting and providing professional development and continuing education for safety engineers. Nominations for society awards are submitted by members and voted on by the society's international awards committee.

Shivers joined the Marshall Center in 1988 as a system safety engineer. He has held numerous positions during his NASA career, including director of the Payload Assurance Office; manager of the Safety, Reliability & Qualify Assurance Department; and deputy group lead in the Configuration & Data Management Group.

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

Marshall fun day is Oct. 2

The annual Marshall Center Family Fun Day will be held Saturday, Oct. 2 at the Marshall picnic grounds. For the first time, games, entertainment, concessions, food, soft drinks and bottled water will all be offered for one price.

This year's event will recreate the old-fashioned fall festival and carnival.

Tickets will go on sale Aug. 23. Ticket prices are $8 for children ages 4 to 12 and $12 for ages 13 and older. No cost for ages 3 and under. After Sept. 24, tickets will cost $10 for ages 4 to 12 and $15 for ages 13 and above. Once at the picnic grounds, tickets will be exchanged for a wrist band. Tickets may be purchased from the Internal Relations and Communications Department in Bldg. 4200, Room 101; the Space Shop in Bldg. 4203; or administrative officers. Retirees may also purchase their tickets by mail. Send checks to the Internal Relations and Communications Department.

Attorneys admitted to highest bar

Four attorneys in the Office of Chief Counsel at the Marshall Center were recently admitted to the bar of the U.S. Supreme Court.

Pamela A. Bourque, Gray Marsee, Audrey Robinson and Devinti M. Williams were sworn in at a ceremony in Huntsville by former Army Maj. Gen. William K. Suter, clerk of the Supreme Court. As members of the chief counsel's staff, they provide Marshall Center management with legal advice and representation on personnel law, federal ethics standards, contracts and agreements and other matters.

As members of the Supreme Court Bar, they can file and argue cases before the justices and attend Supreme Court oral arguments closed to the public. To become a member, applicants must be sponsored by a current member of the bar; have at least three years of experience practicing law in a state, commonwealth, or territory; and appear to the court to be of good moral and professional character.

Bourque earned her bachelor's degree in English in 1990 from the University of Louisiana at Lafayette and her Juris Doctor in 1993 from Tulane University in New Orleans.

Marsee earned his bachelor's degree in psychology in 1980 from Vanderbilt University in Nashville, Tenn., and his Juris Doctor in 1983 from the University of Tennessee College of Law in Knoxville.

Robinson earned her bachelor's degree in chemistry in 1986 from Oakwood College in Huntsville; her master's in management in 1989 from Florida Institute of Technology in Huntsville; and her Juris Doctor in 1993 from Emory University School of Law in Atlanta.

Williams earned a bachelor's degree in science in 1994 from Alabama A&M University in Huntsville and his Juris Doctor in 1998 from Cumberland School of Law in Birmingham.

Flight Projects Directorate holds olympics, awards ceremony

The Flight Projects Directorate held a "backyard olympics" and awards ceremony on July 29 at the Botanical Gardens' Grisham Pavilion. The celebration began with a parade of athletes carrying flags representing their "countries," such as the Federal Republic of Flight Projects and Opstralia. But team members were recognized not for their athleticism, but for their dedication and commitment to the space program over the past year. Two Director's Commendations were presented, in addition to Peer Awards and certificates of appreciation.

Bill Hicks, left, who was serving as acting associate center director, presents the Director's Commendation Award to Julie Sanchez.

Lanny Upton, right, receives the Director's Commendation Award from Hicks.

Photos by Emmett Given, Marshall Center

Jay Onken, left, receives the People Peer Award from Ann McNair, manager of the Ground Systems Department.

Teresa Vanhooser, right, Flight Projects Directorate's deputy director, presents the Customers Award to Lori Manis from her peers.

Sam Digesu, left, accepts the Innovation Peer Award from Robert Goss, chief engineer of the Flight Projects Directorate.

Doug Fooshee, left, accepts the Teamwork Peer Aaward from Scott Croomes, manager of the Flight Systems Department.

Announcements

Women's Equality Day awards program set for Aug. 26

Outstanding women achievers and their supervisors will be recognized in an Aug. 26 ceremony and also receive a Director's Commendation Certificate. The event, open to all civil service employees and sponsored by the Marshall Center's Federal Women's Program, is being held to commemorate Women's Equality Day. See "Inside Marshall'' for details or call Billie Swinford at 544-0087.

Business Systems open house is Aug. 25 in Bldg. 4200

The Marshall Center's Business Systems open house is set for 9 a.m. to 4 p.m. on Aug. 25 in Bldg. 4200, Room G-13A. Several technical and functional experts will be available to offer assistance and answer procurement issues related to SAP Core Financial, SAP Business Warehouse and WebTADS. For more information, call Scott Black at 544-4839.

Mandatory motorcycle safety training is Aug. 25 - 26

A safety training course for motorcyclists who drive on Redstone Arsenal is scheduled from 8 a.m. until 2:30 p.m. on Aug. 25 and 26 at 15100 Highway 20 West in Madison. Rocket Harley-Davidson of Huntsville will provide the training that is open to civil servants. Civil servants should register through SHE. Contract employees may also arrange training by calling Ralph Harris at 256-341-9424.

Shuttle Buddies meets Aug. 23

The Shuttle Buddies will meet at 9 a.m. Aug. 23 at Mullins Restaurant on Andrew Jackson Way in Huntsville. For more information, call Deemer Self at 881-7757.

Combined Federal Campaign to hold silent auction

The 2004 Tennessee Valley Combined Federal Campaign is gearing up for this year's campaign by holding a silent auction in October. Team members are asked to support the campaign by donating or collecting items for the auction. All donors will receive official acknowledgement for any items or services they provide. For more information, call Maria Clark at 313-7620 or 876-9143.

Management Operations Office retirees to meet on Aug. 26

The Management Operations Office retirees will meet for brunch at 10 a.m. on Aug. 26 at the Cracker Barrel Restaurant in Madison. For more information, call 539-0042.

Marshall leadership symposium set for Aug. 24

The Marshall Center will host a daylong leadership symposium at the Von Braun Center in Huntsville on Aug. 24. The event will focus on developing strong leaders who have the knowledge and skills to positively impact their society. For registration information, go to http://mi.msfc.nasa.gov/Leadership/index.html

Marshall to host strategic partnership conference

The Marshall Center will host a half-day conference called "Strategic Partnerships - Finding Solutions for Today and Tomorrow'' at 8 a.m. on Friday at the Propulsion Research Lab. The conference will bring together NASA, the Department of Defense, industry and academia to learn how the PRL can facilitate collaborative research efforts.

Mars Golf League tournament set for Aug. 28

The MARS Golf League will have a 4-ball (2-person best-ball) tournament at Goose Pond Colony Aug. 28. Entry fee is $42 and is due at the time of entry. Entry fee also covers green fee and mandatory cart fee. Entry deadline is Aug. 20. For more information or to enter the tournament, call Robert Rutherford at 544-8117.

Retirement reception for Mike Savage is Aug. 27

A retirement reception honoring Mike Savage for more than 42 years of federal service will be held at 1 p.m. Aug. 27 in Bldg. 4663, HOSC Main Conference Room A164. The reception is hosted by the Ground Systems Department of the Flight Projects Directorate. For more information, call 544-3788.

Marshall Venturing Crew Program meeting is Aug. 24

High school students ages 14-19 of Marshall team members are asked to participate in the Center's Venturing Crew program. An organizational meeting will be at 5 p.m. Aug. 24 at the U.S. Space and Rocket Center. Marshall's Venture Crew is an organization created to encourage high school students to pursue careers in science and engineering. For more information, call Joel Farbman at 961-7899.

Traffic and parking reminders while at the Marshall Center

Redstone Arsenal and Marshall Center officials remind team members and visitors to obey all the Center's traffic and parking rules. Parking at the Center is permitted only in designated spaces which are identified by a painted space, a bumper block, curb markings, or signs authorizing parking. Parking is prohibited in all other spaces.

Classifieds

MISCELLANEOUS

Wagner 425 airless paint sprayer, power roller, 1/3hp electric motor, 50' hose, $300. 882-2369/Krebsbach

CB equipment: includes two CB 40 channel base stations, tower & antenna. 534-5653

Black plastic toolbox for small truck, $20. 256-355-6984

Psychology book, 8th Edition, Spencer A. Rathus, $40; Green/navy/burgundy loveseat & chair, $125. 673-0045

Clarinet w/case, B-flat Buffet E-11 wood body, $650. 881-1895

Coolaroo shade sail awning, 16', 5" triangle, sand color, new, $69. 535-0539

Model airplane kit, Carl Goldberg Tiger 2, 61" wing span, new in box, $45. 828-4564

Clarinet, $100. 721-9410

Two used air conditioners, 5,000,BTU, White Westinghouse, 2 yrs. old, $55 each. 652-1639

Netgear PS-110 print server, connects two parallel port printers to Ethernet, $75. 883-2877

1988 Lowe Pontoon boat, 24', 90HP Mariner engine, $4,200. 256-738-5996

Guitar/amp starter pack, Fender Squire guitar, Peavey amp w/accessories, $250. 679-1946

Bike mount for truck bed, tension mounted, adjustable, $50. 797-6173

Epson Action Laser 1500 printer, $25. 859-4122

Computer, 400Mhz, monitor, printer, $100; Women's bicycle, $25, girl's bicycle, $15. 883-7564

1997 LaZBoy sofa and loveseat, navy, burgundy, green, gold plaid, both recline, $400. 837-0037

Stepper exerciser, $30; GE electric range, almond color, $100. 772-1870 after 5 p.m.

Convertible bicycle trailer/baby jogger, $75. 830-5939

Jansport D2 backpack, external frame, large capacity, $115; Whisperlite stove w/ MSR fuel bottle, $45. 881-8130

Kincaid cherry wood 3-piece entertainment center, 6' high, 8' wide, $1,200. 828-0756

Briggs & Stratton vertical shaft gasoline engine w/electric start, 8HP, needs ring job, $40. 881-8408

HP LaserJet III printer, letter & legal paper trays, low page count, $50. 765-532-4218

Antique dining room table, insert, 4-chairs, $100; kitchen table, tile top, 4-chairs, $125. 830-8934

Solid Oak twin headboard, dresser, mirror, $225; baby bed, mattress included, $75. 539-7281

Audiobahn 12" subs, 750 watts, $350; Halo angel eyes headlights for 94-97 Honda Accord, $150. 830-6584

Antiques: drop-leaf table, $100; Farm-style table, $150; four cane bottom chairs, $35 each; bench, $20. 883-1874

Cushcraft A3S 3-element HF beam, 10/15/10 meter bands, used 2 years, $275. 931-703-5956

Drum sticks, practice pad, beginning drummer's video, $25. 890-0755

Kayak w/paddle, Perception Sparky, color red, $250. 348-7146

Canon S450 printer w/ink, $31; New Epson C84, $70. 489-0136

VEHICLES

2002 Honda Shadow Ace Deluxe, silver/purple, 750v-twin, 6k miles, many accessories, $5,000. 881-9753/Jeff

1992 Buick Lasabre Limited, ps/pb/air, cassette player, $1,795. 256-586-8664

2000 Ford Taurus SE, 56K miles, ac, pb/ps, cd. 353-3229

1995 Dodge Dakota SLT extended cab, camper shell, loaded, needs some repair, $3,000 firm. 651-1223

2002 Suzuki Intruder, VS800GL, 3,500 miles, red/chrome, adult driven, unlimited mileage warranty, $5,000. 509-5375

1998 Chevy Malibu, 160K miles, new tires/brakes, driven daily, $2,750. 656-0077

1999 Mitsubishi Galant ES, 4-cyl., automatic, 59k miles, $5,450. 256-828-2643

1998 Pontiac Grand Prix GTP, bright red, black leather, all options, 73k miles, $8,200. 721-3945

2002 Mercedes C230 Sport coupe, 49.5k miles, remaining warranty, $18,500. 256-551-0276

1995 Blazer LS, 4wd, 4-door, 140k miles, Michelins, $5,100. 256-859-5089/ Harvest

1990 Buick Electra Park Avenue Ultra, 178k miles, v6, leather, ps/pw. 721-0540

2001 Cadillac Sedan DeVille, white diamond, 56k miles, loaded, new tires, one-owner, $18,000. 536-8692

1999 Toyota Camry, white, all-power, cd/tape, spoiler, 102k miles, $7,500. 828-4385

2004 Mustang Mach 1, black, 12k miles, loaded, leather, 4.6L/v8, 5-speed, $26,000. 256-784-9025 after 4 p.m.

2000/2001 Honda XR-250-R dirt bikes, $3,500 for both. 256-550-1165 leave message

1999 Montero Sport LS, $8,500; 1991 Toyota Camry DX, automatic, $2,995. 256-337-5269

1983 Chevrolet Serra pickup, white, long-bed, 130k miles, auto, a/c, $2,500. 755-0516

WANTED

Used chain saw, roto tiller and hedge trimmer, all in good working order. 683-9364

1956/57 Chevy in good condition. Call 653-6295.

FREE

Puppies, 2 males, 1 female, mixed breed, medium sized, cute. 883-7089

LOST

Digital camera cover w/digital memory chip, approx. 126MB, vicinity Motor Pool/Security Bldg., Digney Road, 8/6/04. 544-1140

FOUND

Sunglasses, Bldg. 4200 Lobby; car key; bracelet, Bldg. 4312 Lobby. Call 544-3623 to claim/identify

Ladies watch, Bldg. 4200 sidewalk; Eyeglasses, Bldg. 4249 parking lot. Call 544-3623 to claim/identify

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