

MARSHALL STAR

Serving the Marshall Space Flight Center Community

Feb. 14, 2002

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Wings for X-37 spaceplane shipped to Palmdale final assembly facility

by Holly McClain

he Boeing Company recently completed the composite wings for the X-37 reusable spaceplane at its Huntington Beach, Calif., facility and delivered them to the High Desert Assembly Integration & Test facility in Palmdale, Calif. The wings of this next-generation Reusable Launch Vehicle (RLV) technology demonstrator are now co-located with the fuselage, produced by the Boeing Phantom Works prototyping center in St. Louis.

"This is the type of significant milestone we get excited about," said Ron Prosser, vice president of Advanced Space & Communications for Boeing Phantom Works. "The delivery of the wings indicates we are on track and one step closer to getting an autonomous RLV demonstrator built, flying and demonstrating new technologies for making space transportation significantly safer, more reliable and more affordable than is

See Spaceplane on page 9

Huntsville firm to provide NASA support services

Compiled from Marshall and NASA news releases

i Signal Research Inc. (ASRI), a small, disadvantaged company in Huntsville has been selected to provide customer and employee-relations support services at the Marshall Center.

The contract, effective Feb. 15, includes a one-year performance period plus four one-year priced options. If all options are exercised, the contract could be worth as much as \$39 million.

Under the contract, ASRI will provide support services to Marshall's Customer and Employee Relations (CaER) Directorate. The directorate is primarily responsible for human resources, education programs, government and community relations, media relations, public exhibits, internal communications, employee training and organizational development and technology transfer.

This procurement was conducted under Section 8(a) of the Small Business Act, limiting competition to qualified small, disadvantaged firms. Congress mandates that NASA, as a

See Services on page 8



Photo by Emmett Given, NASA/Marshall Space Flight Center

Marshall welcomes new administrator

Center Director Art Stephenson, left, greets NASA's new Administrator Sean O'Keefe upon his arrival in Huntsville. O'Keefe visited the Center Feb. 8-9 as part of his NASA Centers orientation tour. See story and photos on pages 4-5.

Black History Month

'Doing the right thing' nurtures individual excellence

Editor's note: Each week during Black History Month, the "Marshall Star" will feature a Q&A with African-American leaders at the Marshall Center who are "Profiles in Excellence." Q

How do you nurture individual excellence? Where are the greatest opportunities for advance ment at the Center?

James Wyckoff, who has worked at the Marshall Center since 1975, is chief of the Planning and Requirements Office for the Space Transportation Directorate. He is a NASA Headquarters Professional Development Program participant, facility program manager, legislative intern, and serves on numerous Agency teams.



Wyckoff

"To nurture individual excellence, an individual should have a strong desire to do the right thing. He or she must believe in himself or herself and remember all people are the same. We have the same basic needs and desires. We just go about fulfilling them in different ways. The Marshall Center seems to have a number of areas where an individual who wants to can excel and advance."

As Marshall's audit manager, *Warren Woods* manages Marshall's audit programs and reports the results to top Center management. He also is a member of the NASA Management System Advisory Team headed by NASA Headquarters in Washington, D.C. Woods started his career at Marshall in 1985 in Mission Operations.



Woods

"To excel, don't do what everyone else does. Do what is right. I think the best opportunity for advancement at Marshall lies in making oneself an essential part of the Space Launch Initiative. Whatever happens in the future, NASA will need a better way to get 'stuff' into space. SLI is currently the way the agency is looking at this problem. Somehow, someplace, we will do this work."



Randolph

Tom Randolph is the deputy program manager for an administrative services contract at the Marshall Center. He joined the Marshall workforce in 1999 after 10 years with the Department of Defense.

"The greatest opportunities for advancement at the Center are in the administra tive and engineering fields, I believe. Individuals can nurture excellence by setting goals with no limitations and always striving to improve and better themselves. Knowledge is very important. Education is the key to success."

Black History Month events

n February, the Marshall
Center will mark Black
History Month with a series of
programs and events intended to
unite NASA employees with
Huntsville-area industry leaders and
young people.

- Spider Martin Civil Rights
 Photo Exhibit: Open daily through
 Feb. 27, Bldg. 4200 lobby. In the
 1960s, Alabama photojournalist
 Spider Martin captured images of
 the American civil rights movement.
 His national touring exhibit of still
 photos, taken between 1965-1968,
 will be on view for NASA employees and visitors to the Center.
- Food tasting: Feb. 21, Rustic Lodge
- Science Fair: 7 a.m.-2:30 p.m., Feb. 26, National Space Science and Technology Center (NSSTC), 320 Sparkman Drive. Elementary students from Huntsville area schools will display their science projects at the NSSTC (Rm. 4708), tour the Marshall Center and learn more about NASA's mission. Visitors escorted by badged NSSTC employees may attend.
- Black History Month closing ceremonies: 10-11:30 a.m., Feb. 27, Bldg. 4200, Morris Auditorium. Guest speaker is Dr. Julian Earles, deputy director, Glenn Research Center in Cleveland. Local educators and organizations will be awarded for contributions to science education and leadership. The event is open to the public.
- Unification Activity: 9:30-11:30 a.m., Feb. 28, Sparkman Center's Bob Jones Auditorium, Redstone Arsenal. The Marshall Center will participate in the 7th annual "Festival of African-American Music/Art/Portrayals," hosted by Redstone Arsenal. The event is open to NASA and Arsenal employees.

Educators visit applied research facilities during workshop

wenty science center and museum educators participated in NASA's Educational Workshop held Jan. 30-Feb. 7 at the U.S. Space & Rocket Center.

The workshops focus on the needs of science center and museum educators and technology specialists. They discussed teaching, learning, assessment and professional development strategies called for in the national science, mathematics, technology and geography education standards.

The educator workshops are sponsored and implemented by NASA and Marshall's Education Programs Office.



Dan Woodard, left, the lead for Microgravity Outreach and Education, demonstrates the effects of free fall.



Keith Parrish, left, of the Flight Projects Directorate, explains packaging of Environmental Control and Life Support Systems hardware.



From left, Drew Gilmore, of the Cumberland Science Museum/ Sudekum Planetarium in Nashville; and Laurie Provin and Catherine Killoran of SciQuest in Huntsville watch a demonstration in the Army and NASA Virtual Innovations Laboratory (ANVIL).

Severe Weather Awareness Week Feb. 18-22

Marshall Center to participate in statewide tornado drill

from the National Weather Service

♦ eb. 18-22 is Severe Weather Awareness Week in Alabama. The National Weather Service, the Alabama Emergency Management Agency, the Alabama Department of Education, and the American Red Cross urge everyone in Alabama to become weather aware.

This special week is a time for all Alabamians to learn or review the proper safety measures to protect themselves during deadly weather. Quick action by you can mean the difference between life and death.

On Feb. 20, the Marshall Center will participate in a statewide tornado drill. All employees are expected to evacuate to their protective areas when the Emergency Warning System

announcement is made, and stay there until the drill has concluded and another announcement is made saying "this concludes the tornado drill." If severe weather is in the area on Feb. 20, the alternate date for the drill is Feb. 22.

But tornadoes are not the only weather dangers we face. Each year, severe thunderstorms and lightning cause millions of dollars in property damage — and kill. Damaging wind events from severe thunderstorms are much more frequent than tornadoes in Alabama. Lightning has frequently been called "the underrated killer" because it is so common, but deadly. Flooding and flash flooding are often underrated, too, as Alabama found out several years ago when significant flooding and flash flooding ravaged the state.

O'Keefe stops at Marshall as part of NASA Centers tour

by Debra Valine

ASA's new administrator, Sean O'Keefe, visited the Marshall Center Feb. 8-9. The visit was part of a welcome tour the administrator is taking to all the Centers.

During his two-day visit, on Feb. 8 O'Keefe toured Marshall's Propulsion Research Center, Payload Operations Center, Materials Science and Biotechnology, and the National Center for Advanced Manufacturing.

O'Keefe also met with Marshall Center Director Art Stephenson and his senior executive staff Feb. 9 to discuss philosophies and issues, and get their recommendations.

Marshall team members met O'Keefe in Morris Auditorium Feb. 8 to learn a little about the new administrator.
O'Keefe outlined his philosophy that a truly great organization is based on strategic elements.

"My good friend and mentor Paul O'Neill, who is the Secretary of the Treasury, talks about what he calls three strategic objectives that must be met in order to be a truly great organization," O'Keefe said. "The first element is summed up simply as, 'treat folks



Dr. Ann Whitaker, right, director of Marshall's Science Directorate, discusses with O'Keefe the capabilities of the Microgravity Development Laboratory.

professionally.' Everyone is where he or she is because we trusted him or her to do a good job. So, treat others the same way you want to be treated and everything will be just fine.

"The second element is 'provide people with the resources' needed to carry out the

tasks they have been hired to do. But this doesn't just mean you should get everything you ask for. Set priorities, be able to justify the resources you need for the task, and to demonstrate success through metrics. Leadership must provide

See O'Keefe on page 5



With an example in his hand, Dr. Paul Munafo, right manager of the Materials, Processes and Manufacturing Department, explains rapid prototyping of ceramic materials to O'Keefe.



Dr. Jan Davis, left, director of the Flight Projects Directorate, gives O'Keefe, center, and Fred Gregory, NASA's acting Associate Administrator for Space Flight, an overview of the Payload Operations Center.



O'Keefe, right, gives Dr. Stephen Rogers, left, and Dr. Francis Thio of the Propulsion Research Center a thumbs-up.



O'Keefe addresses community and business leaders at a reception at the U.S. Space & Rocket Center.

O'Keefe ——

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appropriate resources to help ensure success of the task.

"And finally, 'someone noticed.' We have to recognize the result for what it is. Celebrate the successes and lament the less than successes. Learn from failure," O'Keefe said.

O'Keefe hopes that someday his friend and mentor will use NASA to illustrate his model of truly great organizations.

"This is a collaborative effort,"
O'Keefe said. "We are all involved. We all share a stake in the outcome of this mission. If we follow this approach, we have a really strong chance of being a truly great organization. This is achievable. We can do it.

"My fondest hope is that when Paul talks about this, one of these days, he will say, 'let me tell you about a public organization that best fits the model of a truly great organization' and that ought to be NASA. In my mind, we have all the elements here. It is not only achievable. It is likely. It is just a matter of how we commit ourselves to that task."

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

Dr. Julian Earls to speak to Marshall Association Feb. 27

r. Julian Earls, deputy director for Operations at Glenn Research Center in Cleveland, Ohio, will speak on "Leadership in the new NASA" at the Marshall Association's Feb. 27 meeting. The meeting begins at 11:30 a.m., at the Redstone Officers' and Civilians' Club.

Earls has written numerous publications, both technical and non-technical, and has been awarded NASA medals for exceptional achievement and outstanding leadership. He is the recipient of the Presidential Rank Award of Meritorious Executive and was elected into the inaugural class of the National Black College Alumni Hall of Fame. He is founder of the Development Fund for Black Students in Science and Technology. Its members work to raise a million dollar endowment for scholarships to black students who major in technical disciplines at historically black colleges.

Lunch costs \$8, payable at the door. To attend, make reservations by 3 p.m. Feb. 22, using e-mail or call Cliff Bailey at 544-5482.

Procurement Office rewards employees for hard work

arshall's Procurement Office recently held a starstudded awards luncheon honoring several of its employees for outstanding accomplishments.

Eleven procurement awards were presented in various categories, including the Peer Honor Award recognizing an individual who has made an outstanding contribution to the Procurement Office as recognized by their peers.

Ten of the awardees also were nominated for the annual NASAwide Procurement awards administered by the Office of Procurement at NASA Headquarters in Washington, D.C.

Subsequent to the Marshall awards ceremony, Gloria Coffey was selected as NASA-wide Simplified Acquisition Specialist of the Year.

The Procurement Office patterned the luncheon after the Academy Awards of Hollywood with participants attired in beautiful long gowns and tuxedos. The theme for the annual celebration was "Marshall Procurement Moves With the Stars."

Procurement's leading man, Director Stephen Beale AKA Robert Redford, hosted the luncheon. Deputy Director Byron Butler, AKA Sean Connery, co-hosted the event. Presenters for the event also posed as well-known stars of stage and screen. The special guest for the luncheon was Marshall's Deputy Director Jim Kennedy — Procurement's special guest for the luncheon — congratulated the 2001 winners and commended the procurement organization for having such an outstanding and fun-filled program. Kennedy extended a special thanks to the organization for the outstanding and professional manner in which they support the Center.

The program entertainment also included performances by Procurement's own soloists Kathy Rice and Gloria Coffey. Other participants included Procurement contractor support personnel from Infinity Inc. and BRACE, who also presented group achievement awards to their personnel.

Joseph Hobson coordinated and narrated the event with the assistance of Customer and Employee Relations Directorate personnel.

See Procurement on page 7

And the winners are:



House



Coffey

Mid-range/Commercial Person of the Year — Shirley Shue, for accomplishments in pre- or post-award areas relating to mid-range and/or commercial procurements, especially in expanding the use, or use of, innovative techniques.

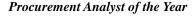


Franklin



Shue

Grants Specialist of the Year
— Gladys Franklin, for accomplishments in pre-award or postaward activities related to grants.



— Betty McCown, for accomplishments in contract review and other activities related to procurement operations not related to a specific contract or procurement action.



McCown

Clark

Simplified Acquisition
Specialist of the Year — Artra
House and Gloria Coffey, for
accomplishments in pre-award or
post-award activities related to
small purchases.

Procurement Support Person of the Year — Dwight Clark, for contributions made to the achievement of the organization's procurement objectives. Personnel eligible for this award include contract price analysts, clerks, management support assistants, procurement assistants, computer specialists or any other professional or administrative position.

Contracting Officer's Technical Representative of the Year — Anthony Lavoie of the Chandra Program Office for his outstanding efforts in managing contracts or cooperative agreements and embracing the Center Values in accomplishing his role as COTR. Receiving honorable mention in this category were Mike Rudolphi of Reusable Solid Rocket Motor Project Office, Pete Rodriguez of the Second Generation Reusable Launch Vehicle Program Office, and Steve Meacham of Payload Operations and Integration Department.



Lavoie



Southgate

Contract Specialist of the Year — Lynn Southgate, for accomplishments in preaward and post-award activities, including competition advocacy, procurement planning, solicitation preparation, proposal evaluation, cost and price analysis, negotiation and contract preparation.

Contract Manager of the Year —

Ketela White, for outstanding accomplishments in contract administration. These activities include post-award activities, including effective use of delegations, communication with COTR's, monitoring, subcontract management, performance evaluations, and funds obligation monitoring.



White



Posev

Procurement Supervisor of the Year - Emil Posey, for outstanding supervisory effort, which directly resulted in achievement of procurement objectives in their procurement organization. This is the only award for which supervisory personnel are eligible.



House

Peer Honor Award — Artra House, for her outstanding contribution to the Procurement Office as recognized by peers. This award was presented only at the Marshall Center and was not nominated for a NASA-wide award.

Procurement

Continued from page 7

"We also presented procurement Office certificates to our employees for "Going the Extra Mile," Good Attitude", and for "Dangerous Display of Initiative," Practicing Good Values, and "Safety Awareness Award," said Stephen Beale, director of the Procurement Office.

The "Going the Extra Mile" certificates went to Lydia Butler, Edgar Sanchez, Tim Crabb, Jeff Jackson, Glen Alexander, Isaac Jones, James Bailey, Betty Kilpatrick, Jennifer McCaghren, Paul Pickett, Becky LaRue, Sandy Presnell, David Morgan, Melinda Dodson and Beth Shelton. "Good Attitude" certificates went to Dan Fuller, Sherry Davidson, Wayne Harmon, Alice Sams, Rita Mason, and Bob Martin. Certificates for "Dangerous Display of Initiative" went to Carlos Smiley, Dave Seborg and Monica Williams. The "Practicing Good Values Awards" were given to Brian Speer, Jeannette Swearingen, Terry Wilkinson, Roxanne Melton, and Gary Bugbee. The Safety Awareness Awards" went to Jerry Williams, Joseph Hobson, Calvin Tubbs, Thelma Collins, and Kathy Huskey.

Services

Continued from page 1

federal agency, spend at least 8 percent of its contracting dollars annually with small, disadvantaged businesses.

In other contract news,

NASA has awarded a \$936 million modification to the prime contract for the International Space Station. *The Boeing Company* will extend station integration and operations work through Dec. 31, 2003, the current period of performance. This work has been planned and is contained in the budget estimates represented in the FY 2003 President's budget.

The eight-year prime International Space Station contract awarded to Boeing in 1995 covers construction, integration and operations of the station by Boeing Information, Space and

Defense Systems. The modification brings the total value of the contract, NAS 15-10000, to \$10.7 billion.

Work on the contract will be performed at various Boeing facilities located in Huntington Beach, Calif; Canoga Park, Calif; Huntsville, Ala; Orlando, Fla., and Houston, and at a variety of subcontractor facilities located throughout the United States.

Dyncorp Technical Services LLC of Forth Worth, Texas, has been awarded a five-year, \$148 million Center Operations Support Services contract for work to be performed at Johnson Space Center in Houston.

The hybrid cost-plus-award fee/firm-fixed-price contract also includes operation support services for NASA facilities at Ellington Field and at the Sonny Carter Training Facility, both in Houston.

Tasks to be performed include maintenance, operation and repair of Johnson's physical plant; engineering, design and minor construction; grounds maintenance; facility-related information management; logistics, transportation, inventory management, rigging and hauling and custodial support.

In addition to existing work, NASA has tasked *Lockheed Martin Space Operations* of Houston to provide support to the Earth Observing System Program's Earth to Polar Ground Network project under the Consolidated Space Operations

Contract (CSOC).

The tasks associated with this effort include procurement, installation, operation, and maintenance of telecommunication services. Specifically, the firm will provide circuits that will be used to provide data communication services between Goddard Space Flight Center in Greenbelt, Md., and the NASA facility in Spitzbergen, Norway; between Goddard and Gilmore Creek, Alaska; between Goddard and Poker Flats, Alaska; between Poker Flat Research Range and Gilmore Creek, Alaska.

The new work is valued at \$78 million, should NASA exercise the five-year option of the contract. If the option period is exercised, the contract will run through December 31, 2008. Most of the work will be done at the Marshall Center under the cost-plus-award-fee contract.

ManTech Systems Engineering Corporation of Fairfax, Va., has won a \$82.3 million contract to provide engineering and technician mechanical support at Goddard Space Flight Center, Greenbelt, Md.

Goddard builds instruments and satellites that monitor the Earth's vital signs, study the Sun and its influence on our planet and peer into the deepest reaches of space for answers to fundamental questions about the origin and fate of the universe.

To accomplish this task, Goddard operates the Environmental Test and Integration Facility to assemble the instruments and satellites and verify their ability to withstand the rigors of launch and the extremes of space. The contractor will provide engineering and technical services for the operation, maintenance and modernization of the facility.

This facility is one of the most complete and comprehensive within the United States government for environmental test and qualification of space flight hardware. The facility includes clean-room assembly and checkout areas, thermal vacuum chambers, a high capacity centrifuge, an acoustic test cell, electro-dynamic shakers, static-load test facilities, a modal test facility, electromagnetic compatibility test facilities and a magnetic characterization test facility.

The cost-plus-award-fee contract begins May 1.

'They' are finally revealed

ince January, messages stating "they are coming" have been identified across the Center.

After weeks of speculation, the identity of "they" has been revealed to be a new library of online courses that will soon be made available to Marshal Center employees.

"This new courseware will usher in a new era of learning at the Center," said John Heath of the Employee and Organizational Development Department. "Like the marketing campaign indicated, this is an award winning library of 1,700 courses that is available at work or home whenever you need it. Most programs take less than two hours to complete and include live chat capability with subject matter experts."

A kickoff session is being planned to introduce the courseware library.

"I anticipate employees will be very

impressed with the variety and quality of the programs available," Heath said. "Fortune 500 companies such as Dell, Microsoft, Richoh and Manpower Staffing Services are using this service. Several government entities, including CIA, FBI and the Defense Department also have access to portions of this online library of programs.

For more information, call 544-2622.



Photo by Doug Stoffer, NASA/Marshall Space Flight Center

Getting a Silver Snoopy

Astronauts Dominic Antonelli, left, and Chris Ferguson, right, present Silver Snoopy Awards to John Moorehead, Roger Henderson, Oscar Hobson, Kathy Poe and Carol Bryant of the Space Shuttle Projects Office. The presentation took place last month.

Spaceplane

Continued from page 1 possible today."

"The completion of the wings finishes one of the many complex tasks in building a Reusable Launch Vehicle (RLV) technology demonstrator," said Jeff Sexton, NASA's X-37 program manager at the Marshall Center. "Advancing RLV technology from the research environment to the real world of manufacturing, assembly and flight testing comes with great challenges. The manufacture and assembly of the wings are no exception."

The Marshall Center's 2nd Generation RLV Program manages the NASA-wide Space Launch Initiative (SLI) that is developing cost effective and safety enhanced alternatives for accessing space. The X-37 program manager said, "I am proud of the X-37 team and their commitment in clearing another hurdle. Many more challenges are ahead of us as we pursue the goals of the SLI program to demonstrate 2nd Generation RLV technologies. Accomplishments like this are a motivation to the entire SLI team."

The complex wings were produced by a Phantom Works composite development team at Huntington Beach using sophisticated, highly controlled machining and bonding processes. When attached to the 27.5 ft.-long X-37 fuselage, the wings will have a span of 15 feet.

The fuselage is constructed of Graphite Bismaleimide (GrBMI), which is a high temperature composite ideally suited for reusable vehicles returning from orbit. GrBMI operates at 450°F, 100°F higher than the current aluminum structure of the

Space Shuttle, allowing for a thinner and lighter thermal protection system. In addition, the fuselage is primarily bonded together to minimize weight.

"Ever since the low altitude flight dynamics of the X-37 were verified by last year's seven successful test flights of the subscale X-40A, we've been looking forward to the final assembly of major components," said Kevin Neifert, director of Next Generation Launch Systems. "A great team is at work here, and witnessing the main elements of the X-37 taking shape is very gratifying. The advances in technology and expertise that we have acquired are directly applicable to the development of next generation space vehicles. Additionally, X-37 has strong synergy with our work on NASA's Space Launch Initiative, a key program leading to the next generation of crewed, reusable launch systems."

During the final assembly process the wings will be mated to the fuselage this June, with completion of the X-37 targeted for late 2003. The first unpowered drop test from a NASA B-52 is slated for early 2004 at Edwards Air Force Base, Calif. NASA and Boeing continue to discuss plans for boosting X-37 into orbit.

The X-37 government team, led by the Marshall Center, also includes NASA's Ames Research Center, Mountain View, Calif.; Kennedy Space Center, Fla.; Goddard Space Flight Center, Greenbelt, Md.; Langley Research Center, Hampton, Va.; and Dryden Flight Research Center and the U.S. Air Force Flight Test Center, Edwards Air Force Base, Calif.

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

Software of the Year

Marshall seeks nominations for annual competition

he annual call for nominations for the NASA Software of the Year Award, to give recognition to software developed and owned by NASA, has gone out.

This very prestigious award includes a Space Act Award of up to \$100,000 and a certificate of recognition. The criteria for eligibility for this software award include: 1) NASA has an intellectual property interest; 2) It has been supported, adopted, sponsored, or used by NASA; 3) It is significant to the NASA mission(s); 4) The software has been tested and documented per the requirements of NPD 2820 Section 1(e); 5) The software must have been released in accordance with NPD/NPG 2210.

The NASA Software Advisory Panel, comprised of software development experts from all NASA Centers and the Jet Propulsion Laboratory, will judge entries. After its review, the panel will submit its selection(s) to the Inventions and Contributions Board.

All interested applicants for this award must submit a NASA Form 1329 (ICB Space Act Award application), NASA Form 1679 (Disclosure of Invention and New Technology (Including Software) (if one has not already been submitted), along with letters of endorsement for the software. Competition guidance, NASA Form 1329, and information about last year's winners is available on the Web at: http://icb.nasa.gov

For more information, call James J. McGroary, Marshall's Awards Liaison Officer, at 544-0013 or Abbie Johnson at 544-0014. Entries and supporting material must be submitted no later than April 15 to LS01/James J. McGroary.

Energy tip

Sealing gaps and cracks reduces unwanted infiltration of unconditioned outdoor air

Editor's note: Thank you to Paul Wieland of Marshall's Environmental Control and Life Support Systems Group for sending us this week's Energy Tip. This tip emphasizes the importance of reducing infiltration.

typical size window with a 1/8-inch gap all around is equivalent to having a 1.5-inch diameter hole in the wall. Another way that air infiltrates is through the electrical outlets and switches. On a cold windy day if you can feel the air coming through the outlets — even on interior walls — you are losing conditioned air as the cold, unconditioned air comes in. Even a well-insulated house will use a lot of energy to heat and cool if it is not well sealed.

If you have an energy tip that you would like to share with the "Marshall Star" readers, send it to: *Cedreck.davis@msfc.nasa.gov* or *Juergen.Haukohl@msfc.nasa.gov*.

Center Announcements

NASA Exchange

Huntsville Flight basketball tickets

ASA employees, retirees and contractors and their families can receive tickets for \$5 each to the Huntsville Flight's basketball game at 3 p.m. Feb. 18. Ticket orders must be made in advance by either e-mailing Thommy Scott at: thscott@NBA.COM or by calling the Von Braun Center ticket office at (256) 429-1013. The game will be nationally televised on ESPN2. For more information, call Candy Bailey at 544-7565.

NASA scholarships

Applications are being accepted for six scholarships to be awarded by the NASA College Scholarship Fund Inc. The scholarships are for \$2,000 for the 2002-2003 school year and are renewable for a maximum of \$8,000 over six calendar years. For complete information on the scholarship and application process, visit the Web at: http://htro.jsc.nasa.gov/jsc-hro-2/specialprogs/fellowships&scholarships.htm.

Softball meeting

There will be a Marshall Exchange softball organiza tional meeting on at 11:15 a.m. Feb. 27 in room 117 of the new Wellness Center.

Community Chorus

ASA employees, retirees and contractors can receive a \$2 discount to the Madison Community Chorus production of "Annie," at 7 p.m. Feb. 21-23 and at 2 p.m. Feb. 23. To receive the discount, present your badge at the Bob Jones High School Auditorium in Madison, or purchase tickets in the lobby of Madison City Hall from 11 a.m.-1 p.m. Feb. 19-22.

Obituaries

Dolve, Nels O., 85, of Hazel Green, died Jan. 31. He retired from Marshall in 1994 where he worked as an electrical engineer. He is survived by his wife, Glenda Dolve.

Powell, Samuel W., 66, of Athens, died Jan. 31. He retired from Marshall in 2000 where he worked as an AST, liquid propulsion systems. He is survived by his wife, Martha Powell.

Center Announcements

Blood drive

The American Red Cross needs ▲ Marshall employees to come to the Wellness Center, Bldg. 4315, Digney Road, from 8 a.m.-1:30 p.m. on Friday, Feb. 15. Blood supplies are dangerously low. All blood types are desperately needed. Donors will receive a gift certificate for a free medium one-topping Domino's pizza and a coupon for a Chick-Fil-A sandwich. Anyone who cannot attend this blood drive but wishes to participate can donate at The American Red Cross, 1101 Washington Street, Monday through Thursday, 10 a.m. - 5:30 p.m., or Friday 8 a.m. – 1 p.m. For more information, call Nancy Jane Fitzgerald at 544-7561.

Moonbuggy volunteers needed

Volunteers are needed to help with the 2002 Great Moonbuggy Race being held from 8 a.m.-5 p.m. April 12-13 at the U.S. Space & Rocket Center. Sign up online at: http://ntf-2.msfc.nasa.gov/tgmr2002.nsf/reg. For more information, call Joel Farbman at 544-2319 or send an e-mail to joel.farbman@msfc.nasa.gov.

Washington Update breakfast

The Washington Update breakfast with U.S. Sen. Jeff Sessions scheduled Feb. 18 has been postponed. A new date will be announced.

Earth Day logo contest

The Marshall recycling committee invites all Marshall employees and onsite contractors to participate in the 2002 Earth Day logo contest. The theme is, "It's Hard to Stay Green." Submissions must be original artwork on 8.5 by 11-inch white paper and must have no more than four colors. Each employee may enter up to three designs, with the winner of the contest receiving \$50 at the tree planting ceremony at 10 a.m. April 18 at the Wellness Center, Bldg. 4315. The winner's design will be depicted on the 2002 Earth Day T-shirts. Send entries — identified with name, organization code

and phone number on the back — to Shirley Novy Shue/ PS31-G, Bldg. 4202, room 220A, or Jeanette Swearingen/PS52-Q, Bldg. 4203, room 3146, by close of business March 1. Entries will not be accepted after the closing date.

Auction sale

An auction of approximately 140 lots of miscellaneous computer equipment, test equipment and furniture will be held beginning at 9 a.m. Feb. 26 at Intergraph Bldg. 21 at 470 Dunlop Blvd. in Huntsville. Pre-screening of the items will be from 9 a.m.-3 p.m. Feb. 25 and 7-8:45 a.m. Feb. 26. For details, call Greg Tate at 544-1774, the sales hotline at 544-4667 or visit the General Services Administration Web site at:

Upcoming classes

Zelda by Herself

www.gsaauctions.gov

Sylvia Thomas and Dr. Martha
Atkinson of Huntsville's Museum of
Art will show slides of Zelda Fitzgerald
and discuss the life of this famous flapper
at a lunch and learn at 11 a.m. Feb. 28 in
Morris Auditorium. A time for discussion
and questions will be allowed.

For a complete list of training opportunities at the Marshall Center, visit the "Inside Marshall" Web site.

Clubs and Meetings

Shuttle Buddies meet

The Shuttle Buddies will meet for breakfast at 9 a.m. Feb. 25 at Mullins Restaurant on Andrew Jackson Way. For more information, call Deemer Self at 881-7757 or Gail Wynn at 852-8189.

Genealogy society meets

The Huntsville Genealogical Computing Society will hold its monthly meeting at 7 p.m. Feb. 18 in the audito-

rium of the Huntsville-Madison County Main Library. The program will be a show and tell of computer genealogy software. Visitors are encouraged to attend. Reservations not required.

AIAA meets

Pr. Alfred Ritter will speak on aerodynamic research and development in China at the Feb. 21 meeting of the American Institute of Aeronautics and Astronautics (AIAA). The meeting begins at 6:30 p.m. at the Holiday Inn Research Park. Regular admission is \$15. Student admission is \$8. Make reservations via e-mail to ArloeWJr@cs.com or call 881-7124 by noon Feb. 18.

Sports

NASA Ski Week

The 11th Annual NASA Ski Week will be hosted at Banff/Lake Louise March 9-16, 2002. All Marshall employees, on-site contractors, retirees, and dependents are eligible to participate. Interested persons may call 544-6568 or e-mail for additional information.

Miscellaneous

Weight Watchers

Yeight Watchers is now holding meetings at the Wellness Center at 11:45 a.m. Thursdays. The program is an AT WORK Program, using the Weight Watchers Points Program, and is lead by a skilled Weight Watchers leader. Meetings will last 30-45 minutes. The program is 15 weeks with the first meeting on February 7. The fee is \$159 for the 15week program if attending the first meeting, and can be paid in three installments. Fees are pro-rated to \$11 weekly if joining after the first meeting, but can only be paid in one, full, up-front payment. For additional information, please contact Rachael Thompson at 544-1525 or e-mail to:

 $rachael. thomps on @\mathit{msfc.nasa.gov}.$

Employee Ads

Miscellaneous

- ★ Computer, 400Mhz Pentium II PC w/zip drive, 6Gb HD, 128Mb RAM, 17" color monitor, \$375 obo. 882-1779
- ★ 1997 Kawasaki Vulcan 1500 D2 Classic, 12K miles, lots of extras, \$5,900. 882-6556
- ★ Passport radar detector by Cincinnati Microwave, \$35; restored antique Shell gas pump, photo available. 325-6000
- ★ Laptop computer, Micron, 400MHz CPU, 192MB RAM, 10Gig HD, 14.1" TFT screen, 56K modem, two new batteries, \$675. 837-0625
- ★ Rosenthal teapot, never used, \$40; Murano glass vase, never used, \$15; Turkish carpets, hand-woven. 882-6832
- ★ Max Payne PC game, includes CD, box and book, \$25. 461-0482
- ★ Ceramic molds, \$300 for all. 722-8004 after 6 p.m. weekdays
- ★ Bookcase headboard bed and dresser with mirror, solid wood, light walnut stain, \$250 obo. 881-9567
- ★ IBM Think-pad Pentium 166MHz, 2Gig HD, 48MG RAM, Windows 98, 2nd Edition, Microsoft Office 2000, external CD ROM, case, \$385. (256) 682-5181
- ★ Turkeys for sale: one pair Black Spanish, \$50; one pair Bourbon Reds; \$50; one pair Bronze, \$45. (256) 828-3668 after 5 p.m.
- ★ Computer desk, L shape, drawer, file cabinet and shelves, \$78. 539-9777
- ★ China cabinet, medium oak finish, \$200. 464-0359
- ★ Round oak table, \$50; Whirlpool washer and dryer, \$75 for set; blue couch, \$75. 325-7155
- ★ Magnavox 13" color TV, \$30. 883-8257
- ★ German cuckoo clock, \$80; Alabama "Bear" Bryant Coke bottle collectible, \$5. (256) 658-0339
- ★ Car cover for Dodge Intrepid, \$50; ergonomic pillow, \$10. 721-0540
- ★ Unimax S-6E scanner for Mac with

- transparency adapter and Adobe PhotoDeluxe. 729-6375
- ★ Lane sectional 5-piece, blue, recliners at both ends, queen sleeper, non-smokers, \$600. 325-7542
- ★ Learn Japanese software, \$30; Infrared massager, \$10; Greatest Story video, \$10; Norton anti-virus 2001, \$20. 722-9483
- ★ Ramptech skating ramp, can be used by skateboarders or bladers, sturdy heavy-duty plastic kicker ramp,12x21x39, \$50. 464-9733
- ★ Pentium 233Mhz, 3.2GB, 96MB, 52Xcd, KB, mouse, speakers, 2X Phillips CD burner, \$300. (256) 859-0914/(256) 326-8259
- ★ Macintosh 611CD, 14" monitor, Canon BJ-210 printer with Power Print software, all for \$75. 797-6173
- ★ 1998 Honda Z50 mini-trail bike, \$900. 729-0024
- ★ Micron laptop, 400MHz, 192MB RAM, 10Gig HD, 14.1" TFT, 56K Modem, two new batteries, docking station, \$650. 837-0625
- ★ Local honey, \$5 quart, \$3 pint, discounts by case. 837-8087
- ★ Desk, wooden w/hutch, \$35; desk return, metal, 3 drawers, \$20; or all for \$50. 880-9025

Vehicles

- ★ 1998 Mustang, 6 cyl., 5-speed, 60K miles, lots of options, black, new tires, \$7,950 firm. (256) 753-2278
- ★ 1998 Dodge Grand Caravan, SE, \$9,900. 233-6197/564-6225 beeper
- ★ 1995 Ford Windstar van, one-owner, service records available, \$4,500 obo. 533-1172
- ★ 1999 Grand Jeep Cherokee, Gold package, Michelin tires, 87K miles, \$14,500. 518-9802
- ★ 1996 Mazda Millenia, sunroof, CD changer, all-power, 74K miles, champagne, gray interior, \$9,200. 880-9025

- ★ 1995 Toyota Camry LE sedan, dark green, beige interior, 118K miles, \$5,000. 230-6846
- ★ 1999 Chevrolet Silverado LS, 18,300 miles, white, V-8, auto w/Leer camper shell, \$15,200. 881-8849
- ★ 2001 Chevy S-10 pickup, 5-speed, cruise control, am/fm radio, bedliner, 17K miles, \$10,500. 536-6921
- ★ 1991 Pontiac Grand Prix SE, red, automatic, 139K miles, \$2,900. 828-2643
- ★ 1997 Nissan Maxima SE, auto, green w/ beige leather, moon roof, power seats, 65K miles, \$11,700. 232-1940
- ★ 1996 Ford Windstar LX, 87K miles, nonsmoker, white/gold/tan, four captain's chairs, \$7,500. 325-7542
- ★ 1992 Honda Accord EX wagon, sun roof, power windows/locks, air, new Michelin tires, aluminum wheels, \$4,300. (256) 880-9487
- ★ 1995 Mitsubishi Eclipse, 5-speed, deep green/tan interior, 139K miles, \$2,900. (256) 355-7933
- ★ 1997 Dodge Caravan SE sport, teal, new tires, new a/c, \$8,800. 922-9387

Lost

★ Clip-on sunglasses in the Southside parking lot of Bldg. 4200. Call 544-0021 to claim

Wanted

- ★ Temporary utility pole. (256) 247-5269
- ★ Computer book, Mac for Dummies, Third Edition. (256) 882-2400
- ★ Used Hartz Desert Empire Hamster plastic cage w/tunnel accessories. 828-4502 leave message

Free

- ★ Mixed breed puppies, wonderful personalities, need a good home. (256) 586-7130
- ★ Sweet dog, 2 1/2 year old, needs a good home with fenced yard. 859-2633

MARSHALL STAR

Vol. 42/No. 22

Marshall Space Flight Center, Alabama 35812 (256) 544-0030 http://www1.msfc.nasa.gov

The Marshall Star is published every Thursday by the Internal Relations and Communications Department at the George C. Marshall Space Flight Center, National Aeronautics and Space Administration. Contributions should be submitted no later than Monday noon to the Marshall Internal Relations and Communications Department (CD40), Bldg. 4200, room 101. Submissions should be written legibly and include the originator's name. Send electronic mail submissions to: intercom@msfc.nasa.gov The Marshall Star does not publish commercial advertising of any kind.

Manager of Internal Relations and Communications — Steven Durham Editor — Debra Valine

U.S. Government Printing Office 2002-733-060-20085

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