



MARSHALL STAR

Serving the Marshall Space Flight Center Community

Dec. 1, 2005

Marshall facility expands for new payload support capabilities

By Sherrie Super

Scientists and payload developers have more options for developing and testing hardware, thanks to a new capability at the Marshall Center. Installed by the Expedite the Processing of Experiments to Space Station Rack Program, the addition is a new EXPRESS Rack flight unit with expanded resources for supporting space station payloads.

The unit is in Marshall's Microgravity Development Lab, a facility that supports development and testing of payloads planned for the International Space Station. On-orbit, the EXPRESS Racks provide payload users with



Michael Cole, Flight Systems Integration and Test Branch chief, demonstrates the Microgravity Science Glovebox hardware.

power, data processing, thermal control, vacuum exhaust and nitrogen. The on-Earth version of the EXPRESS Rack provides similar

capabilities to support payload development and verification testing.

As part of this newly enhanced capability, payloads now can test full data communications with the Payload Operations and Integration Center — the science command post for the space station at the Marshall Center.

"The new EXPRESS Rack flight unit helps simulate the end-to-end flight environment for different payloads," said Joseph Pelfrey, EXPRESS Rack stage

manager.

See EXPRESS on page 3

Saturn V restoration provides legacy for future generations

By Rita Roberts

Many may have wondered what the beehive of excitement is at the U.S. Space & Rocket Center in Huntsville. Shrouded in drop cloths, strewn with construction equipment and crawling with workers, the Space & Rocket Center has been a hub of activity for the restoration and conservation of an important piece of history — the Saturn V rocket.

The Saturn V launch vehicle took the first humans around the moon during the 1968 Apollo 8 mission. There were 13 successful Saturn V launches from 1967 to 1973, though the Apollo program was officially cancelled in 1970. Three Saturn V rockets remain in existence today, with one each in Houston, Cape Canaveral and Huntsville. The rocket at the Space & Rocket Center in Huntsville



Conservators repair the third stage of the Saturn V rocket at the U.S. Space & Rocket Center.

See Saturn V on page 2

Shared Services Center opening in March at Stennis

NASA is implementing a Shared Services Center that consolidates selected activities in Financial Management, Procurement, Information Technology and Human Resources into one new center: NASA Shared Services Center. The NSSC is opening March 1, 2006, at Stennis Space Center in Mississippi.

The Shared Services Center's vision is to provide "unparalleled service," which will be measured and reported to all customers. The Shared Services Center will work with NASA field centers to meet all service needs through Customer Contact Center and center

liaisons. Because the Shared Services Center will provide NASA with a unified process for obtaining transactional, administrative and support functions, there will not be any duplication of transactional, administrative or support functions between the centers and the Shared Services Center.

The Shared Services Center was originally to open Oct. 2 and began relocating staff to Stennis the week of Aug. 22.

However, the project team had to evacuate the Gulf Coast region during Hurricane Katrina. They temporarily returned to Washington to regroup and

assess the feasibility of the Oct. 1 opening date.

Following a visit to the Gulf Coast region after the hurricane, the team concluded the opening would need to be delayed until March 1, 2006, to ensure successful operation and safety for all its employees.

Plans are to begin relocating the Shared Services Center staff to the Gulf Coast region beginning Jan. 3. The Shared Services Center will operate from an interim facility at Stennis until the permanent facility, provided by the state of Mississippi, is available.

Saturn V

Continued from page 1

has been on display since the early 1970s and is made mostly of test parts, intended for development and propulsion testing and not for flight.

The first stage of the Saturn V, designated as the S-1C-D, was used for dynamic testing early in the Saturn program. The vehicle's second stage, called the S-II-D/F, served as a stand-in for multiple test roles after the intentional destruction of the original dynamic and facilities test stages. The S-IVB-D stage was used for dynamic testing for both the Saturn 1B and the Saturn V. The fourth stage, a mostly plywood and sheet metal mockup of the Apollo spacecraft, was not salvaged for restoration. The Command Module/Launch Escape System test boilerplate, formerly on display in Marshall's Rocket Park, is being refurbished and will be added in its place.

This first phase of the restoration — the cleaning, coat removal, metal repair and repainting of the rocket and its transporter — began last April and will be completed by mid-December. The next phase — constructing a building to house the rocket — is expected to begin in spring of 2006.

In addition to aiding the project by providing special equipment, logistics and moving assistance, and historic research, Marshall engineers have contributed technical expertise, safety assessments and advice on repair techniques for the vehicle's engines.

"By restoring this artifact and bringing it indoors, we will

preserve possibly the most important piece of engineering of the 20th century, second, perhaps only to the Wright Flyer," said John Dumoulin, Marshall exhibits manager and the center's liaison to the restoration committee. "The work on the rocket has come

a long way and I think future generations are going to appreciate the efforts of everyone involved in its preservation."

The Saturn V rocket was studied by Conservation Solutions Inc. of Santa Fe, N.M., to determine the extent of deterioration. Cracks in the clevises that support the J-2 engines on the rocket's second stage were an important consideration in the decision to move forward with a conservation and restoration project. In addition to the corrosion and cracking, the restoration process uncovered hand-written notes, decals,

dials, gauges and labels that had been covered over by as many as 14 layers of paint. Over the decades, raccoons and birds had made their home in the rocket, further complicating conservation efforts.

"I think it will be important to have an example from our roots as we develop and advance the Crew Exploration Vehicles and Cargo Launch Vehicles," said Dumoulin. "The Saturn V represents a milestone in space and NASA history, and we owe it to ourselves and future endeavors to be good stewards of that history."

Almost half of the funds needed for both phases of the project have been raised. For more information on the conservation and restoration of the Saturn V rocket, visit <http://www.spacecamp.com/saturnv>.

The writer, an ASRI employee, supports the Public and Employee Communications Office.



A Conservation Solutions Inc. employee sand blasts paint from the Saturn V rocket under a protective covering in the Rocket Park at the U.S. Space & Rocket Center.

Obituaries

Milan D. "Mike" Burns, 85, of Huntsville died Oct. 26. He retired from the Marshall Center in 1976 as a contract specialist. He is survived by three sons, Patrick Burns, Michael Burns and Robert Burns; four daughters, Mary Cattadoris, Dianne Deen, Margaret Cobb and Michelle Chambless; and two brothers, Bob Burns and Kenny Burns.

Darrell W. Gladish, 82, of Fayetteville, Tenn., died Aug. 29. He retired from the Marshall Center in 1985 as an aerospace engineering technician. He is survived by his wife, Frances Gladish; one son, Steven Gladish of Brentwood, Tenn.; and three daughters, Sharon Redpath of Delrose, Tenn., Sandy Davis of Brentwood, Tenn., and Vickie Larscheid of Naples, Fla.

Daniel P. Hale, 79, of Huntsville died Nov. 4. He retired from the Marshall Center in 1975 as a space scientist with the center's Space Science Lab.

James K. MacLean, 73, of New Market died Oct. 26. He retired from the Marshall Center in 1989 as a supervisory contract specialist. He is survived by his wife, Loretta MacLean; two sons, Kevin MacLean

and James A. MacLean; and three daughters, Kathy Huggins, Laura Stooksbury and Sharon Leary.

Glenn E. Wilmer Jr., 63, of Huntsville died Oct. 25. He retired from the Marshall Center in 2002 where he was an aerospace technician for propulsion flow dynamics. He is survived by his wife, Barbara Jean Sutton Wilmer; one son, Brian W. Wilmer of Birmingham; two daughters, Amy W. Glannola of Birmingham and Kimberly J. Wilmer of Charlotte, N.C.; and one brother, Arthur David Wilmer of Lynchburg, Va.

Virginia Jossey Hancock, 85, of Huntsville died Nov. 14. She retired from the Marshall Center in 1968 as a management technician. She is survived by her husband, John Paul Hancock; and two daughters, Lynda Sobera of Huntsville and Paula Perkins of Pensacola, Fla.

Artice Glen Hammond, 75, of Decatur died Nov. 14. He retired from the Marshall Center in 1990 as a contract price cost analyst. He is survived by his wife, Doris Belew Hammond; and two sons, David Hammond of Decatur and Doug Hammond of Huntsville.

EXPRESS

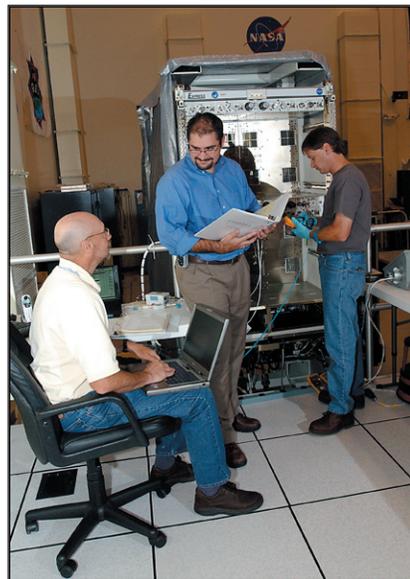
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In the first demonstration of the new capability, engineers from the European Space Agency recently visited Marshall to test the Portable Glovebox. Like the Microgravity Science Glovebox, the Portable Glovebox is a space station research facility with gloves that allows for crew-manipulated investigations. The Portable Glovebox fits within the larger glovebox.

The new flight unit can use power from the EXPRESS, Microgravity Science Glovebox and the utility outlet panel. Using the new unit, engineers tested all three interfaces — showcasing the improved efficiency of this facility as a single source for payload testing.

Future plans include more in-depth payload testing with the EXPRESS Rack and the Payload Operations and Integration Center data interfaces.

The writer, an ASRI employee, supports the Public and Employee Communications Office.



Doug Steffer/MSFC

From left, Bill Telesco of Teledyne Brown Engineering; Joseph Pelfrey, NASA EXPRESS Rack stage manager; and Kerry Moody of Morgan Research conduct sub-rack payload testing of the EXPRESS Rack and Microgravity Science Glovebox.

Around Marshall

MARS Christmas dance, dinner will be Dec. 3

The MARS Christmas dance and dinner will be Saturday, Dec. 3, at the Von Braun Center. A social begins at 6:30 p.m. with dinner at 7. Dancing will be from 8 to 11 p.m. Semi-formal attire is requested. Reserved tickets cost \$20 for MARS members and \$25 for non-members. Tickets are available through Nov. 29 by calling Gerald Maxwell at 544-1954.

Marshall Center to hold Holiday Reception Dec. 9

The Marshall Center's annual Holiday Reception will be held Friday, Dec. 9, from 1 to 3 p.m. in Center Activities Building 4316. All Marshall team members are invited and requested to bring donations of non-perishable food items.

Silver Snoopy Awards presented to 7 Marshall team members

Silver Snoopy Awards were presented to seven Marshall team members Nov. 15 by astronaut Barbara Morgan during her visit to the Marshall Center.

The Silver Snoopy is the astronauts' personal award to members of the workforce for outstanding and exemplary work. The Snoopy emblem reflects NASA and industry's sense of responsibility and continuing concern for astronaut flight safety. Less than 1 percent

of the space program workforce receives the award annually.

Selected by NASA in January 1998 as the first educator astronaut, Morgan reported to the Johnson Space Center in Houston later that year. Morgan served in the Astronaut Office CAPCOM Branch, working in Mission Control as a prime communicator with on-orbit crews. She is assigned to the crew of STS-118, an assembly mission to the International Space Station. The mission will launch in 2006.



David Higginbotham/MSFC

Ron Unger receives a Silver Snoopy Award from astronaut Barbara Morgan.



From left, Jeff McCracken, astronaut Barbara Morgan and Edwin Ethridge at the Snoopy presentation.



From left, Robert Lake, Cindy Upton, astronaut Barbara Morgan, Kathy Jones and Steven McClard.



NASA

Marshall employee earns Silver Snoopy award

Astronaut Terry Virts, right, presents Ricardo Yague a Silver Snoopy Award on Oct. 21 at the Johnson Space Center in Houston. Yague is the book manager for all Node 3 Interface Control Documents on behalf of Marshall. He is currently at Alenia Spazio, an international contractor in Torino, Italy.



Classified Ads

To submit a classified ad to the Marshall Star, go to Inside Marshall, to "Employee Resources," and click on "Employee Ads — Submit Ad." Ads are limited to 15 words, including contact numbers. No sales pitches. Deadline for the next issue is 4:30 p.m. Thursday.

Miscellaneous

Pennsylvania House video cabinet, Cherry, holds up to 30" TV, VCR/DVD, \$725. 931-427-2059

Full-size headboard, dresser w/mirror, set, \$150. 651-7640

New Dell 8400 computer, DVD/CD burner, 3.4Ghz-P4, XP-home, 512Gb-RAM, 160Gb-HD, GeForce-6800, \$649. 797-7614

Wicker/Rattan pedestal glass-top table w/4 chairs, Blush, \$300. 772-7262

Casio CTL-691 keyboard w/sustain pedal, stand & carrying bag, Musical Instrument Digital Interface (MIDI), \$200. 883-1003

Barkley Lightning fishing rod w/Abu Garcia 704 Cardinal spinning reel, all new, \$40. 883-1003

Troy-bilt yard vacuum chipper/shredder/vacuum/hose, 5.5HP, \$250. 837-5035

Antique Oak dresser w/beveled mirror, \$275. 353-0370

WaveMaster training bag, \$75. Yamaha Portatone PSR-36 keyboard, \$75. 722-9535

Remote control for BOSE radio/CD, new/unused, battery included, \$10. 256-684-0129

Craftsman lawn vacuum, shredder, chipper, blower, 6.5HP, 2 yrs. old, \$300. 881-6962

K&N air filter, E-1290, new, fits older F150s and other applications, \$20. 527-8116

Broyhill traditional couch, \$100. 882-6982

Large satellite dish, ready for pickup, & one digital channel box, make offer. 256-694-0388

Cable midget upright piano, 75 yrs. old, completely reconditioned, solid Mahogany case, \$1,500. 837-2386

Bush corner computer desk, pull-out computer shelf, file drawer, \$50. 216-1502

Assorted brass candlesticks, new, \$6 each; two brass reindeer, \$10 pair. 837-6776

Ember Hearth wood stove w/blower and other attachments, \$375. 880-3851

Console piano, \$500; golf clubs/cart, \$25; Fostoria punch bowl, \$100; portable CD & cassette player, \$25. 881-4067

Billy Goat lawn vacuum KD5111C, 5HP Briggs & Stratton engine; Troybilt Junior tiller, 4HP. 256-883-9292

Xbox360, new, \$600; Xbox w/2 controls, \$170; 3 games, \$30; DVD remote, \$25. 256-990-1626

Used 4-post drafting table w/parallel bar, Oak, auxiliary drawers & side storage, 43"x31", \$750. 971-1969

Two Tennessee Titans versus Houston Texans tickets, 12/11, 12 p.m., Nashville, \$70. 656-3333

Pilates machine, from QVC, 4500JP, and 2 instructional videos, \$75. 256-536-4146

Beau Soleil tanning bed, 1.5 yrs. old, 20 new bulbs, 3-months old, facial tanner, \$1,000. 256-586-2994

King-size mattress, box springs, frame, \$100; large bookcase, 72"x36"x12", w/adjustable shelves, \$45. 603-3558

Snapper Hi-Vac riding mower, Tecumseh industrial engine, bagger attachment, \$175. 851-7406

Vehicles

2003 Polaris Sportsman 700 4-wheeler, 250 miles, \$4,800. 694-1217

1996 Town & Country, LXI, dark green, 3.3L, leather captains seats, \$4,000. 256-355-6858

2004 Dodge Intrepid ES, 53K miles, 3.5L/V6, leather, ext. warranty, \$13,500. 837-8389

2000 Nissan Frontier crew-cab, automatic, power, CD/cassette/stereo, 97K miles, silver, \$10,700. 880-9025

2000 Chrysler Town & Country LTD, leather, rear a/c, heated seats, CD, 75.5K miles, \$10,000. 256-828-6333

1999 Ford Explorer XLS, 4x4, 4-door, towing package, \$8,100. 353-3229

2001 Chevy Camero, one-owner, \$9,000 negotiable. 714-4962/Larry

2001 Toyota XLS, 36K miles, leather, power seats, CD/cassette player, moon-roof, silver, \$16,650. 883-0313

2000 Nissan Frontier crew-cab SE, loaded, yellow, auto, \$10,250. 527-8116

2005 Nissan Frontier ext. cab, 25mpg, city garaged, low miles, storm gray, \$17,950. 837-1774

2004 Harley Davidson Road-King Classic, pearl white, EFI, security electronic cruise, 8.6K miles, \$18,900. 776-0811

2004 Ford Explorer XLT, 29K miles, leather, sunroof, new Michelin tires, fully loaded, \$21,000. 256-797-1730

2001 Pontiac Aztek GT, FWD, 50K miles, leather, all-power options, towing package, \$9,100. 882-9370

Wanted

Digital piano w/weighted keys, preferably Technics. 414-403-7676

Landscaping tractor w/front-end loader, 30HP or more, reasonable price. 256-694-0388

Refrigerator in good condition with top freezer, will pay \$75. 534-2368

Trampoline, preferably with safety net. 256-565-4466.



David Higginbotham/MSFC

Educator Resource Center donates videos to Athens State

Marshall's Educator Resource Center recently donated video tapes to Athens State University. Donated to the school's curriculum labs were the NASA Connect and NASA Sci-Files Series, as well as videos that can be used in teaching science, technology, engineering and mathematics for students in grades K-12. From left are, Jennifer Simmons from the Academic Affairs Office at Marshall, Karla Miller from the Educator Resource Center and Dr. Debra Baird from Athens State University.

Internal Communications Survey being conducted

The Office of Strategic Communications is conducting a communications survey of all center supervisors and of randomly selected employees. The survey will focus on how employees get their information, if they are receiving all they need, and which communications vehicles are the most effective in reaching the

Marshall team. OSC will use the survey results to inform its planning of internal communications products and processes. If you receive an e-mail with a link to the survey, please provide your input and share your ideas for improving employee communications within Marshall. It should take no more than 15 minutes of your time.

Two vying for election to NASA Exchange Council

Two Marshall employees responded to the request for petitions to fill one vacant position on the NASA Exchange Council.

The candidates are David A. Guy of QD50 and Michael J. McLean of CS30.

The election will be held electronically. It begins Dec. 8 and will end Dec. 22. Only civil servants can vote.



David Guy

To vote, employees should go to <http://oscar.msfc.nasa.gov/cd/exchange.nsf/vf>. Ballots are linked by employee badge numbers and UserID numbers to ensure a fair election. The candidate with the most votes will win.

Transferring from the Defense Contract Management Agency in 1991, **David Guy** served Marshall for 10 years as the industrial property officer. In 2001, he transferred to his current assignment in the Industrial Safety

Department. Guy has served on numerous committees sponsored by the NASA Exchange to enhance employee awareness and morale. He believes the Exchange is a valuable asset to all Marshall employees, and is willing to serve out of a passion to help enhance peoples'

quality of life.

Michael McLean came to Marshall from a position with the Defense Department in Birmingham, where he also served as vice president of the board of directors of the Birmingham Federal Employees Federal Credit Union.



Michael McLean

At Marshall, McLean has worked as a contracting officer and a strategic planning analyst, and is currently the events manager.

He also served as the leader of the Procurement — Legal NASA Employee team, and was the first deputy chairman of the Marshall Health and Safety Action team.

"I have enjoyed running and playing racquetball and soccer (poorly) in leagues set up by the gym. Through the years I have taken advantage of the many services that the Exchange has to offer, like the Space Shop, the nut sale and have probably consumed thousands of soft drinks from their vending machines. It's such a tremendous organization; I want to give something back by offering to serve on the board," said McLean.



Tennessee School for the Blind students visit Marshall Center

Honor students from the Tennessee School for the Blind gathered at the historic T-Tower in the East Test Area during a visit to the Marshall Center last month. The students, faculty and chaperons experienced a hot gas firing and were shown solid rocket fuel samples and heat resistant shuttle tiles. The students also interacted with engineers and scientists, and toured various parts of the center.

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