National Aeronautics and Space Administration
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MARSHALL STAR

Serving the Marshall Space Flight Center Community **Nov. 27, 2008**

NASA, ATK successfully test first Orion launch abort motor

From a NASA Headquarters news release

Flames shot more than 100 feet high in a successful five-second ground test firing of a launch abort motor for NASA's next-generation spacecraft, the Orion crew exploration vehicle. NASA and the Orion industry team conducted the firing Nov. 20 at the Alliant Techsystems, or ATK, facility in Promontory, Utah.

The abort motor will provide a half-million pounds of thrust to lift the crew module off the Ares I rocket, pulling the crew away safely in the event of an emergency on the launch pad or during the first 300,000 feet of the rocket's climb to orbit. The abort motor is a key element in NASA's launch abort system, which will provide a safe, reliable method of pulling the entire crew out of danger in the event of an emergency.

The firing was the first time a motor with reverse flow propulsion technology at this scale has been tested. It also is the first test of its kind since the beginning of the Apollo Program.

"This is a watershed moment for the development of the Orion vehicle that will carry

See Test fire on page 5

ATK

Launch abort system motor test firing

Endeavour to undock from space station Nov. 28

Landing scheduled Nov. 30 at Kennedy Space Center

By Sanda Martel

STS-126 astronauts completed the last of four spacewalks on Nov. 24; they have focused on servicing and repairing Solar Array Rotary Joints that allow the solar arrays to track the sun and provide power on the International Space Station.

In 2007, astronauts on the STS-120 mission found debris on the joints — identified as the cause of increased vibration experienced on the station. The space station has had only limited use of the starboard joint since that mission.

Engineers in the Marshall Space Flight Center's Materials and Processes Laboratory helped to resolve the problem. They examined the wear patterns inside the bearing assemblies, helping to pinpoint the root cause. [See related story on page 4.]

STS-126 spacewalks have focused on cleaning and lubricating the joints.

The Water Processing Assembly racks, developed by the Marshall Center and delivered to the station by space shuttle Endeavour on this mission, are functioning very well, mission managers said Nov. 23. The assembly is designed to convert urine and condensate into potable water for astronauts aboard the space station.

A portion of that system, called the Urine Processor Assembly, will recycle condensate and urine onboard the station when it becomes operational. It experienced several brief shutdowns during the mission as astronauts tested the system. Engineers believe the shutdowns were caused by physical interference within the assembly. This resulted in increased power usage and higher temperatures, triggering the shutdowns.

Mission managers have extended the mission by one day to continue monitoring the assembly, which will allow the station to accommodate a six-member crew beginning in 2009.

Endeavour is scheduled to undock from the space station Nov. 28. Landing is scheduled Nov. 30 at the Kennedy Space Center at 12:18 a.m. CST.

A Russian Progress vehicle is scheduled to launch Nov. 26 to deliver supplies to the space station. Docking with the station is expected Nov. 30.

Martel, an AI Signal Research Inc. employee, supports the Office of Strategic Analysis & Communications.

Director's corner

We have much to celebrate this Thanksgiving!

It has been nearly four centuries since the colonists at Plymouth celebrated the first Thanksgiving feast, more than two centuries since George Washington proclaimed the first National Day of Thanksgiving and almost a century and a half since President Lincoln enjoined a bitterly divided nation to put aside hostilities and give thanks with "one heart and one voice." And it has been less than a month since our nation elected the first African American, President-Elect Barack Obama, to its highest office and initiated another peaceful transition of power which characterizes our democracy. For this we have reason to be immensely thankful this Thanksgiving.

We wish President and Mrs. Bush and their family well as they prepare to return home and thank them for their service to the American people. We thank President Bush for his leadership and commitment to our nation's space program. And we pledge our support to President-Elect Obama and wish him, Mrs. Obama and their two daughters a safe and happy holiday as they prepare to leave their private lives behind and answer America's resounding call to public service.

We thank the men and women in our Armed Forces who are serving the cause of democracy around the world this Thanksgiving. They and their families are paying the heavy price of freedom, and they are among our most cherished blessings. We thank our police officers, our firefighters, our first responders, our homeland security and our intelligence personnel — dedicated individuals who watch out for us and keep us safe and secure.

We also thank the many great hearted individuals who serve our communities to help those in need. There is no better expression of gratitude for the many gifts we have been given than to reach out and help those who need our help.

As you pause to continue the great American tradition of giving thanks, I ask you to consider the many ways you can spread hope this holiday season. If you haven't made a donation to the CFC, there's still time. However you choose to spread hope, your gift can make the difference between a child having a holiday gift this year or not having one, between someone spending the holidays alone or with friends, between someone going to sleep hungry or fed. I encourage each of you to enjoy the inherent rewards of giving back not only during this season but all year long.

Thank you for your hard work and excellent performance throughout the year. We have had yet another great year, and it's a privilege to serve with you.

Have a safe and happy holiday!

Dave

Dave King
Marshall Space Flight Center Director

Former associate director of Stennis dies

William "Bill" F. Taylor, Jr., 70, a former manager of the Space Shuttle Main Engine Project at the Marshall Space Flight Center, died Nov. 11 in his home in Diamondhead, Miss. He retired as the associate director for Stennis Space Center in Mississippi, in 1994.

Taylor enjoyed a 31-year career with NASA, including working at the Marshall Center and at NASA Headquarters. He was born in Clinton, Ill., and had lived in Diamondhead for the past 20 years. Taylor received an engineering degree from the University of Texas at Austin in 1961.

Gene Goldman named director at Stennis Space Center

NASA Headquarters news release

NASA has named Arthur E. (Gene) Goldman as the new director of NASA's John C. Stennis Space Center in Mississippi.

The promotion of Goldman, the center's deputy director since October 2006, is effective immediately. He replaces Bob Cabana, who left in October to become the director of NASA's Kennedy Space Center in Florida.

Gene Goldman

"Gene is a terrific manager and a highly respected engineer, with broad experience in rocket propulsion system development and engine testing," NASA Administrator Michael Griffin said. "I'm very pleased that he is available to head the team at Stennis, and I am confident he will continue to provide outstanding leadership there."

Stennis' facility in southwest Mississippi is NASA's primary testing ground for rocket engines and propulsion systems. Goldman brings a wealth of experience in that area to his new job.

He served as manager of the space shuttle main engine project at the Marshall Space Flight Center from March 2004 until he departed for Stennis in 2006. He was the project's deputy manager for six years before ascending to the top job.

"I'm honored to be selected to lead the great NASA team at the Stennis Space Center," Goldman said. "We have a lot of exciting and challenging work ahead of us at a pivotal time in NASA's history. I'm eager to continue this work in my new role."

A native of Russell, Miss., Goldman worked as a project engineer for the Tennessee Valley Authority from 1978-1981. He left for a position at Gulf States Utilities in Baton Rouge, La., from 1981 to 1987, before returning to the Tennessee Valley Authority, in Athens, Ala., from 1987 to 1990.

He started his NASA career in 1990 at Marshall as a project engineer for the Space Shuttle Systems Integration Office and served as supervisor of that organization from 1992-1994.

Goldman moved to the space shuttle main engine project in 1994, supporting it as manufacturing engineer until 1996. He later worked in the project as technical assistant from 1996-1997 and as business manager from 1997-1998.

Goldman was appointed to the Senior Executive Service in March 2004. He has received many professional awards, including NASA's Exceptional Achievement Medal and the Marshall Center's Director's Commendation. Goldman earned a bachelor's degree in civil engineering from Mississippi State University and is a registered professional civil engineer. He also completed the Senior Executive Fellows Program at Harvard University.

Johnny Stephenson selected deputy director for Office of Strategic Analysis & Communications

Johnny F. Stephenson Jr. has been named deputy director in the Office of Strategic Analysis & Communications at the Marshall Space Flight Center.

Stephenson has 22 years of experience that span both the public and private sectors. He currently serves as manager of Marshall's Performance & Capabilities Management Office, which analyzes the center's capability to execute its mission assignments.

Stephenson chaired the Source Evaluation Board, which awarded an $800 million contract to design, develop and produce the Instrument Unit Avionics for NASA's Crew Launch Vehicle.

He previously served as acting director of NASA's Organizational Readiness Division within the Office of Program Analysis & Evaluation at NASA Headquarters, where he was responsible for establishing the capability to assess the agency's readiness to execute its mission objectives. The efficiencies realized from one such assessment exceeded $20 million, saving 69 days cycle time.

Stephenson has also served as chief architect and implementation lead for the Agency's One NASA initiative. He was responsible for elevating the effectiveness of NASA by implementing tools for improved partnering and collaboration, by streamlining business processes to improve agency efficiency, and by optimizing the use of capabilities across NASA's 10 field centers, Headquarters and the contractor community.

Johnny Stephenson

Stephenson began his career with NASA in December 1986 as a systems engineer and has been subsequently recognized as an authority in the fields of engineering management, business management and operations, and organizational effectiveness.

Stephenson completed the NASA's Senior Executive Service Candidate Development Program in March 2007. He has been the recipient of numerous awards including NASA's highest honor, the Distinguished Service Medal.

Edwin Jones, lead for the Resource Assessment & Planning Team, will replace Stephenson as manager of the Performance & Capabilities Management Office.

Marshall engineering team honored with Space Flight Awareness Team Award for space station support

By Lori Meggs

When the International Space Station experienced difficulties with hardware that helps its solar arrays track the sun for power, a Marshall Space Flight Center engineering team was called on to help.

The specialized group was organized by Marshall's Tribology Team, which is part of the Engineering Directorate's Materials and Processes Laboratory Mechanical Test Branch. They helped get to the root of the problem.

In recognition of their contributions to the larger effort, the group's members were recently honored with a Space Flight Awareness Team Award. The award recognizes small groups of employees that have demonstrated exemplary teamwork while accomplishing a particular task or goal in support of the human space program.

Doug Stoffer/MSFC

NASA astronauts Joe Tanner and Chris Cassidy recently presented the Marshall Tribology Team with a Space Flight Awareness Team Award. From left, front row, are Tanner, Chip Moore, William Davis, Scott Babbitt, Jada Tidmore and Cassidy. Back row, from left, are Rickey Clements, Anthony Buchanan, Stephen Snoddy, Richard Caldwell, Matt Legg and Donald Strange.

Tribology is the science and technology of interacting surfaces in relative motion, including the study of friction, lubrication and wear. The Marshall team performed unique tribological exams on 30 trundle bearing assemblies for the station's starboard Solar Alpha Rotary Joint. The trundle bearing assemblies — about the size of a football — are a major component of the massive rotating joints on both sides of the space station, connecting solar arrays with their truss segments and helping the large joints rotate.

The starboard Solar Alpha Rotary Joint began experiencing problems with the bearings soon after installation. Engineers noticed an increase in vibration to the station, and that it was taking more power to rotate the joint. A spacewalk by station crew members found the bearings were contaminated with debris. After reviewing photographs of the damaged bearings, tribologists at Marshall suggested to a NASA-led industry investigation team — formed by the Johnson Space Center in Houston and the NASA Engineering Safety Center — that the debris was coming from the bearing itself. The NASA-led team concluded that the most probable cause of the damage was a lack of adequate lubrication between the trundle bearings and the race ring surface that connects the bearings to the joints.

Using Marshall's unique optical microscopes, the team produced video images of the rolling motion of the bearings. They measured the critical alignment of the bearings with a precise, programmable coordinate measuring machine. Using state-of-the-art stylus profilometers, which can profile the texture of a surface below a millionth-of-an-inch, the team also examined the wear patterns inside the bearing assemblies to help pinpoint the problem.

"If the profilometers were big enough, and you stacked a wall of quarters a mile high, the instruments could trace along the top and tell me if a single quarter had been taken out and where," said Chip Moore, Marshall's senior tribologist and leader of this impromptu team. "No procedures existed for the measurements we made, nor were these unwieldly, complex parts very easy to position for these delicate instruments. Drawing from other unique experiences, we've been able to use creative problem-solving with these machines in ways the manufacturers never dreamed."

The work of the center's tribology team highlights one of the unique Marshall engineering capabilities available to resolve and evaluate difficult spacecraft hardware problems in real time and support NASA's entire space program. "Our work supported a much larger recovery effort based out of the Johnson Center to determine the root cause of the problem, fix it and refine analytical models to prevent it from happening again," added Moore.

Kevin Window, manager of Safety and Mission Assurance for the International Space Station Program at the Johnson Center and head of the Solar Alpha Rotary Joint Anomaly Recovery Effort, nominated the Marshall team for the Space Flight Awareness Award.

The Marshall engineering team's success is leading to future work. During the STS-126 mission, which launched Nov. 14, the remaining trundle bearing assemblies on the station's starboard Solar Alpha Rotary Joint will be removed and brought back to Marshall for the same detailed analysis.

Meggs, an AI Signal Research Inc. employee, supports the Office of Strategic Analysis & Communications.

Three vying for election to Marshall's NASA Exchange Council

Three Marshall Space Flight Center employees have been nominated by center civil servants to fill two vacant positions on Marshall's NASA Exchange Council.

The candidates are Lorraine Peterson, management support assistant in the Office of Procurement; Rhoney Triplett Jr., contract specialist in the Office of Procurement; and May Wales, team lead in the Office of Strategic Analysis & Communications.

The electronic election for the two, two-year positions began Nov. 26 and will conclude Dec. 12. Only civil service employees are eligible to vote. Results will be announced in an upcoming Marshall Star.

The new council members will help shape the direction of the exchange. Its primary mission is to provide services for the health and welfare of Marshall team members. It also is active in funding centerwide events such as the Marshall Fall Cookout and the Center Director's Holiday Reception.

Peterson, Triplett and Wales share a common goal: to tend to the needs of the Marshall community through services offered by the exchange.

"Since arriving on-site, I have had the opportunity to use many of the services offered through Marshall's NASA Exchange," said Peterson. "I feel the council is an invaluable resource to all the center's employees. It strives to meet the various needs and interests of such a diverse group of people. I would like to have an opportunity to become involved in this worthwhile organization."

Lorraine Peterson

Rhoney Triplett Jr.

May Wales

Triplett said he is "running for this position because I want to be your voice on the center's NASA Exchange Council. I've already talked to folks and, and if elected, they want me to ensure the Farmer's Market at the center continues. Others are interested in ensuring that our sports activities remain fully funded. I hear you and will do my best to bring your voice to the table."

Wales said she is "fortunate to have worked in numerous offices throughout my 35-year career at Marshall, which has given me the opportunity to work with many people. As an incumbent on the exchange, I am familiar with the policies and procedures, and have been able to support the various needs of individuals who have contacted me. If elected, I look forward to continuing the relationship with all of our center employees and helping to make the exchange the best it can be."

To vote, visit http://exchange.msfc.nasa.gov/mars_vote/login_act.cfm.

Test fire

Continued from page 1

astronauts to the International Space Station in 2015 and return humans to the moon by 2020," said Steve Gaddis, deputy project manager for the Orion launch abort system. "This is a milestone and a historic moment in this country's space exploration program, not only just because it signals a new era, but because we have put all this work into a system we hope that we never have to use."

The abort motor must be ready to operate in many different environmental conditions, and tests such as this one are critical to assure the safety and reliability of the system.

"We're elated," said Ted Kublin, a Marshall Space Flight Center engineer and the launch abort system motor lead. "The abort motor firing was by all accounts a success. Now the team will evaluate the engineering test data to determine if we met all our performance, safety and reliability requirements."

The test firing was the culmination of a series of motor and component tests conducted this year. The tests were in preparation for the next major milestone: a pad abort test scheduled for spring 2009 at the White Sands Missile Range in New Mexico with a full-size mock-up of Orion.

The abort motor stands more than 17 feet tall and is 3 feet in diameter. During the ground firing at ATK's facility, the motor was fixed in a vertical test stand with its four exhaust nozzles pointing skyward.

The high-impulse motor was developed to expend the majority of its propellant in the first three seconds, delivering the half-million pounds of thrust needed to pull the capsule away from its launch vehicle in an emergency abort.

For images and video of the test firing and more information about NASA's Constellation Program, visit http://www.nasa.gov/constellation.

Employee Services & Operations Office dedicated to meeting Marshall organizations' human resources needs

By Megan Norris Davidson

"Getting the right people, in the right place, at the right time."

That is what Danny Hightower says is one of the main goals of the Employee Services & Operations Office, part of the Marshall Space Flight Center's Office of Human Capital. Hightower, who has managed the office since 1997, leads a team of 22 civil service and 15 contractor employees who provide numerous human resources services to Marshall organizations.

"Our team is dedicated to supporting Marshall's organizations, providing the human resources services and guidance necessary to achieve their tasks," Hightower said. "Without the right people in place, the center wouldn't be able to accomplish NASA's mission of putting new explorers and rockets into space."

The organization provides assistance to Marshall management on the best strategies to recruit employees for position vacancies and expertise in using the various staffing tools and processes to find new hires. In 2007, Hightower's team helped in hiring approximately 200 people, including personnel supporting Marshall's Ares Projects, which is building NASA's next generation of rockets to take human explorers to the moon and beyond.

Human resources specialists take staffing a step further by consulting with Marshall managers on proper organizational structures, staffing plans, job audits and pay grades. They also support center management on all matters relating to executive-level positions. The office manages the center's Senior Executive Service Candidate Development Program, which prepares employees for future executive positions.

The Employee Services & Operations Office offers organizations help in performance management with the Employee Performance and Communications System. This system helps to improve individual and organizational performance by enhancing communication between a supervisor and an employee and focusing employees on achieving results. Human resources specialists advise Marshall supervisors about how to use the system to improve communication through developing effective performance appraisals and conducting mid-term performance reviews. They also work with Marshall managers on employee relations issues, including leave administration, work schedules, employee conduct, and performance and potential workplace violence situations. The Labor Relations Officer assists supervisors in understanding their responsibilities under the NASA/Marshall collective bargaining agreements and labor relations statutes and works closely with Marshall labor organizations on changes to conditions of employment affecting their respective bargaining units.

Individual employees also benefit from a variety of other services provided by the organization. The Employee Assistance Program offers civil service employees one-on-one counseling, and workshops on stress management, marital relationships, communication skills or any other issues that can negatively impact work performance. Lynn Motley, a licensed certified social worker with WILL Technology Inc., supporting the Employee Services & Operations Office, is the primary point of contact for the assistance program. The office also administers the Workers' Compensation Program, which provides wage replacement benefits, medical treatment, vocational rehabilitation and other benefits to workers or their dependents who experience a work-related injury or occupational disease.

In the immediate future, Hightower foresees some challenges for his team to meet in providing the support services to the center. "Our office needs to provide efficient and effective plans to help managers fill their critical positions as quickly as possible," said Hightower. "Our team also wants to help supervisors maintain a productive work force and properly deal with personnel issues."

"We are always looking for ways to do things better and keep providing high levels of service to the Marshall team," he added. "Our mission is to ensure that we are meeting our customers' needs to the fullest extent."

For more information on the Employee Services & Operations Office, visit http://ohc.msfc.nasa.gov/eso/.

Davidson, an AI Signal Research Inc. employee, supports the Office of Strategic Analysis & Communications.

David Higginbotham/MSFC

The Employee Services & Operations Office — led by Danny Hightower, at the head of the conference table — provides numerous human resources services to Marshall Center organizations.

In celebration of NASA's 50th anniversary

On Dec. 6, 1958 — almost 50 years ago, the U.S. Department of Defense, working on behalf of NASA, launched a Pioneer satellite from the Atlantic Missile Range. The purpose of the mission — which was launched by an Army Juno II rocket — was to place a primary payload in the vicinity of the moon. Although the satellite did not accomplish its mission, it achieved an altitude of 63,580 miles and added to our scientific knowledge of outer space.

Classified Ads

To submit a classified ad to the Marshall Star, go to Inside Marshall, to "Employee Resources," and click on "Marshall Star Ad Form." Ads are limited to 15 words, including contact numbers. No sales pitches. Deadline for the next issue, Dec. 4, is 4:30 p.m. Wednesday, Nov. 19.

Miscellaneous

Peavey Mark VIII bass amp head, 210TX, 410TX bass enclosures, $600; Fender guitar, $500. 636-2978

19th-century hand-hewn spinning wheel, $300 obo. 776-7249

Life Gear inversion table, $100. 961-0727

Hard bow case, $15; Graco travel system, $90; high chair, $50. 813-391-9673

225 amp Lincoln AC Stick electrode welder, many extras, $190 obo. 353-7670

IBM Aptiva 166MHz PC, CD, monitor, $75 obo; 486/66 PC, CD, monitor, $40 obo. 828-5326

Antique oak china cabinet, claw feet, half-mirrored back, $1,150. 693-4280

Four HD Planet Earth series DVDs, $25. 534-9711

Lined drapes, two pairs, 96wx82l, rods. 837-2267

University of Tennessee jacket, XL, leather, $30 obo. 777-8229

Guitar Hero Legends of Rock for PlayStation3, $45. 783-4703

0.86-carat round diamond solitaire ring, white gold, $1,200. 599-0209

Washer, $100. 316-2746

Refrigerator, 2'9" tall, 1'9" wide, 1'10" deep; 20" chrome Arelli rims, $450 obo. 532-3934

Mirage speakers, two OM-7 towers, two Omnisat satellite speakers, stands, $1,500. 679-2165

Matching dark navy hide-a-bed sofa, loveseat, area rug, $800. 683-3398

Vintage McCoy pitcher and bowl set, turkey pattern, $20. 891-1073 or 738-2941

Peg Pegero John Deere Gator, needs battery, $75; FP SmartCycle, four games, $75. 679-4459

Sony Xplod subs, 2-12", 1300 watt; Xplod amp, 1200 watt; Scosche capacitor. 345-4209

1/144 scale model of Ares I-X rocket, space shuttle launch pad, $200. 527-4863

14-karat gold band, .50-carat pear diamond, 10.025 carat round diamonds, appraised $2,500, $1,000. 552-0998

AKC Weimeraner puppies, silver, declawed, tails docked, shots, $250. 287-2488 or 347-2097

Twin-size AeroBed inflatable mattress, air pump, $60. 859-3136

Blue and tan floral design couch, $200. 859-0729 or 603-3617

Navy leather purse, white stitching, inside pockets, $7. 837-6776

Black DCM TF-400 speakers, http://www.dcmspeakers.com/manuals/TF400.pdf, $100 pair. 797-5282

Iron and glass top end table, $90. garybraden@comcast.net or 797-5282

15x10" Dick Cepek wheels, 295/50R/15 street tires, 5x4.5" lug pattern, $850. 278-0607

Grizzly 10-inch table saw, 1-1/2 HP motor, 120VAC, $100. 882-0947

Garbage compactor, residential, brown, $300 obo. 852-5595

One unrestricted space in Maple Hill Cemetery, $1,500. 552-0998

Used office furniture, conference tables, file cabinets, dry erase boards, more. 931-2740

Transfer bench, padded, slides from floor to bathtub, $75; Tetris game for Playstation, $18. 498-2028

Ambidextrous modular horizontal shoulder harness, magazine pouch, no holster, fits different guns, $15. 874-0410

Vehicles

2007 Mitsubishi Eclipse, sunroof, red, black interior, Rockford Phosgate stereo, 30 mpg, $15,415. 776-8785

2007 4Runner Sport, 2WD, V6, leather heated seats, Sirius, 27k miles, $21,500. 426-1822

2006 BMW 325i, white/tan, loaded, 39k miles, $22,900. 883-6894 or 468-6894

2005 Ford Taurus Five Hundred Limited, AWD, leather, power moon roof, 44k miles, $14,500. 975-1667

2005 Honda ATV Fourtrax Rancher, red, racks, digital display, push start, $2,800. 783-4326

2004 Toyota Tacoma 4X4, four door, leather, power steering/windows, CD, alloy wheels, 54k miles, $16,200. 874-1012

2004 Audi A4, silver, V6, 3.0L, six speed, new tires, $18,900. 325-2424

2003 Dodge Caravan, new handicap conversion package, auto ramp, wheelchair securement system, 67k miles. 232-1461

2000 Mercury Cougar, loaded, $4,400. 479-5953 or 890-0799

1972 Cutlass convertible, auto, power steering, new top/tires/upholstery, 155k miles, $14,000. 881-7357

BumbleBee Striker II, 60 HP Mercury, trailer, trolling motor, fish finder, photos available, $4,600. 881-4565

Wanted

Golden Retriever puppy, male. 783-9844

Electrical work to do, wiring houses, detached garage, adding/removing lights, switches, plugs. 468-8906

Trampoline, swing set, playhouse, will pick up. 505-2830

Tickets to Broadway Theater League's Chitty Chitty Bang Bang, Feb. 1. 603-1273

Two girls North Face Denali Style Jackets, clean, good condition, medium, any color. 468-2648

Reasonably-priced Elliptical machine. 508-0509

Information on changing combinations on file cabinet locks/safes. 506-8153

Found

Please call 544-4680 to claim any of the below items:

Gold metal bracelet, post office area of Building 4200.

Silver ring, Building 4600.

Silver bracelet, blue stones, Building 4600.

Man's gold ring, Charlie's Grill, Building 4200.

Cosmetics bag, Building 4600.

Free

Two black cats, 5 years old, littermates, scratching post, toys. 337-1288

Freshwater aquarium fish, three clownfish, one Dojo, 1 Pleco, 5-7 years old. 783-7842

Celebrating American Indian traditions

Joseph Big Mountain, center, and Jimmy Big Mountain, right, both descendants of the Mohawk and Comanche tribes, perform a traditional native dance Nov. 19 at Team Redstone's American Indian Heritage Month event. The celebration honors the traditions and history of intertribal cultures. More than 300 Huntsville-area school children joined the Marshall Space Flight Center and Redstone Arsenal military organizations for authentic American Indian food, dance, music and other activities.

'Jingle bells, jingle bells....'

Marshall to brighten the season with Tree Lighting Ceremony

On Dec. 1, step out on the front lawn of Building 4200 and end the workday with rich hot chocolate, homemade cookies and flickering white lights adorning a tree.

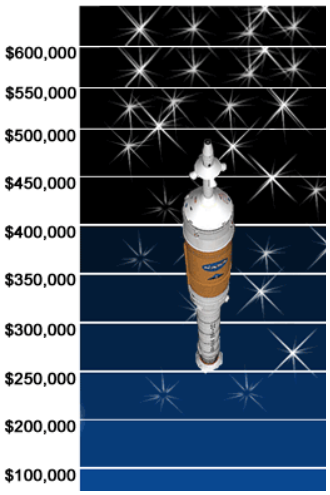
The Marshall Space Flight Center will hold its 2008 Holiday Tree Lighting Ceremony beginning at 4 p.m.

All Marshall team members are invited to join Center Director David King to ring in the holiday season, with musical entertainment provided by children ages 4-5 from the Marshall Child Development Center.

A special guest will make an appearance to help King light up the holiday tree.

Bundle up and come join your colleagues!

Marshall encouraged to donate to CFC



To date, Marshall's civil service work force has contributed $488,799 toward the center's $600,000 goal. The campaign ends Dec. 12. To make a donation, visit http://cfc.msfc.nasa.gov/.

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