National Aeronautics and Space Administration
NASA Marshall Star: Feb. 2, 2006 : Vol. 46/No. 19

# MARSHALL STAR

Serving the Marshall Space Flight Center Community Feb. 2, 2006

## Marshall Director King helps observe Challenger 20th anniversary

**Marshall Center Director David King, right, speaks at a public memorial service Saturday, Jan. 28, marking the 20th anniversary of the loss of Space Shuttle Challenger. Following the ceremony at the U.S. Space & Rocket Center, a new documentary, "Christa McAuliffe: Reach for the Stars," was shown. The film is about a teacher who continues to inspire young people. For more photos of the event, see page 2.**

Emmett Given/MSFC

## Michoud's Scheuermann receives NASA Outstanding Leadership Medal

*By Sanda Martel*

Patrick Scheuermann, chief operating officer of the Michoud Assembly Facility in New Orleans, has received NASA's Outstanding Leadership Medal for his leadership during the facility's recovery following Hurricane Katrina.

The award honors employees whose outstanding leadership has a pronounced effect on NASA's technical or administrative programs.

NASA Administrator Mike Griffin presented the award to Scheuermann during a recent ceremony at Michoud. The Administrator praised Scheuermann for "extraordinary leadership and selfless dedication" during the facility's recovery from Hurricane Katrina, which hit the Gulf Coast last August.

Under Scheuermann's leadership, Michoud was able to quickly return to its business of building and processing external fuel tanks for NASA's Space Shuttle Program. Just nine weeks after the hurricane, the facility had returned to full operations and most of its 2,000 employees — 600 of whom lost their homes in the storm — had returned to work.

Scheuermann was appointed to his position Aug. 26, just four days prior to Hurricane Katrina's landfall on the Gulf Coast. He is responsible for the day-to-day management and operation of the facility.

Scheuermann began his NASA career in 1988 at the Stennis Space Center near Bay St. Louis, Miss., working as a shuttle main engine test conductor. In 1994, he became chief of the New Business Office. In 1999, he was selected to serve as a NASA fellow on the legislative staff of U.S. Sen. Trent Lott of Mississippi.

In 2001, he became the deputy director of center operations at Stennis, where he served until appointed to his current position.

***See Katrina on page 4***

# Remembering Challenger . . . 20 years later

Emmett Given/MSFC

Jan. 28 marked the 20th anniversary of the loss of the Space Shuttle Challenger. The U.S. Space & Rocket Center held a public memorial service. At left, the Grissom High School ROTC presents arms during the posting of the colors.

U.S. Space & Rocket Center Media Relations Director Al Whitaker rings a bell seven times, once for each astronaut onboard the Challenger.

Audience members from left, Homer Hickham, Linda Hickham, Walter Jacobi and Jim Ellis.

# 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

55 gallon aquarium w/ stand, filters, blue lights, driftwood and hood. $350.00 or less (256) 851-6746

King mattress set w/frame, $100; Trundle bed w/mattress, $50; bookcase, $30; baby stroller, $40. 603-3558

Kenmore dishwasher, 1 yr. old, $75. 714-7045

Gibson ES-137, Cherry sb, new, $1,300. 256-232-0246

Two American bulldogs, brindle males, 9-weeks old, $100 each w/o shots, $140 each w/first shots. 534-9838

Weider Pro 9640 home gym system for 2 people, $300. 325-0085

Washburn X50 Pro Wineburst electric guitar, Seymor Duncan pickups, case, $500. 655-6293

AKC Labs, block heads, otter tails, hunting bloodlines, first shots, de-wormed, vet checked, $350. 256-468-3738

Storm ThunderFlash bowling ball, needs to be drilled and polished. 714-4962/Larry

Hitachi Ultra-vision 60SX12B big screen TV, 60", $750. 882-3326

Blue sofa, $200; chest-of-drawers, $100; Dirt Devil vacuum, $30; kitchen table w/4 chairs, $100. 534-0939

Jessica McClintock formal length prom dress, never worn, size 5/6, $100. 931-425-0205

Air Walker and Stair Stepper, $50 each. 684-2256

Evita, Bombay Dreams, Mama Mia, front row, middle, Sunday, 2 p.m., $149 for all. 256-498-2028

Range/oven, white, works well, $75. 931-937-6970

Compact home gym, Gold's, $75; Executive desk and credenza, $300. 464-0994

Bose CD/Radio Graphite, $375. 256-289-0368

Two chrome wire-laced wheels, 15x7, multi bolt pattern, new, never run, $200. 256-773-0194

Whitewashed Pine entertainment center/armoire, holds up to 27" TV, $300. 337-9683

Dinette: Rattan pedestal table, glass top, four arm chairs, two swivel stools, $250. 256-355-1542

Ruger "old army" stainless cap and ball revolver, $300. 851-8085

Ruger single six stainless Model KNR-5, used four times, $350. 971-0571 after 5 p.m.

Sears leaf vacuum/mulcher and chipper, $145. 683-9364

Craftsman 10" table saw, 1-1/2HP w/belt drive, cast iron wings, includes mobile base, $400. 230-0762

Mega blocks, 850 pieces, tank, $15. 464-9408

GE TV, 31"; shelf for 150 lb. TV; Sony Progressive Scan DVD player. 461-6337

PSP, $222; PSP games, $28 each; Pro-Duo stick, 1GB, $73; Motorola V220 cell phone, $62. 655-1986

Sofa, oversized chair, ottoman, from Marks-Fitzgerald, rose, green, & blue floral, $350. 503-5115

Bedroom set: dresser w/mirror, 6-drawer chest, nightstand, $325. 837-3387

2003 Epiphone Casino w/hard-shell case, still has factory strings, sunburst, rarely played, $570. 746-9080

Two AKC/CKC Maltese puppies, males, vet checked, $600. 721-9456

## Vehicles

2001 Silverado ext. cab, 1S package, loaded, 5.8 liter/V8, hunter green, $12,000 firm. 714-7852

2004 Nissan Altima SE, 3.5, one lady owner, garaged, under warranty, low miles. 837-1774

1996 Ford Contour, 90K miles, needs some body work (hood, hood support, light assembly), make offer. 883-1003

2001 Ford Taurus, red, V6, auto, all-power controls, CD, 85.7K miles, $6,500. 256-656-9681

2005 Toyota Camry LE, V6, 5.2K miles, all-power, JPL stereo, 418,000. 881-3612

2001 Yamaha V-Star 1100, Cobra pipes, shield, saddle bags, cruise, custom backrest, $13.5 miles, $4,900. 694-0173

1993 Pontiac Firebird Formula, 350/V8, 6-speed, dark green, beige interior, 59K miles, $8,999. 256-306-0658

Thistle sailboat w/trailer, 17', two sets of sails, accessories, $2,500. 256-651-5491

1987 Toyota Celica, A/T, a/c, good tires/brakes, $1,100. 837-8897/evenings

1998 SeaRay 210 SunDeck, 265 hours, loaded, dry storage, tandem trailer, 4-disc brakes, $21,500. 882-3753

1993 Honda Civic LX, 4-door, automatic, all-power, $1,995; Bon-Aire pop-up camper, sleeps 6, $1,195. 426-1711

1997 Thunderbird LX all-power, sunroof, hitch, 142K miles, $4,000. 883-6339

2002 Nissan Altima SL, green, 131K highway miles, automatic transmission, leather, tinted windows, sun-roof, $9,000. 774-2910

2005 Nissan Frontier, gray/charcoal, loaded, garaged, great gas mileage, $18,500. 837-1774

1998 Chevy Silverado, 305/V8, white, auto, a/c, cruise, tow package, short bed, 144K miles, $5,500. 776-0811

2000 Nissan Frontier crew-cab, automatic, power, CD/cassette, 99K miles, remote, bedliner, silver, $10,000. 880-9025

2005 Yamaha YZ125F 4-stroke, blue, $2,000. 751-3766

2001 Jayco travel trailer, 30', a/c, fridge, heater, stove, microwave, awning, sleeps 8, $11,000. 859-0729

## Free

Split firewood (Hackberry), well seasoned. 256-551-0276

Black Lab, one year old, no children, has had shots to date. 468-4796

West Highland Terrier (Westie), 4 yrs. old, never around children. 533-7234

## Wanted

To buy "Old" turkey calls. 256-593-7207

Utility trailer for hauling 4-wheeler. 830-2806

Washer/dryer, electric, matched set, good working condition, reasonably priced. 313-655-7966

Child's twin bed frame w/headboard. 656-9009

Used working T-Mobile flip-style and/or camera cell phone under $50. 882-0461

Books or magazines in any condition for 6th grade extra reading. 883-2757

Honda or Toyota car w/less than 100K miles, 4-door, auto transmission. 783-6594

Old sliding glass doors, will pickup. 874-7874

Carpenter to build pergola/arbor. 256-509-2046

# Obituaries

**Brelen A. Lowery**, 88, of Albertville died Nov. 19. He retired from the Marshall Center in 1982 as an industrial equipment mechanic.

**Donald L. McClearen**, 88, of Huntsville died Nov. 21. He retired from the Marshall Center in 1977 as an aerospace engineer. He is survived by his wife, Mary McClearen of Hazel Green; and one son, Richard McClearen of Hazel Green.

**Edward W. Kilgore**, 85, of Huntsville died Nov. 22. He retired from the Marshall Center in 1974 as an aerospace engineering technician supervisor. He is survived by one son, Wayne Kilgore; one daughter, Sallie Brewer; and two sisters, Carolyn Isbell and Edna Baucum.

**James Lindell Sanders**, 78, of Huntsville died Dec. 7. He retired from the Marshall Center in 1987 as an aerospace engineering technician supervisor of liquid propulsion systems. He is survived by his wife, Elizabeth K. Sanders; three daughters, Elizabeth Haymond of Grant, Ellen Lee of Duluth, Ga., and Lesa Kervin of Seneca, S.C.; and one sister, Carolyn Logue of Brementon, Wash.

**George Grady Harris Jr.**, 78, of Huntsville died Dec. 9. He retired from the Marshall Center in 1986 as an electrical engineer. He is survived by his wife, Corene Hall Harris; and one daughter, Jane Harris Spalding.

**John T. Schell Jr.**, 83, of Huntsville died Dec. 17. He retired from the Marshall Center in 1981 as an aerospace engineering technician for aerospace polymers. He is survived by one son, John T. Schell III of McLean, Va.; and one brother, Luther Schell of Chatom.

**Bobby G. Bynum**, 69, of Huntsville died Dec. 27. He retired from the Marshall Center in 1994 as an electrical engineer. He is survived by one son, Danny Bynum; two daughters, Laura McComb and Emily Bynum; and one sister, Sybil Waddell.

**Stanley Neal Carroll**, 70, of Huntsville died Dec. 27. He retired from the Marshall Center in 1993 as an aerospace engineer. He is survived by one daughter, Beverly C. Naylor of Huntsville; one brother, Charles E. Carroll of Bremen, Ga.; and one sister, Betty Jo Parsons of Bowdon, Ga.

# *Marshall employees' participation sought for Black History Month*

*By Rita Roberts*

Team Redstone is looking for personnel to volunteer in this year's program at Marshall's Morris Auditorium marking Black History Month.

Black History Month is observed every February. Team Redstone, which includes the Marshall Center, has formed a program committee to plan activities tied to this year's national theme: "Celebrating Community: A Tribute to Black Fraternal, Social and Civic Institutions."

"This year's Team Redstone celebration commemorates more than 100 years of service by black fraternal and social organizations and civic institutions," said Joseph Hobson, Team Redstone Black History Month chairperson.

Team Redstone also will sponsor display and essay contests during the month-long celebration. Employees are encouraged to enter a two-page, double-spaced essay or a stationary display of their choice that relates to the observance theme.

"We are asking all of Team Redstone to assist us in making this year's tribute to black history the best yet," Hobson said.

For more information about volunteering or participating in the display and essay contest, contact Hobson at 544-0375 or at joseph.d.hobson@nasa.gov .

Essay writers can send entries to: Commander, USAG-Redstone Arsenal, Attn: AMSAM-RA-EO (Sgt. 1st Class Monique Mixon), RSA, AL 35897. She can be contacted at (256) 876-8947, fax (256) 876-8947 or at monique.c.mixon@redstone.army.mil . Or contact Commander USAOMEMS, Attn: ATKS-AE (Master Sgt. Tuynuykua Jackson), RSA, AL 35897. She can be contacted at (256) 876-9224, fax (256) 842-6853 or at tuynuykua.jackson@redstone.army.mil .

Display entrants should provide notification to Mixon or Jackson of the display location and a point of contact. All entries are due by close of business Feb. 15. The submissions will be judged Feb. 16. Plaques and trophies will be awarded to winners at the program in Marshall's Morris Auditorium.

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

# *Volunteers needed for 13th annual Great Moonbuggy Competition on April 8-9*

Volunteers for the 13th annual Great Moonbuggy Competition are needed for Friday, April 8, and Saturday, April 9. The race will be at the U.S. Space & Rocket Center.

Positions include obstacle judging, score keeping, reporting, pre-race qualifying and start/finish line activities. A T-shirt and lunch will be provided for each volunteer.

To sign up, go to http://oscar.msfc.nasa.gov/hs/tgmr2006.nsf/reg or Inside Marshall. There will be a volunteer meeting Wednesday, March 29, at 3 p.m. at the Space & Rocket Center. For more information, contact Julie Clift at julie.d.clift@msfc.nasa.gov.

# Katrina

***Continued from page 1***

A New Orleans native, Scheuermann grew up in the town of Arabi in St. Bernard Parish. The son of Karl and Carol Scheuermann, he is a 1982 graduate of Holy Cross High School in New Orleans. He received a bachelor's degree in mechanical engineering in 1986 from the University of New Orleans.

In 2001, Scheuermann received NASA's Exceptional Service Medal for significant service characterized by unusual initiative and creative ability that clearly demonstrated substantial improvement in engineering, aeronautics, space flight and space related endeavors. He received a Distinguished Alumnus Award in 2001 from the University of New Orleans. He also was a finalist in NASA's astronaut candidate selection program in 1998.

Scheuermann and his wife, Sarah, live in Slidell, La., with their son and daughter, Chandler and Christina.

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

David Higginbotham/MSFC

**Patrick Scheuermann, right, receives NASA's Outstanding Leadership Medal from NASA Administrator Michael Griffin during an awards ceremony at the Michoud Assembly Facility.**

## *Super Guppy to deliver test module to Marshall Center on Feb. 8*

NASA

**NASA's Super Guppy aircraft will deliver a module, originally developed for use as a habitation module for the International Space Station, to the Marshall Center Wednesday, Feb. 8. The aircraft is expected to land at Redstone Army Airfield at 4:30 p.m. CST. The module will be used to conduct Advanced Environmental Control and Life Support System testing for future NASA Exploration missions. This system will provide fresh air, water and a comfortable living environment for crews on future spacecraft.**

# International Space Station crew prepares for spacewalk

*By Lori Meggs and combined reports*

Preparations for a walk in space are taking center stage on the International Space Station. Expedition 12 Commander Bill McArthur and Flight Engineer Valery Tokarev have reviewed procedures, gathered tools and outfitted equipment for their scheduled Feb. 3 spacewalk.

The walk, which could last six hours, begins at 4:20 p.m. CST. NASA TV coverage starts at 3:30 p.m. During the walk, the crew will release the unusual SuitSat satellite — a Russian Orlan spacesuit outfitted with amateur radio equipment. It will fly freely for several weeks of scientific research and amateur radio tracking. Eventually, SuitSat will burn up in the atmosphere.

The crew will also install a safety bolt in an emergency cable-cutting system on the station's mobile transporter rail car. The transporter is used to move a platform containing the station's robotic arm along the truss of the complex. Other spacewalk tasks include relocation of an adaptor for the Russian Strela boom. The crane-like Strela is used to move spacewalkers and cargo.

Managers decided to extend Expedition 12's mission and delay launch of Expedition 13 by one week. Expedition 13 is planned to launch on a Soyuz rocket from the Baikonur Cosmodrome, Kazakhstan, on March 29. It will dock on April 1. Expedition 12 is scheduled to return home April 8. The additional time will be used to prepare the Expedition 13 Soyuz spacecraft for flight.

The Protein Crystal Growth Monitoring by Digital Holographic Microscope for the International Space Station experiment began Jan. 19 on the station. It uses diagnostic equipment to monitor the exact growth conditions of protein crystals. It operates for 15 days inside the Destiny Laboratory's Microgravity Science Glovebox. A better understanding of protein crystal growth may aid in the research for new medicines.

The ground-commanded Binary Colloidal Alloy Test captured time-lapse photography of its sixth sample using camera equipment borrowed from a student photography experiment called EarthKAM. The experiment studies the physics of the Earth's surface crystallization and fluids at their critical point.

As part of NASA's education programs, McArthur also videotaped a description of how astronauts stay oriented in weightlessness. The video will be used in classrooms and NASA educational products.

The payload operations team at the Marshall Center coordinates U.S. science activities on the station.

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

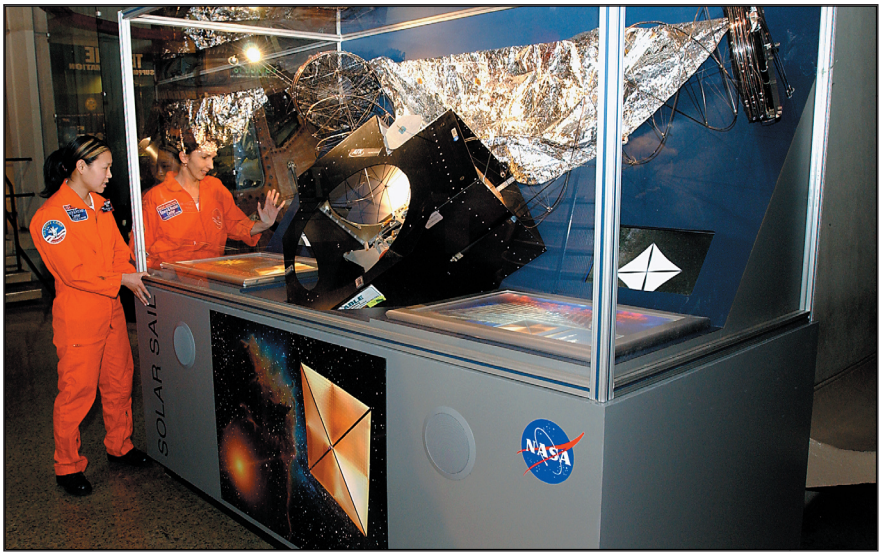
# Solar sail exhibit opens at U.S. Space & Rocket Center

*By Sheri Bechtel*

A new NASA exhibit showcasing a unique propulsion technology — one that uses the sun's energy to propel vehicles through space — opened Jan. 12 at the U.S. Space & Rocket Center in Huntsville.

The solar sail exhibit explains just one of the kinds of future propulsion technologies being developed by NASA's In-Space Propulsion Technology Program, which is implemented by the Marshall Center.

The exhibit — 8 feet long, 4 feet wide and 7 feet high — features a sail system test article and includes a short video about how a solar sail and boom system is deployed in space. The public can view the display with paid admission during museum hours, Monday through Friday, 9 a.m. to 5 p.m.




Doug Stoffer/MSFC

**Rachael McClelland, left, counselor and museum tour guide, and Monika Savar, museum tour guide, look at a new exhibit that showcases a Marshall Center technology – solar sail propulsion – at the U.S. Space & Rocket Center.**

Solar sails, made of lightweight material 40-to-100 times thinner than a piece of writing paper, move by reflecting sunlight. The continuous pressure exerted on the sails by this sunlight provides sufficient thrust to perform spacecraft maneuvers, such as hovering at a fixed point in space or changing a vehicle's orbit. Because the sun provides the necessary propulsive energy, solar sails require no onboard propellant, thus reducing spacecraft mass.

The sail and boom system featured in the exhibit was developed by ATK Space Systems of Goleta, Calif., a contractor for Marshall's In-Space Propulsion Technology Office, which manages solar sail propulsion research for NASA.

The boom system was part of a series of ground tests of a 20-meter sail system, conducted in the spring of 2005 at NASA Glenn Research Center's Plum Brook Station in Sandusky, Ohio. The sail is one of four triangular segments of a 10-meter solar sail — large, sprawling sheets of material that resemble extremely thin pieces of aluminum foil supported by a series of booms. The 10-meter sail underwent design tests that studied its shape and system dynamics — how it functions in relation to force, weight and tension — in July 2004 at NASA's Langley Research Center in Hampton, Va.

In addition, a second solar sail design was built and tested by a team led by L'Garde, Inc., of Tustin, Calif. The sail exhibit video also features artist renderings of both company's designs in space, along with scenes of the sail systems being manufactured and deployed in a vacuum test chamber.

ATK Space Systems donated the sail and boom hardware to NASA for the exhibit. The display was designed and developed in-house at the Marshall Center.

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

**MARSHALL STAR**

Vol. 46/No. 19

*Marshall Space Flight Center, Alabama 35812*
*(256) 544–0030*
**http://www.nasa.gov/centers/marshall**

The Marshall Star is published every Thursday by the Public and Employee Communications Office at the George C. Marshall Space Flight Center, National Aeronautics and Space Administration. Classified ads must be submitted by 4:30 p.m. Thursday, and other submissions no later than 5 p.m. Friday to the Marshall Public and Employee Communications Office (CS20), Bldg. 4200, Room 103. Submissions should be written legibly and include the originator's name. Send e-mail submissions to: intercom@msfc.nasa.gov . The Star does not publish commercial advertising of any kind.

Manager of Public and Employee Communications — Dom Amatore
Editor — Jessica Wallace

GPO U.S. Government Printing Office 2006-523-050-20034

PRSRT STD
US POSTAGE PAID
HUNTSVILLE, AL
PERMIT NO. 298