



# MARSHALL STAR

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March 19, 2009

## *STS-119 scheduled to perform first spacewalk March 19*

### **Marshall propulsion team contributed to successful launch**

*By Sanda Martel*

Space shuttle Discovery and its seven-member crew lifted off from the Kennedy Center March 15 at 6:43 p.m. CDT to deliver the fourth and final set of power-generating solar array wings and a new crew member – Japan Aerospace Exploration Agency astronaut Koichi Wakata – to the International Space Station.

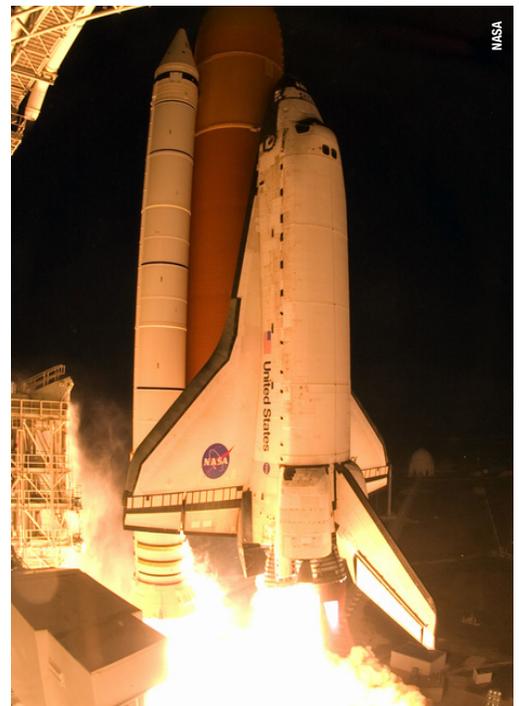
Discovery docked with the space station March 17 and the first spacewalk is scheduled March 19.

"We saw an exciting and beautiful evening launch of the space shuttle Discovery at the Kennedy Space Center in Florida," said Steve Cash, manager of the Shuttle Propulsion Office at the Marshall Space Flight Center.

"The entire Marshall-led shuttle propulsion team made very important contributions to this mission, including excellent performance of the external tank, solid rocket boosters and space shuttle main engines," Cash said.

"All members of our team – the Space Shuttle Main Engine Project Office, the External Tank Project Office, the Solid Rocket Booster Project Office and our engineering integration team – can be very proud of this accomplishment," he said.

Discovery's delivery of the solar array wings will complete the space station's truss, or backbone. The arrays will provide the electricity to fully power science



Space shuttle Discovery lifts off on the STS-119 mission from the Kennedy Space Center on March 15.

*See STS-119 on page 4*

### ***Final pieces of Ares I-X rocket head to launch site***

*By Daniel Kanigan*

The final pieces of the Ares I-X flight test rocket left the manufacturing facility in Promontory, Utah, on March 12, and began a 2,917-mile, cross-country journey to the launch site at NASA's Kennedy Space Center in Florida.

The Ares I-X is the first flight test for the Ares I – the agency's next-generation spacecraft and crew launch vehicle system.

The flight will provide NASA an early opportunity to test and prove hardware, facilities and ground operations associated with Ares I.

The first stage motor segments are the last shipment of major hardware elements for the rocket. The hardware will arrive in Florida later this month and undergo final processing and preparations before being stacked with

the other portions of the rocket.

"This shipment means great things for the Ares I-X mission," said Steve Davis, Ares I-X deputy manager at the Marshall Space Flight Center. "It's wonderful to see the next generation of American spaceflight continue to take shape. The excitement is really building now as we start stacking the pieces and prepare for

*See Ares I-X on page 4*

## Your life could depend on an Automated External Defibrillator

By Jessica Wallace

It can strike without warning. One minute you are working, the next minute you are fighting for your life due to sudden cardiac arrest.

The American Heart Association estimates that 250,000 Americans die each year when the heart suddenly stops beating. In most cases, sudden cardiac arrest is caused when the heart's electrical activity becomes disordered, known as ventricular fibrillation. According to the association, with proper cardiopulmonary resuscitation, or CPR, and early electric shock treatment, up to 74 percent of the victims can survive.

To provide immediate assistance to victims of cardiac arrest, the Marshall Space Flight Center has installed 171 Automated External Defibrillators at various on-site buildings in wall-mounted cabinets. A defibrillator is a computerized device used to interpret heart rhythm and determine if shock is required. If necessary, the unit prompts

the rescuer to deliver the treatment.

"These devices are very easy to use if someone's heart requires shock, and anyone who is available to help can operate it," said Tony Ceci, a Huntsville Emergency Medical Services Inc. paramedic in the Environmental, Engineering & Occupational Health Office of Marshall's Office of Center Operations. "The defibrillators guide the rescuer with voice prompts, instructing them what to do and when to do it," he said.

When the cabinet door is opened to retrieve the defibrillator, an alarm sounds to alert people nearby of a potential emergency. "Make sure someone dials 911 first," advised Mary Jones, head nurse in the occupational health office. "Then use the defibrillator as necessary until professional help arrives."

"Many people are afraid that they will shock someone when it's not needed," said Ceci. "This cannot happen because the device will only issue a shock when

the person reaches a particular heart rhythm."

Good Samaritan laws offer Automated External Defibrillators users some protection from personal liability, he added, so users need not be unduly concerned.

"These devices are self explanatory," said Ceci. "However, if you do not know CPR, then their effectiveness can be limited. We are offering classes to Marshall team members interested in learning CPR and how to properly use the defibrillators. We would like three trained people within hearing distance of each unit. These classes typically last four to five hours, and allow for hands-on experience."

Training will be provided by the Training & Incentives Office in Marshall's Office of Human Capital. CPR certification is valid for two years, and renewal classes will be offered in the future. To sign up for training classes, contact Ceci at [ceccei-1@nasa.gov](mailto:ceccei-1@nasa.gov).

"We have a lot of people volunteering to participate in the classes," said Ceci. "I really appreciate everyone's commitment to making this center a healthy environment."

For a list of defibrillator locations, visit [http://inside.msfc.nasa.gov/announcements/AED\\_Locations\\_Website.pdf](http://inside.msfc.nasa.gov/announcements/AED_Locations_Website.pdf).

*Wallace, an AI Signal Research Inc. employee and the Marshall Star editor, supports the Office of Strategic Analysis & Communications.*



Marshall team members should look for this sign to locate an Automated External Defibrillator. The device will be under the sign, and inside a wall-mounted cabinet. An alarm will sound when the cabinet door is opened, alerting those nearby of a potential emergency.



Mary Jones, Marshall's head nurse, and Tony Ceci, a Huntsville Emergency Medical Services Inc. paramedic, demonstrate how to use an Automated External Defibrillator.

# NASA Dryden Director Kevin Petersen to retire in April

*NASA Headquarters news release*

Kevin L. Petersen, director of NASA's Dryden Flight Research Center in Edwards, Calif., announced plans to retire from NASA effective April 3. A veteran aerospace engineer and manager with 38 years experience at Dryden, Petersen has served as the center's director for more than 10 years and is the longest-serving field center director currently at NASA. Dryden's deputy center director, David D. McBride, has been named acting director.

"Kevin's service to NASA exemplifies what's great about the people who make up America's space program – he's served with distinction and helped lead the agency aeronautics efforts into the 21st century," said NASA Acting Administrator Chris Scolese. "I've asked David McBride to serve as acting Dryden director. I'm confident David will help keep Dryden in the forefront of aeronautics research during this period of transition."

During Petersen's tenure as center director, Dryden has been transformed from a field center primarily focused on aeronautics research and support for the space shuttle program to a center with major projects supporting all four of NASA's mission disciplines – environmental and space science, space exploration, human spaceflight and aeronautics.

During the last decade, Dryden has accomplished many flight-research "firsts," including the flight of the Helios solar-electric aircraft to a world record altitude of 96,863 feet, the flight of the X-43A integrated scramjet vehicle to a speed of Mach 10, and the demonstration of fully autonomous in-flight aerial refueling capability.

"It is hard to imagine a career with more excitement and opportunity," said Petersen. "Dryden is a unique place with unmatched talents and capabilities. It has been a privilege and an honor to have played a small role in Dryden's historic accomplishments."

Petersen began his career at Dryden as a university cooperative student in 1971 and was hired as an aerospace engineer upon graduation in 1974. Early in his career at Dryden, Petersen worked as a research engineer on the three-eighths-scale F-15 Remotely Piloted Research Vehicle, the F-8 Digital Fly-By-Wire and the Highly Maneuverable Aircraft Technology projects.

He later served in multiple supervisory and management positions at Dryden within the Research Engineering Division. He provided multidisciplinary support to a variety of research programs for flight dynamics and controls, structural dynamics and flight systems. Programs he supported included the F-18 High Angle-of-Attack Research Vehicle and the X-29 Forward Swept

Wing technology demonstrator aircraft, for which he was chief engineer. He also headed the center's National AeroSpace Plane project office from February 1992 through November 1993.

Beginning in 1993, Petersen served as the center's acting deputy director and was appointed Dryden's deputy director in January 1996. Upon the retirement of former Center Director Ken Szalai, Petersen was named the center's director on Feb. 9, 1999.

Petersen was awarded NASA's Exceptional Achievement Medal in 2004 for his contributions to the agency. He also has been the recipient of NASA's Exceptional Engineering Achievement Medal, NASA's Exceptional Service Medal, NASA's Outstanding Leadership Medal and NASA's Equal Employment Opportunity Medal.

Petersen holds both a bachelor's degree and a master's degree in aerospace engineering. He is a fellow of the American Institute of Aeronautics and Astronautics.

For more information about NASA's Dryden Flight Research Center and its research projects, visit: <http://www.nasa.gov/centers/dryden>.



Kevin Petersen

## Obituaries

**Ernest Nathan**, 84, of Huntsville died Feb. 2. He retired from the Marshall Center in 1997 as an engineer. He is survived by his wife, Hilda Nathan.

**Marvin Adcock**, 83, of Athens died Feb. 4. He retired from the Marshall Center in 1981 as an equipment specialist. He is survived by his wife, Bobbie Nell Adcock.

**Norman Schlemmer Sr.**, 79, of Huntsville died Feb. 5. He retired from the Marshall Center in 1987 as an aerospace engineer supervisor. He is survived by his wife, Peggy Coward Schlemmer.

**Hazel Geneva Goode**, 84, of Athens died Dec. 31. She retired from the Marshall Center in 1972 as a general supply specialist. She is survived by her husband, Calvin Goode Jr.

**Lorraine M. Marthet DeCuir**, 81, of New Orleans died Feb. 17. She retired from the Marshall Center in 1983 as an administrative officer. She is survived by her husband, Joseph E. DeCuir.

**Robert Daryl Tackett**, 51, of Huntsville died Feb. 19. He retired from the Marshall Center in 2007 as an aerospace engineering technician. He is survived by his wife, Monica Tackett.

experiments and support expansion of the station's crew members to six later this year.

The 13-day mission will feature three spacewalks to install the S6 truss segment on the starboard, or right, side of the station and to deploy its solar arrays. The flight also is delivering a replacement unit for a system that converts urine to potable water.

Shortly before launch, Commander Lee Archambault thanked the teams that helped make the launch possible.

"It's truly an honor to be part of this team representing NASA, the nation and the international partners," Archambault said. "See you in a couple of weeks."

Archambault is joined on STS-119 by pilot Tony Antonelli and mission specialists Joseph Acaba, Steve Swanson, Richard Arnold, John Phillips and Wakata. Wakata will replace space station crew member Sandra Magnus,

who has been aboard the space station for more than four months. Wakata will return to Earth during the next space station shuttle mission, STS-127, targeted to launch in June.

Former science teachers Acaba and Arnold are now fully trained NASA astronauts. They are making their first journey to orbit on the mission and will step outside the station to conduct critical spacewalking tasks.

Discovery's launch was postponed March 11, after a leak associated with the gaseous hydrogen venting system was detected during fueling. Technicians rebuilt and replaced seals and other components associated with the system. No leaks were detected during the March 15 fueling.

NASA is providing continuous television and Internet coverage of Discovery's mission, which is the 125th shuttle flight, the 36th for Discovery

and the 28th shuttle mission to the space station. NASA Television features live mission events, daily mission status news conferences and 24-hour commentary. NASA TV is webcast at: <http://www.nasa.gov/ntv>.

NASA's Web coverage of STS-119 includes current mission information, interactive features, news conference images, graphics and videos. Mission coverage, including the latest NASA TV schedule, also is available on the main space shuttle Web site at: <http://www.nasa.gov/shuttle>.

Live updates to the NASA News Twitter feed will be added throughout the shuttle mission and landing. To access the NASA News Twitter feed and other agency Twitter feeds, visit <http://www.nasa.gov/collaborate>.

*Martel, an ASRI employee, supports the Office of Strategic Analysis & Communications.*

## Ares I-X *Continued from page 1*

launch later this year."

The Ares I-X first stage uses a four-segment solid rocket motor, capable of generating 3.3 million pounds of thrust. The motor provides the primary propulsion for the vehicle from liftoff to stage separation 120 seconds into the flight. The motor segments were taken from the existing space shuttle solid rocket booster inventory for the flight test and were manufactured by Alliant Techsystems, known as ATK, in Promontory. The booster used for the Ares I-X flight test has been modified to meet Ares needs by adding new forward structures and a fifth segment simulator to better simulate the size and shape of the Ares I rocket.

"The first stage team is very pleased with this significant accomplishment," said First Stage Team Lead Chris Calfee. "The ATK and Marshall teams did a tremendous job in preparing the motor segments for shipment and completing all the planned

work."

The Ares I-X rocket is a combination of existing and simulator hardware that will resemble the Ares I rocket in size, shape and weight. It will provide valuable data to guide the final design of the Ares I. The test flight also will bring NASA one step closer to its exploration goals of

returning to the moon for more ambitious exploration of the surface, and traveling to destinations beyond. The Ares I-X launch is scheduled for 2009.

The Marshall Center manages the first stage project for the Ares I-X mission,



A train carrying the final pieces of the Ares I-X flight test rocket left the Alliant Techsystems manufacturing facility in Promontory, Utah, on March 12.

located at NASA's Johnson Space Center in Houston.

*Kanigan is a member of the Public & Employee Communications Office in the Office of Strategic Analysis & Communications.*

## Drink a cup of coffee in Marshall's new Cyber Cafe

Want a nice, quiet place to drink your coffee and put your laptop to work? Check out the Marshall Space Flight Center's new Cyber Cafe. Located on the first floor

of Building 4203 in Room 1103, it's where team members can grab a cup of coffee and enjoy it in a Wi-Fi capable room equipped with cushiony bar stools, hydraulic tables and cafe prints

hung on cream colored walls. The room accommodates 16 people. For more information, contact Gene Fundum of the Office of Center Operations at 544-3366.



Sipping on hot coffee and surfing the Web in Marshall's new Cyber Cafe are, from left, Victoria Garcia of the Engineering Directorate, and Chip Dobbs and Melissa Kaiser from the Office of Center Operations. The self-service cafe opened March 9 and is accessible 24 hours a day, seven days a week.

## 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, March 26, is 4:30 p.m. Thursday, March 19.

### Miscellaneous

Free weight machines, leg press, hack squat, seated row, full rack, bench, \$1000. 479-8536  
 Entertainment center, \$35; TV stand, \$25; table with 4 chairs, \$100; and more. 461-7520  
 Jones Valley pool membership, \$350. 468-0854  
 Two tickets to "The Rat Pack," Von Braun Center, March 29. 503-7060  
 Three propane tanks for gas grill, two full, one partial, \$75. 656-2951  
 Drexel dining table, \$450; Henredon end table, \$125; overstuffed chair, \$125; contemporary chair, \$50. 585-3594  
 Paradigm stereo speakers, Studio 20 Reference Series, built in amplifiers, gamers or audiophiles, \$725. 352-514-8405  
 Weimaraner pups, AKC, silver, 6 weeks, \$350 for male, \$400 for female. 287-2488 or 347-2097  
 Two Game Stop gift cards, \$20 and \$50. 466-4500

MEGA BLOKS, 710 pieces helicopter, \$12. 464-9408  
 KINEX building sets, \$105. 464-9408  
 Camolet pool membership, \$500. 417-8972  
 Firewood, \$80 per truckload. 755-0050  
 Bristol Motor Speedway camping spot, Bristol Dragway, reserved, Section E, shower passes, March 18-23, \$170. 585-0500  
 Peavey Mark VIII bass amp head, 210tx bass enclosure, 410tx bass enclosure, \$400. 636-2978  
 Utility trailer, 6'x16', all metal, dual axle, \$800. 651-5847  
 2004-2009 BMW 5 series sport package, OEM 18" wheels/tires, style 124, \$750. 655-9464  
 Kids' electric four wheeler, \$50. 783-4850  
 XL Medline disposable adult briefs, 72 per case, three cases, \$60; front tine tiller, \$200. 778-8893  
 Cedar fence posts, \$3 and up. 682-7165  
 Two Cirque Du Soleil tickets, April 17, Box 1, Row B, seats 3-4, \$65 each. 566-5828  
 5HP Rotary Phase Converter, \$325; Shelby Foote complete Civil War book set, \$190. 890-0554  
 Samsung Glyde cell phone, \$80. 975-2034  
 Oak dining room table, leaf, six chairs, \$350; computer desk, \$20. 776-7399  
 Maytag side-by-side refrigerator, 26 cubic feet, black, water/ice dispenser, \$600. 698-0385  
 Firewood, \$65 per truckload. 232-8311  
 Two Sharper Image air purifiers, \$50 each; VHS player, \$15; antique table/chairs, \$700. 551-0276

### Vehicles

2008 Blue Honda Accord Coupe, loaded, black leather, ground effects, multi-CD/XM/iPod, 9k miles, \$25,900. 604-9951  
 2006 SL55 Mercedes AMG, loaded, hardtop convertible,

silver, 14k miles. 830-5999  
 2004 Chevy 2500, 4x4, loaded, all power, towing package, trailer, extended mirrors, \$14,500. 426-9565  
 2003 Gas Club Car Golf Cart, beige with tan seat, windshield, good condition, \$2,250. 682-6326  
 2003 Club Car, good batteries, windshield, cooler rack, charger, \$1,800. 682-6326  
 2003 Infiniti G-35, sports model, silver exterior, moon roof, leather seats, 73k miles, \$12,800. 881-6495  
 2002 Fleetwood Expedition motor home, 300HP Cummins diesel, Allison transmission, take up payments. 431-9898  
 2002 Fifth Wheel, sleeps 8, kitchen, bath, 2 LP gas tanks, \$14,000. 721-1260  
 2001 Isuzu Rodeo LS, bronze, 99,500 miles, never wrecked, original non-smoking owner, \$5,495 obo. 830-085  
 2000 Ford F-250 Super Duty 4x4, 5.4L, 170k miles, regular cab, long bed, \$5,000. 541-0445  
 2000 Mercedes ML430 SUV, white, sunroof, leather, entertainment package, navigation, loaded, Bose. 520-2802  
 1998 Mercury Sable GS, white, gray interior, 55k miles, rebuilt transmission, \$3,200. 880-9025

### Wanted

Nepenthes carnivorous plant. 504-715-7226  
 Lightly used queen mattress set. 352-514-8405  
 Houses/offices to clean, available evenings/weekends, leave message. 777-8595  
 Cherry dresser for baby girl's room. 759-3009  
 Summer care for two girls, ages 13 and 10, south Huntsville, must drive, references. 882-2076

### Lost

Silver earring, dangly with three interlocked squares, hook style, March 5, Building 4200/4202/4203 area. 544-7543

# Ares I first stage igniter successfully tested

On March 10, the Marshall Space Flight Center successfully completed the test firing of the igniter that will be used to start NASA's Ares I first stage motor. The test

paves the way for the first ground test of the fully developed Ares I first stage later this year. Ares I is the first launch vehicle in NASA's new Constellation Program family of space vehicles being

developed at the Marshall Center. The Ares vehicles will transport astronauts to the International Space Station, the moon and beyond in coming decades.



The March 10 test, conducted at ATK Launch Systems test facilities near Promontory, Utah, generated a flame almost 200 feet in length. Initial data showed the igniter performed as expected. ATK Launch Systems, a division of Alliant Techsystems of Brigham City, Utah, is the prime contractor for the Ares I first stage.

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