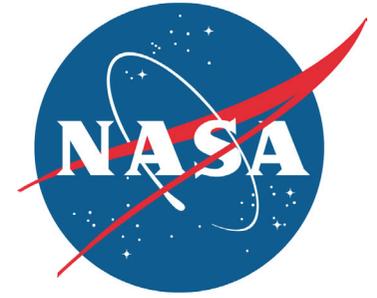


Spaceport News



John F. Kennedy Space Center - America's gateway to the universe

www.nasa.gov/centers/kennedy/news/snews/spnews_toc.html

Work force prepares for Kennedy transition

NASA plans new options to assist employees

It almost was impossible to watch local TV news, listen to the radio or pick up a local newspaper last week without hearing or reading about thousands of possible job losses at Kennedy Space Center when space shuttles are retired in two years.

NASA Administrator Michael Griffin said during a U.S. Senate hearing Feb. 27 that Kennedy will require several thousand fewer jobs to fly the new Orion spacecraft and Ares rockets than has been needed for shuttles.

By design, the new launch and crew vehicles that will carry our astronauts back to the moon, then to Mars and beyond will require less labor-intensive preparation -- meaning fewer workers to process and launch them. That is the only way to fly new missions while designing and building the next hardware needed to keep America's space exploration program constantly moving out into the solar system. NASA knows it won't receive the comparably hefty budgets of the Apollo era, so the agency must live within its means.

Kennedy Center Di-

rector Bill Parsons sees this transition as an opportunity, not a problem. "Change is an inevitable part of life. This transition is intended to make things better. It will allow us to do more space exploration than we have been doing. Kennedy has a very motivated

maintain the excellence of the shuttle program, while they wonder how their skills might fit the needs of processing the next generation of space vehicles.

The main question many workers are asking is a simple and honest one:

NASA and its contractors are exploring ways to answer the question many workers are asking: "What will happen to my job?"

work force with a diverse skill base. We will stand up to the challenges presented by the next program. We will adapt. We have time to work the transition and we will do so successfully."

While talk of fewer jobs should not be a surprise to anyone who works at the center, it's a timely reminder that as the Space Shuttle Program finishes and the new era of the Constellation Program begins, the sense of excitement associated with NASA's new long-term exploration plans is coupled with serious questions about what lies ahead.

And some of those questions come down to a very personal level as members of the technically skilled work force strive to

"What will happen to my job?" In addition to the KSC Transition Working Group addressing all transition-related issues including the work force, NASA has requested assistance from other leaders and organizations. Many of the state's top lead-

Assisting the transition

Many top leaders are working to ease the transition from the space shuttle to the Constellation Program. They include:

- Members of Congress
- Florida Gov. Charlie Crist and other state leaders
- Brevard County Commission
- Space Florida
- Economic Development Commission
- Brevard Workforce Development Board

ers in economic, space, employment and community issues have been working behind the scenes to find ways to help Kennedy employees make the transition -- either within or outside the space program.

The exact number of workers who will be affected is still unclear, but NASA believes that retraining employees for the new program -- and new work that can be gained at Kennedy -- may help significantly decrease the amount of people without positions.

The state is taking numerous legislative initiatives to bring new work to the area, such as commercial space enterprises. Many contractors have developed skill-retention programs, and community and space leaders have held numerous conferences

to discuss future employment in the area.

The Brevard Workforce Development Board has a legislative budget request for

the 2008 state session which, if approved, will provide millions of dollars in funding to retrain Kennedy workers in new positions at the center, and aid displaced Brevard workers in finding jobs in the area. Kennedy is looking to enter into a Space Act

Agreement to work more closely with the board on work force issues.

A number of space shuttle workers are expected to use the end of the program as an opportunity to cap off their space careers in retirement, but others in mid-career will need to look closely at their skills and goals for the future.

It will be important for contract employees to take the initiative to learn about their company's retraining and transition plans through their human resource departments. In addition, NASA will continue defining new roles for non-traditional work at Kennedy.

Two important goals must simultaneously be pursued over the next two years.

First, the space shuttle must continue to be processed and launched with the highest attention to safety. Not doing so would affect all future plans.

Second, the agency also must ensure the Kennedy community and the center's facilities evolve to meet the needs of the next major steps in space exploration.

The work the Kennedy team is doing right now is vital for paving the way for future activities, which are among the most ambitious exploration projects ever attempted.

2008 All-American Picnic goes 'green'

By Linda Herridge
Staff Writer

The plate you'll use at this year's Kennedy Space Center "All-American Picnic" eventually may become soil at Walt Disney World later. This year's picnic, from 10 a.m. to 4 p.m. March 29 at KARS Park I, will go "green" in a new way that will benefit the area's natural surroundings, reduce the impact to local landfills and eliminate disposal costs.

For the first time, food and refreshments will be served in biodegradable and compostable plates, bowls, cups, utensils and napkins - then even cleaned up in "green" trash bags - in an effort to reduce waste at the event by 95 to 99 percent, according to Frank Kline, lead design engineer in the Facilities Division of Center Operations.

These environment-friendly efforts at Kennedy and across the agency are in line with a presidential Executive Order to use more domestic, bio-based products.

"The picnic is a great place to start this process," said Justin Junod, picnic logistics committee chairman in Center Operations.

Designated recycling stations will be located throughout the park for collection of compostable and recyclable wastes. A mobile recycling unit from Somat Waste Reduction Technology will be on site to shred the compostable waste material as a demonstration of the technology.

Through an agreement with Walt Disney World, Kennedy will transport the shredded garbage to its composting



NASA/Amanda Diller

From left, Ned Voska, Gladys Morales, Dawn Reynolds, Sandy Massey, Jenifer Kalis, Jack Fox, Kennedy Space Center Director Bill Parsons, Pat Simpkins, AnnaMaria Ruby, John Horan and Samantha Dunscombe show off the "Big Ticket" for this year's All-American Picnic.

Ticket info

The 2008 All-American Picnic will take place from 10 a.m. to 4 p.m. March 29. Tickets are \$6 and \$3 (ages 3 to 12). Kids ages 2 and younger will be admitted free.

Tickets increase by \$2 after March 26.

More than 5,000 Kennedy employees and their family members are expected to attend, so get your tickets early.

To volunteer or for more information, go to <http://kscpicnic.ksc.nasa.gov>

facility, where it will be put through a commercial composting process and turned into soil for use in its theme parks.

The picnic will feature astronaut autograph sessions, a space art exhibition, a live tiger act, live music, a Guitar Hero III competition and the popular Chili Cook-off. Other features include community and Kennedy exhibits, children's games, a car



NASA/Dimitri Gerondidakis

Food and refreshments will be served in completely biodegradable and compostable plates, bowls, cups, utensils and napkins in an effort to reduce waste at the picnic by 95 to 99 percent.

and motorcycle show, rock climbing walls, a magic act, a dessert contest and more.

Tickets are \$6, and \$3 for children ages 3 through 12. Children ages 2 and younger are admitted free. On March 27, the cost will increase by \$2 per ticket.

Tickets go on sale March 17 at NASA Exchange Stores at Headquarters, the Operations and Checkout Building, the Operations and Sup-

port Building I and the Space Station Processing Facility, as well as the KARS Country Store, Hangar I Annex, Room 210 at Cape Canaveral Air Force Station, and the NASA Shuttle Logistics Depot 2, Cube 649.

Jack Fox, chief of the Management Integration Services Office in the Engineering Directorate, is chairman of this year's picnic. He said many volunteers are needed to make this year's event

successful. Those who volunteer for a minimum of two hours can purchase a discounted ticket for \$4 and receive a "2008 KSC All-American Picnic Volunteer" baseball hat.

Fox encourages employees to bring their families out for a day of fun, camaraderie, entertainment and plenty of food and drinks.

"Come on out and have a relaxing and enjoyable day with your families and co-workers. We'll have something for everyone," Fox said.

The "greening" efforts at the event were coordinated by Kline, who is also the Leadership in Energy and Environmental Design representative for the center, and Junod, along with Kennedy's Environmental Program Branch and Dynamac Corporation environmental specialists who staff the agency's Principal Center for Recycling and Green Purchasing.

STS-123 crew ready for record mission

Commander Dominic Gorie and his six crewmates are ready for launch on the STS-123 mission to the International Space Station, set for 2:28 a.m. March 11.

During space shuttle Endeavour's 16-day mission, the crew will deliver and install the first section of the Japan Aerospace Exploration Agency's Kibo laboratory and the Canadian Space Agency's two-armed robotic system, Dextre. Five spacewalks will be conducted during the flight.

"One of the best parts of this mission is working with our partners, Japan and Canada with our two prime payloads," Gorie said. Regarding JAXA, "we have a superb, competent group of engineers who has given us a piece of hardware with no issues."

STS-123 will be the longest shuttle flight to the orbiting outpost.

Gorie will be joined



NASA/Kim Shiflett

The crew for space shuttle Endeavour's STS-123 mission takes time out from training activities inside the White Room. From left, top row, are Commander Dominic Gorie and Mission Specialist Mike Foreman, and in the bottom row are Mission Specialists Garrett Reisman and Robert L. Behnken, Pilot Gregory H. Johnson, and Mission Specialists Takao Doi of the Japan Aerospace Exploration Agency and Rick Linnehan. The crew is at Kennedy for a full launch dress rehearsal, known as the terminal countdown demonstration test or TCDT.

on STS-123 by Pilot Gregory H. Johnson and Mission Specialists Robert L. Behnken, Mike Foreman, Rick Linnehan, Garrett Reisman

and Japanese astronaut Takao Doi. Reisman will remain on the station as a resident crew member, replacing station flight engineer Leopold Eyharts

of the European Space Agency, who will return home on Endeavour.

After two days of evaluating launch preparations for the mission,

NASA's mission management team confirmed the readiness of the shuttle, flight crew and payload for the next flight on Feb. 29.

Bill Gerstenmaier, associate administrator for Space Operations, said there are very few issues being worked.

Gerstenmaier stressed the mission will be complex for the crew.

"It was a very thorough review. We covered lots information, lots of data," Gerstenmaier said. "The teams are truly ready."

"It's a tribute to the teams that they worked so well with the vehicle. They've done a phenomenal job."

STS-123 is the 25th shuttle mission to the International Space Station.

For more information about the STS-123 mission, including images and interviews, go to www.nasa.gov/shuttle



NASA/Amanda Diller

Space shuttle Endeavour, atop the well-lighted mobile launcher platform, passes the rotating service structure, left, and flame trench, below, on Launch Pad 39A. The journey from the Vehicle Assembly Building began at 11:24 p.m. Feb. 17 and ended at the launch pad at 6:22 a.m. Feb. 18.

STS-122 mission a success



Courtesy of Gary Rothstein for NASA

Space shuttle Atlantis releases its drag chute after main gear touchdown on Runway 15 of the Shuttle Landing Facility at NASA's Kennedy Space Center after a nearly 5.3 million mile round trip to the International Space Station. During the mission, Atlantis' crew installed the Columbus laboratory, leaving a larger space station and one with increased science capabilities. The Columbus research module adds nearly 1,000 cubic feet of habitable volume and affords room for 10 experiment racks, each an independent science lab.

Scene around Ken



NASA/Jim Grossman

From left: InDyne JBOSC "Above and Beyond" Award winner James Whitehead and his manager, Rick Knutson; InDyne CAPPS Imagery Support Team "Team Works" Award winners Walter Fritz, Steve Wilson, Melanie Gurnavage, Nancy Strott and John Proferes with their manager, Dick Blondin. Not pictured: Robert Beary and Kevin Gill.



NASA/Amanda Diller

Robert L. Jordan, chairman of the Brevard County School Board, is surrounded by students from West Coast School in Titusville during the 2008 African-American History Month Luncheon at the Kurt Debus Conference Center on Feb. 29.



NASA/Kim Shiflett

NASA Administrator Michael Griffin, right, presents a special distinguished service medal to John J. "Tip" Talone Jr. following the launch of space shuttle Atlantis on its STS-122 mission.



NASA/Kim Shiflett

Workers prepare the Delta II second stage for GLAST for weighing at Cape Canaveral Air Force Station. The Delta rocket will be used to launch the Gamma-Ray Large Area Space Telescope on May 16 from Launch Pad 17-B on Cape Canaveral Air Force Station.



NASA/George Shelton

The United Launch Alliance Delta II first stage is revealed after the cover was removed from the truck trailer that delivered it to Hangar M on Cape Canaveral Air Force Station. The GLAST is a powerful space observatory that will aim to crack the mystery of stupendously powerful explosions known as gamma-ray bursts.

Kennedy Space Center



NASA/Kenny Allen

A diamondback rattlesnake slithers across the road near Launch Pad 39B.



Photo courtesy of USAF/TSgt. Justin D. Pyle

The U.S. Air Force Thunderbirds fly past Launch Pad 39A at NASA's Kennedy Space Center in commemoration of NASA's 50th anniversary. The aircraft had flown earlier to support the Daytona 500, also celebrating its 50th anniversary, and chose to fly over Kennedy on their way to their next assignment. On the pad, space shuttle Endeavour waits to launch on the STS-123 mission.



NASA/Dimitri Gerondidakis

From left, Dionne Jackson, Vernon Gibbs, Terry Williams, Janet Petro, Orlando Melendez, Jay Bonadio and Clara Wright were at the Executive Safety Forum on Feb. 21.

Spaceport News seeks your input

Send photos of yourself and/or your co-workers in action for possible publication. Photos should include a short caption describing what's going on, with names and job titles, from left to right.



For NASA

Members of the R-12/GT-81 Reactivation Test Team and observers signal “thumbs up” following a successful test completion. SGS/JBOSC, NASA, Northrup Grumman, United Space Alliance and Arctic Slope Research Corp. combined efforts and contributed to the successful project.

NASA, groups team up to get STS-122 off ground

With so much on the line, NASA joined the Space Gateway Support (SGS)/Joint Base Operations Support Contract (JBOSC) team and other Spaceport contractors to solve a potentially serious problem which could have affected the launch of space shuttle Atlantis’ STS-122 mission.

On Dec. 13, SGS workers were using a mobile Paul Recharger unit to charge the gaseous oxygen battery on Launch Pad 39A in support of the STS-122 launch, when the charger experienced a break in a “u-tube” through which flows high-pressure liquid oxygen. The gaseous oxygen battery is used to fill the shuttle fuel cells and the Power Reactant and Storage Distribution Systems.

NASA, through SGS, maintains five recharger units built by the Paul Division of the Air Reduction Co. The units convert and compress cryogenic forms of liquid air, liquid nitrogen and liquid oxygen into high-pressure gases that can flow into storage vessels.

A NASA Mishap Investigation Board determined the root cause of the recharger failure was



For NASA

Operators thaw the recharger tube assemblies that were tested for leaks at cryogenic temperatures for re-torquing operations.

fatigue. NASA requested that SGS Design Engineering redesign the tubing and Wyle/UPC Operations personnel fabricated, inspected and installed the newly designed tubing. The recharger went back into service after undergoing a series of scheduled runs with nitrogen, breathing air, and oxygen. However, on Jan. 24, another tube (same location, different recharger) failed during the oxygen battery recharge at Pad A.

At this point, NASA requested analysis and test support from SGS, United Space Alliance, Northrup Grumman, and Arctic Slope Research Corporation contractor experts. The assembled team quickly performed a test run of the problematic design and determined that due to vibration, the tubing design was flexing too much during use.

NASA approved returning the rechargers to service with the new design in time to allow

“Knowing why equipment fails, then taking the time to test the new configuration represents the cornerstone of NASA’s 50 years of success.”

Roy Tharpe, Deputy Chief of Operations, SGS/JBOSC

SGS/Wyle to support the third and final recharge of the oxygen battery at Pad A.

This time, the recharging operation performed flawlessly and supported the STS-122 launch on time Feb. 7. NASA officials extended their appreciation to the Reactivation Test Team for going above and beyond to get the job done.

The agency congratulated the team members for their contribution in supporting the launch of space shuttle Atlantis.

Surprisingly, Landsat-3 shared view for 5 years

By Kay Grinter
Reference Librarian

The third in a series of satellites designed for repetitive remote sensing of conditions on the Earth's surface launched from Vandenberg Air Force Base in California on March 5, 1978.

The Landsat-3 spacecraft, built by the General Electric Company's Space Division, lifted off atop a McDonnell Douglas two-stage Delta launch vehicle.

While weather satellites had been monitoring Earth's atmosphere since 1960, no real appreciation of terrain data gathered from space existed. The Landsat program was conceived in 1966 largely as a direct result of the demonstrated value of the studies of the orbital photography of Earth resources conducted during the Mercury and Gemini Programs.

When the remote-sensing program was proposed, it met with intense opposition from the Bureau of Budgets and those who argued high-altitude aircraft would be the fiscally responsible choice for Earth observation.

The Department of Defense also feared a civilian program such as Landsat would compromise the secrecy of reconnaissance missions. Photographing foreign countries without permission also raised geopolitical concerns.

All objections appeased, the program was funded, and eight Landsat satellites launched from Vandenberg between 1972 and 1999 into near polar, sun-synchronous orbits. A team from Kennedy Space Center's Unmanned Launch Operations conducted the launches.

John Neilon, NASA's launch director for the early Landsat missions, recalls that Landsat was not the original name given to the satellites. "The first one started life as ERTS-A, or Earth Resources Technology Satellite-A, and lived in orbit as ERTS-1 for several years before being rechristened Landsat-1," he said.

Before the second satellite was launched in 1975, Dr. George M. Low, NASA deputy administrator,

Remembering Our Heritage

View photos online

To view Earth images taken by Landsat satellites, go to <http://landsat.gsfc.nasa.gov/images>

suggested a new name be found with more public appeal. Since NASA planned a Seasat satellite to study the oceans, "Landsat" was chosen as the appropriate name for the existing satellite that studied the land.

Bud Thacker was at Vandenberg for the launch, although his duty station was at Kennedy. "I was chief of NASA's Delta Launch Operations Division, and the Vandenberg launch team was part of my group," he recalled. "Gene Lagenfeld and Carl Latham were spacecraft coordinators at the time. Walt Dundon was the 'PR' man at Vandenberg."

Neilon further explained: "ERTS-1 was one of the few NASA launches from Vandenberg that attracted much press attention. Whenever we launched from Cape Canaveral, there was always a large press contingent that caused us to have a prelaunch briefing and a well-patronized press viewing area. That seldom happened at Vandenberg. For ERTS-1, we did have a prelaunch briefing - although it was held in the Los Angeles area - and there were press representatives on site for the launch."

AMSAT's privately funded OSCAR-8 ham radio satellite piggybacked on the Landsat-3 launch.

Tom Page, a ULO guidance and control engineer on the Delta, was at Vandenberg for the launch and recalled: "The Oscar satellite was accompanied to Vandenberg by a volunteer, usually a NASA engineer from Goddard Space Flight Center who had to take personal leave from his job for the trip. Interestingly, Oscar traveled in its own seat in the passenger compartment of the commercial flight with its escort for protection against



NASA file

This McDonnell Douglas two-stage Delta launch vehicle helped put the Landsat-3 satellite in orbit to find energy resources and monitor large-scale environmental effects. The Landsat-3 satellite surpassed its one-year life expectancy by working for more than five years.

rough handling in the cargo bay."

Landsat-3 was considered an experimental project and operated by NASA until 1979, when it was declared operational. Responsibility then shifted from NASA, a research and development agency, to the National Oceanic and Atmospheric Administration, or NOAA, the agency charged with operating the weather satellites.

Decommissioned in March 1983, Landsat-3 successfully returned data for five years.

For more than three decades, Landsat satellites have collected spectral information on Earth's surface, creating a historical archive unmatched in quality, detail, coverage and length. Landsat-5, launched in March 1984, is still functioning in orbit.

WORD ON THE STREET

What is your favorite part of the KSC All-American Picnic?



"Networking. It's one of the few times I get to see co-workers in a social setting."

Becky Hinton, Workers Compensation Administrator for Boeing Inc.

"The food and music were good last year. It was my first time."

Lupe Soto, Management Support Assistant for the ISS and Spacecraft Processing Directorate's Office



"I like to take my kids and I really enjoy the rides and stuff available to them."

Dave Thomas, Logistics Technical Support Specialist with Boeing Co.

"The food . . . the beer . . . all of the above. It's all good."

Kevin Grant, Electrical Engineer with NASA



"You get to socialize with the people you work with . . . and the beer truck."

Joe Black, Materials Specialist for Creative Management Technologies



NASA Employees of the Month: March



NASA

Employees of the month for March include, from left: Charles Walker, Launch Services Program; Steve Chance, External Relations; Christopher R. Parlier, Engineering Directorate; Tammy J. Kennedy, Engineering Directorate; Anthony Bartolone, Launch Vehicle Processing Directorate; Dawn L. Oliver, Chief Counsel Office; Doug Durham, Center Operations; Debra Caldwell, Information Technology and Communications Services; and Ralph Fritsche, International Space Station and Spacecraft Processing Directorate. Not shown: Paul Mogan, Constellation Project Office; Marcus C. Orr, Procurement Office; and Rob Ellison, Safety and Mission Assurance Directorate.



Courtesy of Gary Rothstein for NASA

An osprey flies with a fish in its talons at Kennedy Space Center. The bird is one of more than 500 species of birds that co-exist at Kennedy and the surrounding Merritt Island National Wildlife Refuge.

Looking ahead

Target March 11	Launch/KSC: Endeavour, STS-123; at 2:28 a.m.
Target March 13	Launch/CCAFS: Delta II; at 2:09 a.m.
March 17	KSC All-American Picnic tickets go on sale
March 29	KSC All-American Picnic
Target April 14	Launch/CCAFS: Atlas V, ICO G1; TBD
Target May 9	Launch/CCAFS: Delta IV-H, NROL-26; TBD
Target May 16	Launch/CCAFS: Delta II, GLAST; 11:45 a.m. to 12:45 p.m.
Target May 25	Launch/KSC: Discovery, STS-124; at 7:26 p.m.
Target June	Launch/CCAFS: Delta II, GPS 2R-20 (M7); TBD
Target July 16	Launch/CCAFS: Delta II, STSS Demo; TBD
Target Summer	Launch/CCAFS: Atlas V, WGS SV 2; TBD
Target Aug. 8	Launch/CCAFS: Delta IV, GOES-0; TBD
Target Aug. 28	Launch/KSC: Atlantis, STS-125; 8:24 a.m.
Target September	Launch/CCAFS: Delta II, GPS 2R-21 (M7); TBD
Target Oct. 16	Launch/KSC: Endeavour, STS-126; TBD
Target Oct. 28	Launch/CCAFS: Atlas V, LRO/LCROSS; TBD
Target November	Launch/CCAFS: Atlas V, AEHF 1; TBD
Target Dec. 1	Launch/CCAFS: Atlas V, SDO; TBD
Target Dec. 4	Launch/KSC: Discovery, STS-119; TBD
Target Feb. 16, 2009	Launch/CCAFS: Delta II, Kepler



John F. Kennedy Space Center

Spaceport News

Spaceport News is an official publication of the Kennedy Space Center and is published on alternate Fridays by External Relations in the interest of KSC civil service and contractor employees.

Contributions are welcome and should be submitted three weeks before publication to the Media Services Branch, IDI-011. E-mail submissions can be sent to **KSC-Spaceport-News@mail.nasa.gov**

Acting managing editor Candrea Thomas
 Editor Frank Ochoa-Gonzales
 Copy editor Corey Schubert

Editorial support provided by InDyne, Inc. Writers Group.
 NASA at KSC is on the Internet at www.nasa.gov/centers/kennedy
 USGPO: 733-049/600142