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Spaceport News

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

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

Discovery waits on Pad 39A for launch

Space shuttle Discovery stands poised for liftoff at Launch Pad 39A at NASA's Kennedy Space Center, following its arrival at the pad on Sept. 30 for mission STS-120.

The shuttle began its slow 3.4-mile journey to the seaside pad atop the giant crawler-transporter at 6:47 a.m., leaving the Vehicle Assembly Building in the early morning darkness. Discovery concluded its one-mile-an-hour trip at about noon and was secured on the pad at 1:15 p.m.

Also at the pad is the payload canister containing the Italian-built U.S. multi-port module named "Harmony," which the STS-120 crew will deliver to the International Space Station. Harmony will be installed in Discovery's payload bay as launch preparations continue at the pad.

Discovery and its seven-astronaut crew are targeted to launch Oct. 23 on the mission, marking the 23rd shuttle flight to the station.

Retired U.S. Air Force Col. Pamela A. Melroy will command the mission. Melroy, a veteran shuttle pilot, is the second woman to command a shuttle. U.S. Marine Col. George D. Zamka will serve as pilot. The flight's mission specialists will be Scott E. Parazynski, U.S. Army Col. Douglas H. Wheelock, Stephanie D. Wilson and Paolo A. Nespoli, a European Space Agency astronaut from Italy.

(Above) While on the launch pad, space shuttle Discovery will undergo inspections and testing to verify its capabilities for a successful launch targeted for Oct. 23.

Zamka, Wheelock and Nespoli will be making their first spaceflight. This flight also will bring astronaut Daniel Tani to the station, allowing Expedition 15/16 Flight Engineer Clayton Anderson to return from the station to Earth aboard Discovery.

Dawn on way to find asteroids between planets Mars and Jupiter

NASA's Dawn spacecraft is on its way to study a pair of asteroids after lifting off Sept. 27 from the Cape Canaveral Air Force Station at 7:34 a.m. (photo at left).

Mission controllers at NASA's Jet Propulsion Laboratory in Pasadena, Calif., received telemetry on schedule at 9:44 a.m. indicating Dawn had achieved proper orientation in space and its massive solar array was generating power from the sun.

During the next 80 days, spacecraft controllers will test and calibrate the myriad of spacecraft systems and subsystems, ensuring Dawn is ready for the long journey ahead.

"Dawn will travel back in time by probing deep into the asteroid belt," said Dawn Principal Investigator Christopher Russell of the University of California, Los Angeles. "This is a moment the space science community has been waiting for since interplanetary spaceflight became possible."

Dawn's three-billion-mile odyssey includes exploration of asteroid Vesta in 2011 and the dwarf planet Ceres in 2015. These two icons of the asteroid belt have been witness to much of our solar system's history.

By using Dawn's instruments to study both asteroids, scientists more accurately can compare and contrast the two. Dawn's science instrument suite will measure elemental and mineral composition, shape, surface topography, tectonic history, and it will seek water-bearing minerals. In addition, the Dawn spacecraft, and how it orbits Vesta and Ceres, will be used to measure the celestial bodies' masses and gravity fields.

NASA's Kennedy Space Center managed the Dawn launch. The Delta 2 launch vehicle was provided by United Launch Alliance.

Year marks 50+ launches for LSP

By Steven Siceloff
Staff Writer

Sometimes launches just happen too close together. Not that anyone's complaining.

That was the case for the Launch Services Program, or LSP, which had a series of missions so close together that by the time the program got a chance to celebrate its 50th launch, 51 successes were already on the books.

Four hundred LSP and support staffers filled the IMAX theater auditorium at the Kennedy Space Center Visitor Complex to mark the occasion and watch a special film highlighting the program's accomplishments and importance in NASA's mission. Simultaneously, the public benefited by viewing the same historic film on NASA television.

As noted by the title of the film, the LSP offers "Earth's Bridge to Space" in the form of a team that brings a NASA payload together with the right rocket and launches the mission.

"We take a mission from its inception and we know what the science is, what the technologies are and we put it all together and integrate it into a launch vehicle to put it out to go do its science," Launch Manager Omar Baez said.

The program is based at Kennedy and was formed as a way to unify similar operations spread across three NASA field centers.

Although Kennedy is the home for the LSP, its operations stretch well beyond the launch pads at Cape Canaveral Air Force Station. The LSP team routinely oversees launches from NASA's Vandenberg Air Force Base facilities in California, and has launched missions from Kodiak Island in Alaska and Wallops Island, Va.

The team also uses several different boosters for its missions, including Delta and Atlas rockets from United Launch Alliance and Pegasus and Taurus rockets from Orbital Sciences. The LSP history also includes missions aboard rockets that have since retired, such as the Lockheed Martin Titan IV.

The Deep Space-1 mission of 1998, which tested ion propulsion to visit an asteroid, was the first to be overseen by the LSP. The launch also incorporated the Sedsat mission. The 50th mission began when an Orbital Sciences Pegasus rocket lofted the AIM satellite into orbit

The Delta II rocket with its Mars Exploration Rover, or MER-A, payload leaps off the launch pad to begin its journey to Mars. MER-A, known as “Spirit,” is the first of two rovers being launched to Mars. Liftoff occurred on time at 1:58 p.m. EDT from Launch Complex 17-A, Cape Canaveral Air Force Station.

in April to study high cloud formations.

In between, LSP launches dispatched several orbiters and landers to Mars, launched numerous advanced satellites to study Earth from orbit and sent the New Horizons probe toward the farthest reaches of the solar system.

No matter where the mission is slated to begin, LSP officials said the payloads and rockets always get careful attention, though some missions require more than others.

Launch Manager Chuck Dovale points to the CALIPSO/CloudSat mission of April 2006 as the most challenging of the program. The launch occurred on the fourth try, showcasing the team's determination to get the launch just right.

"There was a huge sigh of relief when the vehicle lifted off and was successful," Dovale said.

The challenges add to the thrill of a completed launch, officials agreed.

"You can't help but sit back and look at that whole team perform and not have a part that says it is fun," said Steve Francois, director of the Launch Services Program.

Francois offered awards to the team that produced and oversaw the film and a hearty congratulations to the whole LSP team for making 50 launches a reality.

Going green in center cafeterias makes cents

By Jennifer Wolfinger
Staff Writer

While one side of Kennedy Space Center is characterized by gravity-defying spacecraft and exciting technology, another facet is its wildlife refuge made up of serene waters and varied animals. To preserve this delicate combination which provides employees with a distinctive work environment, Lackmann Culinary Services initiated a reusable drinking cup project.

The seven center cafeterias were using 20,000 Styrofoam cups monthly. Styrofoam, which isn’t recyclable, takes 2,000 years to decompose. Once discarded, the cups linger in landfills, emitting toxins such as methane and carbon dioxide, which are two greenhouse gases contributing to global warming. Beginning this month, Lackmann will reduce this factor by selling reusable, cost-saving and dishwasher-safe 20-ounce drink and 16-ounce coffee mugs for $2.50, with 50-cent refills thereafter.

This new plan has sparked a domino effect. Lackmann will also stop selling 20-ounce plastic bottles of soft drinks. While customers may be fond of these bottles, the benefits of abandonment are worth the growing pains. Making these bottles takes five liters of water to cool the plastic, and once they’re used, they will never decompose. The cafeterias are also already stocked with napkins made of recycled paper.

Maureen Legg, Lackmann project manager, also encourages employees to take advantage of all the little but influential opportunities for conservation, such as using China dishes when dining at the cafeterias. She also explained that these new cups do not pose sanitary risks because the lids have to be removed in order to refill them.

“When we try something new, employees can be skeptical, but (these are) things they can easily do with an added bonus for them,” Legg said.

It may seem that initiatives like this are hard to accomplish, but with thorough research and planning, anybody can make a positive impact on the environment. The Logistics Building Cafeteria Manager Debra Jones prompted this initiative after watching an environmental television series and participating in the center’s energy and environmental awareness activities. After researching Styrofoam alternatives and presenting her proposal, she was very pleased when NASA staff quickly approved

Trying out the new cups in the cafeteria are (left) Maureen Legg, project manager, and Debra Jones, the Logistics Building cafeteria manager.

(See GREEN, Page 6)

Intercenter Walk/Run challenges all


Bill Parsons

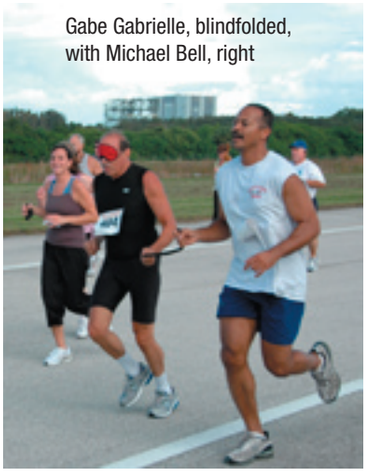
Whether walking, running or rolling, employees of Kennedy Space Center showed their mettle Sept. 25 during the annual Intercenter Run. With a start called by Center Director Bill Parsons, hundreds made their way around the Shuttle Landing Facility, withstanding scattered storm clouds and even light rain. Besides the accomplishment of making it to the finish line, participants enjoyed a waiting dinner catered by Kelsey's restaurant in Titusville.

Jeanne Ryba of NASA's Public Affairs division has taken part in the walk/run for five years. Her walking partner was Amber Philman, also with Public Affairs. "The event builds camaraderie in the office," said Ryba, "as well as getting to mix with others from around the center. United Space Alliance and the Air Force were also well represented."

Ryba especially enjoyed the opportunity for a pre-race massage "to loosen up the joints, especially the ankles," she said. Kennedy's own masseuse, Valerie Jaramillo, provided the massages to participants.

Although participation was down this year, possibly due to the rain postponement from the week before, 330 people entered.


Randall Crosby (left), with Chaz Wendling


Gabe Gabrielle, blindfolded, with Michael Bell, right


Jimmie Wright


Ray Sullivan

Runners and walkers (above) from across the center and CCAFS endured heat, humidity and even showers during the annual intercenter run. They enjoyed a catered meal at the finish line (right).

Visual challenge no obstacle to running with coworkers

By Jennifer Wolfinger, Staff Writer

Since Randall Crosby, owner of the Headquarters Building snack bar, ran cross country as a teen, it may not be surprising that he participated in this year's Intercenter Walk/Run. However, Crosby, who was diagnosed with retinitis pigmentosa at age eight, is legally blind. Furthermore, with the help of a blindfold, Crosby's friend Gabe Gabrielle was able to better understand Crosby's experiences during the Sept. 25 event.

"My favorite part was hearing all the people cheering and clapping for (Crosby). He is such an inspiration," Gabrielle said. "Never underestimate the power of your mind or the determination of someone who believes in their ability to achieve a goal, regardless of what obstacles we think they have."

SGS Facility Programmer Gabrielle and his guide, Michael Bell, a NASA Center Operations employee, held on to a 24-inch rope for assistance, but Gabrielle still felt insecure not knowing if he was running straight or diagonal. He had also blindfolded himself 15 minutes before the race and was immediately intimidated by his new world.

Crosby praised Gabrielle for wearing a blindfold during the run. "People often say, 'I can't imagine what it's like to be blind,' but Gabe took it a step further and found out. He has a genuine regard for and an appreciation of what a disabled person must overcome to function on a day-to-day basis." Crosby was guided by Chaz Wendling, a NASA Center Operations employee.

Changes planned, in progress for Ken

By Steven Siceloff
Staff Writer

The Ares rockets that will take over for the space shuttle and carry humans to the moon are closer to lifting off from the drawing board.

Designs and modifications are under way at Launch Pad 39B, the Launch Control Center and the Vehicle Assembly Building at NASA's Kennedy Space Center to accommodate the first test flight of an Ares I rocket in April 2009.

At the same time, workers in Kennedy's Assembly and Refurbishment Facility and Parachute Refurbishment Facility are working on the components for the first launch test.

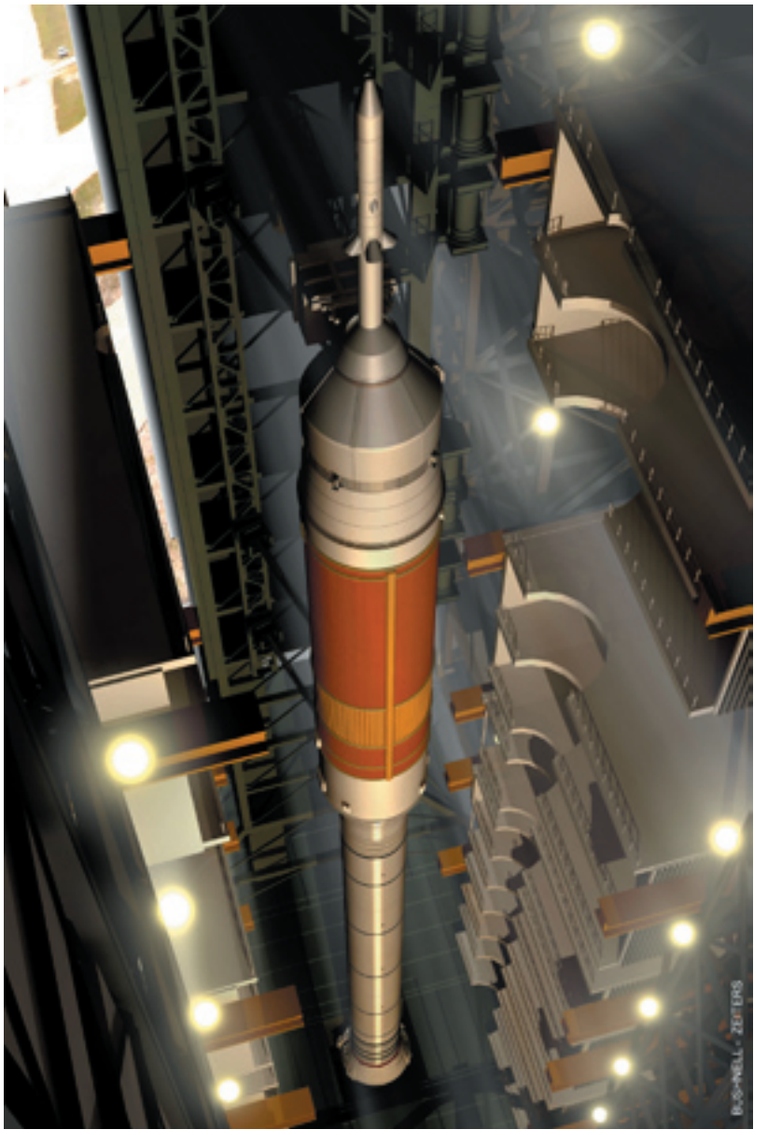
It is all part of a plan to use rockets based largely on technology proven in the Space Shuttle Program as the foundation for America's next generation of crewed spacecraft. One rocket, the Ares I, will pick up where the shuttle leaves off as America's prime vehicle for launching humans. The other, Ares V, will launch everything else needed for trips to the moon.

The demonstration rocket for the 2009 test, Ares I-X, will look just like the rocket that will launch astronauts to the International Space Station in the next decade and on the first leg of trips to the moon beginning in 2020.

The test flight calls for a surplus shuttle solid rocket booster to be topped with an inert fifth segment, a non-working upper stage and a boilerplate capsule built to the dimensions of the Orion spacecraft that will carry humans to Earth orbit.

But for the 2009 test flight, the capsule will carry only instruments and will launch on a ballistic trajectory into the South Atlantic Ocean. This will allow engineers to study the conditions Ares I will experience at liftoff, while the solid rocket is thundering toward space and when the second-stage rocket and spacecraft separate.

A second unmanned test flight with a higher-fidelity upper stage and Orion spacecraft simulators is planned for 2012. The first crewed flight of Ares I and Orion is scheduled for no later than 2015.



The Ares I inside the Vehicle Assembly Building (drawing).

Although the rocket is a new design, NASA is following a plan that allows the agency to use many facilities that already exist.

"The infrastructure we have for shuttle is mainly what we're going to use," said Pepper Phillips, manager of Kennedy's Ground Operations Project in the Constellation Program.

Constellation encompasses the Ares rockets and the Orion capsules under development, as well as the lunar landers and surface systems that will be used by astronauts exploring the moon.

Here is a detailed look at the changes already under way around Kennedy to get ready for that test flight. It also is a look ahead at what needs to be done so the Constellation Program can begin Ares I crewed missions, as well as Ares V missions beyond 2015.

Launch Pad 39B

Role in Constellation: Launch complex for the Ares I-X and operational flights of the Ares I rocket.

Status: Launch Pad 39B has hosted its last planned space shuttle launch, though it will be kept ready in case an emergency flight is called for during the last Hubble Space Telescope repair mission in September 2008. Then major work will begin.

To be done: The fixed and rotating service structures standing at Launch Pad 39B will be dismantled sometime after the Ares I-X test flight. A new launch tower for the Ares I will be built onto a new mobile launch platform.

The gantry for the shuttle doesn't reach much higher than the top of the four segments of the solid rocket booster. Pad access above the current shuttle launch pad structure will not be required for Ares I-X because the stages above the solid rocket booster are inert.

For the test scheduled in 2012 or for the crewed flights, workers and astronauts will need access to the highest levels of the rocket and capsule. When the Ares I rocket rolls out to the launch pad on the back of the same crawler-transporters used now, its launch gantry will be with it. The mobile launchers will nestle under three lightning protection towers to be erected around the pad area.

Kennedy's Constellation managers say the Ares' time at the launch pad will be significantly less than the three weeks or more the shuttle requires. This "clean pad" approach minimizes equipment and servicing at the launch pad. It is the same plan NASA used with the Saturn V rockets and the launch industry employs it with more modern boosters.

The launch pad will also get a new emergency escape system for astronauts, one that looks very much like a roller coaster. Cars riding on a rail will replace the familiar baskets hanging from steel cables.

Launch Pad 39A

Role in Constellation: Launch Pad 39A will be the home of the Ares V rocket, a behemoth vehicle almost as tall as the Saturn V, and even more powerful. The Ares V will not carry a crew, but is slated to loft a lunar lander and a fueled upper stage that will connect with an Orion capsule in Earth orbit. The upper stage from the Ares V will ignite to send the Orion and lander toward the moon.

nedy's future in Constellation Program

Status: The launch complex that saw the liftoff of Apollo 11 to the moon will be used for the space shuttle until the orbiters are retired around 2010.

Vehicle Assembly Building

Role in Constellation: The giant hangar used to stack the Saturn V rocket and space shuttles will retain that role in the Constellation Program. It is the only structure at Kennedy tall enough to accommodate the Ares rockets.

Status: The building's high bay 3 is undergoing minor changes to handle the Ares I-X rocket. The new vehicle is about 150 feet taller than the shuttle orbiter, so bigger changes will be needed for the final Ares I design. Work platforms similar to those used in Apollo will give workers the access they need to stack the pieces and process the rocket for launch.

To be done: After the shuttle fleet retires, high bay 1 will be converted to handle the mammoth Ares V rockets. Cranes that assembled the last rockets destined for the moon will again be used to attach pieces for a moon ship.

Launch Control Center Firing Room 1

Role in Constellation: Firing Room 1 already holds the distinction of overseeing the first launch of a space shuttle and supporting the Apollo Program. Now it is poised to take on the task of controlling the first launch of the shuttles' replacement.

Status: The expansive room inside the Launch Control Center is gutted and the windows on the doors are papered over. It won't stay that way for long, though, because NASA wants members of its launch team to begin practicing with the new equipment and procedures in summer 2008.

About that launch team: While it takes more than 200 people in the Launch Control Center at Kennedy to launch a space shuttle mission, Phillips said the Ares launch team is targeted to number fewer than 50.

"This vehicle is far less complex than a shuttle system," Phillips said. "We recognize it's a less complex vehicle, so we're looking to use a simpler launch control system."

Ares V on Launch Pad 39B (drawing).

Assembly and Refurbishment Facility

Role in Constellation: Employees in the Assembly and Refurbishment Facility process the nosecones and aft skirts of the shuttle solid rocket boosters before they are bolted onto the fueled segments. The Ares 1 doesn't require a booster nosecone, but the aft skirt for the test flight is already being prepped.

Status: Engineers are modifying the aft skirt so it can behave a bit differently as the main booster for the Ares I. C.J. Smith of United Space Alliance noted the small rockets that push a booster away from a shuttle during launch will be used to help separate the upper stage from the solid rocket after the first part of the flight.

Emergency egress from the Ares V/Orion takes on the semblance of a theme park ride (drawing).

Parachute Refurbishment Facility

Role in Constellation: Parachutes will allow controlled returns to Earth for both the Orion capsule and the Ares I solid rocket booster. The refurbishment center is getting the first parachutes of the program ready and will overhaul them for reuse.

Status: Parachutes are already being stitched for upcoming drop tests in Yuma, Ariz.

Mobile Launch Platforms

Role in Constellation: NASA will stick with mobile launch platforms throughout the Constellation Program, the same concept it has used since the Saturn V. Earlier rockets were small enough to be assembled at the pad. For the 2009 test flight, workers will modify one of the three existing launch platforms to handle the Ares I stack. The 2012 test flight and subsequent launches will use a new mobile platform design.

Status: NASA has awarded a contract to Reynolds, Smith and Hills Inc., located on Merritt Island, for the design of a new mobile launcher structure dedicated to the Ares I. The platform will hold the rocket and the service structure.

Crawler-transporters

The work of the crawler-transporters is far from being finished. After hauling Saturn Vs to the launch pad during Apollo and Skylab and carrying space shuttles back and forth from the Vehicle Assembly Building to the launch pads for almost 30 years, the crawlers are nowhere near retirement. The vehicles are planned to carry the new rockets, launch platforms and service gantries to the launch complexes.

Status: There are no major overhauls planned for the beefy vehicles, but they will need a little more muscle in the form of reinforcement to carry the Ares rockets. NASA is working to use the crawlers "as-is" for Ares I, but the Ares V will require more carrying capacity. Phillips said studies are ongoing to determine exactly how much work the crawlers will need.

Russian test pilot Mosolov tours Kennedy

By Linda Herridge
Staff Writer

Retired Russian MiG chief test pilot Col. Georgy Mosolov's spirits were flying as high as the 114,000-feet altitude record he set in a MiG-21 fighter in 1961 as he toured Kennedy Space Center last month.

Mosolov toured the Space Station Processing Facility, Apollo Saturn V Center, Orbiter Processing Facility, Vehicle Assembly Building and Launch Pad 39A. He said he enjoyed meeting and talking to workers and noted that everyone was very friendly and gracious.

Mosolov said it was interesting to see all the various approaches NASA workers used to solve the many problems facing those who explore space. "If you imagine it, you can build it," Mosolov said.

He remarked on all the great achievements of mankind evident at the center. "Everyone in the world appreciates America's achievements and contributions to space exploration," Mosolov said. "It is a great example of what humans can achieve when they have almost impossible goals, but set their minds to it."

The 81-year-old Russian hero flew from Moscow to Embry-Riddle Aeronautical University in Daytona Beach on his way to Los Angeles, where he became an honorary member of the Society for Experimental Test Pilots during a Symposium in Los Angeles.

Mosolov was a good friend of the first Soviet cosmonaut, Yuri Gagarin, and was the primary test pilot on many of that country's first jet fighters during the 1950s and early 1960s. He is regarded as the Chuck Yeager of the old Soviet Union for his many aeronautical accomplishments.

He was the first man to fly many Soviet-era, single-engine jet airplanes, and holds two world speed records and one world altitude record. Mosolov received many awards, including the prestigious Hero of the Soviet Union Gold Star, the Russian equivalent of the U.S. Medal of Honor. He is the honored citizen of the city of Kharkov and the village of Ermakovkoe in Russia.

Col. Georgy Mosolov (left); Vitaly Guzhva, assistant professor in the College of Business at Embry-Riddle Aeronautical University; and Dr. Rodney O. Rogers, professor of aeronautical science at Embry-Riddle Aeronautical University are on a tour in the Orbiter Processing Facility. Behind Mosolov is Dr. David Pedersen, director of the Center for Teaching and Learning Excellence at Embry-Riddle.

Mosolov's visit to KSC was arranged by Dr. Rodney Rogers and Shirley Waterhouse, both professors at Embry-Riddle. They met him during a visit to Russia in 2002 and returned in 2006 to travel with Mosolov by rail across Siberia from Moscow to Vladivostok.

Mosolov said he is forever grateful to explorers such as Amelia Earhart and Chuck Yeager, Russian pilots Valery Chkalov and Mikhail Gromov, and cosmonaut Gagarin for their early flight accomplishments.

Mosolov hopes that future space exploration continues the current U.S. partnership with Russia. His main hope is that all of the future aircraft developed will be used for the benefit of mankind for knowledge and progress.

Space Coast FEW seeks donations for Brevard Sharing Centers

The Space Coast Chapter of Federally Employed Women, known as the FEW, is seeking canned goods and personal care items to assist the Brevard Sharing Centers. The group is helping the charities for "Make a Difference Day" and hopes to collect enough to benefit the Central and North Brevard centers.

Suggested items include canned foods, peanut butter, jelly, packaged rice and pasta meals, and other non-perishable items, as well as personal care items such as toothpaste, toothbrushes, shampoo, cream rinse, soap, shaving cream, razors, diapers of all sizes, wipes and toilet paper.

The following are contacts at areas with collection boxes for donations:

Irene Laturno, 476-2626, Cape Canaveral Air Force Station Hangar R&D, room 109;

Martha Carroll, 853-6858, CCAFS 45 CES/CVP building 60600, room 2025;

Mary McMains, 867-7406, Central Supply Building, Rm. 101;

Laurie Brown, 867-4166, Central Instrumentation Facility, room 302B;

Dawn Partlow, 853-5356, CCAFS, E&O Building, room 2030G;

Sandra Getter, 867-6951, Engineering Development Laboratory, room 203;

Linda Rhode, 867-2455, Headquarters Building, room 1114A;

Debi Bledsoe, 867-2028, HQ, room 2142;

Mary Baldwin, 867-3322, HQ, room 3144;

Sandy Eliason, 861-9309, Launch Control Center, room 4P23B;

Jim Hall, 867-1089, Base Support Building, room 141;

Charmel Jones, 867-2938, Operations and Checkout Building, room 1073M2;

Brian Luther, 861-3837, Operations Support Building, room 5301D;

Arden Belt, 867-2468, Press Site, room 1000; and

Tina Adams, 867-6054, Space Station Processing Facility, room 3074D.

The project continues through Oct. 26. If you would like to set up a collection box in your area or have questions, contact Sandra Getter at 867-6951 or *Cassandra.F.Getter@nasa.gov*.

GREEN. . .

Continued From Page 2

her idea. This type of effort also supports the Kennedy Environmental Management System team's commitment to a presidential executive order to continue one of the center's guiding principles of environmental stewardship.

"It's just a fact that being aware of your surroundings can present opportunities. Little things can make a huge difference," Jones said. "I'm proud of myself, and it feels awesome that in some way, I'm contributing to the planet."

Remembering Our Heritage

45 years ago: Six orbits and 'textbook flight' for Schirra and Sigma 7

By Kay Grinter
Reference Librarian

On Oct. 3, 1962, Walter Schirra Jr. made six orbits of Earth on the Mercury-Atlas 8 mission, the third of four orbital flights during NASA's Project Mercury. Schirra doubled the flight time any American had spent in space.

Schirra chose the call sign "Sigma 7" for his McDonnell Aircraft-built capsule for this mission to evaluate spacecraft systems. "Sigma" is an engineering symbol for "summation."

The General Dynamics-built Atlas D rocket was similar to the one used on the previous orbital flight, but with baffle injection engines and a hypergolic ignition system added.

Project Mercury's launch team had to contend with the usual challenges. Eleven days before launch, a faulty valve on the capsule had to be replaced, requiring the capsule be removed from the Atlas booster.

Chuck Clary was a NASA experimental electronic instrument maker assigned to the Sigma 7 capsule. Now working part time for United Space Alliance, he recalled: "We built a special instrumentation box for this capsule to take additional temperature and pressure readings. Since it was not a part of the original drawings, we designed it on our desk pads.

"The box is still visible in the capsule, which is on display at the Astronaut Hall of Fame in Titusville," Clary explained.

With launch just days away, a tropical depression formed in the Atlantic Ocean. By the time it reached hurricane strength on Oct. 3, Daisy was not a threat to the Florida coastline. Liftoff from Pad 14 on Cape Canaveral was at 7:15 a.m. EDT, as planned.

Adjustment of Schirra's spacesuit coolant supply was required during the first orbit and drew questions from the press at a post-flight news conference. Schirra put the problem into perspective: "I have been much hotter in the tent at Cape Canaveral than I ever, ever thought of being in Sigma 7."

The successful mission proved not only the feasibility of prolonged weightless flight in space and of drifting in orbit without consuming hydrogen peroxide attitude-control fuel, but also that longer spaceflights would not physically endanger an astronaut.


Walter Schirra Jr.

After nine hours and 13 minutes, Sigma 7 splashed down five miles from the aircraft carrier U.S.S. Kearsarge for the first Pacific Ocean recovery. Aboard ship, Schirra told the physicians, "I feel fine. It was a textbook flight."

Schirra, the only NASA astronaut to fly in America's first three human space programs, died May 2, 2007.

Fire escape planning saves lives, maybe yours

More than 4,000 Americans die each year in fires and more than 20,000 are injured. Many of them might be alive today if they had only had the information they needed to avoid a disaster.

Consider these facts: Eighty-two percent of all fire deaths occur in the home. Senior citizens who are ages 65 and older, and children under the age of five are at the greatest risk of death from fire. Deaths due to an inability to escape are particularly preventable. Having a working smoke alarm reduces one's chance of dying in a fire by nearly half.

The U.S. Fire Administration offers the following lifesaving tips that could make a big difference for you and your community.

- Install a smoke alarm on every level of your home. Test smoke alarm batteries every month and change them at least once a year. Consider installing a 10-year lithium battery-powered smoke alarm, which is sealed so it cannot be tampered with or opened.
- Know your local emergency numbers. In most areas, the number is 911.
- Practice finding your way out of the house with your eyes closed, crawling, or staying low and feeling your way out of the house.
- Never open doors that are hot to the touch.
- Teach your family members to stop, drop to the ground and roll if their clothes catch fire.
- Designate a meeting place outside and take attendance. Get out and stay out.
- Remember to escape first, then notify the fire department.
- Make sure everyone in your family knows at least two ways to escape from each room in the house.

Fire Prevention Week: Oct. 7-13

For more information on how you can help prevent fires and fire deaths, contact Chief of Fire Prevention Carlray Boswell at 476-5520 or the U.S. Fire Administration at 800-238-3358, or visit **www.usfa.dhs.gov** or **www.firesafety.gov**.

Innovative engineering workshop for girls

The Society of Women Engineers will conduct a new program for girls in 7th through 10th grades titled "WOW! That's Engineering!" on Oct. 20 at Bayside High School in Palm Bay.

The workshop will include five hands-on lab activities, allowing the students to experience the creativity and innovation of engineering and technology.

Attendees will also meet women engineers and technologists to hear firsthand about these exciting careers. The girls will have an opportunity to choose from more than 10 different activities, including programming robots, learning about tools, creating electronic circuits and learning about design engineering.

Registration is open at **www.swe-sc.org/WOW**. For information, contact Judy Kersey at *judy.kersey@swe.org* or 783-4644.

Guest Column

Combined Federal Campaign is near

By Thomas Eye, 2007 Kennedy CFC Chairman

There's more than just football seasons beginning and baseball playoffs happening every year at this time. Around the world, across every federal agency, there's a group of dedicated people who take on the important task of conducting the Combined Federal Campaign, or CFC. This year, our Kennedy Space Center campaign will run from Oct. 9 through Nov. 9.

The CFC is the world's largest and most successful annual workplace charity campaign, with more than 300 national and international campaigns helping to raise millions of dollars each year. Pledges made by federal civilian, postal and military donors during the campaign season support eligible non–profit organizations that provide health and human service benefits throughout the world.

Our local campaign, now officially called the Space Coast CFC, includes all federal agencies located within Brevard County, but the campaign is not just about Brevard. Neighboring counties can, and many do, apply to be included in our local campaign. With many of our federal workers living in neighboring counties, this is a great way to give at work and have your dollars reach charities in your own neighborhood.

You're invited to join us at the 2007 CFC Kickoff Rally from 10 to 11 a.m. Oct. 9 in the Training Auditorium

This year's KSC campaign slogan, "Federal Hearts at Work," was submitted by Stephenie Hadaway of Safety and Mission Assurance, and it's perfect for KSC. We have demonstrated year after year through our contributions that we have big hearts and put our money where our hearts are.

This year's committee has conducted training for key workers, and we also held a CFC orientation for new KSC employees. We have been working for months to ensure our campaign provides the information you need if you choose to give.

This year, the CFC committee is focusing on local charities included in the campaign. Throughout the campaign, we've invited charities to come tell us about their organizations. A schedule is included on Kennedy's CFC Web site, **http://cfc.ksc.nasa.gov.**

Finally, you're invited to join us at the 2007 CFC Kickoff Rally from 10 to 11 a.m. Oct. 9 in the Training Auditorium. I think we've put together an informative hour that will set the stage for a successful campaign. See you there!

Benson's images garner second video award

by Jennifer Wolfinger, Staff Writer

Thanks to award-winning videographer Glenn Benson, people around the world are able to witness NASA's unique and exciting milestones.

For the second consecutive year, Benson received the agency's Videographer of the Year Award for the documentation category. The annual award recognizes and rewards videographers for their achievements in improving documentation within NASA.

To create his 2006 space shuttle montage entry, Benson had to shoot in an innately uncontrolled environment where conditions such as lighting, scripting and scene staging couldn't be managed. His creativity and flexibility clearly overcame those challenges, since media professionals from Hollywood, New York and NASA selected him as the best.

"What an honor to be selected twice. It is truly rewarding to receive such an award. It is such a great feeling and an honor to be respected among some truly talented people," Benson said.

In 1988, Benson, an InDyne Inc. employee, came to Kennedy Space Center to cover launches using video and still photography. In 1995, his work became focused strictly on NASA public affairs. Since then, he has continued covering astronaut activities such as training, the traditional launch day breakfast and the astronauts "suiting up," and space shuttle and expendable launch vehicle processing and launches.

"I truly enjoy making pretty pictures. To me there is nothing prettier than coming in early in the morning and photographing the sunrise with the orbiter rolling out in the foreground. What a dream job I have. I am so lucky to do what I do," he said. "One of my most memorable assignments was going to Russia to cover the first three crew members going to the International Space Station."

He is now busy preparing for the STS-120 launch, flight crew training and the terminal countdown demonstration test. Benson graduated from Daytona Beach Community College in 1984 with an associate of science degree. Prior to joining the space program, he did industrial photography.

"A 19-year veteran of the space program, Glenn is an outstanding videographer. Over the years, he has videoed shuttle processing, astronauts and numerous launches including Soyuz launches from Baikonur Cosmodrome, Russia," said Bill Rauckhorst, Benson's manager.

"If you've ever seen video of the space shuttle at KSC, then you've seen Glenn's work."

To view his 2006 award entry, visit: **http://jansmurals.com/Glenn_VOTY.wmv**.

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