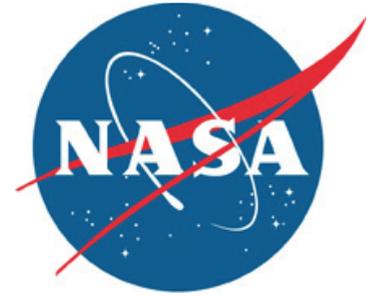


Spaceport News

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

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



3 pallets for Hubble servicing arrive

Carriers will hold precious cargo aboard Atlantis on STS-125 mission

By Linda Herridge
Spaceport News

The Hubble Space Telescope servicing mission pallets will not leave Earth's atmosphere until October, yet they already have traveled 900 miles. Three of the four large pallets arrived at NASA's Kennedy Space Center on July 16 after a two-and-a-half-day trip from Goddard Space Flight Center, in Greenbelt, Md.

The pallets that will carry precious cargo aboard space shuttle Atlantis on mission STS-125 were unwrapped and steam cleaned in the Canister Rotation Facility before transfer to the Payload Hazardous Servicing Facility, in the center's industrial area.

Jim Barcus is the Hubble Space Telescope launch support manager at Goddard. Barcus and several others from Goddard were stationed

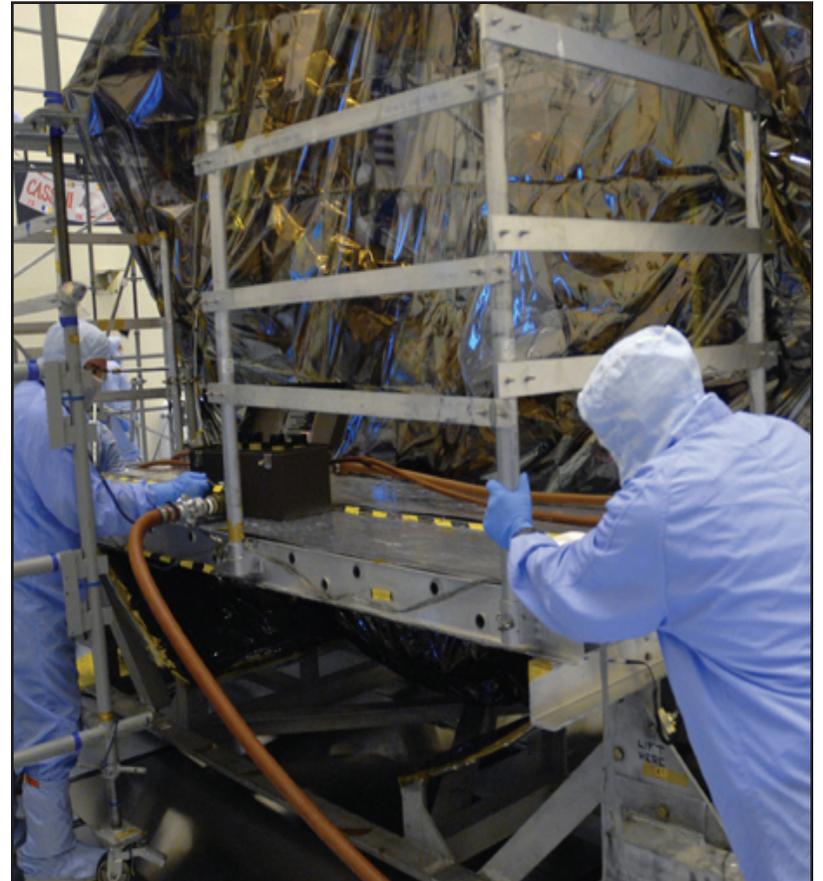
in the Mission Operations Support Building to help coordinate the transport and arrival of the pallets.

"It's very near and dear to our hearts to make sure the hardware arrives here safely and as on time as possible," Barcus said.

The Super Lightweight Interchangeable Carrier, or SLIC, is a composite carrier that will make its first appearance in space aboard the STS-125 mission. According to Barcus, the lighter design allows the shuttle to carry more Hubble Observatory hardware to orbit, including the Wide Field Camera 3.

The Orbital Replacement Unit Carrier, or ORUC, is a cradle-type pallet that will carry two of Hubble's three science experiments. These are the Cosmic Origins Spectrograph, or COS and the Fine Guidance Sensors, or FGS. It also will carry replacement gyroscopes.

The Flight Support System also arrived at the center. This system will grasp onto Hubble during the mission and provide power to the telescope while it is serviced by



NASA/Jack Pfaller

Workers begin to move a carrier for the STS-125 Hubble servicing mission to nearby scaffolding in the Payload Hazardous Servicing Facility. The carrier, or pallet, will hold the Flight Support System in space shuttle Atlantis' payload bay.

See **Pallets**, Page 8



NASA/Kim Shifflett

STS-125 Mission Specialist Andrew Feustel checks the thermal protection system tiles of space shuttle Atlantis during the crew equipment interface test July 11-12. Launch is targeted for 1:34 a.m. Oct. 8.

STS-125 crew gets up close look at hardware, equipment

Members of the STS-125 crew were busy at Kennedy Space Center on July 11-12, familiarizing themselves with the spacecraft that will carry them to service NASA's Hubble Space Telescope.

Shuttle crews frequently visit Kennedy to get hands-on experience, called a crew

equipment interface test, with hardware and equipment for their missions.

On STS-125, space shuttle Atlantis crew members will install instruments, gyros, batteries and other components crucial to Hubble's continued success through the year 2013. Launch is targeted for 1:34 a.m. Oct. 8.

Veteran astronaut Scott

Altman will command the final shuttle mission to Hubble.

Navy Reserve Capt. Gregory Johnson will serve as pilot.

Mission specialists include veteran spacewalkers John Grunsfeld and Mike Massimino and first-time space fliers Andrew Feustel, Michael Good and Megan McArthur.

Team tackles challenge of creating lunar outpost

By *Kate Frakes*
Spaceport News

Thirty-nine years after conquering the dream of sending men to the moon, NASA will raise its standards to new heights with the Constellation Program's lunar landing and launch plans. On June 9, more than 170 employees and summer students filled the Training Auditorium to attend KEA-23: Lunar Landing and Launch.

Kennedy Space Center's Engineering Academy (KEA) provides the center's engineering community with an institution for sharing technical knowledge. In this case, to hear the goals and challenges for further missions to the moon.

Of those leading the lunar conquest, surface systems lead engineer for NASA's Advanced Systems Division Rob Mueller discussed the specific needs for a successful lunar landing.

"Our goal is to successfully land a crew of four and cargo on the moon at a lunar outpost, on a repeatable basis with safe operations and reasonable life-cycle costs," Mueller said.

To accomplish this feat, Mueller discussed the main challenges confronting the team, the most crucial being foreign object debris, or FOD. He explained that during lunar landing, rocket engine's exhaust plume interacts with the lunar regolith, or the moon's soil, causing unknown reactions.



NASA

The Lunar Attachment Node for Construction Excavation is a lightweight bulldozer blade developed by Kennedy Space Center for use on the Chariot mobility platform, which was developed at Johnson Space Center, to perform site preparation and clearing of areas where a lunar outpost could be deployed.

"The interaction causes particles to travel at velocities of up to 2,000 meters per second," Mueller said. "That's four times faster than a speeding bullet."

Keeping that in mind, Mueller and his team compiled a list of criteria needed to protect the Altair spacecraft and outpost from the numerous ways FOD could cause damage. He discussed the architectural considerations for an outpost, the concepts for blast protection and surface stabilization, as well as possible methods for excavation of

an outpost that currently is being investigated.

"Architecture drives the requirements; the requirements drive the solutions," Mueller said.

Playing a crucial part in exhaust plume research, Dr. Philip Metzger, a physicist for Kennedy's Applied Technology Directorate, discussed new methods for predicting the characteristics of landing and launch plume.

"Our top priorities are to protect the spacecraft from itself and to protect surrounding hardware

from stirred soil dust particles," Metzger said. "The spacecraft needs to launch and land near lunar assets without causing damage to them."

Using research from the Apollo and Viking programs, Metzger and his team studied the interactions of the particles and exhaust gases. Like the soil, these assets will provide astronauts with the resources to live and return to Earth.

"The main focus of our research was figuring out how to reduce a complex set of interactions into a simple model," Metzger said.

Metzger and his team faced numerous challenges obstructing their path to a solution and found the only option is to control plume effects.

"We don't understand the source of cohesion in the moon's soil or the vacuum effects," Metzger said. "Unless you have the same environment, it's hard to predict an outcome or design experiments."

Despite the barriers, the team successfully developed a set of relative characteristics for landing plume, including estimated speeds, altitudes and angles of different gas and soil interactions.

With a combined effort, Mueller and Metzger continue to pursue their mission goals.

"We are still searching for solutions," Mueller said. "Success is a team sport."

CFC committee searches for annual campaign slogan

By *Linda Herridge*
Spaceport News

It's time to put on your creative thinking caps for a good cause. The Kennedy Space Center 2008 Combined Federal Campaign is around the corner and the planning committee wants a slogan for this year's campaign.

NASA civil servants may participate in the slogan contest, which runs through Aug. 1. Slogans may not ex-

Submit slogan online

If you are a NASA civil servant, submit your slogan to the CFC Cabinet at <http://cfc.ksc.nasa.gov>

Previous winning slogans include:

- 2007 - Federal Hearts At Work
- 2006 - Caring & Sharing - Combined We Make A Difference
- 2005 - Launching Dreams of Those In Need
- 2004 - YOU Become the Hero by Caring, Sharing, & Giving
- 2003 - Donations DO Make a Difference
- 2002 - Promoting Hope Through Generosity
- 2001 - United We Care

ceed 60 characters in length, preferably with five words or less. Only one slogan may

be submitted per employee. Cheryl Hurst, External Relations deputy director and

this year's CFC chairperson said, "I want to encourage all employees to participate in this year's campaign and continue Kennedy's long standing legacy of giving. This includes helping to determine this year's theme."

CFC slogans may be submitted to <http://cfc.ksc.nasa.gov>.

Patty Hepburn, slogan contest chairperson, reminds employees that once a slogan has been submitted they will not be able to go back into

the application and make changes or updates.

"Make sure you are happy with the slogan you are submitting before you complete the application," Hepburn said.

The winning slogan will be announced during the senior staff meeting Sept. 15. A special prize will be awarded to the author of the winning slogan.

For more information, call Hepburn at 867-2527.

Life Support Facility takes LEED by going green

By Kate Frakes
Spaceport News

With the rising cost of fuel and natural gas, there is a big push toward becoming more energy efficient. On July 14, NASA's Kennedy Space Center took one large step in reducing its carbon footprint, by completing construction of the new Life Support Facility, M6-490.

The new facility is recognized as the first NASA funded building on Kennedy property that will receive the U.S. Green Building Council's LEED Certification, also known as Leadership in Energy and Environmental Design.

Within the next month, the facility will become fully operational and will replace the previous outdated facilities at the Hangar S complex on Cape Canaveral Air Force Station.

Director of Center Operations Mike Benik said the new facility provides several process enhancements that



NASA/Kim Shifflett

Kennedy Space Center Deputy Director Janet Petro cuts the ribbon at a ceremony July 14 marking the official opening of the Life Support Facility, M6-490. Within the next month, the facility will become fully operational and will replace the facilities at the Hangar S complex on Cape Canaveral Air Force Station.

will increase worker productivity, and benefit health and morale. At \$6.5 million, the construction cost of the new facility is comparable to the estimated total price to repair the original, 45-year-old facilities housing the Life Support operations.

Space Gateway Support President Mike Flynn said, "This addition is a real benefit to these workers. It enables the life support per-

sonnel to provide even better support to the programs and work that they do."

NASA Facilities oversaw the design effort by Jones Edmunds & Associates and the construction of the facility by RUSH Construction, Inc., both of Titusville.

Design and construction of the facility maintained USGBC's green-building principles. Its LEED pro-

gram encourages principles of sustainable sites, conservation of energy and resources, the use of recycled and local materials, as well as innovative design ideas. The LEED rating system provides for four possible certification levels (certified, silver, gold or platinum) depending upon the number of available points received for successfully incorporating sustainable design, construction and operational features. The Life Support Facility is expected to receive the LEED certified rating.

The facility's Lead Design Engineer Traci Robinson said, "Amongst other features, the new facility has increased filtration and carbon monoxide monitoring for improved indoor air quality, dual-flush toilets for water conservation, high-efficiency lighting including photovoltaics (solar cell technology) and low or no volatile organic compounds in adhesives or paints."

Life Support Facility,

M6-490 contains three distinct areas of operation, including administrative office space, a self-contained atmospheric protective ensemble, or SCAPE, processing area and another processing area for emergency breathing equipment and oxygen equipment. Another environment-friendly feature of the new facility is full recycling capability of paper, plastics, metals, glass and cardboard.

The facility houses Wyle Laboratories Life Support Operations personnel supporting Atlas, Delta, Titan and the Space Shuttle Program. With the capability of housing Life Support System's approximate 10,000 pieces of equipment, the building will support the transition from the shuttle program to the Constellation Program.

"Sustainable facilities are the way of the future and NASA is proud to be a part of that future now," Robinson said.

New cold-fuel gauge may make launches more efficient

By Linda Herridge
Spaceport News

A spacecraft has to make the most of everything it carries off the launch pad, including the fuel that powers its engines.

That is where a new gauge from Sierra Lobo Inc., comes in.

If future testing goes well, Sierra Lobo's Cryo-Tracker Mass Gauging System could help NASA's new spacecraft get on their way to the moon and beyond.

The Cryo-Tracker reads the amount and checks the condition of extremely cold fuels, such as liquid hydrogen, liquid oxygen and oxidizers, to ensure an engine efficiently uses these propellants during launch.

Engine control systems use the information to make adjustments to the engines during the climb into space. The more efficiently the fuel is burned, the less fuel a rocket has

to carry for launch or burn later in a mission.

For example, the weight saved by not having to take fuel could make room for a lunar lander to carry more equipment or another experiment.

"We are already working with NASA on base-lining the Cryo-Tracker System on the NASA lunar lander and Earth departure stage vehicles and will be providing some systems for test later this year," said Sierra Lobo's Director of Research and Technology, Mark Haberbush.

Sierra Lobo, Inc. developed the gauge with funding from NASA's Small Business Innovation Research Program and the Innovative Partnerships Program (IPP) Seed Fund.

Haberbush said having access to the Seed Fund and partnering with NASA enabled the company to qualify various components for flight systems, including a tank feed-

through that eliminates the need for any cryogenic electrical connectors like the ones that had problems on space shuttle Atlantis. The STS-122 mission was delayed for two months in late 2007 while the connector problem was fixed.

NASA's Launch Services Program at Kennedy Space Center also helped sponsor the development of the MGS.

Laurie Walls, a Launch Services Program thermal/fluids analyst, helped test the technology, along with James Fesmire at Kennedy's Cryogenics Testbed Facility. Walls said the system's versatile design allows it to be adapted to a variety of applications for use on expendable launch vehicles, including the Delta and Atlas rockets.

Walls said the MGS may be used on launch vehicles and spacecraft designed for the Constellation Program, propellant ground test-

ing and storage, as well as research projects.

Jan Lomness, manager of the Seed Fund partnerships in the Technology Transfer Office at Kennedy Space Center, said the purpose of the IPP Seed Fund at each NASA center is to infuse new technology into agency programs.

"Through investments and partnerships, the Seed Fund provides leveraged technology for mission directorates, programs and projects," Lomness said. "With its development, the fund's ultimate goal is to support projects that focus on technological advancements designed to meet the needs of the Space Shuttle Program and the Constellation Program.

Carol Anne Dunn, with Technology Programs and Partnerships Branch at Kennedy contributed to this article.

Scene Around Kenn

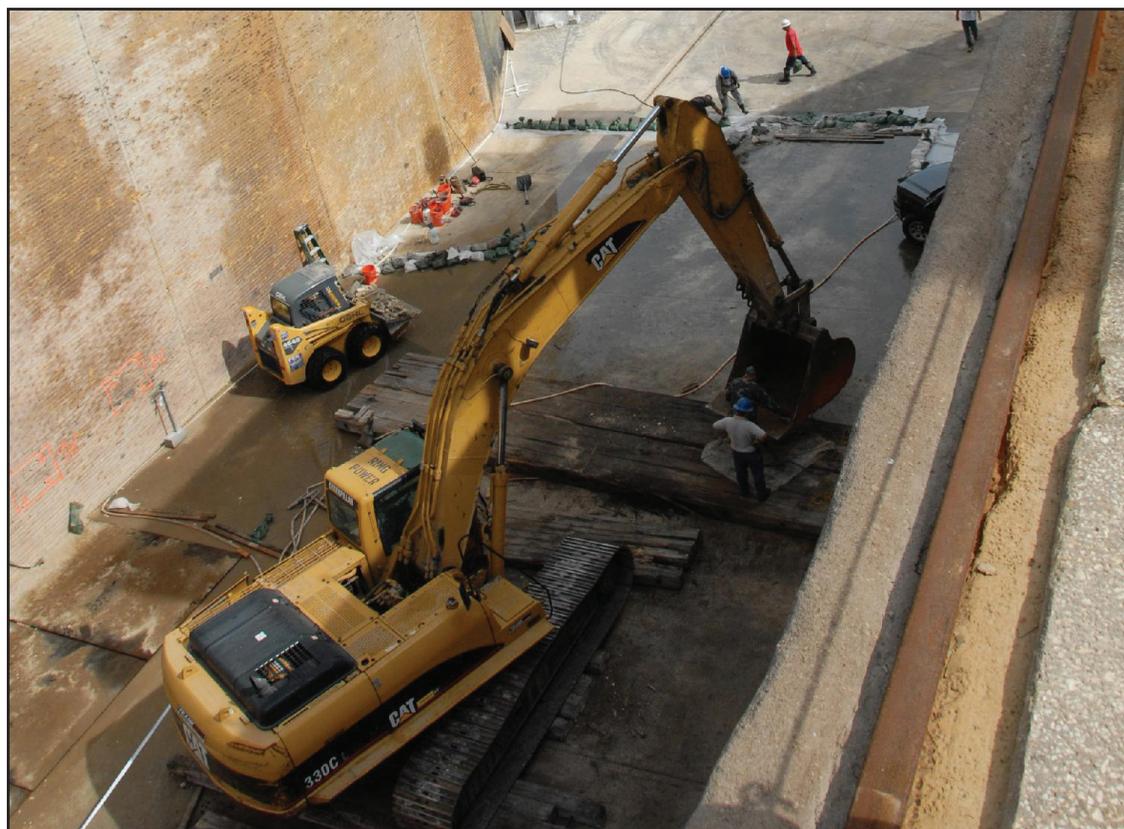


Reader-submitted photo

John Kuhn holds up one of the many gifts he received at his retirement party July 3 after 22 years and 10 months of service as the NASA telephone engineer. Kuhn led the introduction of Voice Over Internet Protocol (VoIP) telephone service to Kennedy.



Kennedy employees and management, along with fixed-priced contract workers, show a sign of unity. Crew photos of subsequent launches were given to the contract workers as a token of appreciation for their work.



NASA/Jack Pfaller

A backhoe is used during repair on the flame trench on Launch Pad 39A at Kennedy Space Center. Damage to the trench occurred during the launch of Discovery's STS-124 mission. Repairs are expected to be complete before the targeted Oct. 8 launch of Atlantis on the STS-125 mission.



United Space Alliance workers install a new American flag July 21 in the payload bay for STS-126 mission. The previous flag was removed after the STS-125 mission.

Spaceport News wants
 Send photos of yourself and/or your co-workers in the field. Photos should include a short caption describing the scene with names and job titles, from left to right. **KSC-**

Kennedy Space Center



NASA/Jim Grossman

As repairs on Launch Pad 39A flame trench were executed in a timely fashion. Mission patches and their hard work and dedication of meeting a timely milestone.



for NASA

Gale Bantugan, left, and Beverly Bragg hold the cover of the brochure for the Occupational Health Conference held July 7-11. It won best of the best Communication Materials Review (CMR) for Kennedy Space Center. The awards are handed out twice a year.



NASA/Amanda Diller

on space shuttle Endeavour's payload thermal wear and tear during spaceflight.

Share your photos

in action for possible publication. Describing what's going on, Spaceport-News@mail.nasa.gov



NASA/Jim Grossman

A worker closes the oven door of the Boeing Replacement Insulation 18, or BRI-18, inside the tile shop at Kennedy Space Center. The tile will be baked at 2,200 degrees Fahrenheit to cure the ceramic coating, part of the process to prepare the tiles for installation on space shuttles.

LSP video team earns awards for 50th launch video

By Linda Herridge
Spaceport News

Awesome launches in high definition and personal interviews with Kennedy Space Center and other NASA center employees are featured in a new Launch Services Program video titled "Earth's Bridge to Space." Produced by LSP and Lockheed Martin, the video recently earned awards in the 29th Annual Telly Awards competition and the 14th Annual Communicator Awards competition.

Executive producer and LSP specialist, Tiffany Nail said the video puts the spotlight on NASA and contractor workers and what they do at Kennedy and other locations to support the program. The video was the first collaboration between LSP and Lockheed Martin, and this was the first year for entry into any competition.

"Earth's Bridge to Space" earned the highest honor, a Silver Telly in the public relations category, as well as two Bronze Tellys.

The video also earned three Gold Communicator Awards in public relations and motivational



For NASA/John Baker

The award-winning team includes, from left, Rick Emery, Lockheed Martin; Ed Heick, Kennedy Space Center; George Diller, KSC; Will Blakley, Lockheed Martin; Tiffany Nail, NASA Launch Services Program; Glenn Benson, InDyne; and Leif Heimbold, Lockheed Martin. Not Pictured are Vern Thorp, United Launch Alliance; Bill Johnson, KSC; Margaret Persinger, InDyne; John Baker, Lockheed Martin; Julie Hauck, ULA; Matt Donavan, ULA; Debbie Catalano, Lockheed Martin; Lloyd Record, Lockheed Martin; Dave Phillips, KSC; Lori Losey, Dryden Research Flight Center; Dick Ewers, NASA Dryden; and Mike Rein, ULA.

categories. The Communicator Award is the leading international awards program honoring creative excellence in various categories for communications professionals.

"We didn't want the video to look like anything that was done before," Nail said. "We wanted it to

really be different, to 'go outside the box.'"

Video team members also included United Launch Alliance, InDyne and the Media Services Division of the External Relations Directorate at Kennedy.

The video production team

also received a NASA Group Achievement Award for creating the outstanding commemorative video, celebrating the program's 50th launch.

The video premiered at the LSP celebration event held in the IMAX theater at the Kennedy Space Center Visitor Center. Contractors, Kennedy management and LSP employees attended the event. Each employee received a copy of the video, which features interviews, a professional narrator, spectacular launch footage and music to capture the spirit of the launch business.

Created in 1978, the Telly Awards honor the very best local, regional and cable television commercials and programs, as well as the finest video and film productions, and work created for the Web.

NASA Group Achievement Award recipients were Tiffany Nail, George Diller and Bill Johnson with NASA; Deborah Catalano, John Baker and Will Blakley with Lockheed Martin; Glenn Benson, Lorne Mathre and Margaret Persinger with InDyne; and Matthew Donovan, Julie Hauck and Vern Thorp with United Launch Alliance.

Winning body-builder highlights fitness resources

By Alessandra Vaughan
Spaceport News

It is never too late to start living a healthy lifestyle. That up-beat attitude is what one Kennedy Space Center employee encourages everyone to live by.

Donald Pittman, who has worked at Kennedy since 1998 and is now a mechanical project engineer for the Constellation Program, also wants all employees to know that the resources to stay or become fit are right at their fingertips.

Kennedy has two fitness centers, one inside Operations and Support Building 1 and another inside the Operations and Checkout



for NASA

Donald Pittman took home second place in his first body-building competition, the Mid-Florida Bodybuilding Classic, in June.

Facility. Each fitness center offers free to all badged employees, cardio-vascular machines, free-weights, group classes and personalized training sessions. Employees also can find

nutrition information and healthy recipes on the Fitness Center's Web site.

Pittman said he knew at a young age that staying in shape was important and he maintained his health by

More online

For more information on the classes and services offered by KSC Fitness Centers, visit www.fitness.ksc.nasa.gov.

weightlifting and physical conditioning. At age 50, Pittman kicked it up a notch and on June 21 he entered, competed and placed second in the Mid-Florida Bodybuilding Classic in Orlando, Fla.

"If I could be an inspiration to one person to live a healthy lifestyle, I would be content in setting this bodybuilding example," Pittman said.

Pittman credits his success to the personal training he received at the O&C Fitness Center. His trainer, Erik Johnson, created a tailored workout program that featured the right combination of exercise, weightlifting and diet.

"Both of the KSC fitness centers are fantastic. Our center director and his predecessor recognized the importance of exercise and they were proactive in getting resources, in the form of equipment, classes, nutritionists and trainers," Pittman said. "These resources can all be a part of improving the quality of life of every employee."

'Live via satellite' is legacy of Syncom II

By Kay Grinter
Reference Librarian

Communications leaped from the pages of science fiction into the modern age 45 years ago when NASA's Syncom II satellite made the first transmissions "live via satellite."

Liftoff of the second Syncom on July 26, 1963, aboard a Delta rocket from Pad 17A on Cape Canaveral, came five months after loss of contact with the first Syncom, 20 seconds after the command was given to fire its apogee motor.

Syncom II was next in line in a series of three spacecraft intended to be the first to travel in geosynchronous orbit. These seemingly stationary satellites are synchronized with Earth's rotation in order to remain on station over a designated point. The Syncom network was planned to provide uninterrupted, 24-hour-a-day television and telephone service.

NASA alum Jim Johnson was the spacecraft coordinator for the mission, answering to Don Sheppard in Spacecraft Operations. Johnson acted as liaison between the representatives of Hughes, the satellite manufacturer, and Douglas, prime contractor of the launch vehicle.

"The satellite looked peculiar sitting on the pad because its apogee kick motor pointed downward," Johnson said. "The motors on all three of the vehicle's stages pointed upward. The Syncoms were the only satellites configured in this way."

The launch was managed by Goddard Space Flight Center's Launch Operations Division, the forerunner of Kennedy Space Center's Unmanned

Remembering Our Heritage

Launch Operations. Hugh Weston was head of Delta Operations. John Neilon was NASA's deputy launch director for the mission, under Launch Director Bob Gray.

"Launching Delta-20 with Syncom II aboard was not easy," Neilon said. "Launch was originally scheduled for July 24, but a defective switch in the payload caused a one-day postponement. The countdown on July 25 proceeded in an orderly fashion until T-4 minutes when excessive drift in the yaw gyro of the booster caused a 24-hour scrub. Launch finally occurred at 9:33 a.m. Eastern time on July 26."

Neilon further explained: "An on-board apogee kick motor was fired to move the satellite out of its first elliptical orbit into geosynchronous position at about 22,000 miles. This is the altitude at which the satellite is moving at the same



NASA file

Syncom II was launched by NASA on July 26, 1963 from Cape Canaveral. It was the first geosynchronous communication satellite and its orbit was inclined rather than geostationary.

angular rate as Earth."

Once established in orbit, Syncom II carried the first live telephone call via satellite between heads of government on Aug. 23. Originating from the White House and Voice of America

studios in Washington, D.C., President John F. Kennedy spoke with Nigerian Prime Minister Sir Abubakar Tafawa Balewa aboard the USNS Kingsport, anchored in Lagos Harbor, Nigeria.

The Kingsport, original-

ly a World War II-era cargo ship, was converted into the first satellite communications ship and provided a surface-based station for satellite tracking and communications. A distinctive 53-foot white plastic dome, installed on its afterdeck, protected a 30-foot parabolic antenna.

Syncom II also facilitated the first live news conference in January 1964, a foretaste of NASA Television operations today. Space reporters sitting in NASA Headquarters in Washington, D.C., took part in a question-and-answer session with the U.S. delegation to the International Telecommunications Union convention under way in Geneva, Switzerland.

Transfer of control of Syncom II from NASA to the Department of Defense (DoD) was completed in July 1965. Today, Syncom II is hailed as the harbinger of the satellite fleet, facilitating instant worldwide television and telephone service.



NASA file

A 53-foot white plastic dome protects a 30-foot stabilized parabolic antenna aboard the USNS Kingsport. This ship served as a station for satellite tracking and communications for NASA's Syncom Project.



NASA/Cory Huston

An overhead crane lifts the newly arrived ground support equipment for the STS-125 Hubble servicing mission off its transporter in the Payload Hazardous Servicing Facility at Kennedy Space Center. The GSE are carriers, or pallets, that will hold equipment in space shuttle Atlantis' payload bay.

From **Pallets**, Page 1

mission specialists.

Tom Griffin, Hubble Space Telescope Observatory manager at Goddard, led the efforts to build and test Hubble components and will oversee launch operations.

"We couldn't run the mission without them," Griffin said. "They are the interface to the flight hardware components, as well as our interface to the shuttle."

A fourth pallet, the Multi-Use Lightweight Equipment, or MULE, will arrive in early August. The

MULE will carry navigation sensors and new outer blanket layers for the fifth and final Hubble Space Telescope shuttle servicing mission.

Science experiment COS is scheduled to arrive July 29, with the FGS following on Aug. 5 and the Wide Field Camera 3 on Aug. 12. The STS-125 mission is targeted to launch at 1:34 a.m. Oct. 8.

"The excitement is building for this mission," Barcus said. "This telescope is a testament to the future of science and engineering and what we have achieved and can achieve in the future."

Looking up and ahead

No earlier than Sept. 26	Launch/CCAFS: Delta IV, NROL-26; TBD
Target Oct. 8	Launch/KSC: Atlantis, STS-125; 1:34 a.m.
Oct. 18	Family Day at Kennedy Space Center
Target Nov. 10	Launch/KSC: Endeavour, STS-126; TBD
No earlier than Nov. 20	Launch/CCAFS: Delta II, STSS; TBD
No earlier than Nov. 24	Launch/CCAFS: Atlas V, LRO; TBD
No earlier than Dec. 1	Launch/CCAFS: Atlas V, SDO; TBD
No earlier than Dec. 16	Launch/CCAFS: Delta IV, GOES-0; TBD
Target Feb. 12, 2009	Launch/KSC: Discovery, STS-119; TBD
No earlier than Feb. 16	Launch/CCAFS: Delta II, Kepler; TBD
Target May 15	Launch/KSC: Endeavour, STS-127; TBD
Target July 30	Launch/KSC: Atlantis, STS-128; TBD

Spaceport News wants your photos

Send photos of yourself and/or your co-workers in action for possible publication. Photos should include a short caption, with names and job titles, from left to right. Send them to KSC-Spaceport-News@mail.nasa.gov

WORD ON THE STREET

How much would you pay to be a space tourist?

at the VAB



"At least six months salary. It would be worth it. Who wouldn't want to go into space?"

Jessie Webb, escort labor, with CL Coatings



"Zero. I have no desire to travel in space. I don't even fly."

Writner Hostetter, aerospace technician, with United Space Alliance



"I'd pay about \$2,500 if I could. That's about how much we usually spend on our vacation."

Wallace Wildenradt, coordinator, with Problem Resolution Center



"Nothing. That's way to far away from family and friends. I couldn't do it."

Gale Watson, escort monitor, with MetCon Construction



"Between a month and six months salary . . . it depends on what they let me do up there."

Jim Pruitt, safety manager, with CL Coatings



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

Managing editor Candrea Thomas
 Editor Frank Ochoa-Gonzales
 Copy editor Rebecca Sprague

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