



# Spaceport News

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John F. Kennedy Space Center

## SERPL construction begins

NASA KSC management and State of Florida representatives gathered under a tent near S.R. 3 on Feb. 8, to break ground for the construction of a three-mile roadway and a 100,000-square-foot research facility made possible through their unique partnership.

The Space Experiment Research & Processing Laboratory (SERPL) will be the magnet facility for a proposed 400-acre Space Commerce Park, located south of the Kennedy Space Center Visitor Complex.

During the ceremony, Florida's Lt. Governor Frank Brogan and Center Director Roy Bridges Jr. spoke to the invited guests about the need for a facility that focuses on technology development.

Among others participating in the groundbreaking were Jan



The SERPL Real Property Use Permit Agreement between Spaceport Florida Authority and Kennedy Space Center is signed by SFA Executive Director Ed Gormel, left, and Center Director Roy Bridges.

(See SERPL, Page 6)

### New feature

Spaceport News is introducing a new feature, "Recognizing our people" on page 2. The new section will highlight awards, retirements and presentations to employees. The page also will be a place to recognize employees on the job with a "Personal Profile."

### Inside

**Page 2** – "Recognizing our people" debuts.

**Page 3** – African-American History Month Luncheon serves up inspiration.

**Pages 4-5** – Spaceport News goes inside Life Support.

**Page 6** – Third Italian module, Donatello, arrives.

**Page 8** – NASA Flight Operations partners with U.S. Fish and Wildlife to fight fires.

## KSC teams with students on FIRST

It's an educator's dream: A way to pass on the learning of the present to the doers of tomorrow. From January to March, that dream is turned into reality at Kennedy Space Center as engineer mentors and students work side by side developing equipment to fulfill a task.

They are taking part in the annual FIRST competition, pitting robots on a playing field against each other and the clock. The robots are designed and built by the student/mentor teams.

The event has been held at KSC for two years, to growing enthusiasm and expertise. Kennedy has sponsored a local team for five years. Two participating schools, Rockledge High and Cocoa Beach High, are building their robot in the KSC Prototype Shop.

Mike Dininny, lead for all manufacturing processing in the Shop, has been part of FIRST for three years.

He is high on the enthusiasm the program generates, not only among the students but himself and other KSC mentors as well. He added, "It's fun to show the kids what we can do in the shop and maybe, after working here, they will be better engineers when they design equipment in the future."



Rockledge High students Ben Hanzl, left, and Adam Hart use a band saw in the Prototype Shop to cut signs for the new robot, identified as No. 233.

Student Terry Ashby is enjoying his first year as a FIRST team member. He likes "learning about a lot of equipment" from the milling machine to the computer.

Another first-timer is KSC engineer Dan Whitworth, with the Spaceport Engineering Development Directorate. He is helping with the electrical system on the

(See FIRST, Page 7)

# Recognizing our people

## Awards

### Gold Quality Dollar

**Brenda Johnson,**  
Wyle Laboratories

**William "Bill" Simmons,**  
Wyle Laboratories

**Melanie Chan,**  
NASA Spaceport Engineering and Technology

**Jan Zysko,**  
NASA Spaceport Engineering and Technology

### Silver Snoopy

**Sandra Weethee,**  
United Space Alliance

**Dr. Dennis Raichart,**  
Space Gateway Support

**Bruce Olseen,**  
Space Gateway Support

**Harold "Hal" Herring,**  
Computer Sciences  
Raytheon

**Mark Paxton,**  
United Space Alliance

**Kimberly Serfozo,**  
Boeing Human Spaceflight and Exploration

**Donald Stieler,**  
Boeing Human Spaceflight and Exploration

**Douglas Stillwagon,**  
Boeing Human Spaceflight and Exploration

**Carmen Moore,**  
Boeing Human Spaceflight and Exploration

**Mark Hudson,**  
Boeing Human Spaceflight and Exploration

**Sherry Reed,**  
Boeing Human Spaceflight and Exploration

## Personal Profile



**Name:** Mae Griffin

**Years at KSC:** 32 years

**My most rewarding experience here:** Being joyful for my customers.

**Job:** Mobile driver

**Most interesting aspect of my job:** Getting to watch all the launches. I've been watching launches here since the Apollo and Gemini days. I never get tired of them. It's always exciting.

**What people don't know about my job:** I make 39 stops a day across the Center in the Snack Mobile.

**Responsibilities:**  
Delivering food

**Company:** Lackmann Culinary Services Inc.

## Employees of the Month



February employees of the month are, from left, Julie Caimi, Procurement Office; Maria Selzer, Shuttle Processing Directorate; Amador Capellin, Launch Integration Office; Polly Gardiner, International Space Station/Payloads Processing Directorate; and Ralonda Farrant, Spaceport Engineering and Technology Directorate. Not pictured are Carl Thorn, Spaceport Services; Doug Newsom, ELV and Payload Carriers Program Office; and Karroll Purer, External Relations and Business Development.

# African-American Luncheon inspires

The 2001 African-American History Month Luncheon on Feb. 7 provided inspiration and good food to about 400 participants.

Held at the Debus Conference Facility at the Kennedy Space Center Visitor Complex, the luncheon recognized achievements of African-Americans over the years and recognized some of Kennedy Space Center's own heroes.

The luncheon was sponsored by the Black Employee Strategy Team (BEST) with Michelle Amos and Michael Bell leading the event.

"We're here to celebrate the contributions of African-Americans to this great nation and what it stands for," said Center Director Roy Bridges. "God willing, we're going to launch the U.S. Lab Destiny today. Many African-Americans in the space program have helped make that possible."

Bridges noted several engineers and STS-98 astronaut Robert Curbeam by name as representatives of many others who have contributed to the International Space Station.

Keynote speaker Ray Johnson asked the audience to rededicate themselves to the mission of helping to improve the lives of those who are not reaching their full potential.

"Let's stay on task, on time and on a mission," Johnson said. "There are still too many who don't know where they've come from. You have to know where you've been to know who you are."

When Johnson speaks to youth, he said, he points out their ancestors built the pyramids and lists many other modern achievements of African Americans.

As founder and principal of the highly regarded Paul Robeson Academy in Detroit, Johnson has been a pioneer in the realm of character education, accelerated learning, multi-cultural and African-centered curriculum.

The luncheon program included an African-American history video listing heroes of history, including those who have contributed to the space program as astronauts.

Among them were Robert



Lawrence Jr. and Ron McNair (deceased), Guion Bluford, Mae Jemison and KSC's own Joan Higginbotham.

During the luncheon, BEST honored retired employees and founding BEST members Jay Diggs Jr., former Director of the Equal Opportunity Office and Alfred McGee for their work at KSC.

Latoya Sutton, a stay-in-school student from Rockledge High School was awarded the first Evelyn Johnson Scholarship in honor of Johnson who at the time

of her death was the Deputy Director of the Equal Opportunity Office at KSC and a mentor and supporter of higher education.

A number of special guests were honored at the luncheon.

They were Gen. Marcie Harris, Florida site director for United Space Alliance; Maj. Gen., Ret., Titus C. Hall, and his wife, Clarissa; Ret. Lt. Col. Hiram Mann, a World War II fighter pilot with the Tuskegee Airmen; Judge Robert Decatur, who served under Thurgood Marshall's NAACP

At left, Kennedy Space Center Director Roy Bridges and keynote speaker Ray Johnson stand together in the buffet line at the African-American History Month Luncheon. Both leaders offered inspiring words during the event, which was held at the Debus Conference Facility at the KSC Visitor Complex. Above, luncheon guests serve themselves at the buffet table. About 400 people attended the event. The luncheon was held to recognize the achievements of African-Americans, including those who have contributed to the space program.

Legal Defense Team and an original "Tuskegee Airman"; Dr. Bessie Cooper Noble, author and Syracuse University professor; Jerry Demings, Orlando police chief; Val Demings, captain in the Orlando Police Dept.; and Raphael Davis, WFTV Channel 9 general assignment reporter.

This year is the 75<sup>th</sup> anniversary of the establishment of "Negro History Week" by Dr. Carter G. Woodson and the 25<sup>th</sup> anniversary of Black History Month established by President Gerald Ford.

# Inside Life Support



A SCAPE Transporter Van parked in front of Hangar S.

## Team dedicated to providing safe service

Various types of life support equipment used at Kennedy Space Center and Cape Canaveral Air Force Station are maintained and repaired at the Life Support Facility in Hangar S.

Joint Base Operations Contract subcontractor Wyle Laboratories is responsible for keeping in working order more than 10,000 pieces of life support equipment stored at Hangar S at CCAFS or in other locations across the Cape Canaveral Spaceport.

Wyle Laboratories uses a detailed record-keeping system to keep track of the critical equipment and to ensure each piece is regularly tested, maintained and, if necessary, repaired or replaced, said Dennis Dudzinski, Wyle's manager for Life Support.

The group also uses the system to respond to customer requests for changes in service or modification to the equipment when feasible, he said.

Two pieces of commonly known equipment on the Center, maintained by the Life Support group, are SCAPE (self-contained atmospheric protective ensemble) suits

and ELSAs (emergency life support apparatus).

SCAPE suits are used in operations involving toxic propellants and are supplied with air either through a hardline (used with Category IV or Category VI SCAPE suits) or through a self-contained Environmental Control Unit (used with Category I SCAPE suits).

Because even a nick in the SCAPE suit's material can affect its ability to protect the wearer from exposure to hazardous materials, the suits must be thoroughly checked after each use and repairs made where needed.

The Life Support group spends much of its time cleaning and repairing the 600 SCAPE suits in addition to sending out teams to suit up workers at launch pads and other facilities when requested by Spaceport customers.

Wyle maintains SCAPE suits for between 4,000 to 6,000 suitings each year, depending upon the launch rate for the year.

Another major role for the group is maintaining the more than 6,000 ELSAs across the Spaceport.

The ELSAs provide 5, 7 or 10

minutes of air in case hazardous fumes create the need for emergency egress.

ELSAs are inspected once a month and flow-tested each year.

The Life Support group also keeps emergency life support equipment for astronauts and rescue personnel ready for action.

KSC/CCAFS Fire Department Captain George Hoggard said his staff are among many workers at the Spaceport who appreciate having their life support equipment regularly serviced and maintained by the group.

"Much of the equipment we use in our job is life support equipment. We depend upon it in a big way," Hoggard said. "When they give us a piece of equipment, we know it's going to work."

Because life support equipment may be needed anytime of the day or night, the Life Support employees are split over three shifts.

"We're here anytime our customers need us," Dudzinski said. "Because of the nature of what we do, safety is paramount and providing good customer service is essential."



Wyle Life Support technician Gary Sera



Tom Seberry works on a Environmental Control Unit (ECU) in the ECU Maintenance Shop.



Wyle Life Support Manager Dennis Dudzinski and technician Todd Johnson review SCAPE suit inspection data.



Mike McLeod cleans a SCAPE suit.



atzki tests a Self-Contained Breathing Apparatus mask.



Robert Chambers repairs a SCAPE suit.



Jim Saylor moves a SCAPE suit.



Betty Flowe runs the Life Support scheduling office "Pulse Center," where customers call for support.



Absalom Ferguson assists a SCAPE operator donning a SCAPE suit with an Environmental Control Unit.

## SERPL ...

*(Continued from Page 1)*

Heuser, program manager of SERPL; JoAnn Morgan, director of External Relations and Business Development; Dr. Pamella Dana, director of the Office of Tourism, Trade and Economic Development, Florida; Congressman Dave Weldon; Dr. Samuel Durrance, executive director of the Florida Space Research Institute; and Cheryl Harrison-Lee, district manager of the Florida Department of Transportation.

The SERPL facility will support the development and processing of life sciences experiments destined for the International Space Station and accommodate NASA, industry and academic researchers performing associated biological research.

The Florida Space Research Institute and the University of Florida will have a permanent presence within SERPL and will be using the facility for biological and space-related academic and research activities.

"The SERPL facility and the Commerce Park will contribute to the expansion and diversification of NASA, commercial, academic and international space programs in our state," said Brogan. "Together with

NASA, Florida is investing in the success of the International Space Station, and in the commercial potential for space-related technology development in our state."

He emphasized how the exploration of space has already bettered our lives and using the Space Station to find cures and explore space will ultimately lead to enhancing the quality of life.

"What is good for space is good for our people, and what is good for our people is good for space," he said.

An unannounced element of the ceremony was the signing of the SERPL Real Property Use Permit between Spaceport Florida Authority and Kennedy Space Center, represented by Executive Director Ed Gormel and Center Director Roy Bridges, respectively.

"The signing," said Bridges, "is symbolic of how all of the factors [have come together] before breaking ground."

He added, "This project was never about a road and a building but about a new partnership between the federal and state government and universities and what the partnership can do. Let the record show that we did something right today to ensure the future of our grandchildren."

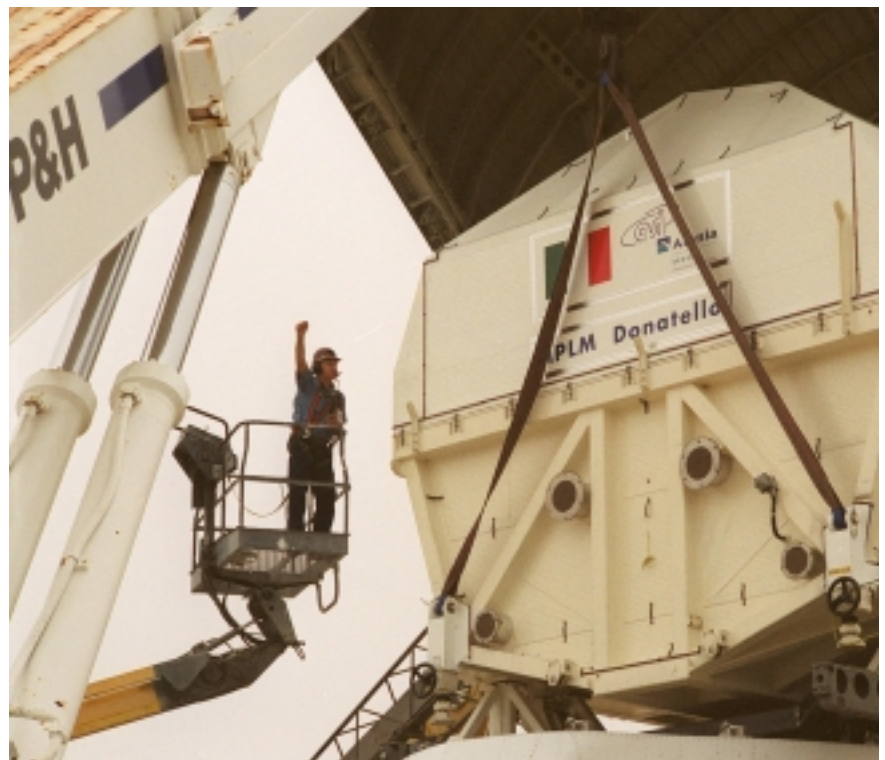
## Destiny on the rise



Atlantis surpassed the full moon for beauty as it roared into the early evening sky trailing a tail of smoke at 6:13 p.m. on Feb. 7. The Shuttle carried a crew of five and the U.S. Laboratory Destiny, a key module in the growth of the Space Station, on mission STS-98.

## Donatello arrives

The Italian Space Agency's "Donatello" Multi-Purpose Logistics Module, at right, the third of three such modules for the International Space Station (ISS), arrived at Kennedy Space Center Feb. 1 and was transported to the Space Station Processing Facility. It arrived on a special Airbus "Beluga" air cargo plane, below, from the factory of Alenia Aerospazio in Turin, Italy. Donatello, a reusable logistics carrier, is one of Italy's major contributions to the ISS program. The logistics modules are the primary delivery system used to resupply and return Station cargo requiring a pressurized environment. The cylindrical module is approximately 21 feet long, 15 feet in diameter and weighs almost 4.5 tons. Donatello will be launched on mission STS-130, currently planned for September 2004.



## FIRST ...

(Continued from Page 1)

Whitworth says "Working with the students is a good learning tool. They teach us, too. It's like a training session to hone our skills."

Not all activities on the team are designing and building the robot.

Renee Lippert, a junior at Rockledge High School, has been with the team for three years. Renee is project manager, in charge of fundraising, spirit, and general organization.

Renee has declared a goal this year of seeking "letter" status at school for FIRST participation.

"The school has academic letters and sports letters," said Lippert.

"We combine both – not playing a game but also designing Roccobot 2K."

Demetrius Taylor is another Rockledge High student with a unique role to play. He is helping develop a 30-second animation of the robot. Demetrius frequents the Prototype Shop to check on the robot but then works on his project at Headquarters in the Dynacs Digital Media Lab.

Eduardo Lopez del Castillo, with the External Affairs and Business Development Directorate, coordinates the FIRST team competition at KSC. He is just as enthusiastic about the event as the students.

"My goal at Kennedy is to make this program a developmental assignment opportunity for NASA and contractor engineers and technicians to be able to sharpen their skills operating the CAD and engineering analysis software and manufacturing tools that we use at Kennedy to develop ground support equipment," said Lopez del Castillo. "This will contribute to equipping Kennedy with the talent needed to get more involved in the development of future vehicle components, robots and support equipment to be used in space colonies. Other skills the program helps develop are applied project management, system engineering, manufacturing, rapid prototyping, team work and communications."

KSC's involvement with FIRST expanded after NASA Administrator Dan Goldin signed a Memorandum of Understanding with Dean Kamen, founder of FIRST, in the



Lead and mentor Mike Dininny talks about scheduling with two of the Rockledge High students on the team: first-timer Terry Ashby, background, and Renee Lippert, back to camera, a three-year veteran.

*"This (work with students) will contribute to equipping Kennedy with the talent needed to get more involved in the development of future vehicle components, robots and support equipment to be used in space colonies."*

**Eduardo Lopez del Castillo,  
KSC FIRST team coordinator**

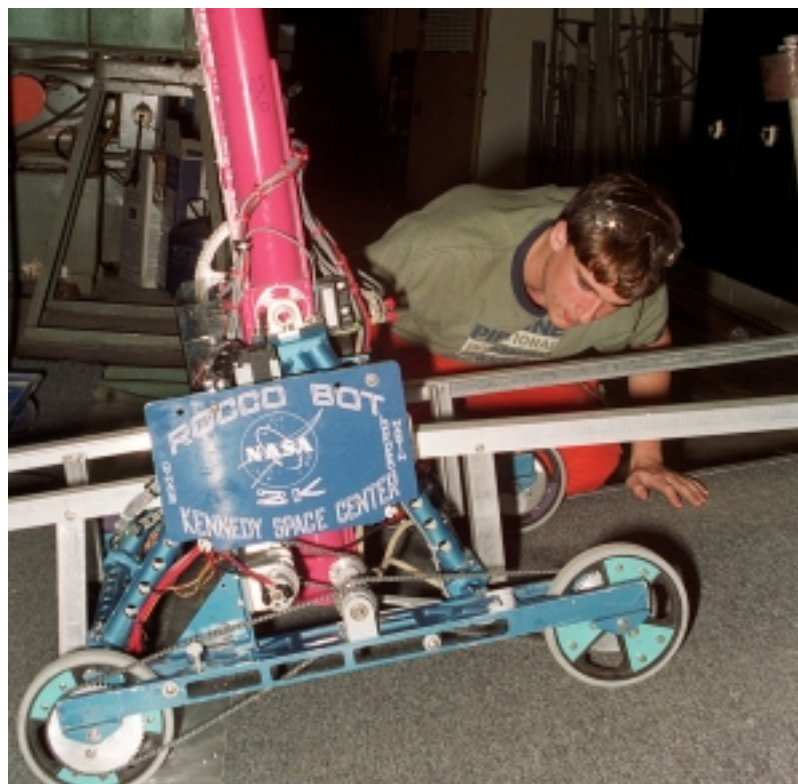
Spring of 1999.

Since then, KSC involvement has been divided into two major efforts:

1) Sponsoring the Space Coast FIRST Team, a partnership between NASA/KSC, Lockheed Martin, Dynacs, Alpha MRC, Inc., Space Shirts, The Brevard School Foundation, Rockledge High and Cocoa Beach High; and

2) hosting the NASA/KSC-FIRST Southeastern Robotics Competition at the Visitor Complex. KSC has a Southeast Regional Planning Committee comprising individuals from different offices within NASA, contractors and the community.

This year the Kennedy Competition will take place March 1-3. Forty teams have registered to partici-



In the Prototype Shop, Ian Myers, Rockledge High School, checks last year's robot the team has modified to practice maneuvers on. The ramp is a new feature in this year's contest.

pate, a 33 percent increase over last year. More than 2,500 people are expected to come from all over Florida, as well as teams from Virginia, Massachusetts, Indiana and a few other states.

Volunteers of technical and non-technical background are needed for the 3-day event. Those interested in participating should

contact Pat Christian at 867-2144 or e-mail her at [patricia.christian-1@ksc.nasa.gov](mailto:patricia.christian-1@ksc.nasa.gov).

The KSC competition is one of 14 regional events this year. The Space Coast FIRST team will also travel to the Philadelphia Regional March 21-24.

The national event will take place in Epcot Center, Orlando, April 5-7.

# Flight Operations takes on new role

## NASA helicopters used to assist Fish and Wildlife

The U.S. Fish and Wildlife Service is being given a helping hand with managing its controlled burns by the NASA Flight Operations' helicopter team.

Through a recent letter of agreement between the two agencies, the group also is set to assist U.S. Fish and Wildlife put out wildfires when they occur on the Merritt Island National Wildlife Refuge. The agreement is designed to save both agencies money, foster their safety preparedness and strengthen their partnership.

"It's a good use of our resources and it keeps us trained to help combat our own fires," said Bud Murray, chief pilot for Flight Operations.

Because of current drought conditions, it's vital that the Flight Operations group is trained and ready to respond, Murray said.

Murray's group began using "Bambi" buckets about a year ago to douse fires at Kennedy Space Center. The rugged plastic buckets are used to scoop water from the Indian River Lagoon to be carried to the wildfire area.

Flight Operations participated in its first controlled burn with U.S. Fish and Wildlife on Jan. 29. About 100 acres were successfully burned on the southeast side of Haulover Canal at S.R. 3. The interagency



A NASA Flight Operations helicopter, at left, is used in a U.S. Fish and Wildlife Service controlled burn on the southeast side of Haulover Canal at S.R. 3 on Jan. 29. Below is an aerial view of the area during the burn.



team also practiced dousing fire using a Bambi bucket.

"We were pleased with the operation and were able to smooth out some wrinkles so that we'll be better prepared for the next time we have to deal with a wildfire," said Frederic Adrian, administrative forester with U.S. Fish and Wildlife.

Two NASA UH-1H helicopters were used during the controlled burn. One dropped pingpong-ball-

shape fire starters to ignite areas to be burned. The other tracked the hot spots in the fire through infrared radar and fire imaging.

Flight Operations, staffed by the Joint Base Operations Contract's Space Gateway Support, is assigned four UH-1H helicopters.

The helicopters are used for security checks on Center and to provide extra security, rescue and medical support for Shuttle

operations. The helicopters are also used for U.S. Fish and Wildlife manatee and bird surveys. That teamwork laid the groundwork for Flight Operations' new role.

"We have an excellent working relationship with NASA Flight Operations and we think that will really help us work well as a team to combat wildfires. The question is not 'if,' but 'when,'" Adrian said. "We'll be ready."

## USA again wins safety award


For the eighth consecutive year, the United Space Alliance (USA) Space Shuttle Florida Operations team has been recognized for superior safety achievements by the Central Florida Safety Council.

The Central Florida Safety Council, with a membership of more than 800 companies, presents annual awards to those companies whose safety efforts deserve special recognition for the overall performance of their workforce.

The awards were presented at the Council's Annual Awards Luncheon in downtown Orlando.

United Space Alliance, with a workforce of more than 6,000 at the Kennedy Space Center, is NASA's prime contractor for the Space Shuttle program.

The USA team received the Year 2000 Special Achievement Award for Continued Safety Excellence for its progress in continuing safety program initiatives as the company prepares for evaluation by the Occupational Safety and Health Administration's Voluntary Protection Program (VPP), one of the highest safety honors a company can earn.



John F. Kennedy Space Center

## Spaceport News

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