

# Spaceport News

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

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## Troops get gift as STS-122 moves forward

By Tanya Nguyen  
Staff Writer

Kennedy Space Center employees played Santa this holiday season as they made wishes come true for 15 stranded Army soldiers.

Workers from NASA and Kennedy's contractors raised \$1,500 in donations for the soldiers to return home to celebrate festivities with their families. The soldiers were stuck in Port Canaveral after space shuttle Atlantis' launch delays.

Space shuttle program managers said mission STS-122 could be ready for launch on Jan. 24 under optimum conditions, but said an early February liftoff seemed more likely.

NASA shuttle program deputy manager John Shannon said the launch date depends on the outcome of tests conducted on the fuel sensor system connector.

The Army crew had arrived at the port aboard the Aldie, an Army landing craft utility vessel. The ship carries one of NASA's X-band radars for the upcoming STS-122 space mission to the International Space Station. The radar aboard the ship helps track the space shuttle during its climb into orbit.

With a looming launch date and the Aldie grounded until Atlantis flies, the Army allowed the soldiers to return to their home port in Fort Eustis, Va., to spend a week with loved ones during the holidays. However, the funding

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For more about the space shuttle and Kennedy Space Center, go to [www.nasa.gov](http://www.nasa.gov)

## Apollo Tribute Bike roars through KSC

By Linda Herridge  
Staff Writer

The echo of launches long past reverberated at Kennedy Space Center when the crew of 2xtreem Motorcycle TV showcased its specially decked-out Apollo Tribute Bike on Dec. 11.

Joe Capicotti revved the engine of the modified Kawasaki ZX-14 as he roared out of the 2xtreem trailer. Frank Sinatra's "Fly Me to the Moon" played over a custom component I-Pod stereo system as Capicotti circled the press site's lower parking lot before departing for the Shuttle Landing Facility.

Capicotti is the owner of Dragonlake Productions, which produces the popular 2xtreem motorcycle program that airs on Sunspots, the Fox Sports Network and several other local affiliates, as well as DirecTV and Dish networks.

Dressed in a racing suit reminiscent of Apollo flight suits and complete with a custom painted helmet and gold shield, Capicotti and the 2xtreem team officially presented the bike to the center. Capicotti described some of the modifications to Joe Dowdy, special operations manager, and John J. "Tip" Talone, associate program manager for the Constellation Program at Kennedy.

"We built this Apollo Tribute Bike to show the level of respect, admiration and support the 2xtreem crew has for NASA, the Apollo program and all the people involved in the current space program," Capicotti said. "We hope to assist in bringing back the magic of Apollo just in time for Orion."

Talone said the bike is a wonderful tribute to the legends that



2Xtreem Motorcycle TV donated a custom Kawasaki ZX-14 to Kennedy Space Center as a tribute to the Apollo program. At the Shuttle Landing Facility, the Apollo Tribute Bike reached speeds of up to 170 mph as crews filmed from a helicopter. The bike will tour the country through August.

**"We hope to assist in bringing back the magic of Apollo just in time for Orion."**

*Joe Capicotti,  
owner,  
Dragonlake  
Productions*

made Apollo possible.

"What a very unique and effective design that captures many of the significant highlights of the vehicle," Talone said. "It makes me proud to know that people have not forgotten what got us to where we are."

Capicotti researched the Internet, his old space books and NASA materials to get all of the

Apollo spacecraft facts correct. He and his team also visited Kennedy on a fact-finding mission.

"Many people do current-event projects, but how can you forget Apollo," Capicotti said. "I felt the time was right to do this tribute bike."

Modifications began in July. The tribute bike has Saturn V-inspired paint and powder-coated wheels, LED lights, custom red instrument faces, a hand-fabricated escape tower, a custom seat with NASA and Apollo patches, airbrushed NASA and Apollo emblems, ceramic high-performance brakes and custom exhaust mufflers in the shape of Apollo command modules.

Large white spaces around the tank and seat are reserved for the signatures of Apollo astronauts.

The 2xtreem crew will take the bike on tour to major racing events through August.

# Kennedy luminary 'Tip' Talone retires

By Corey Schubert  
Staff Writer

A quote that John J. "Tip" Talone Jr. keeps on display in his office reads, "My job is to stay out of the way."

It's an example of the confidence he placed in the teams he led through the years at the Kennedy Space Center. Talone retired this month as the associate program manager for the Constellation Program at Kennedy. His career spanned the history of the space program's most important achievements. One of Talone's legacies is the impact he made through mentoring countless employees during his career.

"If you look at all of the people he influenced and helped foster their growth, the list is quite daunting," said Bill Dowdell, the center's technical operations director and chief of the Mission Management Office.

Among the people Talone inspired are Kennedy Director Bill Parsons, Marshall Space Flight Center Director David King and Langley Research Center Director Lesa Roe.

He also mentored Philip "Pepper" Phillips, director of Kennedy's Constellation Project Office. Interestingly enough, Phillips' father Don was Talone's mentor as well.

"He left a trail of friends and admirers in his wake because wherever he went and whoever he met, they would always remember Tip," said Russell Romanella, director of the International Space Station/Payload Processing Directorate.

Talone's organization plays a vital role in planning and creating the facilities, ground systems and launch-related operations needed for NASA's lunar/Mars human exploration program. He began this position in November 2005.

He has played vital roles in NASA's history since beginning his career with the agency in 1965.

Talone directed the International Space Station Hardware Integration Office, which later became the Station/Payloads Pro-



Tip Talone, right, the former director of International Space Station Payload Processing, discusses STS-114 with Mission Commander Eileen Collins. Talone retired this month as the associate program manager for the Constellation Program at Kennedy.

cessing Directorate. His organization was responsible for preparing all shuttle payloads for launch.

He served in various operations assignments in the Apollo lunar landing, Skylab and Apollo-Soyuz Programs.

After assignment to the Space Shuttle Program in 1976, he served as launch pad manager, shuttle operations integration man-

ager, flow director for the space shuttles Columbia, Discovery and Endeavour, and as a special assistant to the director of Kennedy Space Center.

"He sometimes used to provoke the technical community... Tip would threaten to install clocks in all of the engineers' offices or something like that so they would know that time was

***"If you look at all of the people he influenced and helped foster their growth, the list is quite daunting."***

*Bill Dowdell,  
Kennedy  
Technical  
Operations  
Director*

ticking away while they pondered," Dowdell said. "Tip wanted to see action."

Talone's numerous awards over the years include two NASA Exceptional Service Medals, the Astronaut Corps' Silver Snoopy Award, the NASA Outstanding Leadership Medal and the National Space Club Florida Committee's 2004 Dr. Kurt H. Debus Award.

## Parsons presents Kennedy with Rotary Stellar Award



Kennedy Space Center Director Bill Parsons presented the Rotary National Award for Space Achievement Foundation's Stellar Award to former Director Jim Kennedy.

The Stellar Awards recognize outstanding individuals and teams from the industry and government who have made significant contributions to the future of the nation's space program.

Kennedy earned the award for outstanding leadership and technical direction of NASA's pioneering space endeavors and the Vision for Space Exploration.

# Pack of Kennedy RATS descends on desert

By Anna Heiney  
Staff Writer

Every September, after the summer rains back off but before the mornings get too cold, a pack of RATS descends on the desert near Flagstaff, Ariz., to spend two weeks testing technologies that eventually will play a vital role in the future of space exploration.

About 150 engineers and scientists participate in the NASA program, known as Desert Research and Technology Studies, or "Desert RATS."

The 10-year-old program is part of the agency's Exploration Systems Mission Directorate and involves groups from several NASA centers and universities. During the trip, they take advantage of the variety of terrains to test new or improved equipment astronauts may use during excursions on the moon.

Testing projects range from computer hardware and software to spacesuits, rovers and astronaut habitats.

Three teams from Kennedy Space Center make the trip: the communications/networking group, the cryogenics surface systems team and the surface physics group.

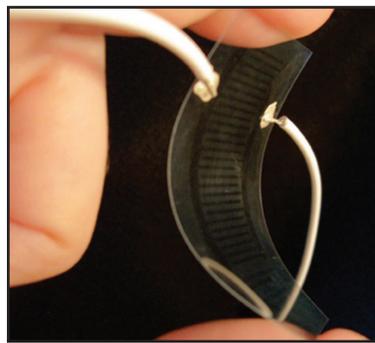
Marc Seibert, a communications and networking engineer from Kennedy, has been attending the desert outings for six years. Seibert is part of the Kennedy Telescience Laboratory, which is responsible for video, voice, data, wired and wireless networking, and network security for the desert test site. Since reliable communications are essential and everyone needs communications at the test site, Telescience lab team members usually are the first on duty in the morning and the last to leave each night.

"Our role in Desert RATS is to make sure everything can communicate, and make sure people back in the mission control building at Johnson Space Center can connect and interact with the test site," Seibert explained.

One of the group's accomplishments during this



Members of the Kennedy Space Center team include, from left, Marc Seibert, Jim Mantovani, Jim Dumoulin, Rebecca Witt, Mike Miller and Tony Cullotta. Seated on the rover are Dustin Gohmert and Brian Daniel.



This close-up reveals a flexible dust screen with a set of electrodes made of a transparent conductive oxide thin-film material. The RATS tested the technology for possible use in future spacesuits.

year's test was a fourth-generation digital signal processor and audio system that dramatically raises the quality of the audio from spacesuit helmets. Although today's astronauts use a head-mounted system with noise-cancelling microphones, the goal is to fix the microphones inside the suit helmet.

The hiss of air flowing over the wearer's head and the resonance of the helmet can make it difficult to understand what an astronaut is saying. With the addition of the processor, most excess noise is removed and the audio is improved.

Another helpful contribution from the Kennedy communications/networking group is a large semitrailer that is part habitat simulator and part control center. In the rear of the

***"It's surreal to see the crew members walking around like they will on the moon again and someday on Mars, taking rock samples, reporting on what they're doing . . . It just feels like you're there."***

***Marc Seibert, KSC communications, networking engineer***

trailer, spacesuit stands allow crew members to practice suiting up and exiting in a lunar habitat. In front, a team of engineers interacts with the suited subjects and monitors and controls the software on the suits and rovers.

This year, the group provided aggregate wireless communications for the field team through nearby Mount Elden in Flagstaff.

At future outings, the group plans to demonstrate a lunar delay simulator that allows team members to selectively insert a delay into network traffic between devices in the field and mission control.

An example would be mimicking the delay between a lunar rover and mission control.

The interactivity, cooperation and rehearsals between the Desert

RATS teams at various NASA centers and universities continue all year, culminating in the annual desert test.

This process means problems are rooted out before new flight hardware is made, helping to ensure these new technologies will be ready for the next giant leap in human space exploration.

"It's surreal to see the crew members walking around like they will on the moon again and someday on Mars, taking rock samples, reporting on what they're doing, etc.," Seibert said. "It just feels like you're there."

For more on the "Desert RATS" and more photos, go to [www.nasa.gov/mission\\_pages/exploration/mmb/ksc\\_drats.html](http://www.nasa.gov/mission_pages/exploration/mmb/ksc_drats.html)

# Scene around Kenn



InDyne Cable Department technicians work along NASA Causeway to remove telephone cables from the underground manhole system.



A sandhill crane is on the lookout in a parking lot near the Headquarters Building.



A bald eagle perches on a pole on Launch Pad 39A, seemingly monitoring the instruction of the space shuttle Atlantis STS-122 crew on slidewire basket operation, part of the emergency exit system on the fixed service structure of the pad.



A bobcat hangs out near the NASA Railroad tracks. Not as large as a panther, but about as big as a medium-sized dog, male and female bobcats average 39 inches and 36 inches in length, and 24 pounds and 15 pounds in weight, respectively.



A dolphin surfaces in the Launch Complex 39 Area turn basin at NASA's Kennedy Space Center.



# Kennedy Space Center



InDyne cable technician Steve Leger splices an 1800 pair cable in the CD&SC communications vault. Leger was voted "InDyne Employee of the Year" for 2007.



A Florida snapping turtle rests on Beach Road, near Kennedy Space Center. This turtle, related to the common snapping turtle, is found only in Florida and Georgia. It is considered a dangerous turtle because it can snap very quickly with its extremely strong jaws.



Enjoying a moment during space shuttle Discovery's rollout are, from left, Alfredo Lopez (electrical engineer), Christy Layton (mechanical engineer) and Edsel Sanchez (electrical engineer).



An eastern diamondback rattlesnake warms in the sun near the NASA News Center at Kennedy Space Center. The diamondback is Florida's largest venomous snake.

**Spaceport News**  
wants your photos

Send unique story ideas and interesting photos of workers in action for possible publication. Photos should include a short caption describing what's going on, with names and job titles, from left to right. Send e-mail to [KSC-Spaceport-News@mail.nasa.gov](mailto:KSC-Spaceport-News@mail.nasa.gov).



Renee Debing of Information Technology, left, and Northrup Grumman Property Management Specialist Arlene Broderick help load donations for delivery to the Salvation Army's distribution center in Rockledge.

## A FEW good women take stock in children

By Linda Herridge  
Staff Writer

The stockings were placed in the car trunks with care in front of Kennedy Space Center's Headquarters Building on Dec. 14. They were chock full of goodies for Brevard County families in need just in time for the holidays.

It wasn't Santa's efforts, but those of the Federally Employed Women that paid off as workers lined up in their cars to drop off the stockings, filled to the brim with appropriate toys, school supplies, non-perishable snacks, gift cards, toiletries and stuffed animals for children ranging in age from newborn to 15 years.

Kennedy workers filled 650 stockings, according to Cassandra Getter, the group's community outreach coordinator. When those ran out, they switched to gift bags, wrapped gifts and decorated surprise-filled shoeboxes for delivery to the Salvation Army's distribution center in Rockledge.

Getter is a management support assistant to the Electrical Division of the Engineering Directorate.

She has coordinated outreach efforts for the organization, also known as FEW, for two years and estimates Kennedy's efforts have helped about 350 families each holiday season.

"Kennedy is the largest provider of stockings to the Salvation Army in this county," Getter said. "It means a lot to know that children who otherwise would not receive gifts and necessities were afforded the opportunity with the help of our wonderful workers."

Salvation Army Major Sharon Owens said Kennedy employees always provide great support for the kids. "I'm amazed each year," Owens said. "We're very blessed."

FEW's other efforts in 2007 included a food drive to benefit the North and South Brevard Sharing Centers before Thanksgiving and awarding \$6,000 in college scholarships.

## Holiday Coffee serves up season's spirit

By Jennifer Wolfinger  
Staff Writer

The normally corporate-looking Learning Institute at Kennedy Space Center was transformed into a festive winter wonderland for the 2007 Holiday Coffee, compliments of NASA senior management. About 800 civil servant and contractor employees made their way into the building along a lollipop-lined pathway on Dec. 14. They were greeted by a Kennedy Visitor Complex spaceman and cheerful "elves," and enjoyed a display of gifts centered in the middle of a toy train track.

If that wasn't enough to get employees in the holiday spirit, plenty of pastries, cookies, apple cider and coffee helped. Second- and third-shift workers were able to attend an evening version Dec. 13.

"I enjoy networking and getting to see people I don't see often. It's also a good break that gets people refreshed and ready to work hard before the holidays," said Pam West, an information manager



Tom Hammond, in front of the astronaut, visits with retirees who attended the 2007 Holiday Coffee last month. Special events coordinator Patti Phelps said the event was an overwhelming success.

within the Launch Services Program.

Several teams of employees helped organize the get-together, which moved this year. In the past, it took place at office facilities such as the Headquarters Building.

According to special events coordinator Patti Phelps, the new location went over well.

She also said these gatherings are important for workers because they boost morale and provide an opportunity for holiday fellowship.

Retired workers also benefit from the Holiday Coffee. Walt Feitshans, who has been retired for five years after working in design engineering, enjoys returning to stay connected to NASA.

"I like to come back to learn about the people, new programs and new facilities," he said. "This event is important because I can touch base with people I haven't seen in a while, and see how their lives have changed, what they're doing and where they're going."



### Donations buy toys for tots

With the help of a toy drive led by Chickasaw Nation Industries at Kennedy Space Center and the city of Cocoa, more than 200 Cocoa children were given a Christmas gift. Among those helping were: Mary Sharpe, left, Billy McMillan, Casee Barber, Jennifer Monroe-Boggs and Becky Wilhelm.

# Apollo 5 took small step toward moon mission

## 40 years ago: Lunar Module passes Earth-orbital test with flying colors

By Kay Grinter  
Reference Librarian

### Remembering Our Heritage

In January 1968, NASA met a major milestone on the path to explore the moon.

Apollo 5 launched Jan. 22 from Cape Canaveral's Launch Pad 37B on an unmanned mission to test the lunar module in Earth's orbit.

The countdown was delayed almost four hours by ground equipment malfunctions, but liftoff came at 5:48 p.m. EST. This fourth flight of the Saturn IB rocket was the first flight test of Grumman's lunar module designed to land two astronauts on the moon and return them safely to the command and service module for their trip home.

The lunar module was the last major piece of Apollo hardware on the schedule to be tested in space. The command module was tested alone in July 1966, and with the service module in August 1966 and November 1967.

The Saturn IB launch vehicle used for the mission had been slated to boost the Apollo 1 crew into orbit. It stood under the capsule on Launch Complex 34 at the time of the fire in January 1967. In March, it was dismantled, inspected for corrosion or any other damage it might have sustained, and then erected on Complex 37 in April.

Don Phillips was NASA's test supervisor and in charge of all operations at Complex 37. "We were in the height of the Cold War and had all the schedule pressure you

can imagine to meet John Kennedy's 'before this decade is out' mandate," he recalled. "Our job was the total integration of the vehicle with the facilities and the Range. We also interfaced with mission control in Houston.

"We had a very dedicated and veteran launch team made up of NASA and contractor personnel. Most of the team that worked on Launch Complex 34 moved over to Complex 37 with the vehicle."

One member of the team was Bill Criddle, NASA's lead test conductor for the lunar module. Now retired, he recalled from his home on Merritt Island: "NASA sent a group of electrical, mechanical and systems engineers to the Grumman facility in Beth Page, N.Y., on Long Island, where the lunar module was built. We spent six weeks checking out the lunar module to determine if it was interfacing properly with the ground support equipment before it was shipped to Kennedy.

"The control room for the lunar module was in the Operations and Checkout Building in Kennedy's Industrial Area, not at the pad," Criddle explained. "The control room was also used to check out the lunar module in the high bay after it arrived at Kennedy, before it was transported to the pad. One of our primary concerns was the charge on its batteries,



The Lunar Module "Spider" ascent stage is photographed from the Command/Service Module on the fifth day of the Apollo 9 Earth-orbital mission. The Lunar Module's descent stage already had been jettisoned.

### Did you know?

The highlight of NASA's 10th anniversary year in 1968 was the success of the carefully planned series of Apollo missions, including Apollo 5 to qualify the lunar lander.

which were not activated until just before launch."

Another member of the team was Gene Sestile, NASA's lead test conductor for the Saturn IB launch vehicle. He is also retired and lives in Titusville.

"Dr. Hans Gruene was head of Launch Vehicle Operations," Sestile reminisced. "He was the most senior man at KSC on both the Saturn I and Saturn V launch vehicle develop-

ment programs and was always an absolute gentleman.

"Launch Director Rocco Petrone was a strong leader and an absolute force," Sestile noted. "He had an unbelievable intellect and demanded excellence. When he asked you a question, if you didn't know the answer, you'd better say you didn't know but that you would find out." Sestile believes that no

one individual was more responsible than Petrone for achieving President Kennedy's goal of landing on the moon in that decade.

Although the lunar module's descent propulsion system engine shut down prematurely after only four seconds because of overly conservative computer programming, NASA pronounced the Apollo 5 mission a success. The primary mission objectives - to prove the structural integrity of the lunar module and verify the operation in space of its descent and ascent propulsion systems, including restart - were met.

# Donations get troops home for holidays

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wasn't provided for their travels.

Unable to pay their expenses, the soldiers remained at the port while they longed to be with their families. Some of the soldiers hadn't seen their families since serving in Iraq, Kuwait and Afghanistan.

That's when several NASA workers and contractors came together in the spirit of the holidays. They raised enough money to cover car and fuel expenses for the soldiers to return home to Virginia and then back to the port to await the orbiter's launch.

It is still unclear how long the ship and its crew will remain at

the port.

The suspected faulty connector was sent to NASA's Marshall Space Flight Center in Huntsville, Ala., where it's undergoing rigorous testing. Shannon said he is confident the fuel sensor system issue will be resolved.

Atlantis remains at the launch pad until modification to the connector is completed. The shuttle will carry the European-built Columbus laboratory to the International Space Station.

The module is outfitted for research and space experiments and Atlantis' seven astronauts will spend much of their two weeks in orbit installing Columbus to the station.



## Sittin' on the dock

The Delta IV first stage that will be used to launch the GOES-0 satellite moves away from the barge after being offloaded on the dock on Cape Canaveral Air Force Station. It will be transported to Complex 37. The satellite is part of the series developed by the Geostationary Operational Environmental Satellite Program, a joint effort of NASA and the National Oceanic and Atmospheric Administration, known as NOAA.

Don't forget! *Spaceport News* wants your photos, feedback

Do you have an exciting photo taken at Kennedy Space Center or a great idea for a story? *Spaceport News* wants you to share it. We want to highlight the people and places that make up the spaceport. Photos should include a short caption with the names and job titles of those pictured, from left to right, and be at least 300 dpi. Send them to [KSC-Spaceport-News@mail.nasa.gov](mailto:KSC-Spaceport-News@mail.nasa.gov)

## NASA Employees of the Month: January



Employees of the Month for January are, from left, Shelley Ford (PH), Launch Vehicle Processing Directorate; Alex Biamonte (VA), Launch Services Program; Darren Gibson (SA), Safety & Mission Assurance Directorate; Cicely Simmons (OP), Procurement Office; Elaine Brabaw (IT), Information Technology & Communications Services; Joshua Manning (KT), Applied Technology Directorate; Sandra L. Loucks (NE), Engineering Directorate; Kelli McCoy (LX), Constellation Project Office. Not pictured are Lorene B. Williams (NE) and Engineering Directorate; and Beth Smith (TA), Center Operations.

## Looking ahead

Under review	Launch from KSC: Atlantis, STS-122
Under review	Launch from KSC: Endeavour STS-123
NET March 13	Launch from CCAFS: Delta II - Mission: GPS IIR-19
NET April 24	Launch from KSC: Discovery STS-124; at 8:26 a.m.
March 29	KSC All-American Picnic
NET May 16	Launch from CCAFS: Delta II - Mission: GLAST
NET July 16	Launch from CCAFS: Delta II - Mission: STSS Demo
NET July 20	Launch from CCAFS: Delta IV - Mission: GOES-0
NET Aug. 7	Launch from KSC: Atlantis STS-125; at 8:24 a.m.
NET Sept. 18	Launch from KSC: Endeavour STS-126; at 8:08 p.m.
Oct. 28	Launch from CCAFS: Atlas V - Mission: LRO/LCROSS
NET Dec. 1	Launch from CCAFS: Atlas V - Mission: SDO
NET Feb. 16, 2009	Launch from CCAFS: Delta II - Mission: Kepler



John F. Kennedy Space Center

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