Administrator Griffin updates work force on future plans

By Linda Herridge
Staff Writer

During his first visit to Kennedy Space Center as NASA’s 11th Administrator, Michael Griffin shared his appreciation for KSC and his ideas for shaping NASA’s future during a town hall meeting May 20.

"KSC is NASA’s launch center...and that is KSC’s core strength,” he said. “You will not be unhappy with KSC’s role going forward.”

Center Director Jim Kennedy introduced Griffin to a packed audience in the training auditorium and NASA TV viewers. “He is the person to lead this Agency as we begin the real first steps of exploring this universe of ours,” Kennedy said.

Griffin said he had visited KSC for at least six launches. “My impression is the same as it always is - talented, dedicated people who know what they’re doing,” he said. “That impression hasn’t changed, it’s only been reinforced.”

Griffin said there are plans to retire the orbiters by 2010, but a number of other components of the Shuttle stack will be very useful going forward.

“I’m looking at the budget to see if there is any freedom, without cutting into any science or aeronautics programs, for money that can be applied to accelerate the Crew Exploration Vehicle (CEV) program,” he said.

Griffin said once NASA has a clear picture of the CEV system design, the Agency can look to international and commercial-industry contributions that might help in augmenting the plan. “The ownership of the core mission has to be with the government,” he said.

While at KSC, Griffin also took part in a press conference May 20 and toured several facilities May 19.

Return to Flight date signifies ‘doing the right thing’

By Mike Wetmore
NASA-KSC Manager of Space Shuttle Processing

The past few weeks have been especially significant to our Space Shuttle Return to Flight path to launch.

We decided to roll the STS-121 stack back from the pad to the Vehicle Assembly Building based on the potential for ice liberation from the External Tank LOX feed line forward bellows. Heaters will be added to the bellows area to preclude ice buildup. We also decided to conduct a second tanking test before rollback to get additional data that will assist in our troubleshooting efforts from anomalies encountered from the first tanking test.

Although these decisions are technically and programmatically sound, there is a natural letdown among our Kennedy Space Center contractor/NASA work force because we were close to launch. I have sensed an initial letdown from our team that has been quickly followed by an overwhelming rededication to “doing the right thing.”

Wayne Hale, the Space Shuttle deputy program manager, recently composed a great message to our Space Shuttle team regarding these challenging days. His words serve as a very timely reminder to all of us as we move forward together toward flight.
The Kennedy Update

Greetings, friends! I know many of us are gearing up for the three-day weekend with some relaxation and fun. This is great because it’s important not only to work hard, but to play hard, as well. But I believe we should all take a minute on Monday and remember why this holiday exists.

Memorial Day is the time we honor those who made the ultimate sacrifice in the cause of defending freedom. They deserve our gratitude and a moment of our time to reflect upon what they mean to our nation.

What an exciting two days we had May 19 and 20. The NOAA-N launch at Vandenberg went picture perfect, and congratulations to the Launch Services Program team and everyone involved in this successful launch.

At the same time, we held a second successful tanking test of Discovery’s External Tank. Our engineers received the data they needed and will be analyzing it during the coming days. All of this points to a current launch window of July 13-31 for our Return to Flight mission.

We accomplished all this while hosting the first official visit of NASA Administrator Mike Griffin that was not the case, and it turns out that there is more work to be done.

It is no fun to come close to success just to find that more work is required. As a matter of fact, it is very difficult. Rather than complain that life is unfair and we deserve better, it is time to be mature, to accept setback with a modicum of grace, and to pick up the shovel and start again to dig ourselves out of the hole.

Remember what we have done in the last two years. It turns out that there are many areas - not just a few - where we had let our guard down to dangerous levels before STS-107 and didn’t realize it. Having taken a critical eye to every aspect of our business, we uncovered the problems and then proceeded to pound them flat, and we will be tremendously safer because of this work.

Perhaps even more importantly, we have re-established the old NASA culture of doing it right, relying more on test and less on talk, requiring exacting analysis, doing our homework. We are, even now, bringing up the new generation of space workers who will carry this bitterly earned lesson into our future programs.

Make no mistake about it, we will succeed. Character is being built.

Discipline is being reinforced. These hard-earned traits will serve to prepare us for even bigger challenges than returning the Shuttle to flight.

During the worst days of World War II, Winston Churchill spoke to the Britons in words that can apply to us today: “Do not let us speak of darker days; let us speak rather of sterner days. These are not dark days; these are great days - the greatest days our country has ever lived; and we must all thank God that we have been allowed, each of us according to our stations, to play a part in making these days memorable.”

These are not dark days; they are only sterner days. At times, it seems to me that there is a Zen force at work in the universe which has set this test in our path to see if we are worthy of success.

Worthiness that is measured by a commitment to discipline, rigor and thoroughness over expedience; worthiness that is measured in work that stretches into evenings, weekends and holidays to the sacrifice of our families or our personal health; worthiness that requires patience and a civil respect for those who question or disagree with us, even when they are hard to understand or worse; worthiness that must be demonstrated by a complete change of heart.

It is not easy. I find myself slipping back into old, bad habits, especially when under stress, when fatigued, and mostly when frustrated. So look out for each other. Encourage each other. We succeed or fail as a team, not as individuals.

I told you before that we should remember that “troubles produce perseverance, perseverance produces character, character produces hope, and hope will not disappoint us.” Don’t doubt it.

The character that we will need to explore the universe in this and the succeeding generations is being formed today.

Make sure that it is a good character. Make sure that character’s lessons are written firmly on our hearts.
Transporter driver enjoys pace of his work

Crawler Systems Engineer Bob Myers drove Discovery to launch pad

By Anna Heiney
Staff Writer

Driving along at one mile an hour does not always feel as exhilaratingly slow as you might think.

Just ask Bob Myers of United Space Alliance. He’s spent more than 20 years helping to drive and care for NASA’s two Crawler-Transports, which have the heavy task of moving the fully-assembled Space Shuttle and its Mobile Launcher Platform (MLP) to the launch pad for flight.

“When you’re walking on the ground, of course, at one mile an hour you can outwalk the Crawler in a heartbeat,” explains the Crawler systems engineer. “But when you have 18 million pounds and you’re up in the cab and it’s moving a mile an hour, it seems fairly fast.”

Myers had the honor of driving Space Shuttle Discovery out of the Vehicle Assembly building when the Return to Flight vehicle made its move out to Launch Pad 39B in March.

“Only a handful of engineers are certified to drive the gargantuan transports, and with good reason. The Crawlers can extend from 20 to 26 feet tall and are 131 feet long, 113 feet wide. They weigh six million pounds without the MLP and Space Shuttle stack.

“As far as Myers is concerned, driving a vehicle so huge, heavy and downright unusual is nothing like driving a car.

He laughs when he’s asked how the Crawlers handle on a drive. “How about ‘really slow?’” he replies. But he explains that there’s really no better way to train for driving a Crawler than through hands-on experience. “It takes some time to learn how to get out on the Crawlerway and learn how to anticipate a turn, to keep the Crawler straight, and learn how it’s going to accelerate, decelerate and stop.”

Myers’ job stretches beyond driving. Crawler engineers spend much of their time refurbishing and upgrading the tracked vehicles, which were built in the mid-1960s for the Apollo-era Saturn V Moon rockets. The Crawlers are still hard at work today, thanks to tender, loving care and ongoing maintenance.

In the last two years, the Crawlers have undergone major structural, mechanical and electrical upgrades. New motor control centers run the vehicles’ electricity, and improvements to the ventilation system provide a safer environment for the people monitoring the engines and pump rooms.

Both crawlers received new treadbelt shoes - 456 on each vehicle - and new mufflers to reduce the noise level generated by the engines. In addition, each Crawler’s dual driver cabs were replaced with new ones, complete with hurricane-safe marine windows. Gauges on the right indicate height, steering angle and the status of the docking system.

Brand stands firmly behind NASA Values

By Jennifer Wolfinger
Staff Writer

Upholding one of the Kennedy Space Center core values may seem difficult, but for John Brand, preserving safety comes naturally. As the Safety and Mission Assurance directorate’s employee of the month in April, safety specialist Brand provides consultation and support for many programs and projects.

He also performs contractor evaluations and oversight for the Spaceport Engineering and Technology directorate and the Information Technology and Communications Services directorate.

“It’s a humbling but exhilarating feeling to know that I was nominated and chosen from all my peers to represent the directorate,” said Brand, who believes his willingness to work as a team member earned him the recognition.

Brand said he enjoys meeting people and being involved with leading-edge projects and experiments, along with the occasional funny moment.

“When the viewing area for the Space Station facility was completed and visitors began to view the construction of the International Space Station, a visitor wanted to know if the people in the Space Station high bay were real or just actors,” he said.

Looking forward also motivates Brand.

“I envision KSC as a thriving hub of research and development of new technologies and space flight activities to Mars and beyond,” he said. “I am committed to improving my safety knowledge and skills to help ensure our KSC family is well informed of safety matters that will help protect them at work and at home.”

After 17 years of supporting the U.S. Department of Defense’s fire services, Brand was given the opportunity to transition into a role in safety. This took away his chance to retire earlier, but he considers being part of the safety team his most rewarding experience.

As if serving the space program isn’t enough, Brand is also involved in many church activities, including children’s care and family care ministries. In his free time, he bikes and spends time with his wife, Linda.
In preparation for the Return to Flight mission, STS-114, the Space Shuttle Discovery crew spent three days at Kennedy Space Center in the first week of May participating in the Terminal Countdown Demonstration Test.

This milestone, highlighted by a countdown dress rehearsal on May 4, marked the first time astronauts boarded a Shuttle on the launch pad in more than two years.

“We had a very successful test,” said Commander Eileen Collins at the conclusion of the activities. “It felt to me like it was a real launch day, the way people were talking and handling issues as they came up.”

The Terminal Countdown Demonstration Test is held prior to every Space Shuttle mission and allows the astronauts and ground support teams to practice pre-launch activities and become familiar with countdown procedures.

On May 2, Collins, Pilot Jim Kelly, and Mission Specialists Andy Thomas, Stephen Robinson, Wendy Lawrence, Charles Camarda and Soichi Noguchi turned their attention to safety training. They practiced driving the M-113 tanks that could carry them away from the launch pad in the unlikely event of an emergency.

They also were briefed on range safety, and received fire suppression training. The astronauts were fitted for the bright-orange suits they’ll wear during the Shuttle’s historic lift off and landing.

Crew members spent May 3 better familiarizing themselves with launch pad escape routes during an emergency egress walkdown at Launch Pad 39B. On May 2 and 3, Collins and Kelly took to the skies in the Shuttle Training Aircraft to practice landing on the Space Shuttle runway.

Early May 4, the flight crew rose early for breakfast and a weather briefing, followed by the standard pre-launch routine. After suiting up, they boarded the silver Astrovan for the 20-minute ride to the launch pad.

Once onboard Space Shuttle Discovery, the astronauts spent the remainder of the countdown performing tasks from their seats inside the crew module.

Meanwhile, the Kennedy Space Center launch team did the same from the Launch Control Center about three miles away.

“I think it’s a testament to all the training and the simulations that have been done over the past 18 months or so,” Collins said of the test’s success.

“I know the team down [at Kennedy] has been doing training and, in fact, our crew has participated in some of the training sessions that they’ve done, and it really shows.”
Terminal Countdown Demonstration Test

DOZENS OF media are gathered at Launch Pad 39B to interview and hear comments from the STS-114 crew.

A SUIT technician helps STS-114 Pilot James Kelly suit up in the Operations and Checkout Building for the trip to Launch Pad 39B for a mock launch countdown.

DURING TCDT activities (above), STS-114 Mission Specialist Stephen Robinson (right) drives an M-113, an armored personnel carrier that is used for speedy departure from the launch pad in an emergency. At left is Capt. George Hoggard, astronaut rescue team leader. Below, STS-114 Mission Specialist Charles Camarda is getting ready to practice driving an M-113. Behind him are Robinson, Hoggard and Commander Eileen Collins.

THE STS-114 crew partakes of the traditional breakfast in the crew quarters at the Operations and Checkout Building prior to suit-up for the trip to Launch Pad 39B for a mock launch countdown.

Camarda reaches for the release of the egress from the Fixed Service Structure. Crew Thomas and Wendy Lawrence.
Astronaut Hall of Fame gains three new pioneers

By Charlie Plain
Staff Writer

Astronauts, employees and patriotic space enthusiasts gathered on April 30 to induct three American space explorers into the Astronaut Hall of Fame at Kennedy Space Center’s Visitor Complex. The event honored astronauts Joseph P. Allen, Gordon G. Fullerton and Bruce McCandless II with a ceremony highlighting their incredible achievement.

Actor LeVar Burton of Star Trek: The Next Generation fame served as the event’s master of ceremonies. “I have been a part of a family that has traveled in space for over 18 years, and what we do in fantasy is what today’s inductees have done in real life,” Burton declared.

Kennedy Space Center Director Jim Kennedy continued echoing Burton’s theme of family and achievement. “We are having a family reunion to pause and celebrate the accomplishment of three heroes of the American space flight program,” Kennedy said.

The first astronaut to be honored was Gordon Fullerton, who has flown 144 different planes. After an extensive career test-piloting military aircraft, he joined NASA as an astronaut and assisted with the final Apollo missions. An engine failure during launch on STS-51F put his piloting skills to the test. Fullerton successfully managed the challenge, becoming the first Space Shuttle commander to ever complete an abort into orbit.

Joseph Allen was the next astronaut welcomed into the ranks of the Hall of Fame. Allen worked in various positions within NASA until he was tapped in 1981 to assist Johnson Space Center with the first Space Shuttle mission. The scientist’s first flight came aboard STS-5 in 1982 on a mission to make the vehicle’s first delivery of commercial satellites into space.

Allen flew again aboard the Space Shuttle in 1985 on STS-51A, this time becoming the first spacewalker to retrieve a marooned satellite and return it to an orbiter.

The final inductee was Bruce McCandless II, who graduated second in his class from the U.S. Naval Academy. NASA chose him to be an astronaut in 1966. During his early years with the Agency, McCandless worked with such notable programs as Apollo and Skylab. The astronaut’s first chance to fly in space arrived in 1984 on the STS-41B mission.

During that mission, McCandless used the Manned Maneuvering Pack “jet pack” to become the first astronaut to fly in space untethered to another vehicle. His second and final flight was STS-31 in 1990 to help deploy the famous Hubble Space Telescope.

McCandless’ STS-41B commander, Vance Brand, recalled marveling at the sight of McCandless floating free in space.
NASA, economic commission partner on Space Act

By Jeff Stuckey
Editor

The Economic Development Commission (EDC) of Florida’s Space Coast has signed an historic agreement with Kennedy Space Center that will outline a specific role in helping retain and boost space activity. The three-year Space Act Agreement was formally signed by Center Director Jim Kennedy and Lynda Weatherman, president and chief executive officer of the EDC, at an April ceremony at the Headquarters Building.

The first of its type, the agreement links the business community and KSC with the goal of enhancing the space program in Brevard County. The Brevard County Commission has provided $145,000 in funding for fiscal year 2004-05, with an immediate plan to increase its presence in Washington and retain EDC staff solely dedicated to space initiatives.

Other goals include participating in commercial space industry trade shows and reaching out to commercial space businesses not already located in Brevard.

According to NASA figures, its economic impact on the state was $3.3 billion. That resulted in $76 million in state and local taxes.

The agreement is “a key ingredient in our future,” Kennedy said at the ceremony. “I’m also very excited about the work being done in the Space Life Sciences Lab. Right here at NASA’s operations center, we’re doing fundamental research to help understand the effects of space on the human body. This is a historic day for us and we cherish the partnerships with the Kennedy Space Center. The additional funding given to the EDC will allow them to explore countless space-related opportunities.”

Weatherman said she’s excited about signing the biggest agreement in the commission’s history. The commission will work closely with congressional offices to ensure Florida’s place in the Vision for Space Exploration.

“The EDC will act as a facilitator and a liaison to identify opportunities that relate to Return to Flight, the International Space Station and the most exciting, new Vision for Space Exploration,” Weatherman said. “We will be able to provide more as a direct result of the funding we received this year from the Board of County Commissioners for Brevard County.

“It sends a strong message to NASA and KSC that this county is strongly committed to what you do. To know the EDC will play a meaningful role in our nation’s future is one of our greatest achievements.”

With the formal relationship in place, the EDC will develop marketing materials to work in coordination with the Florida Space Authority to promote development of the International Space Research Park at KSC. The plan will also address the “2003 KSC High-Priority Technology Needs” report by identifying private industries and universities with the technology needs for potential engineering or collaboration.

Vehicle Assembly Building’s American flag flies again

Workers at Kennedy Space Center have restored to glory the 209-foot-tall American flag painted on the side of the historic Vehicle Assembly Building (VAB) through panel repairs and painting after it was damaged by hurricanes last year.

This marks a major step in completing permanent hurricane repairs on the 52-story VAB, the Center’s most recognizable landmark, set to be restored to its original appearance by mid-July. Since hurricanes punched out about 30,000 square feet of panels on the south side of the VAB last year, employees of Sauer Inc. in Oak Hill used scaffolds hung from the roof to replace temporary panels put up after the hurricanes with permanent ones made of corrugated steel. Flag repairs and painting were completed in early May.

“We will continue to work on the VAB,” said Michael Sumner, NASA deputy director of Center Operations. “The new panels are permanent repairs and the whole building will be repainted when all the work is complete.”

An ongoing project through Fiscal Year 2008 involves performing non-hurricane related maintenance on the VAB, which is one of the largest buildings in the world by volume. The high bay doors 1 and 3 and the roof are being repaired with money allocated before the hurricane damage. Another 10,000 square feet of high-bay and low-bay roof are also being repaired.

For information about the EDC and the Space Act Agreement, visit http://www.spacecoastedc.org.
Hurricane briefing emphasizes need to prepare now

By Jeff Stuckey
Editor

Each year from June through November, residents living on the Eastern seaboard and along the Gulf of Mexico face the threat of hurricanes. These powerful storms can create severe flooding, cause power outages and damage homes and businesses with their high winds, tornadoes, storm surges and heavy rainfall.

The importance of planning ahead and securing our homes and property in advance of storms was the focus of the Cape Canaveral Spaceport Annual Hurricane Briefing, held May 18 at the Kennedy Space Center Training Auditorium during National Hurricane Preparedness Week.

KSC Director Jim Kennedy told employees in the packed auditorium he appreciates the way the work force protected themselves and $5 billion worth of assets last year. “We saw you demonstrate your commitment to Florida Tax-Free Hurricane Preparedness

From June 1 to 12 in the state of Florida, no sales tax will be collected on the sale of:

- Any portable self-powered radio, two-way radio or weather band radio selling for $50 or less; any tarpaulin or other flexible waterproof sheeting selling for $50 or less
- Any self-contained first-aid kit selling for $30 or less
- Any ground anchor system or tie-down kit selling for $50 or less
- Any gas or diesel fuel tank selling for $25 or less
- Any package of AA-cell, C-cell, D-cell, 6-volt or 9-volt batteries selling for $30 or less, excluding automobile and boat batteries
- Any non-electric food storage cooler selling for $30 or less
- Any portable generator used for a power outage selling for $750 or less
- Any portable self-powered light source selling for $20 or less

including Hurricanes Charley, Frances, Ivan and Jeanne, and what they might expect in the future. Although these four storms had an impact on the Central Florida region, none were classified as hurricane strength when they passed the Center.

“We’re looking at decades of more activity in the Atlantic (Ocean) and more land-falling hurricanes, so whatever you may be looking to buy or build, make sure it’s strong enough to withstand these storms,” Lay said.

The four storms accounted for $45 billion in total damage, according to Lay.

The next speaker, John Cosat from the Joint Emergency Preparedness Office, reviewed what was learned from last year’s experience, including important messages to employees in a timely manner. “You have to take this seriously,” Cosat said. “We came up with new recorded 1-800 telephone numbers to get information out. If you call into those recordings, it will help us a lot.”

There is also new terminology on the phone recordings to report the Spaceport’s condition after a storm. The term “weather safe” now means conditions are clear for the damage assessment team to report for its duties. “All clear” means the roads are clear and all the facilities are operating.

William Roeder from the 45th Space Wing Weather Office also discussed the hazards associated with hurricanes and how to prepare for the 2005 season. Hurricane briefings for employees can be scheduled by calling 853-6861.