



JAXSTRONG

## IN THIS ISSUE

- STUDENTS LEARN ABOUT JAX HARBOR DEEPENING PROJECT
- CULEBRA SAFETY CAMPAIGN REACHES HUNDREDS DURING TOURIST SEASON
- ARMY VALUES: SELFLESS SERVICE

...AND MORE



# JAXSTRONG

*jacksonville*

OUR WORK • OUR PEOPLE • OUR DISTRICT

MAY 2014 | Volume 6 Issue 5



# COMMANDER'S CORNER

## MESSAGE FROM COL. ALAN DODD

THE ARMY'S 101 CRITICAL DAYS OF SUMMER SAFETY

The clock is ticking and the Summer Solstice which begins June 21 is nearing. However, those of us living in Florida and the Antilles know that the calendar has little to do with the heat and summer fun we are already experiencing .

The Army's 101 Critical Days of Summer, Memorial Day through Labor Day, safety campaign is intended to remind us that we can't afford to lose focus on safety. Family barbeques, swimming, fishing, softball, hiking, boating, skiing, and camping are just some of the activities we like to engage in during the summer. The prolonged hours of daylight encourages us to jam as many of our favorite pastimes into our day as possible and more activities means more potential for accidents.

While we enjoy these lazy, hazy, crazy days of summer, often we fail to recognize the risks associated with our favorite off-duty activities. Many of us tend to engage in risky activities that take us to the 'edge' and what might begin as a day of fun in the sun may end up with a trip to the emergency room or worse.

Though by no means comprehensive, I want to go over a few basic safety practices that apply especially to our region. The first are heat related problems. Heat cramps occur after several hours of physical exertion in the heat. Symptoms include painful muscle spasms, usually in the legs or abdomen. To treat, get out of the heat and into the shade, hydrate with water or sports drinks, stretch and massage the muscle. To prevent this, acclimatize to the environment so your body adapts to the heat, hydrate, avoid exercising during the hottest part of the day, wear light, loose clothing and use sunscreen.

Heat exhaustion is due to the loss of water and salt through sweat. Symptoms include headache, nausea, dizziness, weakness, and cool, clammy skin. Treat heat exhaustion by stopping the activity and resting, hydrate and get into a cool room or shade, loosen clothing and apply cool wet towels or pour cool water over your head. Prevent heat exhaustion by doing the same things you would do for preventing heat cramps.

Heat stroke is a serious condition when the body's cooling system stops working and core temperature rises to dangerous levels. If ignored, heat stroke can lead to death. Symptoms include red, hot and dry skin, rapid but weak pulse, rapid but shallow breathing, confusion, faintness, staggering, hallucinations, unusual agitation or coma. Treat by reducing body temperature and cooling the body, remove unnecessary clothing, apply water, cool air, wet sheets or ice on the neck, groin and armpits to accelerate cooling and seek medical attention immediately. Prevention is better and is done just as you would for heat cramps and heat exhaustion.

We are blessed to have so much coastline and must also pay close attention to boat operations, swimming safety and rip currents. Operating a boat requires concentrated skill and a keen sense of awareness in the boat and on water. A clear head and a responsible outlook are necessary to make a day on the water as smooth and as safe as possible. Don't overload your boat. Know what your boat can and can't do. Keep a good lookout and situational awareness of other boats and objects. Ensure all on board wear a USCG approved personal flotation device. Operate at safe and legal speeds and watch your wake. Know and respect the weather and heed weather warnings. Take sufficient fuel in proper containers and know your cruising radius. Keep your boat shipshape and check safety equipment. Never operate a boat while impaired by alcohol or drugs.

Always swim with a partner and never allow young children to swim without adult supervision. Never swim when you are tired, under the influence of alcohol, drugs, or medication. Know and observe your swimming limitations and capabilities. Avoid swift-moving water. If caught in a current, swim with it and angle towards shore or the edge of the current. A rip current is a strong channel of water flowing seaward from the shore. It can occur at any beach with breaking waves. To escape it, relax; don't swim back to shore directly against a rip. You risk exhaustion and drowning. Calmly float or tread water to conserve energy. Swim parallel to shore until outside of the rip or in a diagonal direction towards the shore. Swim where lifeguards are present.

If we adhere to the proper safety precautions, there is no reason this can't be a great and safe 101 critical days of summer. Army Safe is Army Strong and Army Safe is Building Strong.

Army Strong. BUILDING STRONG®. JaxStrong.

Alan Dodd  
Colonel, U.S. Army  
District Commander

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## TABLE OF CONTENTS

- Commander's Corner .....2
- STEM Puerto Rico.....3
- Army Values: Selfless Service.....5
- Military Appreciation Month.....7
- Culebra.....8
- Welcome Home.....9
- Survey Vessel..... 10
- Water Safety ..... 12
- Jax Harbor ..... 13
- System Status Report ..... 15
- Jax Facts ..... 16
- National Hurricane Preparedness Week..... 16
- Corporate Run ..... 17
- Memorial Day ..... 17

## ON THE COVER

On the cover: As May brings both Military Appreciation Month and Memorial Day, we salute the brave men and women who serve our nation and those who have paid the ultimate sacrifice. Thank you for your service; we are forever in your debt. (Photo courtesy of [www.army.mil](http://www.army.mil) website)



# Antilles team reaches out to elementary school students

BY NANCY J. STICHT

PICTURES BY LEIGH ADAMS, ANTILLES ELEMENTARY SCHOOL



Capt. J.C. Cordon, deputy commander for the Antilles, was impressed by the questions asked by first grade students when he and fellow team members participated in an April 10 Science, Technology, Engineering and Math (STEM) event at the Antilles Elementary School, Fort Buchanan, Puerto Rico.

Inquisitive minds, vivid imaginations and lofty goals greeted members of the U.S. Army Corps of Engineers' Antilles Office when they visited the Antilles Elementary School at Fort Buchanan April 10. The team, along with Dr. Jorge F. Bauza-Ortega from the San Juan Bay Estuary Program, partnered with the Department of Defense Education Activity to promote science, technology, engineering and mathematics (STEM) education.

The classroom event was only the first phase of the STEM initiative. Students will also visit the construction site of their new school as well as the wind turbines and solar energy panel sites at Fort Buchanan. They will then apply what they have learned to design a playground that incorporates "green" technology.

Carmen Martir, chief, administrative services, presented the topic of recycling and showed the students how to prepare compost and build plant and flower pots, emphasizing

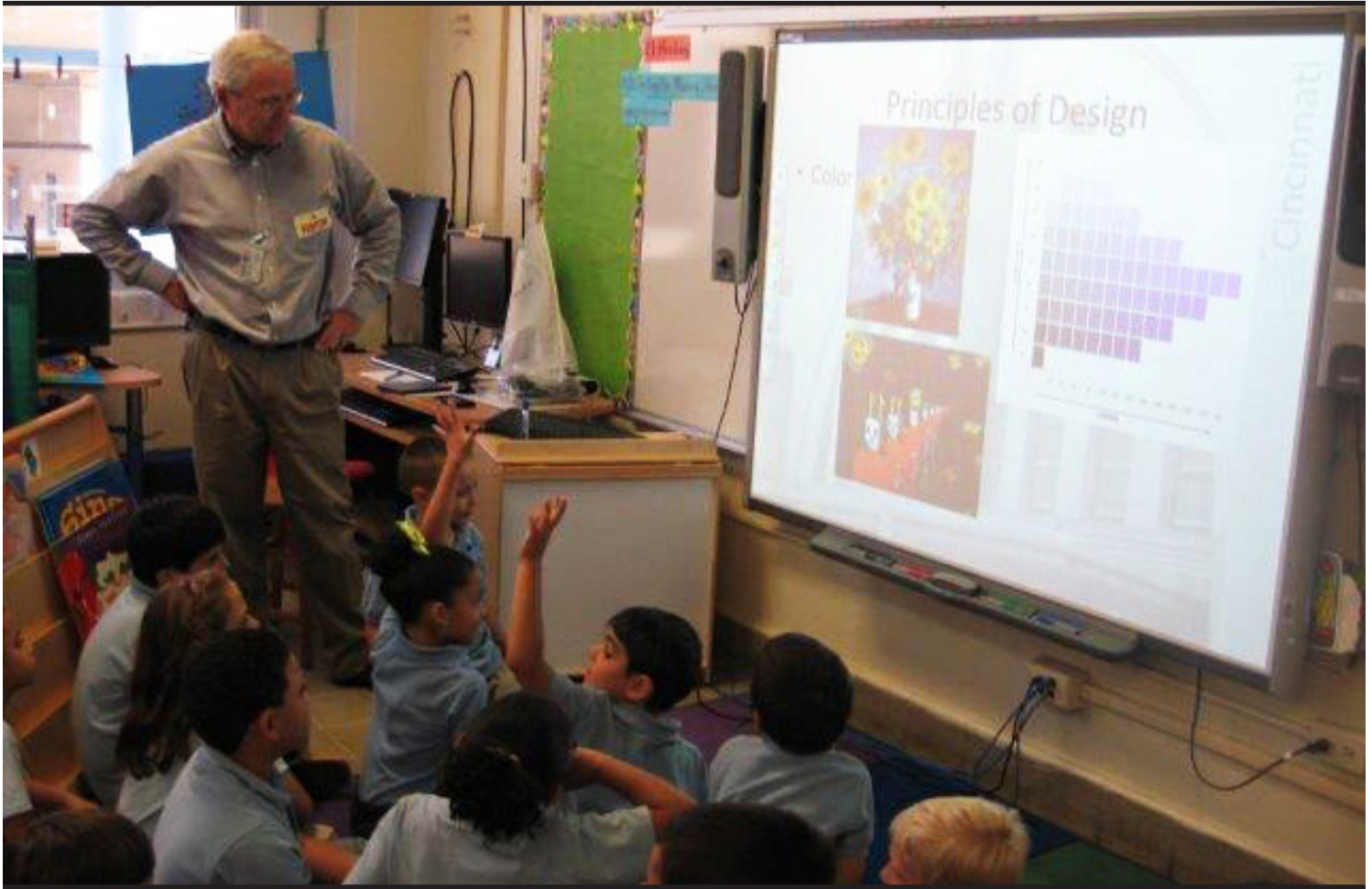
recycling plastic milk containers with a short video about recycling the plastic for use as playground flooring.

"First graders are eager to learn and recycling is an interesting topic," said Martir. "They wanted to know what they can do to help, where they can bring materials – even televisions – for recycling, and how to talk to their parents about the importance of recycling."

Martir said that this first STEM experience was fulfilling, and she was most touched when one of the children raised his hand and said, "Miss Carmen, I want to thank you for all I learned about recycling, because if we recycle, we are going to save the world!"

Jose Mendez, project manager and also a first-time STEM participant, introduced the topic of design for the future and explained that engineers, architects, interior and industrial designers all use their imagination to develop design ideas.

## STEM (continued from PAGE 3)



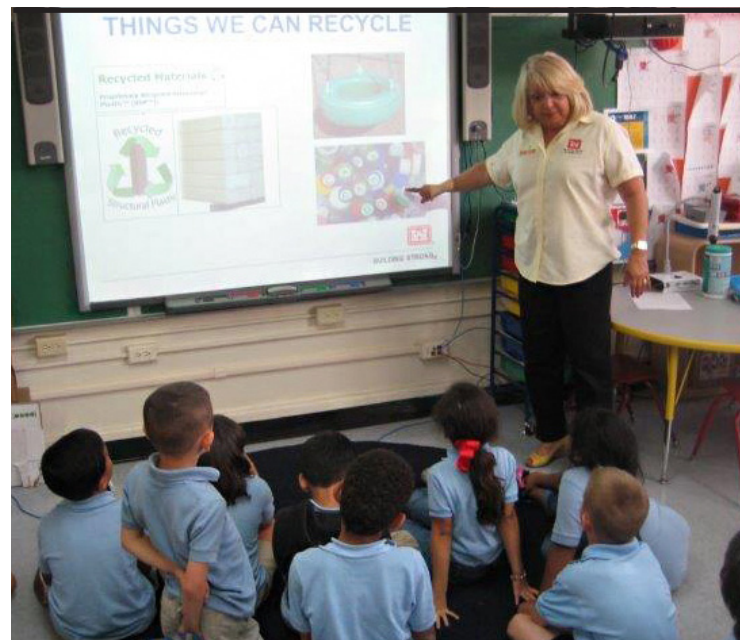
Jose Mendez, project manager in the Antilles Office, talks with Antilles Elementary School students about the principles of design, in preparation for their project to design a playground.

He explained the elements and principles of design, including line, plane symmetry, rhythm, scale and color and relating it to their playground project. The students enjoyed a video of an architect designing a building out of a crumbled sheet of paper.

"Kids that age are very smart," said Mendez. "They compared the photos I showed them with their experiences and didn't hesitate to participate. The class was very interactive, and they were paying attention and enjoying the presentation. I enjoyed myself, too, and received positive feedback from the teachers."

Capt. J.C. Cordon, deputy commander for the Antilles, has been involved in STEM efforts since his assignment to the Army Corps of Engineers. "I have given talks on STEM-related topics and I served as head judge at the Robotics First Lego League competition in Puerto Rico," he said.

He introduced the topic of energy reduction and discussed current and future green technology. "The students had questions about how windmills and solar panels work to produce energy, and about the different types of energy," said Cordon. "This classroom experience, combined with the upcoming site visits, provides a great foundation for the students to use in their playground design project. I'm looking forward to seeing what these future engineers, architects, mathematicians and scientists will do with what they have learned!" ♦



Carmen Martir, chief, administrative services in the Antilles Office, teaches first grade students at the Antilles Elementary School about the importance of recycling.

# Employees put others before themselves, at home and abroad

BY NAKEIR NOBLES



Tim Brown, an engineer with the Jacksonville District, was in Afghanistan when a 7.0 magnitude earthquake struck Haiti. In October 2013, Brown went to Haiti to initiate Jacksonville District's technical assistance to USAID/Haiti program. (Photo courtesy of Tim Brown)

*Put the welfare of the nation, the Army and your subordinates before your own. Selfless service is larger than just one person. In serving your country, you are doing your duty loyally without thought of recognition or gain. The basic building block of selfless service is the commitment of each team member to go a little further, endure a little longer, and look a little closer to see how he or she can add to the effort. - U.S. Army website, [www.army.mil/values/](http://www.army.mil/values/).*

When a 7.0 magnitude earthquake hit the country of Haiti in January 2010, Tim Brown was moved by the catastrophic event even though he was half a world away, in Kabul, Afghanistan.

"My heart went out to them, I was devastated," said Brown. While following the story on the news, "my mind went to 2005's Hurricane Katrina. Knowing a little about the history of the country and its economic state in 2010, I knew Haiti was in a fragile economic condition and it would take major outside assistance to recover from the earthquake".

"There were reports of a lot of non-governmental agencies on the ground helping, and I was relieved. But deep inside I wanted to do my part to help Haiti recover," Brown added.

Already deployed to Afghanistan in support of Operation Enduring Freedom, Brown knew the opportunity would come for him to support and make a difference. He just didn't know when. Shortly after returning home from Afghanistan, he and a friend made plans for a missionary trip to Haiti in 2012. But "life happened," he explained.

Hurricane Sandy hit the northeast October 2012, and Brown deployed as the mission manager of the critical facilities team. He led the assessment of more than 47 critical public facilities along the east coast of New Jersey.

Unbeknownst to him, a new adventure was on the horizon.

Brown, an engineer and senior project manager in the Programs and Project Management Division, took advantage of an opportunity to

## ARMY VALUES

**L** *Loyalty*

**D** *Duty*

**R** *Respect*

**S** *Selfless Service*

**H** *Honor*

**I** *Integrity*

**P** *Personal Courage*

**ARMY VALUES: SELFLESS SERVICE** (continued from PAGE 5)

Jacksonville District engineer Tim Brown (second from left) talks with his team during 2005's Hurricane Wilma recovery. (Photo courtesy of Tim Brown)

work within the division's Military, Interagency and International Services Branch. The position would allow him to use his expertise to support other agencies performing work in other countries. He had no idea he would soon manage a project that would bring economic recovery to Haiti, a nation that had been ravaged by a natural disaster and that had touched him so deeply.

Then the request came.

"We got a call from the U.S. Agency for International Development (USAID) to provide technical assistance in Haiti," Brown said.

In October 2013, Brown went to Haiti to initiate the district's technical assistance to USAID/Haiti on the northern port project, part of USAID's efforts to complete the U.S. Post Earthquake Recovery Strategy for Haiti. The project will provide needed economic stimulation for Haiti.

Whether supporting the nation at home or abroad, it can be difficult to be separated from family and loved ones for extended periods.

"It's a tough decision to leave home and loved ones behind to venture off to the unknown," Brown said. "Comfort and convenience in Third World countries are [few and far between]. You leave the comforts of home to go to a place with unstable power and non-potable water; it's hard. I explained to my kids, seven and 10 years old, 'Daddy has to work in Haiti. There are struggling people who need my help.' They understand that."

As the plane prepared to land in Haiti, reality began to sink in.

"I had a ticket, a point of contact but didn't know who would meet me at the airport. I was in a land of people who looked like me, but I didn't speak nor understand the language." He was an outsider.

"I was very uncomfortable," Brown said, "but I was going to perform work that was more important than me and my comforts. I was uneasy. I was anxious, I didn't speak the language, I couldn't even read the signs," he said. "But that's what selfless servants do. With our gifts and talents, we can

make the world a better place, in spite of ourselves."

To do this type of work, Brown says, one should have a sense of adventure; a set of values where the greater good and what you're working toward outweighs your own personal comforts.

Not only does Brown work selflessly on Corps projects and disaster recovery, he also actively promotes science, technology, engineering and math (STEM) education and careers. He recently coordinated a team of fellow employees to assist with the Second Annual Junior STEM camp, held at Jacksonville's University of North Florida. And most recently, Brown and his co-workers hosted a group of First Lego League students at the district. The event provided a view of STEM disciplines as they are used in Corps career fields.

Brown says he believes to whom much is given, much is required. "We are given abilities for the service for mankind and not for selfish reasons. That is why I do what I do."

Others who embody selfless service may not have deployed or worked on projects that benefit less fortunate countries, but their service to the nation is equally valuable.



Construction representative Shawn Huebner (right) briefs Lt. Gen. Thomas Bostick, Chief of Engineers, while on the job in Afghanistan. (Photo courtesy of Shawn Huebner)

**ARMY VALUES: SELFLESS SERVICE** (continued from PAGE 6)

Ronnie "Shawn" Huebner, construction representative in the South Florida Operations Office (SFOO) in Cleviston, Fla. and Maria Bezanilla, project manager in the Miami Regulatory office forget about their comfort zones and what is "not their job" and, like Nike, they "Just Do It," without any expectation of praise.

"Maria embodies selfless service," said Ingrid Sotelo, chief of the Miami Regulatory office. "Her attitude at work is the polar opposite of the "not-my-job" mentality. Whether it's boxing up files or taking on [additional project load], she takes on whatever she sees [that] needs to be done without being asked; without complaining. One day we will figure out a way to clone her," Sotelo said.



Shawn and Angie Huebner and their son Shane, 3. Shawn defines selfless service as thinking of others first, and said that his wife is a great example of that Army value. (Photo courtesy of Shawn and Angie Huebner)

Huebner is a combat veteran and former infantry soldier who now works in the SFOO contracting section. He also supports the Invasive Species Management Branch one day a week, providing quality assurance for Natural Resources Conservation Service invasive plant control projects.

"I've always been taught to think of others before yourself," said Huebner. He believes that is the definition of selfless service.

"The way I look at it, the phrase 'it's not my job' is not in my vocabulary," said Huebner. "Whatever task a supervisor asks [me] to do, or if a co-worker needs assistance getting a job done, [I] just do it. I don't look at an assignment as not being my job. Often, that assignment gives me an opportunity to learn something," he says.

Huebner said he thinks his wife, Angie, who works in the district's Invasive Species Management Branch in Jacksonville, portrays selfless service more so than he does.

"I was in the military from 1988-91; I was single. But when I went to Afghanistan from 2011-2012 as a Corps employee, my wife supported me. She made the sacrifice," he said. "Without her, I couldn't have done it. She is the selfless servant." ♦

**Military Appreciation Month**



May is Military Appreciation Month - if you would like to thank the men and women of our armed forces, here's one way to do so. Log on to the U.S. Army's Facebook page at the following link, and add your message of thanks to the thousands already collected there:

[https://www.facebook.com/AmyOCPA#!/AmyOCPA/app\\_103926973053781](https://www.facebook.com/AmyOCPA#!/AmyOCPA/app_103926973053781)

Or - post your message to military families on the Joining Forces website, where it will be received and distributed by the USO:

<http://www.whitehouse.gov/joiningforces/message>



# Munitions item found at Culebra one week before spring break

BY AMANDA ELLISON



The U.S. Navy Explosive Ordnance Disposal team conducted a blow-in-place to dispose of a 100-pound munition found by a snorkeler in Flamenco Bay on the island of Culebra, Puerto Rico. (USACE file photo)

One week before hundreds of spring break tourists were due to arrive at Flamenco Beach on the island of Culebra, Puerto Rico, a snorkeler located a large munitions item during an afternoon swim in Flamenco Bay.

Following protocol, the municipality of Culebra notified the Police Bureau of Explosives and Public Security, who in turn contacted the U.S. Navy Explosive Ordnance Disposal (EOD) team. The EOD team inspected and identified the item as an unexploded 100-pound bomb, then safely destroyed it with a controlled detonation in the water.

The Army Corps of Engineers has an active safety campaign on the island of Culebra, to inform both the local citizens and visitors on the correct response in the event they encounter potential munitions. The safety awareness message could not have come at a more critical time, as tourists began to arrive on the island for spring break.

Representatives from the Army Corps of Engineers were on the island the day the snorkeler discovered the item, to distribute safety and educational materials about the importance of practicing the 3Rs of explosives safety:

- **Recognize** that the object might be a munitions item and that munitions may be dangerous;
- **Retreat** to a safe location without moving or touching the item; and
- **Report** the finding immediately to local police.

The Department of Defense used the island of Culebra and adjacent smaller islands to train troops for combat and, although the Department of Defense ceased activities in the mid-1970s,

(CONTINUES ON **PAGE 9**)



CULEBRA (continued from PAGE 8)

**Safely Enjoy Culebra.  
Follow the 3Rs.  
Take only your memories.  
Leave only your footprints.**



The Navy trained on Culebra for many years. You can see the tank they left on Flamenco Beach, but that may not be all that's left. Munitions have been found on the beach and in the water. If you see something unusual, please do not touch it. Remember and follow the 3Rs of explosives safety:

- Recognize. What you found may be dangerous.
- Retreat. Do not touch or move the object.
- Report. Call 787.742.3501  
and say you may have found munitions.



Safely Enjoy Culebra's beaches.  
Follow the 3Rs.  
Take only your memories.  
Leave only your footprints.

U.S. Army Corps of Engineers Jacksonville District  
Email: FUDS.PuertoRico@USACE.Army.mil  
Call (Toll Free) 866-279-4880

**BUILDING STRONG®** US ARMY CORPS OF ENGINEERS | JACKSONVILLE DISTRICT

**Disfruta con seguridad Culebra.  
Siga las 3Rs.  
Llévese sólo sus recuerdos.  
Deja sólo tus huellas.**



Por muchos años la Marina entrenó en Culebra. Usted puede observar el tanque dejado en la Playa Flamenco, pero puede que esto no sea todo lo que se haya dejado. Se han encontrado municiones en la playa y en el agua. Si usted observa algo inusual, por favor no lo toque. Recuerde y siga las 3Rs de seguridad para explosivos:

- Reconozca. Lo encontrado pudiese ser peligroso.
- Retroceda. No toque o mueva el objeto.
- Reporte. Comuníquese al 787-742-3501 y notifique que puede que usted haya encontrado municiones.



Disfruta con seguridad las playas de Culebra.  
Siga las 3Rs.  
Llévese sólo sus recuerdos.  
Deja sólo tus huellas.

U.S. Army Corps of Engineers Jacksonville District  
Email: FUDS.PuertoRico@USACE.Army.mil  
Call (Toll Free) 866-279-4880

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The Corps developed a special safety campaign for Culebra last year, after a young tourist was injured when she found and handled a suspected munitions item. The campaign was coordinated with input from the community, and was well-received by local business owners, who agreed to post and distribute the information to inform residents and tourists alike of the 3Rs of explosives safety: **Recognize, Retreat and Report.**

military munitions remain on the islands and surrounding waters. The Corps is managing the cleanup of Culebra under the Defense Environmental Restoration Program for Formerly Used Defense Sites, and has divided eligible portions of Culebra into 14 project areas. One area is where anecdotal reports indicate materials from an encampment were placed in the wetland. The remaining 13 areas are known as Munitions Response Sites (MRSs).

Of the 13 MRSs, the Corps has initiated fieldwork on all land-based areas and Remedial Investigation/Feasibility Study reports are in development. These reports will form the basis for plans to address each MRS. Additionally the Corps is conducting field investigations in the water areas around the Northwest Peninsula, Soldado Point, Cayo Luis Peña, Culebrita and various adjacent small cayos. ♦

**OVERSEAS CONTINGENCY OPERATIONS**  
**WELCOME HOME**

MARIE HUBER

## New survey boat arrives in Jacksonville District BY JOHN H. CAMPBELL



The new survey vessel SB-48 goes through some tests in advance of its delivery to Jacksonville District. The boat replaced a 25-year-old vessel in the fleet, and will perform primarily near-shore and inland surveying missions in Florida. (USACE file photo)

The modernization of Jacksonville District's fleet of survey boats continues with the arrival of its newest vessel.

Crew members took delivery of the new boat, known as SB-48, in the past few weeks and have been working to install survey equipment so it will be ready to perform missions later this year.

"Once it tests out, it'll be ready to use," said Phil Bates, plant manager, who helped write the specifications for the new boat. "We are finalizing all the cabling and are looking forward to deploying this vessel."

The first job for SB-48 will be an underwater site investigation of scouring on the south bank of the Caloosahatchee River downstream of the Ortona Lock along the Okeechobee Waterway.

"I was approached by the project manager asking if we had the capability to perform such a survey," said Brian Brodehl, chief of the Survey and Mapping Branch. "I said that we have a brand new shallow water sound that can provide both high-resolution multi-beam and sidescan sonar imagery simultaneously, and he said that would be perfect."

The 26-foot catamaran is replacing a 25-year-old boat. It will be based in Jacksonville, but can be transported by trailer. It will work up and down both the Atlantic and Gulf Coasts.

"The old boats were great years ago," said Bates, "but advancements in technology on catamarans really make

them better suited to hydro-survey activities today."

The 26-foot boats in the Jacksonville fleet are used primarily for surveying activities close to land, including inland waterways, where larger boats are unable to work. The district also has off shore boats in its fleet, like the 62-foot catamaran *Florida II*, and other vessels that work in areas in between.

"We've used our old boats to their life expectancy," said Bates. "Repair costs escalate with age. It's just not cost effective to keep repairing boats after a certain point."

The new boats will have plenty of work, supporting shore protection projects on both coasts, channels for navigation, and projects that will result in deeper ports in the coming years.

"Kings Bay Naval Submarine Base is one of our larger customers," said Brodehl. "We recently completed surveys for the entrance channel at St. Mary's Inlet as well as the inner harbor up to the naval base. The *Florida II* will also support an inspection tour of the Atlantic Intracoastal Waterway, something its predecessor, the *Florida*, did annually for many years."

One of the more unique survey projects in recent weeks involved a mission to search for potential cultural resources off the shore near Stuart, in support of a shore protection project in Miami-Dade County.

"We used the full capabilities of *Florida II* on that mission," said Brodehl. "In the past, we would have to survey the locations

**SURVEY VESSEL** (continued from **PAGE 10**)

Jacksonville District's survey vessel *Florida II* recently completed a cultural resource job near Stuart as part of a shore protection project. Brian Brodehl, chief of the district's Surveying and Mapping Branch estimates the high-tech equipment on the boat meant the crew could use three scanning methods simultaneously, reducing the cost of the job by about 50 percent. (USACE file photo)

three times due to the different survey methods and equipment that were needed for that job. Instead, because of the highly advanced equipment we installed on *Florida II*, we were able to perform multiple scanning methods concurrently, resulting in a savings of 50 percent for this job."

The surveying and mapping mission isn't restricted to water. Brodehl says the branch also has numerous land-based missions as well.

"We are currently supporting the Multi-Projects Branch and Vicksburg District on the STA-1E project in West Palm Beach," said Brodehl. "We've also got a job upcoming in the Three Forks Marsh area that sounds interesting and challenging at the same time. We expect to see a good amount of wildlife there, including many gators that inhabit the marsh."

Additionally, the Surveying and Mapping Branch has become the new home for Jacksonville District's Unmanned Aerial System (UAS) program.

"This form of remote sensing and high resolution mapping has added a great deal of surveying capability to the branch and the district," said Brodehl. "We expect use of the Unmanned Aerial Vehicles to grow significantly as we gain the trust and acceptance of our partners and customers."

The UAS is currently supporting projects at Herbert Hoover Dike and for the Natural Resources Conservation Service. Additional

work is coming up for the U.S. Navy and for emergency operations programs.

"There's basically nothing in the surveying world we can't do," said Brodehl. "We are a fully capable surveying and mapping team, and we want people to keep us in mind as they plan future projects." ♦



Land-based surveying and mapping presents some missions that are "interesting and challenging." This alligator was photographed in the Three Forks Marsh area, where members of Jacksonville District's Surveying and Mapping Branch will be working in the coming weeks. (USACE file photo)



# Water Safety



National Safe Boating Week  
May 17-23, 2014

"Grrrrr. rARf. rARf."

Translation, "Wear your life jacket, Champ!"  
Brought to you by the National Safe Boating  
Council and those who ~~rag~~ love you.



safeboatingcampaign.com



SafeBoatingCampaign.com



"Daddy, you promised to wear your life jacket!"

Trust us, she'll know if you don't.  
Brought to you by the National Safe Boating Council and the women who ~~rag~~ love you.



National Safe Boating Week  
May 17-23, 2014



safeboatingcampaign.com



# Fifth grade students take on Jax Port deepening debate

STORY AND PHOTOS BY SUSAN J. JACKSON



Jason Harrah, Jacksonville Harbor project manager, shows Mayport Elementary Coastal Sciences Academy fifth graders examples of projects that the U.S. Army Corps of Engineers has built across the country.

Jason Harrah, Jacksonville Harbor project manager and Paul Stodola, lead biologist, stood tall in front of the principal, six teachers and 50 ten- and 11-year olds. If they were nervous, no one could tell.

Mayport Elementary Coastal Sciences Academy fifth graders are studying the Jax Port “dredging debate” and recently invited the U.S. Army Corps of Engineers, Jacksonville District to present its case. The kindergarten through fifth grade academy teaches students the importance of preserving habitats and ecosystems through resources conservation.

When science teacher Lori Crafton asked for a speaker from the U.S. Army Corps of Engineers, she said the students already knew a lot about the project and its impacts. “We have had field trips to Jacksonville University, and heard the [St. Johns Riverkeeper’s and JaxPort’s] sides of the issue. We also had Dr. [Quincy] Gibson, from University of North Florida, come to speak at our school,” Crafton said.

“So much of our research has been from secondary source information. It would be an invaluable piece to their study to hear directly from the group that’s working on the project,” Crafton said. After hearing the Army Corps of Engineers’ side, she explained, the students would write argumentative essays and participate in a debate. “We’re really excited about the visit,” she said.

So were Harrah and Stodola. Harrah led the presentation with highlights of Army Corps of Engineers’ contributions to the nation’s history, Jacksonville District’s missions, and the district’s nearly twelve-decade-long relationship with the port and St. Johns River.

He then said his “boss’s boss’s boss’s boss” (President Obama) directed Harrah’s boss to get the Jacksonville Harbor study and

recommended plan accomplished no later than April 2014. “The BIG Boss wanted to invigorate the economy with new jobs and prepare the nation’s ports for the next generation of ships,” Harrah said. This seemed to impress the students and teachers, and there were many thoughtful expressions around the room.

When Harrah pulled money from his pocket and asked for someone from the audience, everyone seemed to lean forward. He asked the students if they gave him a dollar and he gave them back \$2.70, would they turn down a deal that could make them some money? A few students raised their hands, which surprised Harrah a bit (knowing his own fifth grader, Emma, would have taken the money). Using a slide with photos and graphics depicting the evolution of container ships, he explained the cost to benefit ratio to the nation and local economies in the ability to ship larger volumes of goods faster and more efficiently.

Harrah pulled out his personal iPad, and asked the students if they would rather pay \$700 for an iPad, or \$400-500 dollars for an iPad. “That’s the difference, when you can ship larger volumes – lower shipping costs translate to lower product costs,” he said. By investing in the deepening project, Florida and the nation will benefit for decades to come.

Harrah then showed the students a map of the mouth of the river and described the conditions there. When he spoke about the Mayport Naval Base and their navigation requirements, the students’ paid especially close attention – after all, that was only several miles up the road and this is a “Navy Proud” community. Harrah led them along the river, describing various locations like Mile Point, where the Corps is working to make a cross-current issue safer for navigation, and the project highlights on the waterway.

(CONTINUES ON PAGE 14)

## JAX HARBOR (continued from PAGE 13)

Stodola then introduced himself to the students. "When I was your age, my favorite hobby was catching and keeping snakes, to the great dismay of my mother," he began. Many of the boys understood and laughed in agreement. In college, Stodola studied fisheries science. Upon graduation, he served in the Peace Corps in the Democratic Republic of the Congo (formerly Zaire), Africa, where he taught aquaculture. Much to the delight of the students, he described his long ago job working as an elephant keeper. He also explained that he has worked as a government biologist for 25 years, where he has applied his knowledge to projects such as Jacksonville Harbor. His passion and commitment to wildlife and the natural environment seemed to strike an instant rapport with students.

Stodola presented information on how the deepening will affect the environment, including salinity, blasting and dredging impacts, and how the Army Corps of Engineers can predict outcomes through data collection and modeling. He asked the group if they knew what salinity meant and nearly everyone raised a hand, and one student gave the definition.

"I knew right away they were a savvy group, and they would 'get it' when I talked about thresholds and modeling predictions," Stodola later said.

Using modeling examples of the river and its tributaries, Stodola discussed salinity impacts to submerged aquatic vegetation, wetlands and fish. He provided statistics and explained that the changes in salinity caused by the deepening are small in the estuary, which naturally differs in salinity levels due to rainfall, tide and drought. He also spoke about lands for conservation, a mitigation feature of the plan, and installation of water quality monitoring stations that would collect data before, during and after construction.

"Now we know some areas of the river have hard bottom that we'll likely have to blast, but let me tell you something – we've come a long way in the technologies that we use, which are the best in the world. We don't have to blow up the rock bottom; we only crack it, which causes a lot less impact. Dredging vessels these days are built better to scrape the bottom and pull up the debris," Stodola said.

Students and teachers alike expressed concern about the effects of dredging and blasting, and raised their hands to ask a variety of questions. Stodola responded to questions and then showed a recording of a confined blast triggered by 1,105 pounds of explosives in 16 holes.

"In confined blasting, the hole in which the explosive material is placed is capped with an inert material, such as crushed rock. The holes are placed at intervals and the explosives are tied to a single charge," he explained.

The room was completely silent as the recorded blast was played. Stodola looked around and smiled as students stared. The "explosion" looked very small. Hands popped up and the children leaned forward in their eagerness to ask questions. Stodola answered every question and even provided examples, which connected science or fact to species and circumstances familiar to the students.

Stodola then explained how the Army Corps of Engineers uses a variety of monitoring activities during blasting and dredging operations to protect aquatic life. The students were keen to hear that all in-water work stops when manatees, turtles and other marine life get too close. He further explained how



Paul Stodola, lead biologist for the Jacksonville Harbor project, explains to Mayport Elementary Coastal Sciences Academy students how the planned harbor deepening will affect the environment and how the Army Corps of Engineers can predict outcomes through data collection and modeling.

blasting would only occur during the winter months, when manatees are less likely to be in the St. Johns River. The class enjoyed watching videos of how night vision technology can be used to find animals at night, and how the Army Corps of Engineers may someday employ sonar to identify and track marine life underwater.

The Army Corps of Engineers anticipates minor impacts to the river estuary and marine life, Stodola concluded.

Harrah concluded the presentation by explaining project benefits and risks. Referring to people like Walt Disney, Steve Jobs, Thomas Edison and novelist J.K. Rowling, Harrah explained, "All these people were told 'no' but moved ahead and succeeded because they believed there was value in their work. To make advancements throughout history there has always been some risk.

"We know there's some risk," Harrah told the students, "but we're doing everything we can to plan well, to monitor and mitigate those risks."

After the presentation, Harrah said he enjoyed it: "This is one of the best highlights of the job."

Stodola agreed, saying that it's not often they get to teach young people about what they do.

"It's exciting to share things with them, especially the new technologies that we use and how much more we know today than [we knew] even 10 or 20 years ago," Stodola said. ♦

# Draft Everglades System Status Report available for public review

BY JENN MILLER



Monitoring is the primary tool used by RECOVER to assess CERP performance by determining if ecosystem responses are desirable, if progress is being made toward interim goals and targets, and whether refinement of CERP implementation is needed. (USACE file photo)

This comprehensive understanding of the system enables the successful use of adaptive management principles to track and guide restoration activities.

"Although CERP implementation has been slower than originally envisioned, where we have seen projects constructed and operated, we see hydrological and ecological trends moving towards restoration goals," said LoSchiavo.

Key findings from the report will be used to assist decision-makers on the planning and implementation of certain CERP features and the data will also provide a basis for future Everglades restoration and operations planning efforts. The 2014 SSR also provides input into the 2015 Report to Congress, required by the Water Resources Development Act of 2000. The Report to Congress is produced every five years to inform the highest levels of the U.S. government on the progress made toward the goals and objectives of CERP.

"What we continue to see in our data is the need for CERP restoration projects to move forward and the value of incremental restoration actions," said LoSchiavo.

In an effort to increase awareness and understanding of the Draft 2014 SSR, public meetings and webinars were held in April to discuss the draft report and give all interested individuals, groups and agencies an opportunity to comment and ask questions. ♦

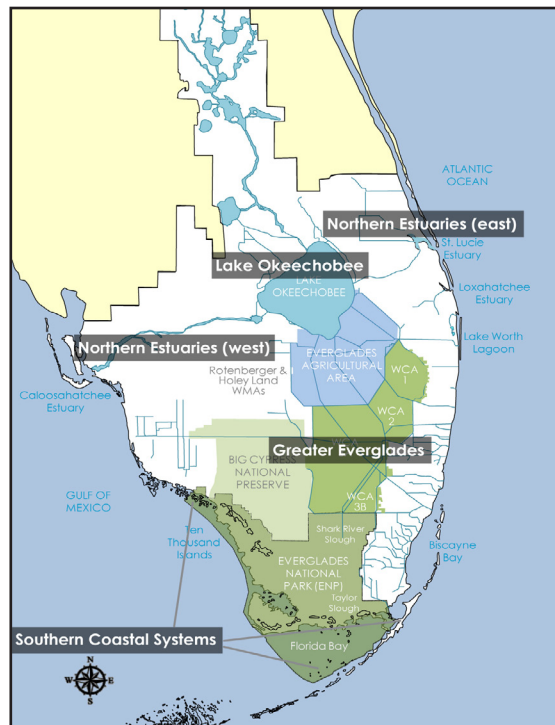
The draft 2014 System Status Report (SSR), a comprehensive report evaluating monitoring data within the Everglades ecosystem, is now available online for public review at [http://bit.ly/2014\\_SSR](http://bit.ly/2014_SSR).

The U.S. Army Corps of Engineers and the South Florida Water Management District – the two implementing agencies of the Comprehensive Everglades Restoration Plan (CERP) – announced the publication of the report March 31.

"This multi-agency report evaluates current monitoring data from different geographic regions within the Everglades ecosystem to determine if the goals and objectives of the Comprehensive Everglades Restoration Plan (CERP) are being met," said Andy LoSchiavo, SSR coordinator for the U.S. Army Corps of Engineers, Jacksonville District. "The data reviewed in the report are used to summarize changes in the ecosystem, and to recognize and discuss, when necessary, why goals are not currently being met and how adaptive management may be incorporated to better manage the system."

The SSR incorporates data collected by the multi-agency Restoration Coordination and Verification (RECOVER) Monitoring and Assessment Plan (MAP) program for CERP, data from CERP projects, and data provided by RECOVER partners. RECOVER is a multi-agency team of scientists, modelers, planners and resource specialists who organize and apply scientific and technical information in ways that are most effective in supporting the objectives of CERP.

The report evaluates data from different system-wide geographic regions, including Lake Okeechobee, the Northern Estuaries, Greater Everglades and Southern Coastal Systems.



The System Status Report evaluates data from different system-wide geographic regions, including Lake Okeechobee, the Northern Estuaries, Greater Everglades and Southern Coastal Systems.

## Key findings for each geographic region include:

### Northern Estuaries

Although high flow events cause the most severe damage to the northern estuaries, new data indicates that supplemental freshwater inflows to the St. Lucie Estuary during extremely dry years, especially when they occur back-to-back, may be needed to maintain healthy oyster populations in the middle estuary.

### Lake Okeechobee

Lake Okeechobee ecology improved when water levels stayed within the desired range of 12 to 15.5 feet. This was due to beneficial climatic conditions and the Lake Okeechobee Regulation Schedule reducing high lake stages. These results indicate that Lake Okeechobee ecology will improve when more storage outside the lake is available to reduce the frequency of high inflows.

### Greater Everglades

Water level recession rate is critically important for wading bird nesting, and it is one of the most directly-controlled hydrologic parameters that can be translated to water management actions.

### Southern Coastal Systems

As a result of the significant construction progress at the Picayune Strand Restoration Project, positive ecological responses are being realized with changes in the hydrology and vegetation of the areas near the back-filled prairie canal.

# Jax Facts: How well do you know Jacksonville District?

BY NANCY J. STICHT



Congratulations to **Jennifer Tyler, Engineering Division**, the first district team member to submit the correct answers to all ten of the following questions, based on stories that appeared in the April issue of JaxStrong. (Photo by Nikki Nobles)

**1. What is the name of the Corps' center of expertise for development and application of innovative technologies for naval architecture and marine engineering, and on what Jacksonville District vessel did it play a significant design and acquisition role?**

A: The Marine Design Center; the *Florida II*. (Marine Design Center helps provide vessels for missions, pg. 8)

**2. What was unique about the Broward County shoreline protection project?**

A: The project was the first of its kind because it included 10,000 truck deliveries of sand from a mine in central Florida, rather than using the dredge delivery method. (Two shore protection projects completed, pg. 3)

**3. Early detection and rapid response efforts have targeted what two invasive plant species in north Florida?**

A: Salt cedar and old world climbing fern. (Working together to combat invasive species, pg. 6)

**4. How much money did the President's Budget for Fiscal Year 2015 include for the South Florida Ecosystem Restoration Program, and what single project will receive more than half of that amount?**

A: \$66 million total; \$38 million for the Indian River Lagoon-South C-44 Reservoir and Stormwater Treatment Area project. (COL Dodd's column, pg 2)

**5. Beach renourishment provides storm protection for upland development. What is an added benefit of this program?**

A: Renourishment also helps restore shorebird and marine turtle habitat. (Two shore protection projects completed, pg. 3)

**6. What Army value is defined by treating people as they should be treated?**

A: Respect. (Jacksonville District team members employ the Golden Rule, pg. 10)

**7. What is the name of the 3.5-mile tidal channel that in the past provided a vital connection between San Juan Bay and San Jose Lagoon?**

A: Caño Martín Peña (Agua mala, pg. 13)

**8. What authority is provided by Section 103 of the Continuing Authorities Program (CAP)?**

A: Section 103 of CAP allows the Corps to assist in the protection of public infrastructure on small beaches against erosion and damages caused by natural, storm-driven waves and currents. (Tarpon Springs project protects infrastructure, hurricane evacuation route, pg. 20)

**9. What special feature for dredges was designed by Jacksonville District and the Engineering Research & Development Center and implemented by the Corps' Marine Design Center?**

A: They developed a turtle deflector in the early 1990s, to help keep sea turtles from being hurt by dredging operations. It has had a major impact in reducing injuries to turtles in dredging operations from Texas to Delaware. (Marine Design Center helps provide vessels for missions, pg. 8)

**10. What project was one of the largest renourishment events awarded by Jacksonville District under the Flood Control and Coastal Emergency program, and what was its estimated cost?**

A: Anna Maria Island, Manatee County, Fla. at an estimated cost of \$12.3 million. (Two shore protection projects completed, pg. 3) ♦







US Army Corps Of Engineers  
Jacksonville District  
2014 Corporate Run 5K Team

Congratulations to Jacksonville District's 2014 Corporate Run 5K Team for a strong finish in this year's race, held Thursday, April 17. Fifty-three participants competed in the event. The women's team placed first in the Military and Government group for the second year in a row, and the men's team took second place in the same category. The Jacksonville District team also boasted both the fastest male and fastest female in the Military and Government category – Shanda Weekes, Contracting Division, finished in 23 minutes 36 seconds and Matthew Miller, Planning Division, finished in 19 minutes, 28 seconds. (Photo by Troy Weber)

## Memorial Day 2014

***"We have shared  
the incommunicable  
experience of war; we  
have felt, we still feel, the  
passion of life to its top."***

-Oliver Wendell Holmes, Jr.  
Memorial Day speech, 1895



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