Palmetto Castle

The U.S. Army Corps of Engineers
Charleston District

Summer 2011

The Change of Command for Charleston District

News Magazine of the U.S. Army Corps of Engineers, Charleston District

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On the cover....

This issue features the biennial Change of Command ceremony for the Charleston District. Here, new Commander and District Engineer, Lt. Col. Edward P. Chamberlayne (left) stands at attention with Maj. Gen. Todd Semonite (right) during the Retirement of Colors.

From the Commander

Greetings!

I am deeply honored to become the Charleston District's 84th Commander and District Engineer. My wife, Allison, and I are extremely excited to join the District team and look forward to serving the District's employees, customers and stakeholders for the next two years.

Over the past several months, I have attended several courses and conferences in preparation for this command. Through this experience, I have learned that the Charleston District has an outstanding reputation and is extremely well respected within South Carolina, across the U.S. Army and at our Corps of Engineers headquarters in Washington, D.C. The unsolicited positive comments that I have received are a true testament to the hard work of Lt. Col. Jason Kirk, Bill Stein and everyone in the Charleston District over the past few years and evidence of your GREATNESS!

One of my initial goals is to immediately travel to all of the District's field offices during July and August and meet each and every outstanding member of Team Charleston. I will take the time to introduce myself, my expectations and my near-term priorities followed by visits to some of our on-going projects. When I meet with our Charleston District team members, I will be looking to learn about our customers and how I can communicate more effectively, which will streamline our work and make it even better.

To our deployed employees both overseas and across the United States, know that our District and nation are tremendously proud of your selfless service. I look forward to welcoming you home soon and hearing your stories. Some of my most rewarding experiences over the past 18 years were spent deployed with USACE employees in Iraq and Afghanistan. Thank you again for your service assisting those in need both in the U.S. and abroad.

To our customers – I look forward to meeting all of you as well. Please tell me how we are doing, how we are communicating with you and how we can improve. Take advantage of the fact that I am new and use this opportunity to address your issues and comments. Feel free to send me feedback at anytime throughout the year on the work we are doing for you. Don't feel you have to wait for our annual customer surveys. We are here to serve you. Again, I am looking forward to meeting you soon in person where we can discuss issues face-to-face.

Hopefully it is clear already, but if not, please know that I am very excited to join the ranks of this District and am eager to continue to advance the District from GOOD to GREAT.

BUILDING STRONG!

Edward P. Chamberlayne, P.E.
Lt. Col., U.S. Army
Commander and District Engineer
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Good to Great!

"This is the power of the flywheel. Success breeds support and commitment, which breeds even greater success, which breeds more support and commitment- round and round the flywheel goes."

Jim Collins
Author, "Good to Great"

Lt. Col. Edward Chamberlayne Assumes

By: Glenn Jeffries

Lt. Col. Edward P. Chamberlayne assumed command of the U.S. Army Corps of Engineers, Charleston District from Lt. Col. Jason A. Kirk on July 8th at a ceremony held at The Citadel, the Military College of South Carolina. Maj. Gen. Todd T. Semonite, Commander of the Corps' South Atlantic Division, officiated at the ceremony and welcomed Chamberlayne and his family to the District. Maj. Kevin Wissel, Charleston District Deputy Commander, served as the master of ceremonies, while Bill Stein, deputy for programs and project management, assisted with the Presentation of Colors, symbolizing the partnership between the District's military and civilian workforce.

Semonite praised Chamberlayne during his remarks saying, "Lt. Col. Chamberlayne's abilities as a leader will serve the Charleston District well. He is the right guy for the challenges that will face the Corps in the future and I look forward to seeing him lead the Charleston team."

Chamberlayne comes to Charleston from his last assignment at Virginia Polytechnic Institute and State University (Virginia Tech) where he earned a doctorate in industrial and systems engineering. Before earning his doctorate, he served in numerous engineer command and staff positions in both the United States and overseas. He was born in Alexandria, Virginia and received a commission as a second lieutenant in the U.S. Army Corps of Engineers in August 1993, after gradu-

Command of the Charleston District

ating from Virginia Tech with bachelor's and master's degrees in civil engineering. He also earned a master's degree in engineering management from Missouri University of Science and Technology and is a registered professional engineer in the state of Missouri. His numerous military awards include two Bronze Star Medals, four Meritorious Service Medals, the Combat Action Badge and the Air Assault Badge.

"I am excited and honored to join this outstanding team of professionals and to serve the citizens of South Carolina," said Chamberlayne. "The Charleston District has a talented team with a reputation for excellence. From the Spartanburg/Greenville area to Fort Jackson to Myrtle Beach and all the places in between, know that the District is hard at work to serve the federal interest in water resources solutions, delivering military construction and protecting our environment."

The tradition of the Change of Command ceremony dates back to the passing of the scepter, which is a symbol of authority, from the old Caesar to the new, in the progression of the Roman Empire. The U.S. Army adopted the custom of the passing of the Colors from the British, and instituted it in the 18th century when General George Washington assumed command of the Continental Army in Boston on July 3, 1775. The ceremony symbolizes the passage of authority, responsibility and accountability.

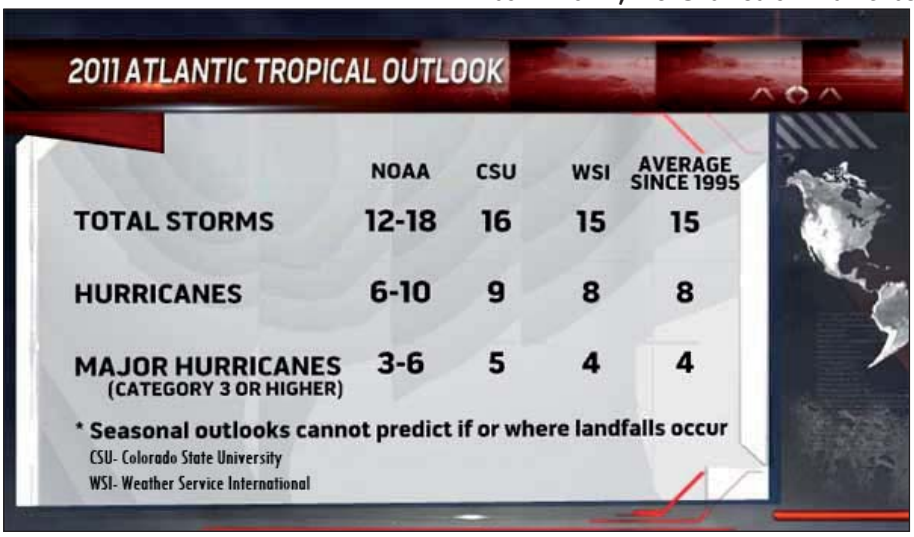
Welcome Lt. Col. Chamberlayne from the entire Team Charleston! We are excited for your leadership for the next two years!

Charleston District Prepared for Active Hurricane Season

By: Sean McBride

Luckily, for South Carolina, 2010 was a quiet year for hurricanes, which was a pleasant surprise. But what will 2011 bring?

June 1st marked the first day of the 2011 hurricane season, which runs through November 30th, and according to the seasonal outlook issued by the National Oceanic and Atmospheric Administration's (NOAA) Climate Prediction Center, a division of the National Weather Service, another "above average" hurricane season is expected for the Atlantic Basin this year.



"The United States was fortunate last year. Winds steered most of the season's tropical storms and all hurricanes away from our coastlines," said Jane Lubcheno, Ph. D., NOAA Administrator. "However we can't count on luck to get us through this season. We need to be prepared, especially with this above-normal outlook. As with every hurricane season, this outlook underscores the importance of having a hurricane preparedness plan in place."

And the Charleston District certainly is prepared.

Every year, the Charleston District, as part of the federal government's unified national response team to disasters and emergencies, is ready to respond when called upon. While emergency preparedness and response are primarily a state and local responsibility, the Charleston District is authorized to assist communities in pre-hurricane preparedness and in-progress- and post-hurricane response. If directed to by FEMA, the District would stand up a recovery field office and provide support. The support comes in five areas: water, ice, debris removal, power restoration and temporary housing.

One way some of the Charleston District emergency response team members have recently received hands-on experience is through recent deployment to Alabama to aid in FEMA missions, such as debris removal, in support of the tornado damage clean-up efforts (see page 8).

The Charleston District has and will continue to work closely throughout the 2011 hurricane season with local and state communities, as well as other federal agencies, to prepare. Wherever and whenever a disaster strikes, many federal, state and local agencies rely upon the U.S. Army Corps of Engineers (USACE) to provide an extensive range of expertise. The Charleston District's employees play a large role in protecting our community by managing our civil works structures and projects in anticipation of tropical storms and hurricanes by doing project pre- and post-storm assessment surveys when requested by the project's sponsor.

Also in 2011, the Charleston District serves as back up to the Albuquerque District for the National Ice Mission. Responsibility for this mission means that the Charleston District stands ready to assist the Albuquerque District in providing an essential commodity, ice, to our nation during a disaster. These districts are prepared to provide three million pounds of ice within 24 hours of being called upon to any U.S. state or territory in need. The ice delivery is crucial to aiding in medical issues such as keeping medication cool.

"We are proud of Charleston District's role in the USACE long-standing mission to serve the nation with expeditionary teams responding to domestic incidents such as hurricane and storm responses here in South Carolina and beyond," said Gilbert Dent, Charleston District's chief of emergency management. "Our team prepares for emergencies 365 days a year; we just heighten our awareness and sharpen the tool kit during hurricane season."

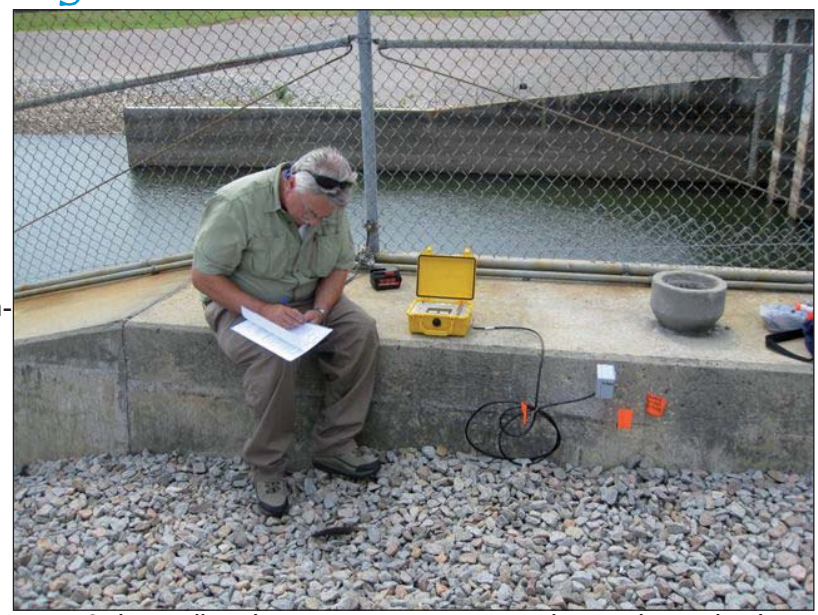
Most hurricanes have a lifespan of about nine days, with a higher lifespan of about twelve days in August. Storms that are of tropical origin and reach a cyclonic wind circulation of more than 74 miles per hour are classified as hurricanes.

If a hurricane is expected in our area, it is imperative to pay attention to all advisories and activate your family hurricane plan. Make sure you have your hurricane survival kit ready and know your evacuation routes and family plan before a hurricane arrives. Awareness, preparedness and action are the keys to the safety of lives and property when hurricanes threaten our area.

Dam Safety Training Score Leads Division

By: Tommy Socha, civil technician

This past spring, the Charleston District hosted a dam safety exercise for the St. Stephen Powerhouse. The goal of the exercise was to test the response of Charleston District personnel and stakeholders to a seismic event, if one were to occur at the powerhouse. Participating with the District were representatives from the South Atlantic Division (SAD) headquarters, Santee Cooper and South Carolina State and County Emergency Management. By including these external participants, there was an opportunity to test combined knowledge and make sure everyone is ready in the event of a real emergency.



Tommy Socha installs a tilt meter monitoring system at the powerhouse. The tilt meter will electronically monitor movements in the spillway during facility operations during the year and is another way the District works to keep safety the number one priority in all activities.

The dam safety exercise tested the effectiveness and accuracy of the St. Stephen Powerhouse Emergency Action Plan (EAP), a document that identifies procedures and operations for emergency conditions. The dam safety exercise was conducted in three phases: preparation, execution and recovery.

The dam safety team was provided five scenario events and developments, covering the time frame from initial response through required follow-up actions for recovery related to a seismic event. Each agency defined their role in each scenario and discussed how they could be a more effective team. The exercise also tested the EAP effectiveness of the communications flowchart between all participants in emergency conditions.

Finally, the District set up an Emergency Relocation Facility (ERF) at the St. Stephen Powerhouse, an off-site location for emergency operations for dam safety, hurricanes, earthquakes and other events.

Don Smith, dam and bridge safety program manager for Charleston and Savannah Districts, analyzes the roles of the participating organizations during the dam safety exercise.

An after action review was held to identify what worked, what did not work and what could be improved upon to enhance the EAP and future dam safety operations. The only concern was the noise level in the ERF and that issue is presently being addressed.

All of the goals were met and the exercise was a complete success.

Dam Safety training is one of several metrics that a project is scored on across the Corps of Engineers. The St. Stephen Powerhouse scored a 96, leading all districts in SAD.

Thanks to our partners for their valuable input. The Charleston District is prepared for efficient and proper action in the event of an emergency.

Charleston District Lends a Hand to Alabama

By: Sara Corbett

On April 27th, a massive storm system with more than 50 tornadoes tore through the southeast United States devastating parts of Mississippi, Alabama, Louisiana, Tennessee and Georgia. As a result of the storm damage, the Federal Emergency Management Agency (FEMA) tasked the U.S. Army Corps of Engineers to provide support to Alabama. There have been as many as 300 Corps personnel from all over the country deployed to Alabama to help with recovery efforts.

When the Charleston District heard of the situation in Alabama, they stepped up to help out by deploying several employees to help with quality assurance (QA), safety, temporary housing and external affairs duties.

"The Mobile District, which falls under the South Atlantic Division along with the Charleston District, is our sister district and we felt the need to lend a hand when their immediate area of responsibility was hit," Maj. Kevin Wissel, deputy district commander said. "I am proud that we have sent so many people to assist with these tasks and know they are doing a great job representing the Charleston District."

The Corps was tasked by FEMA with three missions in this disaster: debris removal, temporary housing and temporary construction of critical public facilities.

The debris removal process consists of construction and demolition (C&D), which is the process of cleaning up shingles, siding, etc. as the result of destroyed buildings, as well as vegetative debris of trees, stumps, brush, etc. Vegetative debris is either taken to a burn pit or is ground and recycled for various uses. C&D is taken to a designated landfill where it is crushed and covered with dirt. It is estimated that the Corps will remove 4.3 million cubic yards of debris by the time this mission is completed.

Machinery piles vegetative debris into a burn pit. Photo by Billy Birdwell.

Debris removal is the main mission that the Corps has been tasked to complete. Adam Collias, logistics specialist, started his deployment assisting the recovery efforts as a QA manager. After a truck picks up the debris, either C&D or vegetative, they take it to their appropriate drop off site for disposal. A truck is paid by the cubic yard in each load. A QA manager makes certain that the truck is dropping off as much debris as they claim to be and they ensure that the truck is empty after they dump so that they don't get paid twice for the same load.

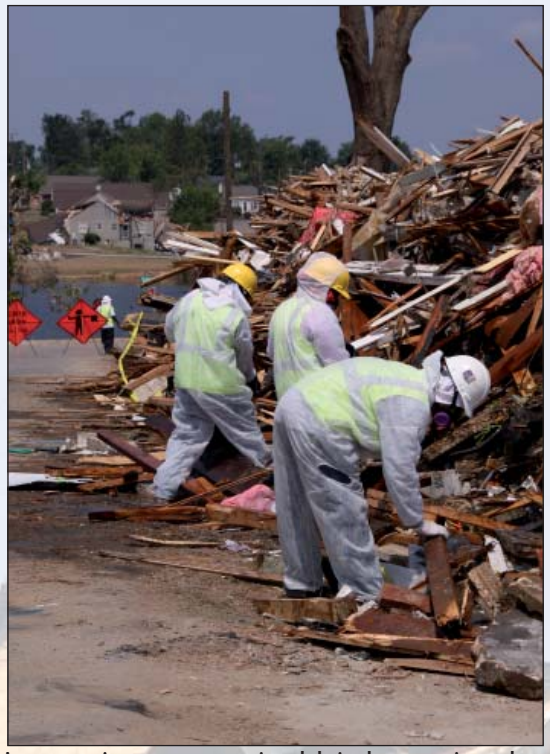
After two weeks as a QA manager, Collias was moved to a segregation crew. Here, he oversaw the crew that separates debris that could potentially contain asbestos material. Items that might have asbestos have to be disposed of differently than C&D and vegetation debris; it must be wetted, bagged and taken to a landfill that accepts asbestos material.

"Having the opportunity to help those that have been affected by the tornadoes is very important to me," said Collias. "I am glad I have been able to move around in different jobs and gotten to experience a lot while here."

The Corps was tasked to provide temporary housing, in the form of "haul and install" trailers, to people living in unsuitable housing situations, due to their home being completely demolished by the storm. The trailer comes with everything a family could need: mattresses, linens, plates, utensils, cooking ware, etc. The Corps will provide approximately 218 temporary housing units and, so far, 185 families have already moved in.

As a supervisor in the temporary housing mission, Charlie Crosby, chief of the regulatory

division's south branch, oversees the installations of haul and install trailers in Phil Campbell, AL. After the contractor brings the trailers, Crosby inspects them to make



A segregation crew separating debris that contains asbestos. Photo by Alicia Embrey.

sure that the water, power and utilities are properly working. So far Crosby has overseen the installation of five temporary houses and plans to oversee anywhere from 10 to 20 more prior to his departure.

"Providing temporary housing to families who lost everything in the tornadoes has been very fulfilling work," said Crosby. "It brings me great joy to know that I have helped those in need after a situation like this."

If a police station, fire department or other public facility is destroyed due to a natural disaster, the Corps provides a temporary structure for the critical public servants to move into while they rebuild their station. The Corps provided seven temporary replacements for critical public facilities during this mission.

Along with the three main missions, Charleston District is also helping with more specialized duties.

John Lindsay, safety officer, deployed to Alabama in mid-May to ensure the safety of the Corps employees and contractors. Since safety is the Corps' number one priority, there are several Corps safety personnel stationed around the state. Lindsay is based out of Tuscaloosa, but travels around to different parts of the state.

"I travel to the different sites, whether it's the C&D drop off site or a burn pit, to ensure that all our employees are wearing their proper safety gear and are using all the safety precautions they should be," said Lindsay. "So far we haven't had any accidents. It's important that we send everyone home in the same condition they arrived in."

Getting the story out through external affairs is an integral component to a crisis, so that the public and media know when, where and how things are happening. Sara Corbett, public affairs specialist, deployed to Alabama to assist with this crucial task. While there, she worked with media and the public from across the state to keep them updated on debris removal and address any concerns, such as asbestos removal and the burning ban that was in effect during the debris clean up.

It is important to keep the public informed during a crisis situation as the people affected by the tornadoes have suffered devastating losses and need to know when debris removal will be done in their area or when they can expect temporary housing, so they can start putting their lives back together.

The Charleston District is proud to have helped the state of Alabama during this difficult time.

Wind Power Gains Momentum as a Viable Energy Alternative

By: Dr. Richard Darden, regulatory biologist

The development of alternative energy options is fast becoming a priority in the minds of many Americans and has emerged over the past several years as one of the nation's great challenges. There is increasing awareness of climate change issues and the role of fossil fuels in contributing to accelerated atmospheric warming. Americans are equally frustrated by dependence on foreign oil and increasingly aspire to greater energy independence through the pioneering use of alternative energy strategies.

Wind energy has been used for centuries in many parts of the world to move sailing vessels, grind corn and grain, pump water and accomplish a host of other labor-intensive tasks. As industry and government look toward diversifying their energy generation portfolios, wind turbine technology promises to be a strong alternative. The U.S. Army Corps of Engineers is committed to energy efficiency at its own facilities as well as helping maximize the use of alternative and renewable energy options at Armed Forces and other government installations.

The Army is implementing an aggressive "net zero" program to appropriately manage its use and stewardship of natural resources in the areas of water, waste and energy. A net zero installation is one that combines the use of renewable energy and conservation practices to produce as much renewable energy as it uses during a given year. The Army is piloting five installations to be net zero by 2020, with a goal of 25 installations by 2030.

Many utility companies in coastal states are pursuing offshore wind power projects. Locations up to three miles offshore are considered state waters, while locations beyond the three-mile limit are considered federal waters. The Corps of Engineers has regulatory permit authority for both ocean areas; the Rivers and Harbors Appropriation Act of 1899 (Section 10) regulates activities in navigable waters and the Clean Water Act (Section 404) regulates the placement of dredge or fill material into any water of the United States. Since an offshore wind farm would involve transmission cables coming ashore to connect to the existing electrical grid, there could be impacts to onshore aquatic resources such as wetlands. Ultimately, a Department of the Army permit would be necessary for any offshore wind construction project.

The National Environmental Policy Act (NEPA) would also play a role in the federal approval of such a project. NEPA requires any agency undertaking a federal action, such as a permit decision by the Corps of Engineers, to identify and disclose the expected environmental effects (positive and/or negative) of the proposed action. The documentation required by NEPA is prepared in an environmental assessment (EA) or an environmental impact statement (EIS) made available to the public and on which agency permit decisions can ultimately be based. For projects proposed in state waters, the Corps of Engineers will act as the "lead" federal agency to address the NEPA obligation and typically will invite other agencies to cooperate in the process. However, for projects proposed in federal waters, the Bureau of Ocean Energy Management (BOEM) would have lead federal agency responsibility because of their role in granting leases for use of the necessary ocean space with the Corps acting as a cooperating agency.

The Corps of Engineers is looking to incorporate wind power into the renewable energy strategies of Army facilities where reliable wind resources can be harnessed.

Perhaps the most publicized offshore wind farm proposal to date has been the Cape Wind Energy Project proposed in Nantucket Sound off the coast of Massachusetts. On

January 5, 2011, the Corps' New England District signed its record of decision to permit construction of 130 wind turbine generators capable of producing up to 454 MW. The permit decision marks the first Corps of Engineers permit for off-shore wind power in the United States.

Dignitaries turn orange sand to celebrate the beginning of construction for the new wind-turbine drivetrain testing facility. Image by: Rebecca Dalhouse, Clemson University

Further south where warmer ocean waters create strong seasonal storms, offshore wind farms have not been considered practical until recently. A newer breed of turbines, more capable of withstanding the higher-speed sustained winds and unpredictable gusts that can occur during hurricane season, has been developed and manufacturers continue to pursue more reliable and damage-resistant turbine designs.

Several states along the south Atlantic coast are evaluating the possibilities for wind power in their offshore waters. For example, the South Carolina Energy Office received a U.S. Department of Energy grant in 2008 to explore the possibilities of offshore wind power. As part of this grant, a Regulatory Task Force for Coastal Clean Energy was formed and has been working since spring 2009 to evaluate the regulatory requirements that would face any proposal to install wind turbines in waters off the coast of South Carolina. The Task Force is comprised of numerous federal and state regulatory and natural resource agencies, including the Corps of Engineers, BOEM, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency and South Carolina Department of Natural Resources, as well as numerous industry, academic and research institutions in the region.

While a fully-funded construction proposal for an off-shore wind farm is not likely to be complete in the next year or two, other preparations are already occurring in South Carolina. One utility company recently erected a demonstration wind turbine in North Myrtle Beach on land and plans to construct a 90-meter-high meteorological platform offshore to gather wind speed, wind direction and other scientific data. The data gathered would be used prior to applying for a permit to construct a demonstration project of 20 turbines offshore near Georgetown.

Another major step in support of offshore wind power broke ground on October 28, 2010, in North Charleston. Construction of the Clemson University Restoration Institute's Large Wind Turbine Drivetrain Testing Facility is under way and will contribute to better understanding of how effectively current turbine designs withstand the forces of hurricane season storms in the South Atlantic Bight, the long bend of land from Cape Hatteras, NC to West Palm Beach, FL.

What about environmental impacts? To be sure, there will be impacts associated with any size offshore wind project because even the most necessary public benefit projects do have some level of impact. Certainly there are concerns regarding any effects during construction and operation to resident and migratory birds, whales and other marine mammals, as well as to sea turtles.

There are other areas of concern as well. Will commercial fishing be allowed in the vicinity of a wind turbine array? How will areas used for dredging sand be affected? Thus, it may be necessary for states to identify and prioritize compatible and competing uses for the ocean space to be dedicated for use in wind farming.

Clearly, there is a lot taking place to prepare for a future that includes making use of the inexhaustible wind resources off our coasts. The Corps of Engineers will be a major player in the federal approval process and, along with the entire spectrum of agency partners with whom we work, we are committed to facilitating the review of these projects to promote clean energy options that may ultimately help reduce the nation's dependence on fossil fuels and foreign oil.

Photo courtesy H.C Sorensen, Middelgrunden Wind Turbine Cooperative.

Navigating the Post 45 Feasibility Study

By: Sean McBride

Over the past few months, major advancements in the Charleston Harbor Post 45 project have occurred, resulting in increased interest and excitement around the Lowcountry. The process to potentially deepen the harbor to allow deep-draft post-Panamax vessels to access the harbor is now underway and it is important to explain where the project will go from here.

The Post 45 project began with a Congressional add to the President's fiscal year (FY) 2010 budget allowing the Charleston District to complete a reconnaissance study on Charleston Harbor to determine if there was a federal interest in conducting a feasibility study. The reconnaissance phase was completed in July 2010 and did show federal interest in performing a feasibility study on the Post 45 project.

With the feasibility study on tap, the Charleston District could not begin without funding. Due to overall national constraints, the President's Budget for FY11 did not allocate funding to initiate the study, but on May 17th, the FY 11 work plan for the U.S. Army Corps of Engineers was approved by the Office of Management and Budget and included $150,000 of federal funding, which allowed the study to begin. With this funding, the Charleston District has begun the multi-year feasibility study to determine if deepening Charleston Harbor is both economically beneficial and environmentally acceptable to the nation.

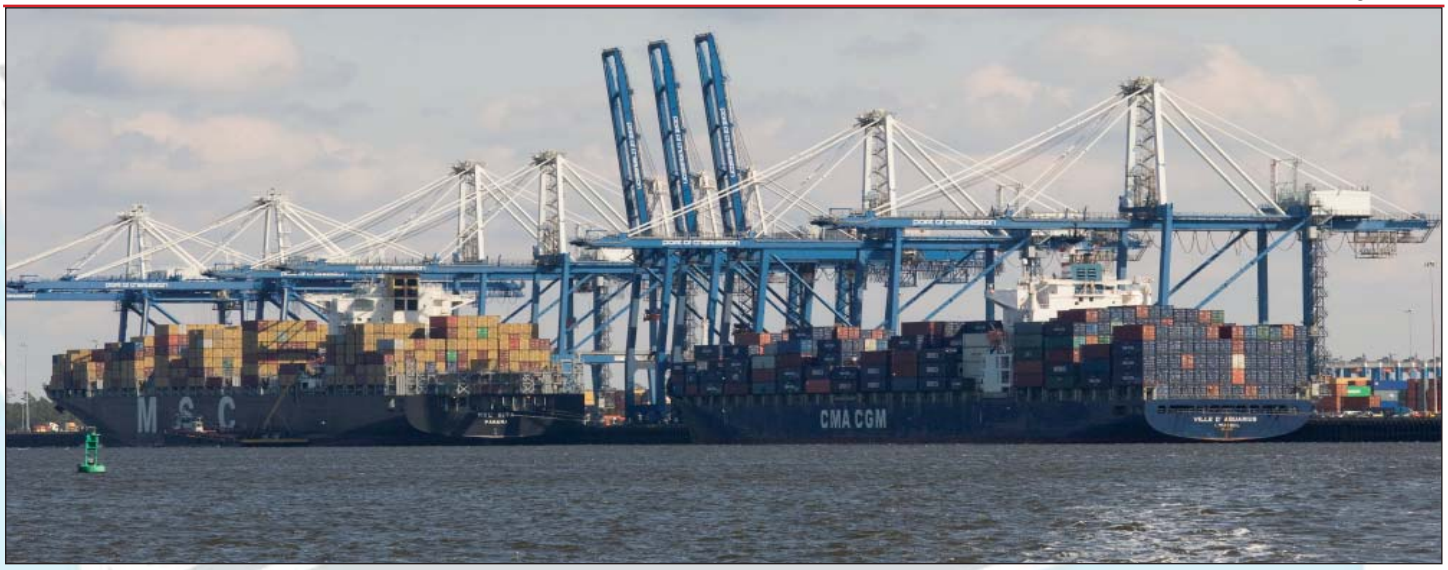
On June 20th, the Charleston District signed the Feasibility Cost-Sharing Agreement (FCSA) with the project's sponsor, the South Carolina State Ports Authority (SCSPA). With the signing of the FCSA, the study officially began. The feasibility study will be cost-shared 50-50 with the SCSPA, but will be conducted by the Charleston District. Here, the Charleston District will identify the National Economic Development (NED) plan that maximizes the net benefits to the nation as a result of deepening the federal channel, which is currently authorized to be dredged to 45 feet.

A feasibility study examines the economic benefits and environmental impacts of a proposed project, determining the most economically beneficial and environmentally acceptable alternative proposed. This means that the Charleston District, until completion of the feasibility study, does not yet know to what specific depth the Corps of Engineers will recommend to Congress as the NED plan for Charleston Harbor. The District's engineers, planners, surveyors and project manager will work to analyze all possible alternatives to determine what depth, if deepened, the Corps will recommend to Congress for authorization.

In the feasibility study, the Charleston District will look at many factors to determine the best possible alternative. The District will follow the same six-step process that every feasibility study completed by the Corps nationwide must undergo in civil works projects like these.

The District will have to run tests on deeper depths that haven't been measured in the past and may come across different sediment types than those at the current 45 foot depth. Geotechnical borings and salinity tests will be on the list with many others. Different sediment types may mean different measures would have to be used to remove the sediment, which impacts the alternatives.

In front, Lt. Col. Jason Kirk signs the Post 45 FCSA with SCSPA CEO Jim Newsome, accompanied by (from left to right) U.S. Sen. Jim DeMint, SC Sen. Chip Campsen, U.S. Sen. Lindsey Graham and SC Sen. Larry Grooms.



Post-Panamax ships, like the MSC Rita (left), can currently only come into Charleston Harbor on high-tides.

The District will also run ship simulations at the different depths with different weather conditions to see how the harbor would be affected and consider the safety of the ship and those in the harbor. The effects on marine life will also be reviewed to minimize disruption to their natural habitats. Where to dispose of the additional maintenance material dredged from the harbor floor and what the life of the harbor will look like over the course of the next 50 years are other questions that have to be answered when conducting the feasibility study.

A feasibility study for a project of this magnitude would typically take 5-8 years and cost approximately $19 million, but every effort will be made to work as quickly and efficiently as possible. With the completion of the expansion of the Panama Canal planned for 2014, the District realizes the urgency of this study. A first round of meetings with Corps headquarters in Washington D.C. has shown promise in the ability to streamline some processes. However, many factors can affect this goal, such as funding and requirements other state and federal resource agencies may have, but it is a top priority for the District and every effort will be made to meet this goal.

The first step in the study is to begin the National Environmental Policy Act (NEPA) process by planning and executing public and stakeholder meetings to receive input on the deepening study. The Charleston District will use this information to develop what alternatives will be evaluated as part of the study to determine if the harbor will be deepened and the potential future depth for the harbor.

If, at the end of the feasibility phase, the study results recommend a deepening of Charleston Harbor, the Charleston District would move to the preconstruction engineering and design phase, an approximate two year undertaking. If Congress authorizes construction of the Post 45 project and provides funds to do so, the District will enter the construction phase, which is estimated to take approximately four years to complete the deepening of the 44.6 miles of channel, three turning basins and one anchorage basin that make up the Charleston Harbor project.

"We are excited to have received the money needed to initiate the feasibility phase for the Post 45 project," said Pat O'Donnell, chief of planning and environmental branch. "We are going to work as quickly and efficiently as possible while navigating through the process required to decide if deepening Charleston Harbor is economically feasible and environmentally acceptable to the nation."

New Commander and District Engineer, Lt. Col. Ed Chamberlayne added, "I look forward to continuing the great work that the District has already started and helping move us forward in this project."

The Corps has maintained Charleston Harbor for more than 130 years and has dredged it every year during that time to ensure the channel is at the required federal project depth, spending approximately $10-15 million and removing 2-3 million cubic yards of maintenance material from the harbor floor each year. Construction to deepen the harbor to the now federally authorized 45 foot depth began in 1999 and was completed in 2004.


Project Name: Charleston Harbor
Authorization: The project, as authorized by the 1996 Water Resources Development Act, provides for deepening the center 800 feet of the existing entrance channel to a depth of 47 feet below mean lower low water (MLLW) for a distance of about 16.3 miles, increasing the depth of existing interior channels and turning basins to a depth of 45 feet below MLLW, and deepening the Shipyard River entrance/lower channel and lower turning basin to 45 feet.
Project Description: Charleston Harbor (CWIS - 02980) is a natural tidal estuary located at Charleston, South Carolina. The harbor covers an area of approximately 14 square miles and is formed by the confluence of the Ashley, Cooper, and Wando Rivers. The entrance to Charleston Harbor is flanked by a dual weir-jetty system 2900 feet apart. Construction of the rubble mound jetties was completed in 1895. The south jetty, which springs from Morris Island, is 19,104 feet in length. The north jetty extends seaward from the southern tip of Sullivans Island and is 15,443 feet in length. The elevation of the jetties is approximately 12 feet above mean low water (MLW) with the ends extending from station 0+00 to station -112+00 of the federal navigational channel. The existing 45-foot Federal navigational channel extends from the 47-foot ocean contour through the jetties to the North Charleston Terminal on the Cooper River, a distance of 26.97 miles. An additional 2.08 mile 45-foot channel extends up the Wando River to the Wando Welch Terminal belonging to South Carolina States Ports Authority. The existing Federal channel varies in width from 400 feet in Town Creek and Wando River to 1000 feet wide in the entrance channel, Fort Sumter Range. A small 110-foot wide by 12-foot deep navigational channel also extends through the harbor, behind Crab Bank and up Shem Creek to Mount Pleasant.
Economics: Charleston Harbor is a vibrant modern intermodal harbor receiving and exporting goods throughout the world. The vessel fleet calling on Charleston Harbor and Shipyard River include containerships, bulk carriers, tankers, and to a lesser degree rollon-rolloffs and cruise ships. Charleston Harbor is located about midway along South Carolina's Atlantic coastline and is one of 17 US strategic ports. It is the 4th busiest container port on the east coast and the 8th in the nation. Provides over 50% of the equipment and material in support of reconstruction efforts in Iraq and Afghanistan. The harbor generates $45 billion annually for the regional economy, and supports the military as a major power projection platform. This project consists of maintenance of 44.6 miles of channel, three turning basins, and one anchorage basin.
Local Cooperation: The Project Cooperation Agreement (PCA) for the Charleston Harbor 45-foot Deepening/Widening project was signed on June 5, 1998. No project cooperation agreement is presently required for the upper portion of Shipyard River. Shipyard River is combined into this Charleston Harbor report as both projects use the same disposal areas and are combined into the same dredging contracts for convenience and efficient use of funds. The sponsor, South Carolina States Ports Authority, has furnished necessary funds and disposal areas in a timely manner.
Congressional Interest: SC Graham, SC DeMint, Scott SC-1, Clyburn SC-6
Annual Dredge Material Removed:
In an average year, 2 million cubic yards of dredged material are removed from Charleston Harbor Federal Channel. This includes the Charleston Lower Harbor, Charleston Upper Harbor, and the Entrance Channel. The Joint Base Charleston averages around 700,000 cubic yards per year. Private dredging averages 500,000 cubic yards per year. Total dredge material removed is roughly 3.2 Million cubic yards per year.
Frequency of Dredging Events:
Entrance Channel is dredge once every 24 months (Dec-March). Lower Harbor is dredged every 12-15 Months. Upper Harbor (Including Shipyard River) is dredged every 18-21 Months. Joint Base Charleston is dredged every 15-18 Months. TC Dock is dredged in conjunction with Upper Harbor or Joint Base Charleston Dredging at least once per year.
Dredging Methods:
Upper Harbor, Shipyard River, and TC Dock are dredged by means of hydraulic pipeline dredges with the material being placed in the existing Clouter Creek Upland Disposal Area. The Entrance Channel is maintained by means of hopper dredges operating within the turtle dredging window (15 Dec to 31 March) and disposing of material in the EPA approved Ocean Dredged Material Disposal Site (ODMDS) located southwest of the Entrance Channel. Lower Harbor material is placed in the ODMDS by means of clamshell dredge and dump scows. With the Lower Harbor maintenance material going to the ODMDS, it is estimated that the ODMDS has a remaining capacity life of 21.3 years at a clearance elevation of -25 feet MLLW. Joint Base Charleston is dredged by means of hydraulic pipeline dredges with the material being placed in the existing Joint Base Charleston and Yellow House Disposal Areas.
Tidal Range:
The mean range of tide and spring range of tide above mean low water, respectively, in the entrance channel are 5.1 feet and 5.9 feet.
New Port Facility at the Old Navy Base:
In April 2007, the U.S. Army Corps of Engineers issued permits for a new three-berth, 280-acre container terminal on the former Charleston Naval Complex. The state permits were issued in late 2006. The $600-million project is supported by S.C. State Law and will boost capacity by 1.4 million TEU. Work to prepare the site for construction is well underway, and a 5,000-foot-long containment structure that will become the face of the dock has been constructed. The terminal's 171-acre first phase is slated to open in 2018 or as market demand requires.
SCSPA TERMINALS:
Wando Welch
Berths = 4 Total Container
Berth = 3,800 Feet of dock
Container Cranes = 10
(6 Super Post Panamax, 4 Post Panamax)
Open Storage = 242 Acres
Enclosed Storage = 200,000 Sq Ft
Columbus Street
Berths = 6 Total Breakbulk and Ro-Ro
Berth = 3,500 feet of dock
Container Cranes = 5
(2 Super Post Panamax, 2 Post Panamax, 1 Panamax)
Open Storage = 78 acres
Enclosed Storage = 259,149 sf
North Charleston
Berths = 3 Total Container
Berth = 2,500 feet of dock
Container Cranes = 6
(2 Super Post Panamax, 4 Post Panamax)
Open Storage =130 acres
Enclosed Storage = 118,500 sf
Union Pier
Berths = 4 Total, 1 Cruise
Berth = 2,470 feet of dock
Veterans
Berths = 4 Piers Breakbulk and Ro-Ro
Berth = Zulu, 1,330'; Mike, 1,170'; November, 1,330'; Lima, 952'
Open Storage = 110 acres
State Hwy S-8-29
State Hwy S-8-803
State Hwy 41
Pier X-Ray
Joint Base Charleston (JBC) Whalf Alpha (ASLAC)
Yellow House Creek Disposal Area
Pier Bravo
Goose Creek
Joint Base Charleston Disposal Area
TC Dock (SDDC)
State Hwy S-8-33
USACE Construction and Survey Annex
UPSTREAM LIMIT OF FEDERAL PROJECT
North Charleston
Clouter Creek Disposal Area North Cell
Clouter Creek Disposal Area Highway Cell
Clouter Creek Disposal Area Middle Cell
Clouter Creek Disposal Area South Cell
State Hwy S-10-62
US Hwy 52
I-26
Veterans
State Hwy 642
USCG Pier Papa
Daniel Island
Daniel Island Disposal Area (SCSPA)
New SCSPA Terminal
Wando Welch
Shipyard River
Cooper River
Wando River
State Hwy S-10-97
Mount Pleasant
US Hwy 78
Drum Island Disposal Area (SCSPA)
Columbus Terminal
Union Pier
Isle of Palms
Shem Creek
West Ashley
Charleston
Crab Bank
Ashley River
Castle Pinckney
Sullivans Island
Fort Sumter
Harbor View Rd
James Island
Morris Island Disposal Area
North Jetty
South Jetty
The ODMDS is approximately 6 miles from tip of Jetties.
Folly Beach
Ocean Dredged Material Disposal Site (ODMDS)
N
S
E
W
USACE Charleston District
Charleston Harbor, South Carolina
Miles
0 0.5 1 2 3 4
Charleston Harbor Reaches
47' Entrance Channel
45' Lower Harbor
45' Upper Harbor
NAVIGATION SECTION
GIS TEAM
PHIL WOLF
06/13/2011

Our Big Mud Pit

By: David Warren, project manager

Clouter Creek Disposal Area (CCDA) is the crown jewel for the upland disposal of dredge material from the federal channel of Charleston Harbor and for the waterfront industry from Shipyard Creek to the North Charleston Terminal of the South Carolina State Ports Authority (SCSPA) in the upper reaches of the Cooper River. CCDA is the only uplands disposal site owned by the Charleston District.

CCDA consists of four cells, or diked areas, that were constructed in the mid 1980's and are used on a rotating basis to receive dredge material. The four cells are named North (190 acres), Highway (460 acres), Middle (410 acres) and South (415 acres). The Charleston District's navigation division has a plan through the year 2020 on managing the capacity in each cell based on the historic amount of material that is placed into each cell every year. Each cell is in a constant life cycle rotation of dredging, drying, ditching and diking, allowing each cell to recover and not be used constantly, extending the life of the cell.

So what do dredging, drying, ditching and diking mean?

Dredging is when maintenance material (water and solids) from the harbor floor is pumped by a hydraulic cutter head dredge boat into a disposal cell, creating a lake. The lake is drained in a controlled manner to allow the solids to fall out of suspension into the cell as the water is slowly released back into the river.

The drying phase lasts approximately 8-12 months during which the material that has been pumped into the cell drains the water and compacts, allowing for more material to eventually fill the area.

During the ditching phase, long-reach back hoes go along the dike areas and cut shallow ditches to facilitate the final draining and drying.

On the page to the left is a map of Charleston Harbor showcasing the different landmarks of the harbor including the port terminals, piers, disposal sites (including the four CCDA cells) and more. It also includes the harbor depths and a description of the Charleston District's role in the project.

Diking is the final step in preparation for the next dredging cycle. Using the material inside the cell, the cell walls are raised several feet to be able to withstand the hydraulic force of the water and material that will be pumped in during the next dredging cycle.

Clouter Island has a long history as a dredge material disposal area for the U.S. Navy and South Carolina which began when the title for 937 acres of the site was signed over to the U.S. government on March 21, 1902. The remaining 460 acres of the site were vested to the U.S. government on January 9, 1963. The State of South Carolina owns the northern portion of the island and the federal government has a perpetual easement on it. In 1996 the Navy transferred the 1,397 acres to the Department of the Army.

Each year, an average of 840,000 cubic yards of dredging material from the federal channel is pumped by the Charleston District into the CCDA along with 438,000 cubic yards of dredge material from private industry docks.

The Charleston District annually spends approximately $1.2 million of operations and maintenance funds on the maintenance of the CCDA while an additional $200,000 is paid from private industries using the site for the same purpose. The District charges any private industry looking to use the CCDA a disposal fee of $1.25 per cubic yard, of which $0.50 goes to the U.S. Treasury and $0.75 goes to the SCSPA to help cover maintenance costs, due to the cost-sharing agreement in place between Charleston District and the SCSPA for the ongoing operations and maintenance.

The CCDA real estate has a direct impact on the cost to the Charleston District's dredging program and industry. The South cell is a heavily sought after location due to the shorter, and therefore less expensive, pumping distance for private industry users.

The future of the CCDA is crucial to the continued health of the economy of South Carolina and the nation based on the revenue generated by the waterfront and shipping industry. With proper management, the Charleston District anticipates the CCDA will be able to support the dredging mission for the next 20-50 years.

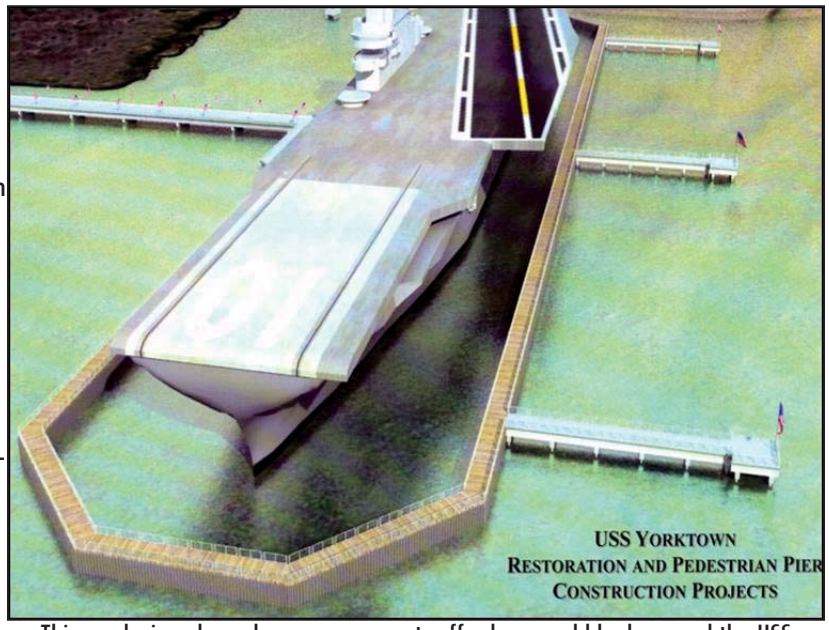
From One Lowcountry Icon to Another

By: Sean McBride

Fort Sumter. The Morris Island Lighthouse. The USS *Yorktown*.

What do these three things have in common? They are all listed in the National Register of Historic Places and have all have received involvement from the Charleston District. The Corps of Engineers constructed Fort Sumter prior to the start of the Civil War. In 2008, the Charleston District completed an erosion-control project at the Morris Island Lighthouse to protect its foundation. Now, the District has completed a concept study on options for protecting the USS *Yorktown* to extend its life into the future.

The Patriots Point Development Authority (PPDA) requested planning assistance from the Charleston District to study the different options of constructing a cofferdam around, and making repairs to, the 68-year-old World War II era vessel. A cofferdam is an enclosure constructed in water to provide a barrier and allow for a dry work environment within the structure.



This rendering shows how a permanent cofferdam would look around the USS Yorktown.

In the Water Resources Development Act of 1974, Congress authorized the Corps of Engineers to assist the states in preparation of plans for the development, utilization and conservation of water and related land. Using this authorization, the Charleston District agreed to a 50-50 cost-share of the study to assist the PPDA in completing an analysis of the alternatives for various types of cofferdams in order to complete crucial repairs to the aging vessel.

Three types of cofferdams were considered: portable, temporary and permanent. A portable cofferdam is best suited for small repairs on a structure, as it can be moved and reused. A temporary cofferdam is constructed around the structure and is used for larger repairs, but can only be left in place for up to a year while undergoing repairs. A permanent cofferdam is best suited for long-term repairs and protection of the structure and lasts for approximately 25 years.

In the case of the USS *Yorktown*, a permanent cofferdam would allow for lighting of the ship's hull as well as public and boat access to see around the ship. This could add an additional aspect to the many daily tours given on the ship and provide a unique sight at night if the ship were lit up.

The PPDA board of directors will ultimately decide which alternative they will use.

"Through the study, we were trying our best to offer the sponsor a range of possible options for the work that needed to be done," said Dudley Patrick, project manager. "We're providing solutions for the survivability of the USS *Yorktown* for future generations."

Cofferdams are currently being utilized for other historic ships on the coast as well. For instance, the USS *North Carolina,* docked in Wilmington, NC, is currently utilizing a portable cofferdam while the USS *Alabama*, docked in Mobile Bay, AL has recently seen construction on a permanent cofferdam around the ship.

The USS *Yorktown*, one of only 2,430 remaining National Historic Landmarks in the US, has been a staple for tourists to the Lowcountry since 1975. Its iconic location on Patriots Point in the heart of Charleston Harbor serves many tourists each day looking to learn educational and historical information. Using a cofferdam system to make repairs to the hull of the *Yorktown* would enable the vessel to be preserved for many years to come.

Enjoy America's Great Outdoors Safely on the AIWW!

By: Sean McBride

As the Charleston District continues to update their new geographic information systems (GIS) maps for the Atlantic Intracoastal Waterway (AIWW) by providing the public with the current conditions of the AIWW so they can be more safety conscious, many people are spending more time outdoors and heading out on the waters of the AIWW and Atlantic Ocean in their boats.

While these activities are great for getting your family together for a day of fun, remember to always follow these boating safety tips to enjoy your summer!

- Always wear your life jacket! There are hundreds of boating-related deaths every year and the majority are caused by drowning due to not wearing a personal flotation device (PFD). Also, make sure your PFD is being worn properly or it will be ineffective
- Get your boat inspected regularly
- Make sure everything is functioning properly before beginning your journey
- Ensure an experienced boater is operating the controls
- Watch the weather to prepare for local conditions and electrical storms
- Do not swim or wade near a boat's exhaust pipe, sit on the swim platform when the engine is running or hold on to the deck when the boat is moving
- Have CPR instructions and local emergency numbers on the boat
- Maintain constant supervision of children, regardless of their swimming abilities or use of PFD's
- Avoid aggressive maneuvers. While making sharp turns at fast speeds may seem exciting to the tubers or water-skiers towing behind you, know the limitations of yourself and your boat for the waters you are in
- Make sure you check out http://safeboating-campaign.com and https://safety.army.mil/ for more safety tips for your summer fun!

Did you know?

- The Corps is the largest federal provider of outdoor and water-based recreation in the nation
- The Corps has 422 lake and river projects in 43 states which host more than 350 million visits per year
- The Corps manages 55,000 miles of shoreline, 4,500 miles of trails and 3,400 boat launch ramps.

Above: Matt Boles of the District's survey crew sports his life jacket aboard the survey vessel *Evans*.

Below: stenciled logo on the Corps' boat ramp at Cape Cod Canal.

Charleston District Completes MARFORRES Headquarters Building

By: Sara Corbett

On June 27th, the Marine Forces Reserve (MARFORRES) hosted a ribbon cutting for their new 411,320 square foot Marine Corps Support Facility (MarCorSptFac) New Orleans headquarters. The U.S. Army Corps of Engineers, Charleston District proudly participated in the construction of this new headquarters facility.

The new MARFORRES headquarters building stands strong in the middle of Federal City on the west bank of the Mississippi River in New Orleans.

"We were awarded the upfit of the project which includes design and execution of emergency power generation, vehicle entry gates and computer room HVAC units. In addition to the upfit award, we provided construction support with quality assurance and quality inspections," said Brian Edwards, project manager.

Overall, project costs totalled $210 million, with $150 million in work executed by the state of Louisiana and $60 million executed by the Corps.

While construction went smoothly for the most part, one issue that arose was the flooding that occurred this past spring due to elevated river levels which put a strain on the Mississippi River levee system. The New Orleans District, as part of their Flood Fight program, instituted a "no excavating or digging" policy within 1,500 feet of the levee, which included the entire construction site of the headquarters. All work requiring excavation or digging was suspended, for approximately one month, until the river levels subsided.

MarCorSptFac was originally built as a result of a Base Realignment and Closure decision in 2005. The headquarters moved from the east bank of the Mississippi River to the west bank to keep the federal agencies within the city of New Orleans.

This new headquarters will be home to approximately 1,000 service members and 300 Department of Defense civilians. The new tenants started moving into the building June 6th and the building was completely occupied by June 23rd.

MARFORRES is the reserve group within the U.S. Marine Corps (USMC) and is the largest command group within USMC with approximately 183 training centers in 48 states.

The Charleston District hopes that MARFORRES enjoys their new headquarters building.

Attendees at the ribbon cutting included (clockwise from back left): Brian Resch, SPAWAR, Robert Sloan, SPAWAR, Rick Mahlie, SPAWAR, Lisa Simmons, Charleston District, Doug West, New Orleans District, Brian Edwards, Charleston District, Robert Braithwaite, MARFORRES, and Maj. Gen. Todd Semonite, South Atlantic Division.

Dove Fields Draw Big Crowds

By: Don Pilkington, natural resource manager

The Cooper River Rediversion Project, which encompasses 2,453 acres of upland, wetland and associated spoil areas, is currently in the Wildlife Management Area (WMA) program, which is administered by the South Carolina Department of Natural Resources (SCDNR). Due to the configuration of the property and limited workable uplands, the only hunting allowed in the area is for dove and quail. The cooperation between the Charleston District and SCDNR has turned this area into a highly desirable destination, especially for dove hunters.

SCDNR plants six dove fields (91 acres) with corn, wheat, sunflowers and millet. The Canal WMA dove fields consistently accommodate more hunters on opening day than any other public field in the state and are considered the most sought after public dove fields in the state. In response to this high demand, SCDNR staff took on an expansion project in several of the more productive fields, increasing their size by more than 14 acres.

The result of this effort has become evident in recent hunt results, with 2010's opening hunt being the area's most successful hunt on record, with 325 hunters harvesting 2,038 doves. The last four years have averaged 300 hunters participating on opening day with an average harvest of 1,274 doves. Typically, four hunts are held throughout the dove season. The planting of the dove fields benefits other animals such as quail, deer, geese, turkey, rabbits and numerous other wildlife species including neo-tropical migratory and other songbirds, providing a haven for animals.

The management of areas outside the dove fields has been directed toward promoting early successional habitats consisting of native herbs and grasses, including partridge pea, ragweed, panic grasses, bluestems and switch grass. These areas are periodically "strip disked," a process of disturbing the soil to reduce the growth of damaging briars or shrubs and expose the soil for easier germination and growth, and some strips are planted in sorghum to provide forage and cover for quail and other birds.

Due to the funding provided by the Charleston District and a productive working relationship with the on-site resource manager, significant accomplishments have been and will continue to be made on Canal WMA.

HERE TO HELP!

Mark Taylor
Chief, Navigation
843-329-8146
mark.r.taylor@usace.army.mil
(replacing retired Norm Moebs)

Narissia Skinner
Executive Secretary to District Commander
843-329-8000
narissia.e.skinner@usace.army.mil
(contact to schedule meeting with Lt. Col. Chamberlayne)

Brian Williams
Post 45 Project Manager
843-329-8153
brian.p.williams@usace.army.mil
(contact for Post 45 questions)

Corps Day Award Winners

Annually celebrating Corps Day to recognize the birth of the U.S. Army Corps of Engineers is a great day at the Charleston District. Employees from the field offices gather with the headquarters group to relax and recognize the hard work done throughout the year.

The following annual award winners truly demonstrate a commitment to greatness and dedication to the Charleston District's vision in our quest for universal recognition as a cadre of highly trusted and valued public engineers, scientists and professionals in service to South Carolina, the nation and beyond.

Commander's Award for Extraordinary Achievement: Lisa Simmons

Lisa's great attitude, energy and responsiveness in the contracting branch have been integral to the success of the MARFORRES Headquarters Upfit Project. The project's many challenges could not have been resolved without the extraordinary efforts of this incredibly talented, dedicated and fully engaged contracting officer. Lisa excelled under extreme pressure for this project while simultaneously executing multiple other concurrent projects.

Lisa was also presented with the Steel de Fleury Medal, the Engineer Regiment's award for professional excellence. The award supplements the U.S. Army awards system, but is not an official part of that system. The medal is named for a French Engineer Francois Louis Tesseidre de Fleury who volunteered to serve with the American Army in its fight for independence from Britain during the American Revolutionary War.

Supervisor of the Year: David Dodds

As chief of the construction branch, David has demonstrated the highest standards of ethics, character and professionalism while leading his team to handle the heaviest construction workload in the Charleston District in more than 50 years.

Administrative and Secretarial Team Member of the Year: Yvette Jenkins

Yvette accomplished a tremendous workload with a positive attitude and never missing a deadline while performing both her own duties and that of the vacant administrative position in project management for more than nine months. Her outstanding efforts helped keep the project management branch, the deputy for programs and project management and the workforce from missing a beat.

Engineering and Scientific Professional Team Member of the Year: Sara Brown

Sara always provides a product of the highest quality, backed by experience and expertise. Her analysis has always been thorough, detailed and accurate. This year and every year, Sara has protected the federal interest while providing maximum support to the customer.

Technical Support Team Member of the Year: Yolanda Grant

Yolanda demonstrated incredible knowledge of the Corps of Engineers Financial Management System throughout the year, performing nearly miraculous actions to enable the District's mission. In her position of systems administrator, she has achieved consistent effectiveness and always delivers exceptional outcomes.

(continued on next page)

Field Team Member of the Year: Chad Konickson

As a regulatory watershed manager, Chad demonstrated superior technical expertise and ability throughout the year. He has led numerous training sessions for the Conway branch, the District and the public. Chad's leadership has been instrumental in creating a cohesive and productive field office.

Project Development Team of the Year: Tracy Sanders, Allison Monroe, Laura Boos and Angela Kelly

The Avatar Project Deliver Team produced a customized animation program that will educate the public about the Corps' regulatory program. It provides the public a means to understand the functions and values of the water resources the Corps' regulatory program seeks to protect. The creative efforts and hard work

completed by this PDT has led to the creation and valuable education resource for the Charleston District for years to come.

District Awards Two Bronze de Fleury Medals

On July 7th, the Charleston District awarded Bronze de Fleury Medals to Bill Stein, deputy district engineer for programs and project management (right), and Maj. Kevin Wissel, deputy district commander (left), for their service to the District.

Stein's tremendous contributions to the Charleston District's workload and the U.S. Army Corps of Engineers are unparalleled. His 37 years of federal service to the Corps have included stints in Baltimore and Savannah Districts as well as South Atlantic Division headquarters before coming to Charleston. He has championed regional workload and lesson sharing across the region and command and epitomizes the de Fleury ethic to take on and lead others in the toughest engineer challenges.

Maj. Wissel joined the Charleston District in July 2010 and has been extremely important to the success of the District's missions since that time. His 16 years of service to the Engineer Regiment has showcased his exceptional leadership, professionalism and unwavering dedication to the mission on each organization he serves.

As discussed in the Corps Day Awards article, the highly prestigious de Fleury Medal is given to honor individuals who have provided significant contributions to Army engineering. The Engineer Regiment adopted the de Fleury Medal because of the values demonstrated by Francois Louis Tesseidre de Fleury. It is widely believed that the de Fleury Medal was the first Congressional Medal ever struck.

District Employees Begin Beach Sweep

By: Sean McBride

Employees of the Charleston District recently took on the responsibility of volunteering in the SC Department of Health and Environmental Control- Office of Coastal Resource Management sponsored Adopt-a-Beach program on Folly Beach, just outside of Charleston. The employees are now in charge of cleaning Folly Beach from 6th Street West down to the county park at least twice a year. On June 2nd, the employees did their first cleaning and had nine volunteers patrol the sand for litter.

All in all, the employees collected several bags worth of trash and large items on their first outing. Obscure items included several planks of wood, a cinder block, a damaged lounge chair, a section of nautical rope, several bags and a broken sandal to go along with lots of bottles, wrappers and cigarette butts. While the employees of the Charleston District are doing their part to keep our beaches clean, make sure we all do our part every time we visit the beach to pick up our trash and keep the beach enjoyable for everyone in the future.

Charleston District Partners with South Carolina State University

By: Jessica Byrd, equal employment opportunity officer

On April 27th, outgoing Charleston District Commander Lt. Col. Jason Kirk and South Carolina State University (SCSU) President Dr. George E. Cooper signed an agreement reinstating the partnership between the organizations that had gone dormant. The ceremony, held at SCSU, was the formal renewal of the partnership.

Under this partnership, the Charleston District and SCSU will jointly work to prepare students for careers in science, technology, engineering and math. The District will offer summer employment opportunities to qualified students, assist the engineering department as guest lecturers and student mentors and assist with recruitment and career placement opportunities in the organization.

The Charleston District looks forward to supporting SCSU students, at field offices throughout the state, in their quest to gain work experience and build leadership as well as enhance the diverse pool of talent in the District.

Regulatory Division Participates in PMECS Workshop

Charleston District's Regulatory Division participated in the University of South Carolina's Annual Partners for Minorities in Engineering and Computer Science (PMECS) workshop providing an educational wetlands tour for approximately 25 minority students from high schools across the state. The purpose of the workshop was to promote student interest in pursuing education and careers in mathematics, engineering, computers and science.

Les Parker, Columbia field office, talks with the students about streams.

Employees Donate to Save Lives

By: Sean McBride

On May 18th, the Charleston District's safety office organized a blood drive for employees through the American Red Cross. The Red Cross' blood mobile rolled up to the headquarters office and received donations from 30 volunteers. Employees were happy to help donate to a cause that is never finished. With someone needing blood every minute of every day, the Charleston District employees did their part to help those in need. Thanks to the volunteers from the Carolina Lowcountry Chapter for coming out and making the experience pleasant for all of our volunteers!

Michael Patrick was one of 30 volunteer donors from the District.

Charleston District Gets History Lessons

By: Jessica Byrd, equal employment opportunity officer

As part of an ongoing effort at the Charleston District to diversify and inform employees, the District's Special Emphasis Program Committee recently hosted two events to enlighten their minds.

This spring, employees gathered for an observance of Women's History Month. Approximately 50 employees were in attendance for the program which included guest speaker Col. Ines N. White, the first female commander of the 841st Transportation Battalion. White, focusing on leadership and women, shared information about her background and talked about her life experiences, challenges and lessons learned. She discussed the important mission and responsibility of the 841st Transportation Battalion to synchronize defense transportation cargo movements and to provide traffic and port management for the Department of Defense in peace and crisis. She concluded her presentation by stressing the importance of teamwork and giving back.

Charleston District employees also celebrated Asian Pacific American Heritage Month with a presentation on tai chi and its history. Tai chi was chosen to expand attendees' knowledge about one aspect of Asian culture. A rather broad term, Asian Pacific Americans represent various nations and ethnicities, each with its own heritage, culture and language.

The presentation was given by tai chi instructors Kaye and Al Finch from the Medical University of South Carolina. The instructors explained that tai chi originated in ancient China for self defense and evolved into a graceful form of exercise. The instructors shared the potential health and wellness benefits associated with practicing tai chi such as improved strength, flexibility and balance, along with positive effects with reducing stress.

Thanks to all our presenters for sharing their knowledge with an eager Team Charleston!

TIDBITS

QR Code

In a continued effort to move forward in the social media world, the Charleston District has developed a quick response (QR) code. Using your smartphone, you can download one of many QR code scanner applications for free. Using your scanner, scan this QR code and see where it takes you!

If you don't have a smartphone, feel free to visit http://youtu.be/0MMydCqF-Tc to learn more about our district.

Corporate Communications Office
Charleston District
U. S. Army Corps of Engineers
69A Hagood Avenue
Charleston, SC 29403