SPECTRUM

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U.S. ARMY CORPS OF ENGINEERS, SOUTH ATLANTIC DIVISION

Emergency Management

RESPONDING WHEN OUR NATION CALLS

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On the Cover:
Help is on the way

Convoys of trucks loaded with emergency supplies like ice, water, generators and temporary roof covers, are a common site following natural disasters. The U.S. Army Corps of Engineers manages the contracts under which these necessities are acquired, distributed and installed and sends specialized planning & response teams to assess and meet a variety of needs.

Emergency Management
Responding When Our Nation Calls

Under the National Response Plan, the federal emergency response to disasters is divided into Emergency Support Functions, with the U.S. Army Corps of Engineers leading the Public Works and Engineering function. The Corps leverages its capabilities to support FEMA and other federal agencies in a number of ways. Typical activities and mission assignments include:

- Emergency Power
- Temporary Roofing
- Temporary Housing
- Structural Safety Assessments
- Debris Clearance and Removal

The Corps also supports stability operations and field force engineering, assisting in the recruitment, selection and deployment of manpower for all of these operations, including response to the 2004 Asian tsunami and in Iraq and Afghanistan. Our Planning and Response Teams are trained to respond to hurricanes, earthquakes and other national and international disasters. The Corps also supports military commanders in achieving their security objectives, by facilitating disaster preparedness workshops to train foreign nationals in international disaster response. Whatever the need, wherever we are needed, whenever the call comes, the U.S. Army Corps of Engineers – relevant, ready, responsive and reliable – answers the call and meets the need.

Brig. Gen. Joe Schroedel
The South Atlantic Division Commander

Message from Brig. Gen. Schroedel

Emergency response is a big part of the Corps of Engineers' mission, particularly in the southeastern United States, where hurricane strikes are frequent. Working with and through the Department of Homeland Security's Federal Emergency Management Agency (FEMA), the South Atlantic Division provides engineering and logistical support to disaster relief efforts in the region.

Specific missions include the provision of food, water and ice to victims of major storms, staging of portable generators to key community sites such as hospitals and sewage treatment plants, and installation of temporary roofing on homes until permanent repairs can be made. The Corps also provides support for temporary housing and debris clean-up following a disaster.

The Corps also has important flood-fighting capabilities which can be brought to bear when a community is threatened by rising waters. We provide sandbags and technical assistance to shore up flood defenses, and are often called upon to repair damaged levees after waters have receded.

The South Atlantic Division has been a pioneer in the modernization of emergency response capabilities within the Corps and the government. This region established an innovative contracting system which ensures timely acquisition and distribution of commodities and services to disaster victims, and has worked closely with FEMA to improve cooperation and coordination for faster and more efficient response.

All of these public services are provided by Corps employees who respond on a volunteer basis. Engineers, scientists, park rangers and many other professionals in the organization belong to specialized response teams who answer the call whenever a disaster occurs anywhere in the nation.

My hat is off to these folks, who represent the best in government service, and I thank them for their selflessness in assisting disaster victims tirelessly and with great skill.

DEEDS, NOT WORDS!

Best wishes always,
Joe Schroedel

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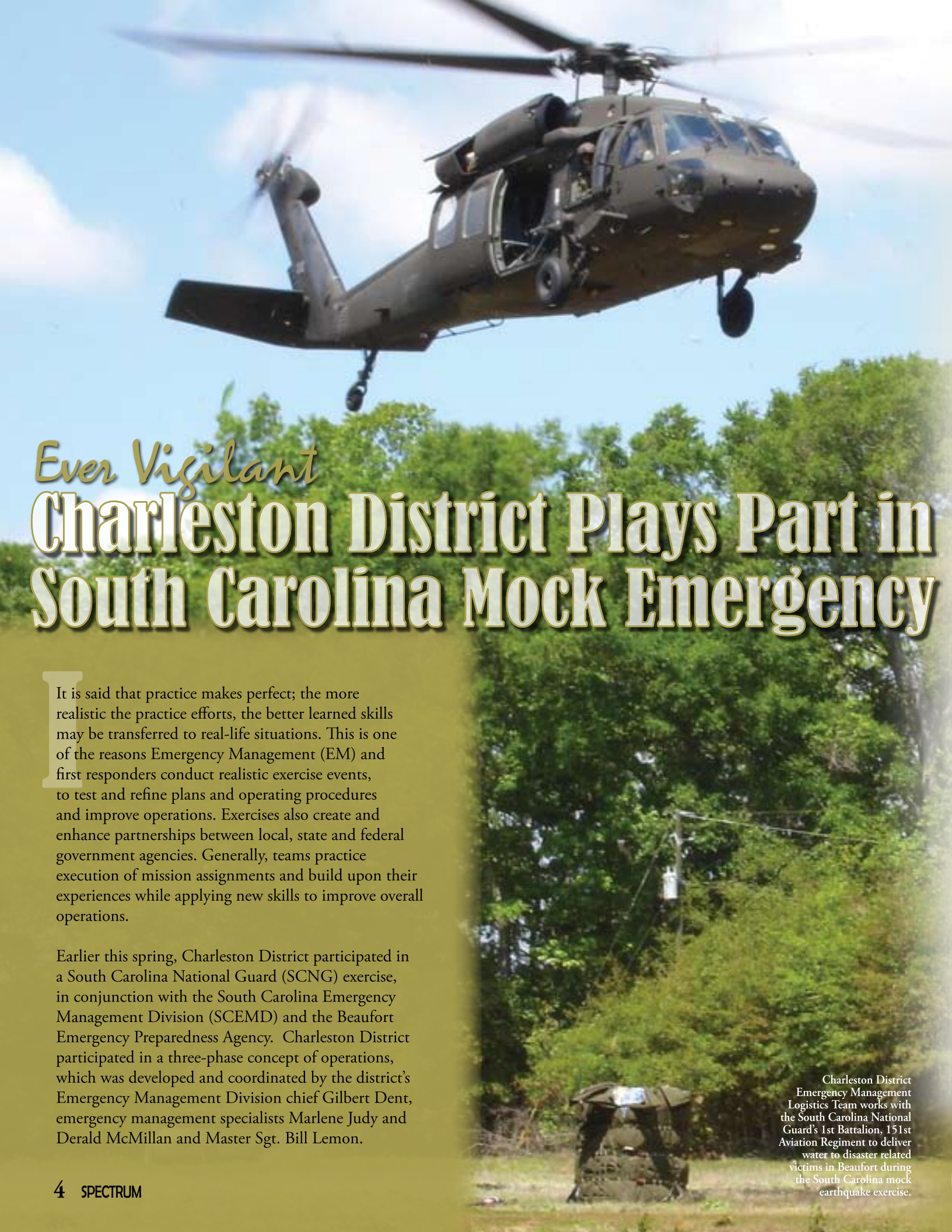


Ever Vigilant

Charleston District Plays Part in South Carolina Mock Emergency

It is said that practice makes perfect; the more realistic the practice efforts, the better learned skills may be transferred to real-life situations. This is one of the reasons Emergency Management (EM) and first responders conduct realistic exercise events, to test and refine plans and operating procedures and improve operations. Exercises also create and enhance partnerships between local, state and federal government agencies. Generally, teams practice execution of mission assignments and build upon their experiences while applying new skills to improve overall operations.

Earlier this spring, Charleston District participated in a South Carolina National Guard (SCNG) exercise, in conjunction with the South Carolina Emergency Management Division (SCEMD) and the Beaufort Emergency Preparedness Agency. Charleston District participated in a three-phase concept of operations, which was developed and coordinated by the district's Emergency Management Division chief Gilbert Dent, emergency management specialists Marlene Judy and Derald McMillan and Master Sgt. Bill Lemon.

Charleston District Emergency Management Logistics Team works with the South Carolina National Guard's 1st Battalion, 151st Aviation Regiment to deliver water to disaster related victims in Beaufort during the South Carolina mock earthquake exercise.

Emergency Exercises

Phase I

Dent initiated a call-down of the district's crisis management team (CMT), alerting them of a catastrophic earthquake, magnitude 7.3, along the New Madrid fault line in Tennessee, with the epicenter located in the Beaufort/Hilton Head area and triggering an after-shock along the Summerville fault line. District Commander Lt. Col. J. Richard Jordan III ordered the CMT to report to the district's Emergency Operations Center (EOC) for further guidance. He also advised the CMT to discuss the event with their immediate families and to initiate an employee accountability order.

Phase II

The CMT was given an update of the event scenario and provided information about potential Federal Emergency Management Agency (FEMA) missions, which included standing up a Recovery Field Office (RFO) at the Federal Law Enforcement Training Center (FLETC) in North Charleston, S.C. Twenty RFO team members completed Level I training, covering Homeland Security's National Response Framework (NRF) and National Incident Command System. The NRF became effective this year, replacing the National Response Plan. The framework explains how the federal government interacts during disaster events.

Members of the RFO were briefed on the national ice mission and commodity team missions and then conducted a case study of an RFO. Charleston District currently has the national ice mission, which procures and transports emergency supplies of ice for disaster response and recovery. Holmes Walters, the commodities team leader from Corps headquarters, provided information from his personal experiences during disaster response.

At the EOC, the "White Cell" team, named after white blood cells because of their assistance in fighting off infections, was led by Michael Hind, Security. The "White Cell" team supports the mission and transfer of command to the RFO. Angela Williams, Corps Logistics Agency (ULA) representative, helped create simulated travel orders for movement of personnel between locations. Cathy Middleton, Regulatory Division, provided message tracking and general administrative support.

The "White Cell" used Engineers Link Interactive (ENGLink), the Corps emergency management system that provides the framework for processing information and performing command and control of Corps elements responding to emergencies. The team created an event in the ENGLink training server, along with necessary documents to track personnel, missions, and situation reports on mission progress. After Action Reports were uploaded into ENGLink for tracking and validation of issues, and will be incorporated into existing plans and procedures.

Rodney Moody, ENGLink contractor, provided virtual training on the new commodities tracking systems, which allows better mission management functions, for Charleston District national ice planning and response team (PRT) members.

Phase III

Charleston District's national ice PRT spent the morning at the RFO and received Level II training. This training provided details on the roles and responsibilities of each position on the team and an opportunity to discuss past experiences in executing the national ice mission. District liaison personnel were dispatched to assist the SCEMD in Columbia, S.C. Colton Bowles, Regulatory Division, represented the district for emergency-related issues between the SCEMD and the Charleston District EOC.

Woodrow Wallace, Resource Management, and Tracy Dotolo, Regulatory Division, were dispatched as quality assurance personnel to the Beaufort point of distribution site. Mark Dumas, South Atlantic Division, accompanied them as an observer. The Beaufort location was established by the SCNG to receive supplies flown in by helicopters for distribution to disaster related victims. The team coordinated with the SCNG and other local officials on site.

The national ice team then returned to the district EOC for a practical exercise that provided the team the opportunity to work a simulated FEMA $20 million mission assignment, complete with challenges, such as rising fuel costs, looting and congested roads.

"The exercise was well-prepared and executed. Participants, especially those who were new to the process, had the opportunity to learn and practice some virtual reality situations. The EM team provided the elements necessary to achieve the exercise objectives, and the team members enjoyed learning in an open environment. Charleston District should be proud of their success," said Jose Delatorre, chief, South Atlantic Division Emergency Management.

Overall, the exercise provided the opportunity to keep the Charleston District, the South Atlantic Division and the U.S. Army Corps of Engineers vigilant in the face of natural and man-made disasters. ▪

by Michael Hind
Charleston District

The U.S. Army Corps of Engineers works with its partners during the South Carolina mock earthquake emergency exercise in Beaufort, SC.

Hurricane Wilma

Proves No Match for Corps Response Teams

Uncommon Season, Uncommon Solutions

In October 2005, only two months after Hurricane Katrina, the deadliest U.S. hurricane since the 1928 Okeechobee storm in South Florida ravaged the Gulf Coast and New Orleans, another record-breaking storm had formed in Jamaica. Hurricane Wilma would soon become the strongest hurricane on record to date and would later rank among the top five costliest storms in history.

Hurricane Wilma formed southwest of Jamaica on October 17 and rapidly gained strength, reaching category 5 just two days later and becoming the strongest tropical cyclone on record in the Atlantic basin. It was the fourth storm of the 2005 season to reach category 5.

The previous two months had brought the country record-breaking storms, accompanied by a whirlwind of issues that lingered long after the storms dissipated.

The U.S. Army Corps of Engineers, in support of the Federal Emergency Management Agency (FEMA), was already dealing with the devastation of Hurricanes Katrina and Rita and the aftermath of the breach of the New Orleans levee system. And then came Wilma.

A Season of Firsts

The 2005 season began with tropical storm Arlene on June 8, nearly two months earlier than the 2004 season had started. This should have been an indication of what lay ahead. The 2004 season hadn't delivered a named storm until two months after the start of hurricane season - the fifth latest start since 1952 - but it was the only time in recorded history that four hurricanes hit a single state in one season.

After being brushed by both Hurricanes Katrina and Rita, the state of Florida was about to be hit with its eighth hurricane in 15 months.

While forecasters can make predictions about the number of hurricanes and the number of named storms, there is no way to predict the devastation that a storm will bring or the complexity of problems that will need to be solved. Problems so complex that they tested the mythical "worst case scenario."

Even with the lessons learned from 1992's Hurricane Andrew response, the 2005 hurricane season brought new lessons for Jacksonville District and all of the South Atlantic Division (SAD).

Meeting Challenges, Exceeding Expectations

With a monumental emergency response effort well under way in Louisiana and Mississippi, and with almost three months remaining in hurricane season, Corps headquarters decided not to task Jacksonville District's roofing team to respond to Hurricane Katrina. However, after Hurricane Rita made landfall near the Texas-Louisiana border September 24, the response efforts required more personnel, and Jacksonville District's roofing team was sent to Texas.

"Jacksonville has done a few of these," was the thinking, according to Todd Trulock, former chief of Jacksonville District's emergency management branch.

Jacksonville District had indeed been through a number of storms and after the 2004 season, the district had some experience in the 'unconventional' as well.

But now the Corps was involved in three major emergency response efforts and the Corps' regular missions and work still had to go on. Four days before Rita made landfall, 2,400 Corps employees were already actively engaged in recovery efforts.

"When Wilma hit us, there wasn't anyone else to play," Trulock said.

With so many people already deployed and two months left in an unpredictable hurricane season, finding more people to deploy was not going to be an easy task.

"There was a tremendous drain on resources," explained Trulock.

Just as historical political writer Thomas Paine said in issuing his call to arms in 1776, "These are the times that try men's souls." In the spirit of "Essayons," the challenge was answered and met. Almost half of the deployments for Hurricane Wilma response came from Jacksonville District and well over half of the total deployments came from within South Atlantic Division.

Jacksonville District's roofing team, deployed to Texas in support of Hurricane Rita, would now also have to support Hurricane Wilma recovery efforts. Jacksonville District communications and information management staffs were already managing the Corps' toll-free telephone information line, recording and updating information in support of both Hurricanes Katrina and Rita.

But human capital was not the only resource being drained.

The arrival of Hurricane Wilma tied the record for the most hurricanes in a given season. A record number of hurricanes placed a great demand on materials for the housing missions. Blue plastic, nails, two-by-fours and plywood were all at a premium throughout the south.

Trulock described a situation where there was a shortage of concrete blocks used for setting up the temporary trailers.

"A contractor had to ship concrete blocks from his hometown of Louisville for the housing mission," said Trulock.

Contractors played a critical role in the recovery efforts. The massive devastation from Florida to Texas also personally impacted Corps employees who lived in the affected areas as well as local business owners. Contactors like Kelly Temporary Services helped to supplement staffing by providing administrative services and staffing the phone bank. With the help of Jacksonville District Small Business Deputy Beth Myers, several small local businesses were afforded opportunities in the recovery efforts.

Other ways of meeting challenges was through using or, as Trulock described it, "borrowing" a contract from another district. A Mobile District regional contract allowed for quality assurance teams to be brought in to supplement Corps staff.

Trulock says that relationships were key to overcoming challenges and accomplishing the mission.

As the housing mission grew, more resources – personnel and materials – were needed. Trulock was able to call on the Rapid Response group in Omaha, part of a larger corporation with the experience and manpower to come in and help get the job done.

Another instance where relationships made the difference was in addressing county and state regulations. Trulock recounts the story of an elderly woman who lived in Clewiston. Her home was damaged by Wilma and she was sleeping in her 70s Chevrolet station wagon. She had received a FEMA trailer but could not get the necessary approval through the city for the certificate of occupancy.

"She was sleeping in her station wagon, parked beside her FEMA trailer," Trulock said.

Trulock contacted local officials to work through the problems with getting the trailer approved and the power turned on. The problems were resolved and she was able to move in the same day.

Up to the Challenge

Managing the recovery efforts on the third costliest storm in U.S. history was no easy feat. Hurricane Wilma arrived at a time when a large number of Corps staff members were already deployed in support of Katrina and Rita, and when impacted areas were still recovering from the effects of the 2004 season.

The 2004 and 2005 hurricane seasons were unusual seasons that challenged even the most experienced emergency responders. With each disaster recovery effort, Jacksonville District and all of South Atlantic Division learned and applied more lessons, for the progressive betterment and benefit of all future responses and the overall quality of life in the Southeastern region. ▪

by Sonya Goines and Nancy J. Sticht
Jacksonville District

(Left) Hurricane Wilma hit Miami on October 24, 2005. (Photo by Javier Saracho)
(Right) Wilma left destruction in her path through this Florida community.

Teams Provide Critical Needs in

In the wake of the Midwest floods, which have been called the worst natural disaster in the United States since Hurricane Katrina, the Savannah District Emergency Management Division (EMD) sent their power and housing teams to assist in disaster relief, a subject in which they are well-versed. In recent years, these teams also deployed to hurricanes in Florida and to three states following Hurricane Katrina.

Chris Klein, chief of Savannah District's EMD, says that their mission is "to plan for and execute disaster response recovery." In accordance with the National Response Framework, Savannah District provides emergency power planning and temporary housing response teams.

The temporary housing team steps in when a disaster may be severe enough to warrant providing temporary housing for residents, from shelters to hotel rooms, apartments and, as a last resort, trailers. The emergency power team helps to keep essential public services functioning by providing emergency power, such as generators.

Savannah's EMD team also executes the flood control and coastal emergencies and the catastrophic disaster preparedness programs; handles all of the district's Global War on Terror civilian deployments; recruits, trains and medically qualifies the power and housing teams; and maintains the Forward Engineer Support Team-Advanced (FEST-A). In addition, the team manages emergency plans for Savannah District, such as hurricane evacuations and tornado alerts.

EMD includes four full-time employees: Klein, natural manager Judy Patterson, emergency management specialist T.J. Tassner (deployed to Iraq until December) and budget analyst Renee Atkins. While Tassner is away on her one-year deployment, Fredricka Bangs has temporarily taken over the EM specialist position, including the duty of managing the deployment of all emergency teams. EMD recruits engineers, contract specialists and construction specialists from the district to fill their teams, including the power, temporary housing and FEST-A teams.

Following the devastating Midwest floods in late June, Klein and Jason O'Kane of the Regulatory Division deployed to Madison, Wis. for ten days, representing the Savannah District as the temporary housing response team.

"Thirty counties had been declared for disaster relief and we were there to determine if a housing mission was qualified," Klein said. "We checked [temporary housing] resources, which the Federal Emergency Management Agency (FEMA) pays for, such as hotels and apartments. We found that the list of available resources was greater than the need, so fortunately, trailers weren't needed, which was the goal." EMD also deployed an Emergency Power Planning team to Illinois.

Because FEMA doesn't typically employ engineers, the Corps is responsible for providing that expertise throughout hurricane season and in other emergencies.

"Last year, FEMA asked the Corps for eight temporary housing subject matter experts to work at their headquarters in Washington, D.C. for the remainder of the hurricane season, and that has carried over to this year," Klein said.

Klein said that Savannah is the lead for the temporary housing mission in the Corps, so he is responsible for managing the process of rotating two subject matter experts to FEMA headquarters every two weeks. About 17 subject matter experts rotate from the six districts that have housing teams.

Savannah District unload generators in Florida following Hurricane Charley, 2004.

Terry Temple, Vicksburg District, checks incoming supplies at Tampa Airport in Tampa, Fla., following Hurricane Charley, 2004.

Debris removal operations in Mobile County, Ala.,

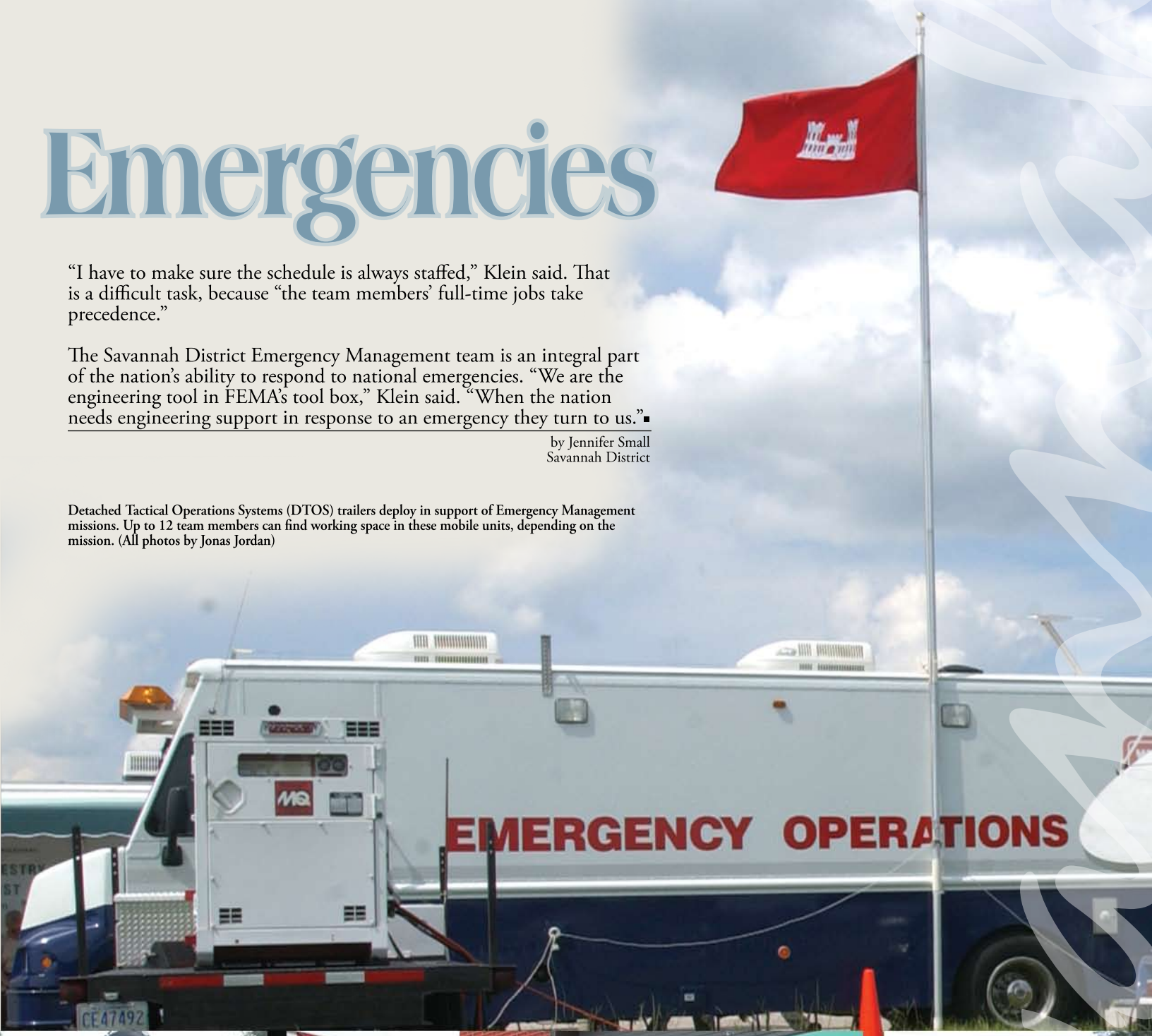
Emergencies

"I have to make sure the schedule is always staffed," Klein said. That is a difficult task, because "the team members' full-time jobs take precedence."

The Savannah District Emergency Management team is an integral part of the nation's ability to respond to national emergencies. "We are the engineering tool in FEMA's tool box," Klein said. "When the nation needs engineering support in response to an emergency they turn to us."▪

by Jennifer Small
Savannah District

Detached Tactical Operations Systems (DTOS) trailers deploy in support of Emergency Management missions. Up to 12 team members can find working space in these mobile units, depending on the mission. (All photos by Jonas Jordan)

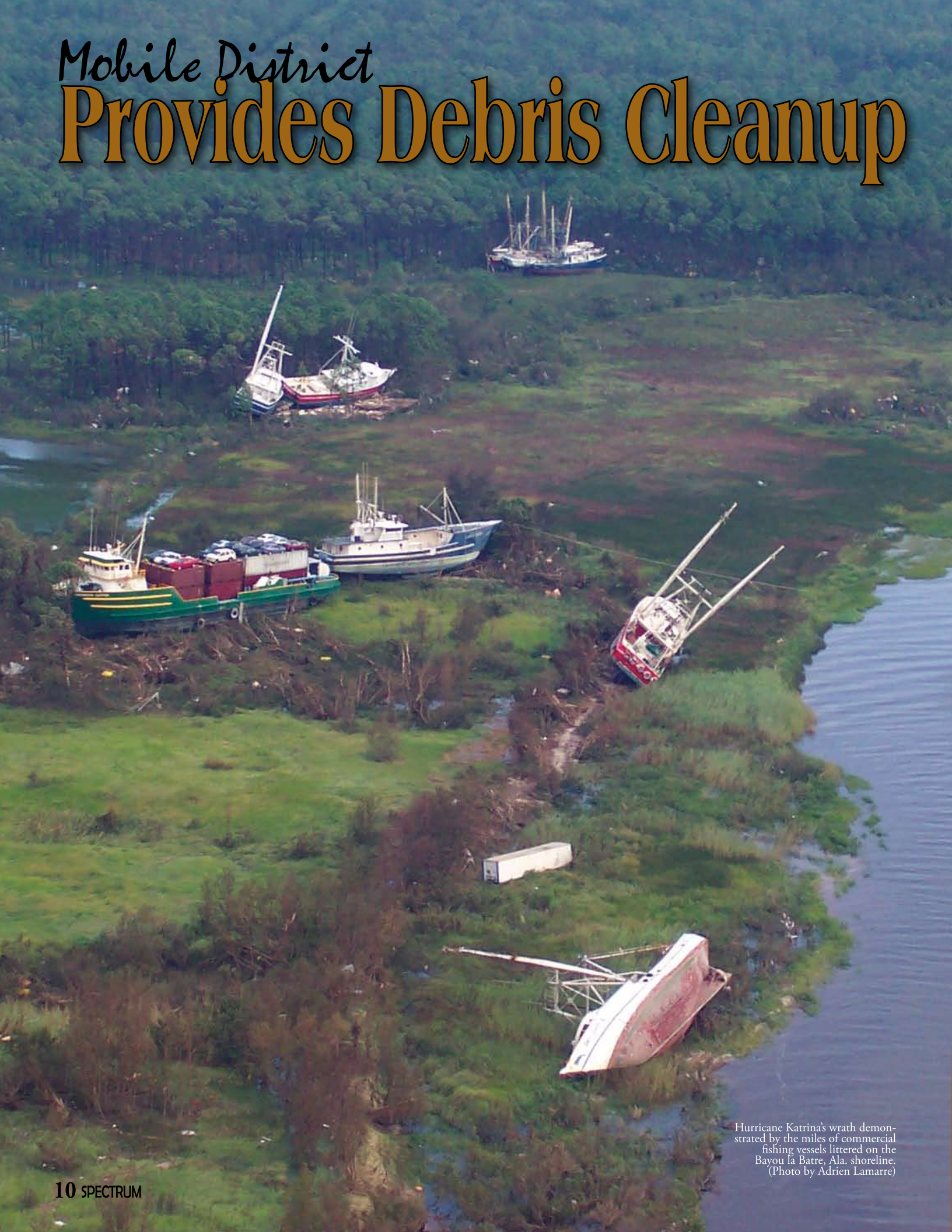


following Hurricane Ivan, 2004.

Emergency operations specialists load trucks with supplies followingHurricane Ivan, 2004.

Robert Clark, Tulsa District, inspects temporary roofing in Pensacola, Fla., after Hurricane Charley, 2004.

Mobile District Provides Debris Cleanup



Hurricane Katrina's wrath demonstrated by the miles of commercial fishing vessels littered on the Bayou la Batre, Ala. shoreline. (Photo by Adrien Lamarre)

The U.S. Army Corps of Engineers is a major military command with a broad set of missions and capabilities, including providing assistance when natural disasters or other emergencies occur. Emergency preparedness and response is primarily a state and local responsibility; however, when a disaster exceeds state and local capabilities, the Corps responds. The Operations Division, Readiness Branch, Emergency Operations Center (EOC), is one of seven districts in the United States tasked with removing debris following an emergency event.

After Katrina struck the Gulf Coast, President George W. Bush declared the states of Alabama, Mississippi and Louisiana disaster areas. Mobile District's EOC was tasked to remove debris in Alabama. The EOC removed, reduced and disposed of eligible debris and provided technical assistance to federal, state and local agencies.

Team

Teams consist of 15 positions, including an action officer, mission manager, contract specialist, environmentalists, engineers and mission specialists. The team typically deploys for no less than 30 days. "The management side would probably stay 60 days," said Bo Ansley, EOC chief. "After 30 days, there will be some folks that are burned out. There are multiple positions, with the majority of our folks being trained volunteers."

Lessons Learned

One of the lessons learned following Hurricane Katrina was how the Corps awards debris recovery contracts. Prime contractors are now local (from the state of Alabama) and, if necessary, sub-contractors provide further assistance. Reach-back capabilities to other debris districts is also an option.

"There is built in redundancy for smaller contracts, such as Multiple Award Task Orders Contracts (MATOC) for small businesses to come in and work after a disaster has been declared," said Ansley.

Technological advances have been made in how debris tickets are created, tracked and shared with contractors. The old paper system meant that a Corps representative on the street would fill out a carbon copy debris ticket, hand off a copy of the ticket to a driver, who would then take the debris to a dump, and then the driver would provide another ticket to the dump personnel. "It wasn't unusual to have a sub-contractor as well as a prime contractor working on the same debris mission, therefore, it wasn't unusual to have four to five debris tickets for each load that went to the dump," said Ansley.

A new handheld device, developed by an independent contractor tasked by the Federal Emergency Management Agency (FEMA), uses a smart card with pull down menu options on which the user may scan, swipe and print debris tickets. The information is then uploaded to a files transfer protocol (FTP) site.

FEMA started a pilot program to have debris removal and disposal handled by the lowest state or local level, and directed that federal assistance would be provided at a 75 percent federal – 25 percent state cost-share. State and local municipalities must provide an approved debris plan to FEMA. The Corps role has since become more technical in nature, to assess situations and help state and local municipalities develop debris plans.

The Corps requires a subject matter expert (SME) to be part of each planning and response team (PRT). The SME is an advisor for FEMA and the Corps, reviewing contracts and helping with debris estimating. "It is an honor to be considered a SME; you must have strong construction and debris management experience and several deployments under your belt," said Ansley. There are only 12 certified debris SMEs nationwide, and more are needed.

"Nationwide, the push now is to try and bring the numbers up. A lot of folks have retired and there is a Catch-22 that you can't become a SME without experience, and there haven't been any events over the last two years," said Ansley.

Tools

ENGlink is a tool that Emergency Management continuously uses to store information for use during a disaster. It is used to fill vacancies and store manuals and samples of reports. Reporting capabilities are very important to the Corps, and sending information up the chain, noting any problems, providing daily production and situation reports provides a lot of information to many people simultaneously.

Volunteers are Needed

There are many great opportunities and reasons to volunteer for the debris mission, among them, the opportunity to work with other federal, state and local agencies and to develop professional, organizational, leadership and networking skills.

There are also numerous financial incentives, such as overtime, per diem and potential temporary promotion. The real reward is the sense of accomplishment and pride that comes with the opportunity to help others recover from a natural disaster. Rather than just watch the events unfold on CNN, you became part of it. ▪

by Lisa Coghlan
Mobile District

Experience Sharpens Emergency Response in Wilmington District

by Stephan Vithalani

(Photo by Hank Heusinkveld)

Major hurricane disasters have historically brought suffering to our coastal populations. However, they have also brought effective, positive change in the way the federal government plans, responds to and recovers from these devastating storms and better serve these populations in the future.

The 2005 hurricane season – which brought with it Katrina, Rita, and Wilma – forever changed the Federal Emergency Management Agency (FEMA) disaster planning, response and recovery actions. But for the U.S. Army Corps of Engineers, major changes in planning and preparation started long ago, following Hurricane Fran in 1996.

In the post-Fran recovery, the Corps determined that response and recovery were slow and manpower-intensive. The Wilmington District's Contracting Office issued a record number of contracts for ice, water, debris removal, power and roofing in Hurricane Fran's aftermath. The contracts consisted of one debris letter contract in the amount of $62 million, and thirty major contracts and numerous procurements valued in excess of $128 million.

New Contracting Initiatives & Teams

To improve response time and cut the cost of contracts, the Advanced Contracting Initiative (ACI) was created. Contracts were awarded for a five-year period for each of the required missions and/or commodities. The first ACI contracts were issued in 1999, prior to the hurricane season. The contracts came in at a lower cost and proved to be an efficient means of rapidly getting the commodities to disaster victims.

Next, the Corps created planning and response teams (PRTs) to provide subject matter experts to execute the contracts in support of each mission. The teams include a management cell and quality assurance inspectors.

The Wilmington District Emergency Management Division manages one of the Corps-wide commodities PRTs, staffed by volunteers from Wilmington District, with Savannah and Jacksonville Districts providing quality assurance support. Preparation includes completing required training, establishing medical clearance and ensuring proper immunizations for each team member and obtaining supervisory approval for deployment. Emergency Management then coordinates the deployment of team members to exercises and events, and ensures new policies and regulations are communicated to the team, increasing their knowledge of their roles and responsibilities.

Wilmington District Emergency Management Division is also responsible for ensuring that the commodities PRT is in a ready-to-deploy status and having the supplies needed to complete the mission. If requested, the team will respond to any disaster within the Corps' area of responsibility.

One-of-a-Kind Mission

The new standard of flexibility and agility in hurricane response also helped Wilmington District to respond when a unique storm-damage situation blew in with Hurricane Isabel in 2003, the last major storm to impact the North Carolina coast.

The storm made landfall north of Hatteras, N.C., creating a breach that washed out 1700 feet of Highway 12 and severing the town from the mainland. FEMA assigned Wilmington District the mission of reestablishing the "life link" Highway 12 to the town of Hatteras. Within three days, all permitting from a multitude of state and federal agencies had been completed. Representatives from all the key state and federal agencies were invited to converged in Wilmington District, where they shared ideas and breaking information, and quickly resolved problems. The contracting office exercised its abilities to move forward quickly with a letter contract initiative.

The result? The highway that had been breached was reconnected only 60 days later. Church bells rang out on Hatteras Island as the community celebrated its renewed link to the mainland. This project, which under normal circumstances would have taken two years, became a great example of government response in ensuring an effective and expeditious recovery.

Organizations Snap into Action

The Wilmington District Emergency Management Division also manages the Recovery Field Office (RFO) and the Preliminary Damage Assessment Teams (PDA). Both teams are staffed by Wilmington District volunteers.

The RFO team stands up and works as a full-fledged organization dedicated entirely to emergency response. It includes key administrative and technical leadership and can function on site at the district headquarters or in an alternate location if necessary.

RFO team members are required to have medical clearance, immunizations and supervisory approval. Emergency Management conducts annual training for the RFO team, so each volunteer is familiar with his or her responsibilities and made aware of policy changes. Emergency Management locates the sites where the RFO will establish operations and ensures all resources are available to the team.

In 2004, Hurricane Ivan crossed Florida and made landfall on the Florida/Alabama state line. This was the first time the Wilmington District RFO team mobilized to support another district by establishing an RFO and executing assigned FEMA missions for Alabama. Wilmington Team members moved to the disaster area, set up shop and were fully operational within days of the storm.

The PDA team's readiness to mobilize at a moment's notice is also the responsibility of Emergency Management. These teams are assigned to sites within the district's boundaries within hours of a storm's passing. The PDA team's responsibility includes inspecting flood protection sites and beaches. The chief of Emergency Management Division and members of the PDA teams meet with each individual coastal county and review points of interest and any concerns they may have. Annual county visits are conducted before hurricane season begins each June 1, and includes a helicopter flight of the entire North Carolina coast.

Preparing for the 2008 Storm Season

It has been almost three years since the east coast of the United States and the Gulf of Mexico were threatened by tropical cyclone landfalls. While the tropics remain relatively inactive, what is the Wilmington District Emergency Management Division doing?

For Emergency Management, the essential task of being prepared is continuously ongoing. These tasks include updating and reviewing the fourteen Emergency Management plans, such as the Hurricane Preparedness Circular, or Hurricane Operations Plan. Most importantly, Emergency Management prepares, trains and exercises for the worst case scenario - a major hurricane impacting the North Carolina coast.

Geologists at Louisiana State University (LSU) stated that the Outer Banks of North Carolina is one of the three top places for a hurricane landfall. The State Climate Office of North Carolina (SCO) states that since 1886, approximately 166 of the 951 tropical cyclones that have been recorded in the Atlantic Ocean and the Gulf of Mexico passed within 300 miles of North Carolina.

The SCO says that a tropical storm or hurricane will impact the coast of North Carolina once every four years, and the state will be affected every 1.3 years by a tropical cyclone. These predictions for tropical cyclone activity and the 2008 probabilities for at least one major (Category 3-4-5) hurricane making landfall on the U.S. East Coast, including the Florida peninsula, is 45% and should keep the Wilmington District Emergency Management Division busy.

Atlantic Basin Seasonal Hurricane Forecast for 2008

Forecast Parameters and 1950-2000 Climatology (in parentheses)	Issue Date 7 December 2007	Issue Date 9 April 2008
Named Storms (NS) (9.6)	13	15
Named Storm Days (NSD) (49.1)	60	80
Hurricanes (H) (5.9)	7	8
Hurricane Days (HD) (24.5)	30	40
Intense Hurricanes (IH) (2.3)	3	4

Source: Department of Atmospheric Science, Colorado State University

Wilmington District Emergency Management Division also remains in contact with the State of North Carolina Emergency Management Association (NCEMA) and attends quarterly meetings and conferences that are held in preparation for response to disasters, the latest of which was the All Hazards Conference held in March 2008 and the Area 4 meeting in February 2008.

Close communication, through regular participation in statewide exercises and monitoring of the state's web-based tracking system, WEB-EOC, helps maintain a state of readiness between Wilmington District Emergency Management and the NCEMA.

The last two hurricane seasons may have many individuals in a more relaxed mode of readiness. This includes many new residents; in fact, the population of New Hanover County, where Wilmington District is located, has grown over 150% since 1960.

Be assured the Wilmington District's Emergency Management team has been hard at work preparing for the worst, by updating plans, conducting exercises and training, maintaining our teams in a state of readiness, and working with state and county emergency management officials. Emergency Management's goal is to be prepared and to respond efficiently in the event of a disaster. ▪

Exercise Tests Corps' Disaster Response

Three elements of the U.S. Army Corps of Engineers' disaster response trained together at Ft. Gillem, near Atlanta, Ga. earlier this spring. The emergency power, commodities (water, ice) and Deployable Tactical Operations System (DTOS) units joined representatives of the Federal Emergency Management Agency (FEMA), the State of Georgia Emergency Management Agency (GEMA), Department of Energy, Georgia Power Company and other agencies to work their way through a realistic hurricane scenario and improve government responsiveness following a major disaster.

The hurricane scenario posited a Category 3 storm coming ashore in Chatham County (Savannah), Georgia. Members of the 249th Engineer Battalion (Prime Power), as well as Corps civilian planning and response teams (PRTs) from all over the nation, gathered to walk through the steps involved in providing emergency generators, bottled water and ice, and administrative and communications support to Corps responders in the immediate aftermath of a major hurricane.

"This is the most realistic exercise we've ever done," said David Bishop of Pittsburgh District, an emergency power subject matter expert. "Having it here at Ft. Gillem allowed us to be near a FEMA logistics center where generators are stored." The PRTs and the 249th directed activity, including transport and actual installation and deinstallation of generators, while FEMA acted in the role of the Corps' ACI power contractor. "Developing relationships and synergy among the players is particularly important in the power mission," Bishop said. "We're a response mission, and timeliness is a major key to our success. We constantly look for ways to reduce the amount of time it takes to get temporary power to critical facilities and exercises are our best means of improving."

The exercise produced more than just a simulated experience. "Members of the 249th Prime Power team actually deployed to Chatham County to perform pre-installation inspections on critical facilities which may need power support following a disaster," Bishop said. "They worked closely with GEMA and developed a database of emergency power requirements for this part of the country, which is a requirement of the National Response Framework."

DTOS training in this exercise focused on "brand new people" according to Doug Nester, mission manager working for Corps headquarters out of Mobile, Ala. "Moving, setting up and breaking down these units requires special skills, and we're always training new folks," Nester said. DTOS units, the prototypes of which were developed in Mobile in the early 1990s, come in several configurations. They include self-contained travel-trailers as well as tractor-trailer units and containerized communications gear.

These units are designed to provide office space and communications capabilities to the earliest responders to disasters. They have played a critical role in such events as the 9/11 attacks and Hurricane Katrina in enabling early federal response. DTOS units have self-contained satellite telephone and internet capabilities, redundant telephone systems, and life-support facilities. Units are maintained at district locations throughout the nation. Several of them were driven to the Ft. Gillem site, and served as space for PRT teams to work on exercise tasks.

Another key early response mission is the provision of water and ice to victims in the immediate aftermath of a disaster. Andrew Benziger of Chicago District, a commodities subject matter expert, said the Corps has four national teams that procure commodities and seven PRTs capable of managing the commodity supply chain to the end user. "There are 6-9 people on the management cell of each team in different functions, such as action officer, mission manager and commodities site manager," he said.

Gary Stangeland of Galveston District said the commodities teams were working their way through new procedures for

Federal and state officials work complex logistical issues during exercise.

During this exercise, generators were trucked from staging areas to potential disaster sites.

efficient delivery of these key items. “Basically we have a new concept of operations from top to bottom,” Stangeland said. Problems with the logistics in this area following Hurricane Katrina prompted FEMA and the Corps to put in place a more well-defined process to determine where commodities are needed and how best to get them there. “The Corps plays a crucial role in this,” Stangeland said. “Early estimates are based on computer models the Corps has developed, but we will also take into account the wishes of the states involved and other factors.” FEMA is considering a policy that would curtail the mass distribution of ice, so that the federal government can focus resources on higher priority, life- saving requirements. In the meantime, the Corps will continue to maintain the capability to procure and distribute ice.

During the federal response to a hurricane, water will be provided from a variety of sources, including FEMA warehouses, the Corps’ water contractor, the affected states and through donations. “Our teams will be responsible for keeping track of all commodities, from whatever source,” Stangeland said. “This will give us a better picture of the overall situation, and allow us to coordinate activities throughout the area of operations,” he said.

All of the participants in the PRTs that took part in the exercise are volunteers who usually have regular jobs in the Corps which are quite different from what they do in emergencies. Linda Clapp, from San Francisco District, normally works as a park ranger at Sonoma Lake in Northern California. As a commodities PRT member, when her team is called to respond, she finds herself operating out of a DTOS unit accounting for palettes of water at a distribution site. Likewise, Deborah O’Leary, also from San Francisco District, works regulatory issues in San Francisco Bay when not on site following a disaster.

The volunteers gathered at Ft. Gillem were, without exception, serious and enthusiastic about their role in disaster response. They were also enthusiastic about the realism and depth of the exercise itself. “This is the first time we have exercised to this level, with the combined ice, water and commodities teams and all levels of government,” Stangeland said. “We’ve been pleased with the results.” ▪

by Rob Holland
South Atlantic Division

Portable offices serve as workspace for emergency responders.

(TOP) Engineers inspect generators before dispatching them to their destinations. (BOTTOM) Satellite communication is part of a redundant system designed to be used when power and cell phone service is down.