

Texas Emergency Management Digest

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Texas is a very fortunate state.

Every single day, while our citizens go about their daily lives, there are individuals throughout this state who are working on plans to save, serve and protect the people of Texas during disasters.

People from many organizations are drilling, training, planning, organizing, coordinating, designing or conducting exercises, going over lessons learned from past events, checking and re-checking plans that will make the difference between life and death.

It might be private sector partners discussing how to deliver supplies or restore power to the impact area. It might be members of our fine voluntary organizations who are working out the details for sheltering and mass care. It might be local officials or representatives of state agencies getting together to rehearse what they will need to do when a hurricane threatens the coast or their jurisdiction receives evacuees from coastal areas. And it might be the men and women who will literally put their lives on the line as they prepare to conduct search and rescue operations.

If there is one thing you can be sure of – and if there is one thing you can be proud of – it's the sheer number of men and women everywhere in this state who care very deeply about playing their parts in this effort. They are working on a daily basis to keep Texas safe.

Every storm is Mother Nature's lesson book and we are never done with school. But if there is a lesson to be learned, Texas learns it. If there is a way to make improvements in our operational concepts, Texas makes those improvements.

We cannot fully anticipate each and every new challenge that will come our way. But we can stand ready, prepared and confident to respond in the strongest and most decisive way we can.

Thank you for all you do.

A handwritten signature in black ink that reads "Jack Colley". The signature is written in a cursive, flowing style with a large initial "J" and a long, sweeping underline.

**GOVERNOR'S DIVISION
OF
EMERGENCY MANAGEMENT**

Office of the Governor

DIGEST

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(Photo by Staff Sgt. Eric Wilson)

Texas Hosts Exercise **Communications Drill Highlights Texas Homeland Initiatives**

From ham radio operators on the ground to the most sophisticated satellite systems in the sky, the capabilities of communications equipment in Texas were put to the test recently as local, state, federal agencies and military and industrial partners gathered at Camp Mabry in Austin.

Operators of different types of equipment – radio, Internet, satellite, wireless communications systems, mobile command vehicles, mobile navigation systems and various other data systems – can only be successful during response if they can use the equipment to communicate among themselves. That's why Texas has put significant investment into communications equipment for the past eight years. Since 9/11, Texas has received \$2 billion in homeland security funding to improve response capabilities throughout the state.

"Our emergency management community has done some incredibly smart work," said GDEM Chief Jack Colley. "We have some really magnificent equipment in this state and they are ready to use it. It's amazing what they've got. There is one group that has a vehicle which can provide a complete 9-1-1 system. Our great private sector can provide cell phone towers so that you can go into an area and not be a burden and not be a victim."

The communications interoperability exercise involved officials from GDEM and Texas Military Forces, and a number of mobile communications vehicles, trucks and equipment. Local jurisdictions were put through their paces as experts gauged their ability to work in conjunction with national and military communications systems as well as private sector partners. The multi-state exercise went on for five days, including everything from jet pilots testing Air Force video equipment to county sheriff's offices testing communications trailers.

Exercise Incident Commander Patrick Cobb said it is crucial for state planners to know "who owns mobile communications assets and what the capabilities of these assets are. We need to know what radio systems they have on board, what bandwidth they use and whether they are self-sufficient and for what period." Communications teams, using the National Incident Management System command structure, checked and rechecked the capabilities of satellites, network infrastructure and how well the various agencies shared access to these systems.

(Continued on page 5)

Re-Entry 101: Texas Takes on Post-Storm Challenge

This year, GDEM-sponsored conferences, training exercises and drills heavily emphasized preparing for the re-entry process. The aim was to develop guidelines and templates for a series of necessary actions that take place during the first 72 hours after a hurricane has struck the Texas coast, while allowing maximum flexibility in response to unforeseen circumstances. “We’re looking at the impact area as a dangerous place. Outside of a combat zone, it’s probably one of the most dangerous places on this earth,” said GDEM Chief Jack Colley.

Goals for the first 72 hours after the storm include: Re-enter and secure the impact area, conduct emergency search and rescue operations, assess damages and synchronize local, state and federal response. This is followed by assistance in restoration of essential services, support of continuity of operations and provision of mass care. Texas Highway Patrol will serve as lead state agency overseeing operational components. Three light task forces consisting of 250 people each will be staged in Dallas, Waco and Austin and a 500-member force will be located in San Antonio. The “heavy” team will forward deploy to the heaviest area of impact.

“These task forces go in where there is devastation, providing us an option we never had before,” GDEM Chief Jack Colley explained. “For re-entry, you have to go in with a task force. You go in with your chin up. You go in organized and ready. The over-riding consideration is to protect and secure.” Re-entry teams will be self sustaining with food, water, medical care and vehicle support for at least 72 hours. There also will be at least seven Incident Management Teams and ten Public Works Response Teams. Colley said, “We will do it efficiently. We will do it effectively. But we will do it under control. In Texas, we do not give up control, ever, to anybody – including the hurricane. Local officials may be standing on the beach in rubble, but they’re still in control.”

Colley said among the many challenges facing Texans working on preparedness this year is disaster fatigue. “I’m calling this a tough love year. It’s tough to

get ready this time around.” Colley said that following a 58 day period in 2008 responding to four hurricanes and three tropical storms from the Atlantic and Pacific both, people are tired: “They’ve been through a lot. They’ve seen what the worst looks like in this state and they don’t want to see it any more.” In addition, he said: “The state of the economy is having an impact on cities and communities. That’s why we’ve got to be quicker, smarter and better organized than ever this year.”

More than 200 personnel attended a two-day ROC (Rehearsal of Concept) Drill at the J.J. Jake Pickle Research Campus in Austin, which also focused on re-entry. Attendees were able to ask questions about tasks of their agencies for preparing and deploying resources and personnel to the task forces. Re-entry concepts were discussed in detail in break-out sessions. “One of the goals of these drills is to constantly evaluate how to improve processes,” Colley said. “The last hurricane season taught us a lot – especially about the immense dedication of Texans to helping each other in the face of Mother Nature’s wrath. The more we are able to come together to review and revamp disaster action plans, the stronger and more prepared we can be.” ★

Contributor: Rachel Jordan-Shuss



Hurricane Rehearsal of Concept (ROC) drill participants. (Photos by Anna Wiles)

Regional PIO Group Helps Locals

Editor's Note: When reporters flock to your area after a disaster, public information officers (PIOs) from your region can assist at a Joint Information Center (JIC). PIO Francisco Sanchez, of the Harris County Office of Homeland Security and Emergency (OHSEM) explains how the Harris County Regional Joint Information Center group got started.

Q: Why did you set up this coordination group?

A: The persons involved in leading public information efforts during Harris County's response to hurricanes Katrina and Rita received NIMS/ICS training just one week before Katrina made landfall. Most of the Joint Information Center participants had no previous NIMS/ICS training or emergency management experience. While both communications efforts were largely considered a success, and included a JIC, it highlighted the need to be better prepared.

Q: How did you get started?

A: In the summer of 2007, Harris County's Office of Homeland Security & Emergency (OHSEM) spearheaded an effort to bring together public information officers from the region's offices of emergency management and their key stakeholders for a dialogue on improving communication for a potential hurricane. From an initial meeting of about 30 organizations, the Harris County Regional Joint Information Center group was formed. The kick-off meeting for the 2009 hurricane season involved 91 attendees from a broad range of public and private sector partners. Benefits of meeting regularly include knowing who your peers are before disaster strikes, gaining a better understanding of your partner agencies' missions and key messages, and improvement in regional collaboration in areas beyond communications.

Q: How often do you meet?

A: The group generally meets quarterly. Core agencies like those directly tied to emergency management, homeland security, public health, voluntary agencies and industry have made an effort to meet more often. PIO and JIC training opportunities have been offered. Additionally, OHSEM has hosted Webinars or conference calls on topics of interest. OHSEM facilitates the meetings, but the "agenda" is driven by the group.

Q: How did this help during Hurricane Ike?

A: Between 2007 and the middle of 2008, we stood up a regional JIC for various incidents - primarily severe weather events. Those activations allowed participants to work in a real JIC and walk away with buy-in of the process, real world experience and a willingness to come back when needed. During Hurricane Ike, that practice paid off and we were indeed able to stand up a successful JIC in response to the third costliest storm in our nation's history. The group effort also paid off during the large scale flooding that took place in late April with almost no warning.

Q: What advice would you give to local officials who want to get started?

A: Start by reaching out to the organizations you already have a working relationship with. Have a group discussion about what messages are important for them and what recent developments in their agency might impact a hurricane response. Ask yourselves how, where and when a JIC will be set up if your community is threatened by a hurricane (or other disaster) this year. Keep the organizational structure informal so that you can focus on the work at hand. ★

(Drill continued from page 3)

Communications teams checked the capabilities of satellites, network infrastructure and how well the various agencies shared the systems. Voice Over Internet Protocol and Radio Over Internet Protocol systems, interoperability channels with radio bridges and satellite systems were also tested. Some participants "broke" equipment and other participants were asked to fix it or come up with another solution to re-establish communications. "We want to avoid being parked side by side during a hurricane and not understand each other's capabilities," Cobb said.

The exercise involved response to a hurricane that would cause significant damage, and took place in conjunction with hurricane drills for first responders in Cameron, Hidalgo and Willacy Counties. Janice Bruno, GDEM State Coordinator for Communications, said: "We formed a Communications Coordination Group so that during an emergency we take the right assets to the right place, with the right stuff to get the right result. We invited all our service providers, Sprint, AT&T, Raytheon and Motorola, to participate."

The exercise, known as the U.S. Department of Defense Interoperability Communications Exercise (or DICE) is sponsored each year by the U.S. Northern Command (NORTHCOM). One of NORTHCOM's missions is to support civil authorities, including state and local first responders, during a national emergency. Texas participants included: Williamson, Harris and Denton counties: fire departments from San Antonio, Austin, DeSoto and Seguin; the cities of San Marcos and Bedford; Middle Rio Grande Development Council, Alamo Area Council of Governments, GDEM, DPS, Texas State Guard, Texas Military Forces, Texas Forest Service, Texas Commission on Environmental Quality, Texas Department of Transportation, the 6th Civil Support Team, All Hazards Incident Management Team, ARES, Texas Army MARS, American Red Cross and FEMA. ★

Contributor: Chief Master Sergeant Gonda Moncada

Public Works Response Teams: Restoring Critical Infrastructure After the Storm

As agencies work to ensure that re-entry after evacuation is conducted in a more efficient and effective manner, one of the best tools to support this effort is the Public Works Response Team. The PWRT has more than 140 members representing 55 jurisdictions. PWRT members work with hundreds of building inspectors and other entities to restore electric power and other critical infrastructure needed by populations living in, or returning to, areas struck by hurricanes and other severe storms. The PWRT response consists of three categories:

- Liaison Support consists of two or three people manning phones and running logistics from the State Operations Center (SOC) to find resources, crews and people, and mobilize them to the damaged area quickly and efficiently.



Flooded water pumps are only one challenge for the PWRT.

- Planning Support involves four to six public works experts, skilled in the public works industry. They are the first ones into the disaster area immediately after the storm, tasked with finding the local public works director, mayor or county judge, then helping local officials determine infrastructural damage. They assist in creating a plan for restoration and re-entry for the citizens.

- Operational or Resource Support teams provide short-term technical assistance to get infrastructure operating again. These “boots on the ground” teams come with backhoes, trucks, shovels, pumps and other equipment. Building inspectors and code enforcement personnel provide additional operational support.

In September 2007, GDEM Chief Jack Colley asked the Texas Engineering Extension Service (TEEX) to organize the first PWRT. The team’s first season involved deployment in the field responding to Hurricanes Dolly and Ike, with work in the State Operations Center during Hurricane Gustav and

Tropical Storm Edouard. “For Dolly, our response was primarily water/wastewater plant restoration due to flood water damage, and securing generators due to long-term electrical outages,” said Tony Alotto, PWRT Team Leader. “We also had members help with the logistics of getting water and food and ice in a centralized location and dispersing it to locations around the Valley.”

The PWRT sent pumping teams from San Antonio, Alvin and Lufkin along with Incident Management Team resources from Lufkin, Webster, Cleveland, Alvin and Luling. A total of 15 pump teams with six-inch pumps and almost three miles of discharge hose worked around the clock to get the water and wastewater plants operating. In addition, 23 generators were delivered to water and wastewater plants in Cameron and Willacy counties to help mitigate long-term power outages. They were huge, trailer-sized generators ranging from 15 kW to 2 mW.

There were two major lessons learned during the response to Hurricane Dolly that would later prove valuable in the response to Hurricane Ike. The first was to get to the affected area quickly after the storm had passed. The second was the power of teamwork. Before the response to Hurricane Dolly, a plan was in place for the PWRT to work with Incident Management Teams from the Texas Forest Service, who were to provide logistical support in the form of food, lodging and communications. “Being able to link in with the IMT as part of the operations team enabled us to totally and completely focus on the public works issues and establish priorities with the local officials,” said Ken Olson, PWRT Field Team Leader.

Alotto explained that this “meant we were completely integrated into the overall response effort, from the SOC to the response teams in the field. We were an integral part of the team, rather than using the IMTs for strictly logistical support.” Alotto said that “Dolly was our first test... We were patting ourselves on the back on how well we had done and about how we had a year to plan for the next one. Then there was Ike.”

Alotto said that Olson and his planning support crew drove into Galveston County literally in the wake of Hurricane Ike: “They were tied at the hip with the IMT for logistical support, and they very quickly made contact with the public works officials in the impacted areas and provided that assistance.” The six-person assessment team performed assessments in Galveston, Orange and Chambers counties and created plans to help get the infrastructure functioning. After initial assessments, the operational and resource support teams sprung into action. About 150 personnel with their equipment from Hidalgo County and San Antonio Water Systems worked tirelessly on Galveston Island, and in LaMarque, Beaumont and Orange.

(Continued on page 7)



Marking Surge Dangers Saves Lives

Texans living in evacuation zones must make tough decisions on what to do during hurricanes or tropical storms. Now there is a new tool available to help them visualize just what a hurricane could do to the area in which they live. A project is underway that involves placing as many as 250 surge markers in coastal evacuation zones. These markers graphically demonstrate just how high storm surge can go. Surge markers have been used in Florida for years and resemble giant multi-colored rulers. They are 12 inches wide and would be built as high as 20 feet. They are similar, on a larger scale, to the water-depth gauges that can be seen on low-water crossings.

Storm surge is a dome of high water that can affect hundreds of miles of coastline. Produced by a combination of high winds and normal to high tides, storm surge can rise as high as 20 feet or more. Much of the Texas Gulf Coast is less than 10 feet above mean sea level. Surge is both deadly and destructive. Strongly built homes may withstand the hurricane winds only to be washed away by the surge. Water weighs 1,700 pounds per cubic yard. That means three cubic yards of surge – crashing into a house again and again – will strike with the force of a truck repeatedly smashing into a house.

Hurricane experts say storm surge is the greatest threat to life and property along the coast. Areas along rivers near the coast also may be affected. Chief Jack Colley of the Governor's Division of Emergency Management said: "The goal of this project is to raise public awareness of the dangers of storm surge in a very dramatic way. Our citizens can see very clearly just how high the waters can rise and how dangerous these storms can be to them and their loved ones."

Surge markers are divided into five sections. Each section is painted a different color to demonstrate how much higher the water will go depending on whether the storm makes landfall as a Category One, Two, Three, Four or Five. The markers can be placed on existing poles, such as utility poles along evacuation routes, or on buildings in public areas. Local jurisdictions work with their communities and businesses to publicize the project and to obtain permission when locating the surge markers. The surge markers were produced by the Texas Department of Criminal Justice with grant funding provided by FEMA. ★



Surge markers graphically demonstrate why obeying mandatory evacuation orders will save your life.

For more information on surge markers, contact GDEM at (512) 242-7501 or e-mail: Thomas.Lebblanc@txdps.state.tx.us

(PWRT continued from page 6)

Examples of how the PWRT can function in a disaster include putting 500 portable stop signs in place to replace damaged and missing traffic signals and lights. As more than 300 requests for approximately 1,300 generators poured in, each of the requests was addressed. More than 20 building inspectors worked to assess which buildings were safe for citizens to enter. Alotto attributed the successful operations

of the PWRT in the face of unprecedented challenges to teamwork: "Many people worked really hard to help put the PWRT together and make it a valuable asset to the state of Texas. We learned a lot of lessons and – like any other response organization – will continue to learn with each deployment." ★

Contributor: Chuck Glenewinkel

For more information on PWRT, contact Tony Alotto at (800) 824-7303 or e-mail: eupwti@teexmail.tamu.edu.

Drought and Wildfires Take Heavy Toll

An eight-year drought in 1950s went down in history as one of the biggest and the worst, surpassing even the Dust Bowl years of the 1930s. Weather experts say that in some areas of the state, there are signs that the current drought may be a record breaker as well, with the first half of 2009 rivaling 1917 as the driest year on record in the past century. Victor Murphy, climate service program manager with the National Weather Service in Fort Worth, said certain areas of Texas are experiencing their driest weather conditions on record, primarily around the Corpus Christi, Austin and San Antonio areas.

Chief Jack Colley, who chairs the Drought Preparedness Council, explains that drought can have long-term effects that are highly destructive to rural communities and damaging to the statewide economy. This year's dry period may cost agricultural producers more than \$1 billion. "Drought is absolutely one of the most insidious and devastating types of disaster," Colley said. Experts at Texas AgriLife Extension Service said more than 70 percent of the state is experiencing drought conditions of varying degrees of severity.



(Photo courtesy of Texas Forest Service)

Dry, hot conditions resulting in severe drought go hand in hand with wildfires. Wildfires in 2006, also a year of serious drought, killed 19 people and destroyed 734 structures during one of the worst fire seasons in Texas history. The 2009 winter fire season, which ran from Jan. 22 through June 3, saw the Texas Forest Service (TFS) responding to more than 700 wildfires. The Wilderness Ridge Fire in Bastrop County, which consumed 26 homes, 44 outbuildings and a number of businesses, was started when a tree fell across a power line.

"Response this year to multiple fires springing up in numerous areas of the state simultaneously has challenged our response efforts substantially," said Colley. "Texas firefighters have performed bravely and well to meet this challenge." TFS reported 9,205 structures were threatened by wildfires across the state with 8,890 saved, 212 lost and 12 damaged.

Local fire departments reported that they responded to 6,237 wildfires, according to the TFS fire reporting Web site. Total acreage affected by wildfires was nearly 600,000. In addition, 44 local firefighters suffered burns or injuries. ★ **Contributor: GDEM Planner Melanie Moss**

For more information and fire safety information, see the TFS and Agricultural Drought Task Force Web sites: <http://texasforests.tamu.edu> & <http://agrilife.tamu.edu/drought>



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