



US Army Corps of Engineers®

READINESS MANAGEMENT

Bulletin

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From the Top



By Ed Hecker, Chief
USACE Office of Homeland Security

As we progress through the 2007 Hurricane Season, I really want to commend the great work that has been done by the entire USACE team to assure we are at the highest possible state of Readiness. As you know, this is an objective that we continue to pursue with continuing training, exercise and planning initiatives both internally and with FEMA, States, and other key partners. With our recent emphasis on the D-Hour operational action sequence, every response team, Crisis Action Team, Crisis Management Team, and Leader should have a good understanding of operational priorities and decisions/actions required starting immediately from the outset of an event. We will continue to “drill” on these procedures right up to the appearance of the first major storm on the horizon.

The Readiness XXI OpOrder was published on 4 June, and prescribes many tasks that we must complete to achieve “Full Operational Capability” by 1 June 2008. The scope of this initiative encompasses elements of all 3 Campaign Plan Goals and at least 3 of the Civil Works Strategic Plan Goals. There is significant work required to meet the RXXI objectives, and the Emergency Management Community of Practice (EM CoP) will have a key role to play as we shape the future USACE Contingency Workforce and Budget. We are continuing work at the HQ level, and are scheduling a “kick-off” event for the week of 16 July. Much more to follow on this in future Readiness Management Bulletins, but I strongly encourage you to become familiar with the OpOrder and prepare to engage with the transformation process prescribed therein.

The EM CoP is also fully engaged in the rapidly evolving Flood Risk Management Program, which includes the establishment of a Levee Safety Program. We are focusing on “Federal” levee systems initially, but the scope will expand in the National Levee Safety Act passed as part of WRDA or other legislation. The Levee Inspection standards and procedures are being updated and integrated with the Levee Safety Program activities as part of this program. Additionally, we are working closely with FEMA to coordinate the Levee Safety initiatives with the Levee Certification process administered by FEMA under the Flood Insurance Program. A website has been set up for ready access to guidance documents and related information for the Flood Risk Management Program.

There continues to be strong emphasis towards implementing the 12 Actions for Change and many of these essential actions apply directly to the EM CoP. Action 7 addresses the Inspection of Completed Works (ICW) Program discussed above, and the Systems Approach, Risk Communication, and Risk Based Planning/Decision-making are clearly at the heart of what we do in Readiness Management, particularly as we continue to address the condition, safety, and security of Critical Infrastructure in the Built Environment. I will address our Critical Infrastructure Resilience initiatives with DHS/FEMA and other agencies in future bulletins. Let me know if there are specific topics you would like me to address in future Bulletins or other media. In the meantime - stay ready!

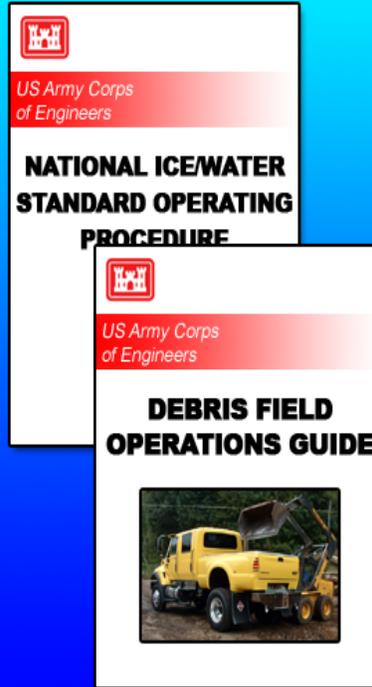
ESF#3 Operational Guidance

Overview: "Fact Sheet" with concise description of capability, team, and resources.

Standard Operating Procedure: A reference document detailing the procedures for performing a function (who deploys, when, where, and how to organize).

Field Operations Guide: A durable pocket/desk guide containing essential nuts-and-bolts information needed to perform specific assignments or functions.

Job Aid: A checklist or other aid for job performance or job training (may be a part of FOG).



EM Community of Practice Awards

By **Bill Irwin, Program Manager**
Civil Emergency Management

Congratulations to Mr. Richard Taylor and Ms. Patsy Fletcher for being selected for the following Chief of Engineers' annual awards for excellence in the field of civil emergency management for the calendar year 2005:

Responder of the Year

Mr. Richard Taylor, Northwestern Division, Omaha District has been selected as the USACE "2005 Responder of the Year". Dick was selected as the individual within the Corps of Engineers whose actions while deployed for a civil disaster had the most impact during response and recovery operations. Dick demonstrated exceptional leadership and knowledge while deployed as he worked to establish and maintain a very successful Temporary Roofing program after the Hurricane Katrina and Rita disasters. Under his leadership, USACE was able to provide temporary roofs to homes that not only protected property, but also allowed numerous disaster victims to return safely to their homes to begin the process of recovery.

Emergency Manager of the Year

Ms. Patsy Fletcher, Mississippi Valley Division, Memphis District has been selected as the USACE "Emergency Manager of the Year". Ms. Fletcher was selected as the Emergency Manager whose actions throughout 2005 had the most positive national impact on the entire USACE Emergency Management Community of Practice. Patsy has been a key player in developing P2 strategies, initiating Regionalization efforts and has emerged as an EngLink Subject Matter Expert. In addition to her national contributions, Patsy led the successful flood fight activities during the 2005 Mississippi River floods and then was the Memphis District Emergency Manager for Hurricane Katrina and Rita disasters and "forward deployed" to Baton Rouge once the Recovery Field Office was established.

These selections place these individuals in an elite cadre of nationally recognized leaders in Emergency Management. The USACE Emergency Management Community of Practice is fortunate to have such exceptional individuals who are always ready to answer the call to meet the nation's disaster response needs.

Disaster Operational Guidance

By **Bill Irwin, Program Manager**
Civil Emergency Management

USACE Disaster Operational Guidance has evolved and improved over the years as we have captured information, procedures, and expertise gained from executing missions in support of FEMA. USACE is transitioning our documents to align with the following National Response Plan prescribed levels of guidance:

Overview Document

This is the equivalent of a Fact Sheet or Information Paper and provides a short (2-3 page) synopsis of an incident management function, team and/or capability.

Job Aids

These are those tools and checklists, such as the "Debris QA Job Aid" or the "Temporary Roofing Installation Job Aid" brochure that can enhance performance and assist in job training.

The NRP is a Federal, State, Local and private sector plan. Our goal in the future is to further transition our work so that our Operational Guidance is "intergovernmental" and can be used at all levels of government and by our private sector partners. Future Remedial Action Program workshops will include a broader audience, beyond USACE, to assist us in making this transition.

Standard Operating Procedures (SOPs)

SOPs provide additional information regarding whom and how we deploy, and how we organize the capabilities in the field.

Field Operating Guides (FOGs)

FOGs are the equivalent of what we used to call "Mission Guides" and are the durable notebooks that we take to the field that provide the "step-by-step" guidance (in great detail) on how the mission or function is performed.

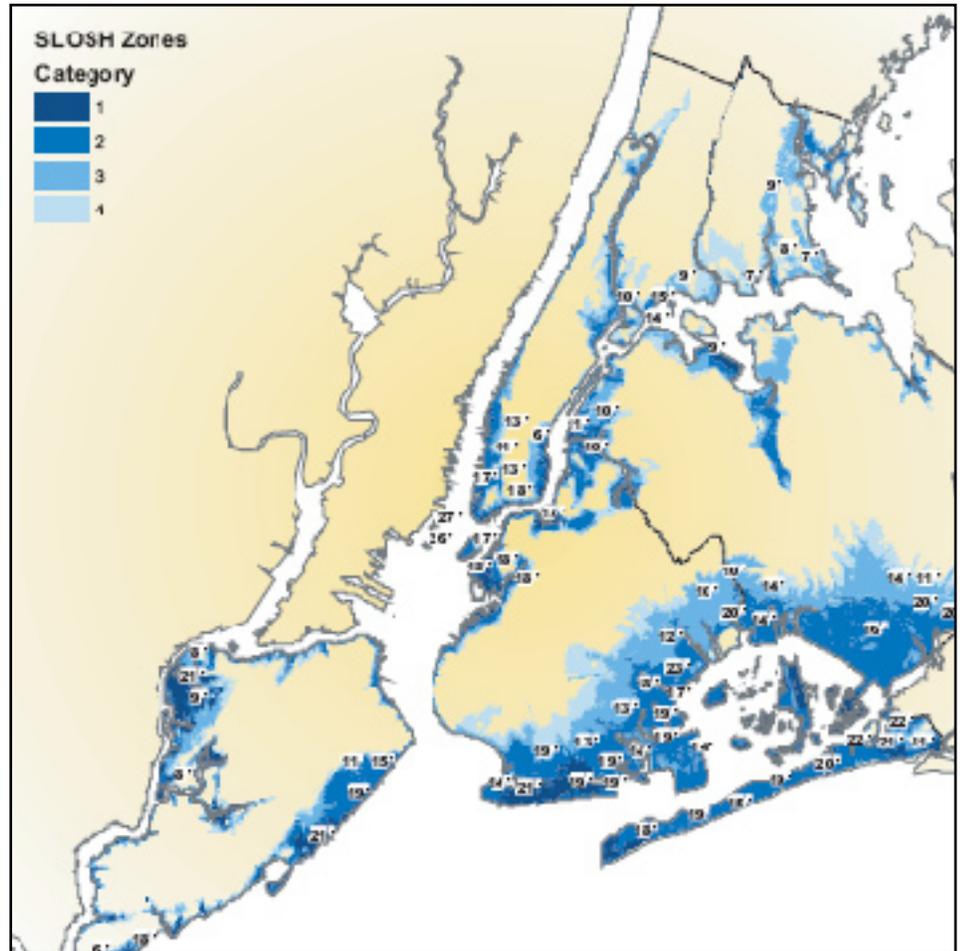
NAN Assists NYC in Hurricane Planning Effort

By Mike Ganley
New York District

New York District (NAN) has a long history of working with New York City's Office of Emergency Management (NYCOEM) and the Federal Emergency Management Agency (FEMA) Region II. NAN has recently provided assistance to the city in efforts that have included coastal SLOSH modeling and the development of the New York City Hurricane Evacuation Restudy, which provided a host of products (behavioral analysis, transportation analysis, etc). In May 2006, FEMA invited the Corps to meet with the NYCOEM to discuss the types of support available through the Corps to address impacts from a major coastal event. At the meeting the Corps and FEMA briefly outlined ESF #3 Pre-Scripted Mission Assignments and discussed other opportunities for planning assistance.

In June 2006, New York City released a 700+ page Coastal Storm Plan. This report precipitated several additional meetings among FEMA, the District, and NYCOEM. The District subsequently formed a small work group to respond to technical inquiries from NYCOEM. The group includes members from NAN PPM, Operations (EM) and Planning Divisions.

The District has been working cooperatively with the City and continues to define a scope of work for providing planning assistance to the city to bolster hurricane preparedness and strengthen the City's Coastal Storm Plan (CSP). In November and December of 2006 USACE and NYCOEM collaborated in identifying specific coastal storm response issues that warrant additional analyses. The team came up with a phased approach that begins with modeling the impacts of various storm tracks and storm intensities, followed by a planning phase, integration of products into the CSP, and pre-event project execution/implementation. The effort's initial goal is intended to provide planning products of value to the City, as well as benefit FEMA and USACE in executing Emergency Support Functions (ESF #3) and other missions in an urban setting before or after a major coastal storm. This will strengthen the City's pre-event planning and preparations efforts and identify opportunities for pre-event missions to protect and secure infrastructure. The products will also aid in subsequent re-



Inundation levels during a Category 4 storm in New York City.

sponse and recovery after an event.

The initial phase is modeling effort. This makes sense because of the unique nature of the geography, population, and infrastructure of the city, to acquire information through outputs that are reflective of the city's unique characteristics. The initial model outputs will have value in planning but also form the basis for additional refinements to further increase the probability estimates of various parameters.

Although NAN has significant coastal expertise, particularly in association with the city, the team quickly realized that Louisville District (LRL) had the required expertise needed to adjust their quantitative Hurricane Model for a more urbanized output. The team has since been expanded to include members from other Centers of Expertise, such as LRL within USACE. In March, FEMA approved limited funding that is allowing LRL to do very basic refinements to the existing model to better reflect the condi-

tions found in the city.

While LRL has been working on the model, the PDT has expanded and has commenced discussion on evaluating the City's emergency power plan. It is anticipated that the efforts will be somewhat iterative, identifying key issues for planning and response issues prior to the upcoming hurricane season. It is anticipated that the power PDT will also identify a planning process that will require additional funding and several years to complete. It is expected that as the process progresses, this effort will improve the current ESF #3 mission models by adjusting them for more urbanized areas.

It is believed that the benefits of this effort will be able to be shared and utilized as planning templates for other highly urbanized areas such as North New Jersey, Boston, Baltimore, Miami, Houston-Galveston, Los Angeles, San Francisco, and other major urbanized areas subject to catastrophic disasters.

Louisiana Recovery Field Office

By Mike Logue, Public Affairs Officer
Louisiana Recovery Field Office

On August 29, 2005, the single largest natural disaster in our nation's history hit Louisiana (Hurricane Katrina). Threatened by Katrina, the New Orleans District reconstituted to respond in Vicksburg, Miss., with a cadre of about 100 leaders and specialists. Memphis District prepared to become the on-the-ground response team for south Louisiana for FEMA's ESF 3 mission, as the Louisiana Recovery Field Office, bolstered by thousands of volunteer specialists in every field worldwide.

The LA-RFO built an organization from scratch larger than most districts (1,300 at peak) with an eventual \$2.5-billion program in weeks, simultaneously responding to Hurricane Rita, with missions in 40 parishes. A headquarters in Baton Rouge, La., eventually moved to New Orleans.

The LA-RFO provided emergency right-of-way removal of debris, with an expedient passage of emergency personnel and equipment for lifesaving, property protection, and reconnaissance of damaged areas. The LA-RFO also provided technical advice, evaluations and inspections, engineering, construction management, and

contracted for the emergency repair of water and wastewater treatment facilities for FEMA. Potable Water and Ice, Emergency Power, Temporary Roofing (Operation Blue Roof), Temporary Critical Facilities, Housing Quality Assurance, DMORT, and Real Estate Support were also a part of the Corps' mission assignment in lifesaving, life-sustaining actions for the following recovery.

Subsequent missions of private-property debris removal and demolitions, both voluntary and by Executive Order, followed, with an estimated 27.7 million cubic yards of debris removed and more than 6,100 of 17,800 structures demolished to date.

Mission Facts

Completed Mission Statistics

- Water: 2,178 truckloads or 40 million liters
- Ice: 1,533 truckloads or 60 million pounds
- Power: 288 generators installed, 928 assessments
- Blue Roof: 81,242 roofs repaired. (1,750 in a single day)
- Critical Public Facilities: 216 classrooms, 94 other critical facilities
- DMORT Victim Identification Center: 18,720 sq. ft. morgue facility, 150-per-day identification capacity.

Ongoing Mission Statistics (as of May 2007)

- Debris
 - 27.6 million cubic yards removed to date (99.56% of estimated mission)
 - ROW Missions in 23 of 26 assigned parishes/municipalities 100% complete
 - Removed 259,000 tires, and 58,000 trees
- Demolition
 - 6,102 demolitions completed statewide (34%)
 - Orleans Parish demolished: 3,330 (22%)
 - 13 of 20 parishes/municipalities are 100% complete.
 - Remaining structures in all other parishes/municipalities: 50-60
- Temporary Housing
 - Assessed 1,217 sites, 144, detailed assessments, quality assurance on 109 constructed
 - Created 25-man team to supplement FEMA technical monitors for 65,000 FEMA trailers

Safety Achievements

LA-RFO safety records have been achieved in one of the nation's most hazardous fields in the midst of an unprecedented environment of chaos and hazards. The LA-RFO proactive, aggressive safety program has resulted in the following lost-time injury rates:

- RFO Mission Total: 0.24 (3.2 million man hours)
- The overall USACE frequency rate is 0.97.
- FY 07 USACE Contractor Composite 0.21.
- FY 07 RFO Contractor Rate: 0.25 (3.2 million man hours)
- CY 06 National Industry Rate: 6.4

Two prime debris-demolition contracts achieved two remarkable no-lost-time-accident milestones each during mission:

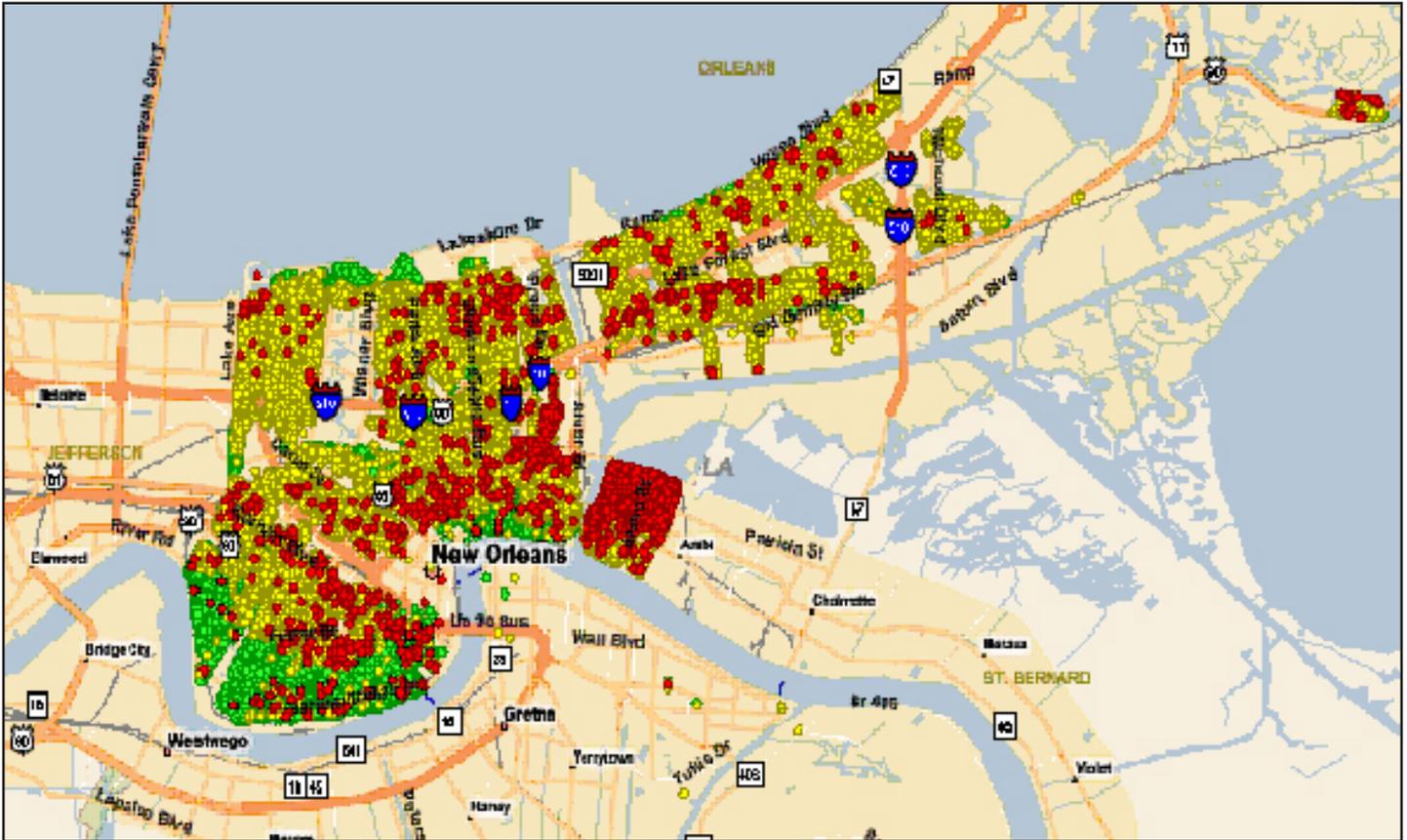
- Phillips and Jordan: 4,329,000 and 3,997,500 man-hours without a lost time injury (36,000-plus workforce)
- ECC: 1,419,459 man-hours and 1 million (12,000 workforce)

Debris Factoids

- 27.7 million cubic yards equals the Superdome 5-6 times, or 7-8 Empire State Buildings.
- 5,000 New Orleans city blocks were rendered useless after Katrina
- In the first six months, LA-RFO removed 19 million cubic yards, outpacing the prior record of 15 million cubic yards in eight months set after Hurricane Andrew
- Once Executive Order authorities were received allowing the Corps access to the property, 20,000 properties were cleaned in three months



Infrastructure Assessment Mission



By Mark Wingate
South Pacific Division

The U.S. Army Corps of Engineers (USACE) is expanding the mission and responsibilities of the Planning and Response Teams (PRTs) that were formally known as “Structural Safety Assessment” PRTs. The teams will now be called “Infrastructure Assessment” (IA) PRTs and their mission will not only be to augment local efforts to conduct quality inspections of residential buildings, but the teams will also now manage the inspections of the public works infrastructure and other critical facilities following a major disaster.

In the past, the primary purpose of these PRTs was to conduct residential structural evaluations to determine whether damaged buildings were safe for use, or if entry should be restricted or prohibited. This work involved conducting rapid building inspections in conjunction with Applied Technology Council (ATC) procedures (ATC-20 are the procedures used following earthquakes and ATC-45 are the procedures used for flood damage inspections). Following Hurricane Katrina, these teams managed the inspections of more than 120,000 structures in

Louisiana. In close coordination with local officials, buildings were inspected for damage and assigned a safety rating or posting category.

The “new” Infrastructure Assessment PRTs (IA PRT) will have additional responsibilities for managing the inspections of public works infrastructure and other critical facilities. The IA mission is intended to be highly flexible and scalable in order to meet specific and changing response and recovery needs. Public Works responsibilities will include mechanical, electrical, and water/wastewater infrastructure inspections. The IA PRT management cell will also manage the structural inspections of other critical facilities such as hospitals and mass care facilities. These structural inspections will be conducted by individuals with an appropriate level of structural engineering that commensurates with the complexity of the structure. Special inspections under the IA mission may include additional areas of discipline (e.g. geotechnical engineering; hazardous material management; environmental engineering, etc).

The South Pacific Division (SPD) has lead responsibilities for the IA mission. These responsibilities include providing leadership

and mentoring of the assigned PRT Districts, monitoring status of team staffing, assuring teams are aware of pending training, hosting training sessions, assuring database information is current, and monitoring and disseminating current team changes and information. The following USACE Districts have been designated to provide Infrastructure Assessment PRTs for emergency response:

- **LRB** (Great Lakes & Ohio River Division) Buffalo District
- **NWS** (Northwestern Division) Seattle District
- **POA** (Pacific Ocean Division) Alaska District
- **SPK** (South Pacific Division) Sacramento District

Many of the USACE Infrastructure Assessment PRT members now possess significant field experience from their deployments following Hurricane Katrina. These team members also have a reputation for providing prompt and professional assistance to State and Local governments. The changes to the IA PRTs will allow for the teams to expand upon their success by providing the management structure needed to rapidly respond to State and Local public works and infrastructure assessment needs.

FY 2007 Program Funding for Flood Control and Coastal Emergencies

By **Jeff Jensen and
Germaine Hofbauer**

Over the past several years funding for the Flood Control and Coastal Emergencies (FCCE) Program has been dependent on supplemental appropriations without funding being provided in the annual Energy and Water Appropriation. This was the case in FY 2004, 2005 and 2006. In 2007, an Energy and Water Appropriation was not enacted by Congress. Instead a Joint Continuing Resolution was enacted that provided funding for Civil Works activities for FY 2007. However, no appropriation was authorized in the Continuing Resolution for the FCCE program. Although, there have been approximately \$7.3 billion appropriated to the FCCE program through emergency supplemental appropriations from FY 2005 through 2007, the majority of these funds were appropriated for project rehabilitations in the southeast and gulf coast regions and only \$70 million in FY 2006 was appropriated for program preparedness and emergency response program activities.

Headquarters has been working with the Office of Management and Budget (OMB) and the Assistant Secretary of the Army for Civil Works office to establish consistent funding for preparedness program activities in the annual appropriation. We are making progress in this area. The FY2008 Energy and Water Appropriation includes \$40 million for preparedness activities. However, this will continue to leave us dependent on emergency supplemental appropriations for our response and recovery activities.

In order to fund our baseline preparedness activities for the third and fourth quarters of FY 2007, \$13.7 million dollars was transferred from other flood control appropriation accounts to the FCCE account. These transferred funds are being used to fund emergency management employees' salaries and facility costs, conduct inspections of non-federal flood damage reduction projects, critical emergency response training, award and maintenance of advance acquisition contracts, and operations and maintenance of the EngLink and DTOS systems. The available balance of undistributed FY 2006 carry

over funds is approximately \$11 million, which will be maintained as a contingency for anticipated emergency responses during the 2007 flood and hurricane seasons.

There are currently \$160 million of project rehabilitation requirements in the states of CA, WA, MT, MO, KS, OR, ID, PA, NY, NJ, HI, TX, IA and NE. The recent supplemental appropriation signed by the President on 25 May 2007 will provide \$146 million to fund these project repairs. This funding will be available for allocation in early June 2007 to begin rehabilitation of these projects. Project repairs for future damages this year or emergency response requirements beyond the available contingency will be dependent on additional supplemental appropriations or emergency transfers of funds from other flood control appropriations.

Headquarters continues to work with OMB and Congress on future budgets to ensure funding will be in place to allow the emergency management community to maintain a high, consistent state of preparedness, as well as provide rapid, effective, efficient all-hazards response to the nation.

GIS Cadre of Subject Matter Experts

By **Kevin Carlock, Team Leader**
GIS Cadre of Subject Matter Experts

The Geographic Information Systems Cadre of Subject Matter Experts (GIS Cadre of SMEs) is ready to support response and recovery efforts for every type of event. Since the Cadre was formally established five years ago, first as a Planning and Response Team (PRT), GIS Specialists have responded to typhoons, hurricanes, wildfires, mudslides, floods, earthquakes, and most recently we are supporting FEMA recovery operations following the devastating tornado that struck Greensburg, Kan., on May 5.

There are currently four teams in the on-call rotation with each team comprised of six to seven GIS Specialists led by an Action Officer. Members of the teams are from various districts and have diverse backgrounds in a wide range of disciplines as well as expertise in cartography and GIS analysis. The teams are available to assist USACE operations when district or division resources are exhausted and also provide support directly to FEMA at the JFOs and AFOs. Once these teams are fully deployed, the Cadre calls on

a reserve list of over 80 individuals from the greater USACE GIS community for support. FEMA considers the GIS Specialists from the Corps to be a very professional and dedicated group of individuals. The FEMA Team Leaders have expressed their appreciation following every deployment. They are particularly impressed with the can-do attitude and flexibility demonstrated by the USACE team.

When assistance is needed at the UOC, GIS Specialists or an Action Officer are available to provide direct support with mission status mapping and other cartographic and analysis products. One or more Action Officers also provide support at the NRCC as GIS and Remote Sensing Liaisons for imagery acquisition and overall coordination with FEMA and partner agencies. These individuals also work closely with the imagery interpretation team at the Topographic Engineering Center (TEC). The TEC team interprets roofing damage that qualifies under FEMA guidelines for the Blue Roofs from post-event high resolution imagery. Interpreted products (GIS data and Map Books) are then delivered to field sites.

The GIS Cadre currently maintains a comprehensive and up-to-date national data set consisting of transportation networks, cultural features, political boundaries, elevation, land cover, census, and critical infrastructure. GIS specialists deploy with external hard drives containing these datasets as well as various analysis tools. They have the latest version of ArcGIS software and have access to additional analysis tools when specialized applications are requested. If home district laptop resources are unavailable for those deploying, the specialists have access to a small pool of laptops maintained by one of the Action Officers. The cadre is also in the process of procuring a large-format plotter for deployments requiring stand-alone capability.

If you have any questions related to how the GIS cadre can support your missions or coordinate with missions that have direct GIS capability, please contact one of the Action Officers:

- **Teri Alberico** — 651-290-5269
- **Kevin Carlock** — 309-794-5844
- **Jon Kragt** — 402-221-4613
- **Steve McDevitt** — 917-790-8719

ESF #3 Support Team

By Holmes Walters
EM Permanent Cadre

The Corps of Engineers supports the Federal Emergency Management Agency (FEMA) and the nation in response to natural and man-made disasters. Under PL 24-88, referred to as the Stafford Act, the U.S. Army Corps of Engineers is the lead agency for response for Emergency Support Function (ESF) #3, Public Works and Engineering under the guidance incorporated into the National Response Plan (NRP). ESF #3 is one of fifteen Emergency Support Function agencies with separate capabilities that work as the inter-agency federal response capability to support FEMA with disasters.

The Corps has task-organized teams that respond to the typical mission sets that have been traditionally assigned. These missions include both Response and Recovery Missions. The typical response missions are during the life-saving and sustaining phase during the immediate aftermath of an event and include providing Emergency Water and Ice to the victims of the disaster and Emergency Power capabilities at critical public facilities. The typical recovery missions include Debris removal, Temporary Roofing, and Temporary Housing, along with all types of Technical Assistance to State and Local entities and other Federal agencies.

In order to support these efforts, USACE has a District Commander and staff that take on the role of the supported District for a particular state to recruit and receive these trained teams at their EOC initially

and establish a Recovery Field Office (RFO) if long term missions such as Debris, Roofing, or Housing assistance are required. The supported district must continue to provide their normal services to the nation, while simultaneously standing up a "Mini-District" to execute and account for the response and recovery missions assigned by FEMA under the Stafford Act.

The ESF #3 Support Team concept and its construct is a result of the lessons learned from previous response efforts. Often in the days leading up to an event like a hurricane and immediately thereafter, or in a no-notice event such as an earthquake, a supported district must recruit, receive, and work with volunteers from all over the nation. Within days after an event hundreds of personnel should be working on the response and recovery missions. This huge influx of personnel, the resource management functions involved, logistical requirements of responders for lodging and equipment, and the requirement for response and recovery information flow can overwhelm the very small staff of Emergency Management personnel and organic functional elements located in that supported district. We have always recruited staff to support this hub of activity at the supported organization through the use of cadres of volunteers from other locations that come to help the responding organization. However, there was not a team task-organized to provide the 24-hour support required in the main functional areas. We have structured the ESF #3 Support Team to fill this niche and to provide additional capability if a responding organization is already

engaged in a Stafford Act response that is geographically dispersed and requires a capability for an Advance Team/RFO Team to locate, lease and provide the functional elements of that Mini-District to support a coordinated recovery to mission assignments and establish a Recovery Field Office.

The ESF #3 Support Team (ESF #3 ST) will provide personnel to the supported district to assist in one or more of the following ways: The ESF #3 ST - Pre-Declaration/Support Cell, the ESF #3 ST - Advance Party, and the ESF #3 ST - Main. The supported district can request all or part of the groups listed above to provide the appropriate mix of resources required for the event(s) they face. The ESF #3 ST shall provide appropriate personnel to support the local EOC operations, provide Reception, Staging, Onward Integration support, staff the leadership and technical/functional roles to support PRTs, manage volunteer and tasked responders to support each mission, and augment the establishment of a RFO.

The intent is for the supported district to provide replacements from within their organic resources to allow the ESF #3 ST resources to return to their home station as soon as practicable, but within 30 - 45 days. This differs from our "cradle to grave" concept for the mission execution teams. Please refer to the ESF #3 Support Team SOP located in the ENGLink Technical Library for the details of the structure of the team. The North Atlantic Division (NAD) is the proponent MSC responsible for the training and staffing of these new teams. The Corps through NAD will have one ESF #3 ST available for support in the 2007 season, with four more MSC sponsored teams available by June 1, 2008.

