

FEMA search team loads semi-rigid boat aboard CH-47 headed for areas devastated by Hurricane Katrina

The Science and Art of Disaster Response by the National Guard

By CHARLES G. RODRIGUEZ

C-5 delivers fire and rescue equipment at Louis Armstrong International Airport in New Orleans to support Joint Task Force Katrina

1st Combat Camera Squadron (Jacob N. Bailey)

Response to a domestic emergency to save life, limb, and property of citizens is one of the fundamental roles of government at all levels, but especially at state and local levels. The domestic mission, including the continual development and refinement of doctrine to protect the homeland and its citizens, justifies at least as much emphasis as overseas military operations. This article suggests basic tenets for the military's contribution, particularly that of the National Guard, to an emergency response; highlights the importance of collaborative and unified efforts by all involved, both civilian and military; and summarizes evolving organizational concepts that might enhance such civilian-military collaboration.

Homeland security, homeland defense, and community preparedness have something

in common with military affairs: all are both science *and* art. Traditionally, the military has attributed great value to adhering to commonly accepted and directed ways of doing business (that is, doctrine). The *science* is this doctrine and its evolutionary refinement, supported by policies, instructions, and standard operating procedures. Through training and exercises, the translation of doctrine into practice and habitual behavior becomes reality.

But more than simply science is required for unified effort and readiness. There is also *art*, which combines experience with wit and inspiration, resulting in preparedness. While one should never depend exclusively on the intuitiveness of art, one shortchanges success by not incorporating it into emergency response preparations and operations. Without the art, there is no passion and no creative initiative to transcend the gaps in knowledge that science inevitably presents.

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USNORTHCOM (Chuck Prichard)

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Requirements

In any emergency, local responders converge and surge early, but then drop off as fatigue sets in after a few days. Also, many first responders need to be relieved to care for their own impacted families and households. Mutual aid from adjacent geographical jurisdictions restores some of the first responder numbers. However, for major disasters, requirements far exceed the available first responder capability.

Initially, statewide civilian mutual aid and National Guard forces are dedicated to damage assessment to ensure that subsequent response is focused and calibrated. However, damage assessment is a key step that habitually is not done well. There is no universally accepted process about how to do quick-look assessments, so typically responders default

to a best guess method based on information received and interpreted by both experienced and novice response coordinators. Part of the challenge is that multiple entities at various levels of government (local, regional, state, and Federal, civilian and military) are engaging in uncoordinated but simultaneous damage assessments, just as they may engage in uncoordinated responses.

There should be an aversion to such piling on by authorities; the assessments should be part of a common operating picture. Only the appropriate number and type of responders can properly mitigate a disaster. Too much of the wrong kind of help, in the wrong place, only complicates relief and multiplies the disaster's effects. The National Guard nationwide, always in support of civilian authorities, provides its Civil Support Teams and fly-away mobile communications teams to local civilian disaster coordinators, staffs headquarters during this initial assessment phase, and continues this support, as required by the state, as a continuous part of the disaster response process.

The National Guard is often responding before a predicted event, such as hurricane landfall, by precoordinating and prestaging interagency strike teams to locations where they might immediately go to work, fully stocked to provide timely relief. In Texas, the Guard entity

is the Texas Military Forces (TXMF), which consists of the adjutant general's department, Texas Army National Guard, Texas Air National Guard, and Texas State Guard (a volunteer state militia authorized in Texas law). For Hurricane Rita, the TXMF and the Governor's Division of Emergency Management developed mass care strike teams in military vehicles, working with the Federal Emergency Management Agency (FEMA), which provided commodities, food, water, and medical teams. These teams were prestaged on the west side of Houston and rolled into Beaumont as soon as the storm passed.

As state and National Guard responses increase, their efforts may be augmented by Emergency Mutual Assistance Compact (EMAC) resources from sister states. It was through EMAC and with the TXMF in state Active duty status that a deployment to New Orleans was executed within hours after Katrina's landfall. The Superdome was secured and evacuated by city officials, with the help of the Texas Army and Air National Guard security forces, before the first Federal troops arrived. The calming presence of citizen-Soldiers who responded rapidly and early is important to assuring public order. The state-to-state EMAC process has proven the fastest, most efficient, and most effective way of augmenting a response with both civilian and state military resources. The real challenge for EMAC in the future may come from a nationwide biological event, such as a pandemic, or a national or regional catastrophic event, such as a New Madrid Fault scenario or another cross-border mass migration crisis in which

FEMA Region VII director and the Adjutant General of Kansas in Greensburg, Kansas, monitor cleanup efforts after the town was struck by an F5 tornado

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Federal Emergency Management Agency (Greg Hershall)

capabilities are so degraded or resources so stretched that states are precluded from fully sharing their assets.

National aid would be triggered for special requirements and capabilities that cannot be satisfied by local, regional, or state civilian and military responders. During Rita, U.S. Northern Command (USNORTHCOM) led the effort in coordinating several specialized response capabilities such as evacuation of special needs patients on Air Force C-5 and C-130 aircraft with specialized Active duty Air Force medical teams; air space management from First Air Force; and liaison with Army Corps of Engineers experts monitoring near-capacity dams.

There was no requirement for general purpose Title 10 Federal ground forces in Texas during the response to Hurricane Rita. The TXMF committed approximately 5,000 troops between mid-September and mid-October 2005. Despite the fact that the TXMF had more than 5,000 troops deployed out of country at the time, there was still a reserve of more than 5,000 uncommitted within the state. Typically, there will be no real requirement for Federal ground troops, just for specific, specialized combat support and combat service support packages that are based on time-sensitive requirements that exceed the capabilities of a state's civilian and military assets. As much as possible, these special-purpose packages should be precoordinated with the force-providing Active component units to preclude the insertion of unnecessary personnel, which could complicate already functioning control and coordination structures managing reception, staging, onward movement, and integration for state and local mutual support operations.

Emergency Response Tenets

This overview about the science and art of emergency response leads to the following tenets for military responders:

- Preposition personnel, equipment, and commodity teams close to the incident.
- Provide early, rapid, and visible presence after the event.
- Support civil authorities, always allowing civilian authorities to lead.
- Refresh and rotate the response force.
- Assure a consistent public face: the Governor leads, the military delivers.

These five tenets spring directly from decades of hurricane, wildfire, flood, and other disaster response in Texas. The first three have

already been addressed. The fourth—resource refreshing and rotation—applies to deployments involving extended duty. A rule of thumb is to plan rotational relief of heavy-use search and rescue troops after 7 to 10 days. Those performing labor-intensive distribution and transportation of commodities and extended-shift support to law enforcement should be rotationally relieved after 2 or 3 weeks. This requires a flow-forward of fresh personnel and a reconstitution site or series of sites to sustain a ready and rested force—an essential task.

The fifth tenet is perhaps the most important. The success of a disaster response is measured in lives saved, property safeguarded, and nurturing of the public perception that civilian authorities indeed are in control and are delivering relief as proactively as possible. Aggressive public affairs and routine media messaging are essential. The lead civilian authority should speak regularly during a crisis. If the emergency is medical or technological in nature, the lead health authority or the other most relevant official should speak. When military leaders can appear in the media, they should. The most important “calming presence” messages that should be delivered include the local disaster response authority (usually the mayor or Highway Patrol captain) describing the type and timing of assistance being delivered to impacted areas. The military should never upstage or speak out of step with the lead civilian authority. For statewide response, the senior civilian authority is the Governor.

JIIM Partnerships

Citizens are not well served if disaster response is not based on the joint, interagency,

intergovernmental, and multinational (JIIM) partnership. JIIM is a disaster response imperative. Similar to peace support operations overseas, if domestic operations are not based on JIIM partnership, the operations are suboptimal. It is wasteful and counterproductive not to engage early and regularly with civilian and military partners who, acting synchronously, provide valuable mutual assistance to one another.

A current example of JIIM is the ongoing support to various Southwest border security operations. Operation *Jump Start* began in May 2006 and engaged more than 1,500 TXMF personnel during its first year along 1,200 miles of international border with Mexico. TXMF personnel are continuing to assist the U.S. Customs and Border Patrol as well as the Department of Homeland Security. In addition, Operations *Rio Grande* and *Wrangler*, in which the TXMF provides planning and operational coordination support, dates back to 2005. Conducting random antiterrorism measures with county sheriffs, Department of Public Safety law enforcement agents, and other state agency representatives, the TXMF has provided aviation support and technical security assistance to the Texas Governor's interagency, intergovernmental missions. The TXMF has a 17-year history of conducting support activities with law enforcement agencies (local, state, and Federal) through the National Guard's counterdrug mission. In 2006, Operation *Rio Grande* alone is credited with reducing crime by up to 65 percent in areas where TXMF presence and coordinated antiterrorism missions have been executed, including the Del Rio, Laredo, El Paso, and Rio Grande Valley areas.

Also representative of JIIM work is the historic precedent of September 2006, when the TXMF was designated by the Governor's Division of Emergency

149th Fighter Wing (Mike Arellano)



Above: Texas National Guard vehicles distribute food and water to victims of Hurricane Rita

Right: Convoy moves troops through flooded streets for search-and-rescue mission in New Orleans



1st Combat Camera Squadron (Jennifer C. Walla)

Management as the lead state agency for planning and training coordination for the Lower Rio Grande Valley Evacuation Plan. This effort required the TXMF team to interface with local, regional, state, law enforcement, medical, transportation, fuel logistics, public school, and other elected and appointed authorities to knit together a comprehensive hub-and-spoke plan to evacuate Brownsville by caravans of buses before hurricane landfall. Texas' emergency response leaders rely heavily on TXMF members' proficiency as planners, trainers, and operators to develop practical plans and provide disaster response training across the state's interagency structure.

As Major General Guy Swan III, USA, Director of Operations for USNORTHCOM, has said, "Knowing all the military and civilian players before a disaster strikes is the key to success." Working together from the planning stage through the execution stage, civilian and military communities can make interagency cooperation a routine practice.

The notion of multinationality was evident during the responses to Hurricanes Katrina and Rita. The TXMF has a special training relationship with the Singapore air force, and some of the visiting CH-47 Chinook pilots live with families in the Dallas area and train with Texas Guard rotary wing aviators in their own Singaporean Chinooks. In the aftermath of Hurricane Katrina, Singapore's helicopters deployed to New Orleans under the oversight of TXMF pilots and helped in the levee repair and evacuation missions. It took many intermediate partners to bring this

about, such as USNORTHCOM, the State Department, and the courageous pilots of the Singapore air force. This was multinational assistance in action.

In the immediate aftermath of Hurricanes Katrina and Rita, Louisiana evacuees in Central Texas received magnificent support from the Mexican army, which provided a large capacity field kitchen and medical assistance for the sprawling Kelly Army mass shelter complex in San Antonio. The TXMF provided the U.S. military command post on-site and some of the interpreters that made the support of the Mexican army there so seamless. Texans genuinely appreciated the selfless support provided by their Mexican counterparts, and this partnership was made possible through the good offices of many Federal and state partners. However, such multinational support should be precoordinated and embedded in evolutionary contingency plans on both sides of the border.

sion of the joint activity toward which the National Guard Bureau is transforming. The February 2006 Townsend Report on Hurricane Katrina highlighted the appropriateness of the state JFHQ serving as a logical platform for both hosting a common operating picture and acting as headquarters for coordinated civilian-military unity of effort in future domestic disaster responses. The Joint Force Headquarters-Texas (JFHQ-TX) now prepares itself for unified command with local, state, Federal, and even Active component (Title 10) forces in order to assure unity of effort in domestic disaster response. Additionally, the JFHQ-TX has commenced active dialogue and familiarization exchanges with the FEMA-run joint field office, the regional home for Federal disaster response leaders.

The JFHQ-TX mission and commander's intent (see figure), taken together, are essentially a mandate to make JIIM work. In order to help participants to understand fully the

Texas' emergency response leaders rely heavily on TXMF members' proficiency as planners, trainers, and operators

JFHQ-State

Today, JIIM is most important when it comes to contingency response or disaster relief missions; and the state's joint force headquarters (JFHQ) is a key part in implementing tenets of disaster response, making JIIM work, and realizing the necessary unity of effort and common operating picture.

Soon, the JFHQ in each of the 54 states and territories will be designated as an exten-

sion of the joint activity toward which the complexities of the National Incident Management System (NIMS)/Incident Command System (ICS) operational environment, the Texas adjutant general requires all joint staff officers, noncommissioned officers, and civilian employees of the JFHQ-TX to complete several FEMA online courses covering the National Response Plan, NIMS, ICS, Emergency Operations Center, and continuity of operations, as

USS Bataan Public Affairs (Chris Gettings)



Mexican marines and Royal Netherlands sailors work with U.S. Sailors at a Red Cross Distribution Center in Gulfport, Mississippi, providing relief for Hurricane Katrina victims

1st Combat Camera Squadron (Jennifer C. Wallis)



Hospital patients evacuated from Beaumont, Texas, because of Hurricane Rita arrive in California for medical care

well as Texas-specific staff team training in state emergency management operations. In 2008, additional joint individual training requirements will include Internet training modules for the adaptive battle staff members provided by U.S. Joint Forces Command.

USNORTHCOM has organized its joint staff around a nodal construct for crisis operations, a modification of the traditional J1–J9 model, as published in the USNORTHCOM concept of operations:

- joint operations
- joint planning
- joint support
- joint information synchronization
- joint interagency coordination.

When JFHQ–TX reorganized after the 2005 hurricane season, it adopted U.S. Northern Command's adaptive battle staff (ABS) model and refined it to meet the needs of the state.

Texas consolidated the ABS model into three nodes, melding joint planning and joint interagency coordination into joint operations, and mapped processes to deliver capabilities from the force providers via the Joint Task Force–Texas and/or joint interagency task force to ultimate customers. The Texas Guard's philosophy is *not* command-centric. By design, and in accordance with the principles of NIMS and ICS, there is no military commander at the top of the TXMF ABS organizational diagram. The response approach in Texas is customer-centric, and the customer is the distressed citizen, as represented by impacted civilian or elected leaders. The Governor's Division of Emergency Management acts as a thermostat on the JFHQ–TX ABS processes, using Annex W (Military Support) of the state's emergency management plan to engage and disengage the TXMF as required.

One of the adaptations Texas is pursuing, which is worthy of special note, is the Defense Support of Civilian Authorities Joint Interagency Task Force (DSCA JIATF). This task force is the subordinate interagency element that the JFHQ–TX “gives birth to” and deploys forward to the vicinity of the disaster site. It is staffed by personnel from the JFHQ–TX and selected members and liaison officers from force provider components, such as the Texas Army National Guard, Texas Air National Guard, and Texas State Guard. The Texas DSCA JIATF also includes representatives from key state agencies. It is designed to deploy forward at alert+2 hours and relies on full-time

Texas Guardsmen to launch and establish the forward operating sections, followed up within a day or two by traditional and State Guardsmen. The DSCA JIATF simultaneously launches liaison officers farther forward to assist key civilian responders at the county and municipal levels—a key enabler for success with local political entities and in the maintenance of a common operating picture, which in Texas exists through a robust liaison officer exchange, along with reliance on WebEOC, the software utility used almost universally by local and state emergency responders. DSCA JIATF military members are there to provide unified command with attached civilian responders in key functions, as suggested by the ICS staffing model. The DSCA JIATF is designed to have operational management responsibilities and can oversee multiple functional and geographical strike teams and subordinate task forces in accordance with established NIMS and ICS procedures.

JFHQ–TX Mandate

Mission

Plan, Coordinate, and Facilitate

Homeland Security Activities
Homeland Defense Operations
Defense Support of Civilian Authorities

Provide Emergency Support Functions

Leadership for Civilian–Military Partnerships Support
Liaison and Communications Interface with State and Federal Civil–Military Responders

Deploy for Unity of Effort and Unified Command Response

Accept Forces
Provide Reception, Staging, Onward Movement, and Integration
Establish Situational Awareness and Assure Effective Communication

Commander's Intent

Ensure Force Protection
Enable Unity of Effort
Maintain a Unified Command Environment
Form Task Forces
Overcome Threats and Risks
Provide Defense Support of Civilian Authorities
Strengthen Partnerships and Function as a Team
Support Lead Civil Authorities
Homeland Security Activities

Commitment to the Federal System

Texas and its JIIM partners have begun a journey to answer the challenge of the Townsend Report and to provide the most timely, well-coordinated response to future major disasters in Texas or wherever the TXMF is called. As part of this journey, the JFHQ–TX is continually evolving with its JIIM partners. While the word *doctrine* is always present in the military, the Texas Military Forces prefers to “evolve practice” with JIIM partners through an ever-shifting balance between science and art rather than stubbornly adhering to doctrine that either does not really exist or is quickly left behind due to changing circumstances presented by disasters and the requirements of local civilian authorities.

Defense support of civilian authorities is a critical National Guard responsibility. However, no doctrinal template or one-size-fits-all plan will fully prepare civilian or military responders for the next major disaster. It will take constant training together and untiring respect for the American system (that is, local, state, and national governments coexisting) to establish genuine domestic operational preparedness. Flexible response should be informed by evolving practice and operational development and refinement. Yet equally important is the art of adaptive, ad hoc collaboration among peer responders: local, state, national, civilian, military, private, non-profit, and multinational.

The military, led by the National Guard in domestic operations, might best find its place in “leading quietly from behind,” contributing its planning and operational coordination expertise and its disciplined ranks and technical ability. The goal of domestic operations by the military is rapid restoration of the economy, domestic calm, and local civilian sovereignty. The Texas Military Forces stands as guardian of this goal in the Lone Star State and opposes any subversion of the Federal system of self-government as articulated in the Constitution, especially the 10th Amendment. Science and art combine to make this possible in Texas and nationally. **JFQ**

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