

Proceedings of the Workshop on Preparing for and Responding to Disasters in North America

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On November 7, 2006 the Homeland Security and Defense Education Consortium (HSDEC), the University of Texas San Antonio (UTSA), and East Carolina University (ECU) sponsored a homeland security education and training workshop on “Preparing for and Responding to Disasters in North America.” The workshop was hosted by the UTSA Institute for the Protection of American Communities (IPAC) at the UTSA downtown campus in San Antonio, TX. HSDEC is co-sponsored by North American Aerospace Defense Command, U.S. Northern Command (NORAD-USNORTHCOM (N-NC)), and the Office of the Assistant Secretary of Defense for Homeland Defense for the purpose of facilitating the development of Homeland Security (HLS) and Homeland Defense (HLD) education in America’s colleges and universities, and facilitating liaison between government and academia on government interests in the areas of HLS and HLD. The HSDEC program is administered under contract by the National Security Division of the Battelle Memorial Institute, Columbus, Ohio. Panelists included representatives from UTSA, ECU, the Federal Emergency Management Agency (FEMA), N-NC, the Canadian Defense Academy, U.S. Army North, the Texas National Guard, and several Texas state and local agencies. The fundamental question at issue was what challenges face the three North American states in the event of disasters that cross state borders or that create conditions that put pressure on the inter-state borders. The three panels convened at the workshop addressed disasters of different character, but each of which could either affect both sides of a political border simultaneously or create pressures on political borders such as population migrations stimulated by disaster. The panels focused on natural disaster, as exemplified by Hurricane Katrina; a disease pandemic; and a terrorist attack.

Opening remarks by UTSA President Ricardo Romo set the tone for the workshop at the outset, declaring that “natural disasters do not know borders.” As an example, he said that Hurricane Katrina did not choose a path to hit the state or location best prepared to handle the fury of the storm. Mr. Bear McConnell, director of interagency coordination at N-NC and representing the command, offered the observation that the three North American countries each had multiple streams by which to respond to disaster, and that academia offered an avenue by which to approach combining and coordinating those individual streams which have not as yet been effectively coordinated.

LTG Chuck Rodriguez, Texas adjutant general, delivered the keynote address for the workshop. General Rodriguez illuminated the dual nature of successful response in science and art, or, as he further elaborated, doctrine and wit. Doctrine provides the standard operating procedures from which wit and imagination can depart in response to non-standard situations. A second major consideration to account for in response

situations, he argued, is the divergence between actual response times and perceived response requirements. The gap between first response and post-first response exists in the area of perception, if not in actuality. In many cases the actual response flows seamlessly, if less publicly, from the more public face of the first response. Among response tenets, then, the public face of response is extraordinarily important regardless of how well the preparation and response effort is progressing on the ground. Finally, Gen. Rodriguez described the organizational challenge facing state National Guard organizations in a joint, interagency, and now also multinational, response coordination environment. Texas is meeting this challenge by utilizing the NORTHCOM adaptive battle staff concept to achieve cross-cutting benefits instead of relying on a traditional stove-piped staff organization.

A second major presentation was delivered by LTG Robert T. Clark, Commanding General, ARNORTH. Gen. Clark discussed the transition of his command from 5th Army, a mobilization command, to ARNORTH, the Army Component Command for NORTHCOM. He also described the operations ARNORTH had already participated in during its short existence, as well as the creation of two mobile Operational Command Posts capable of responding to disasters anywhere in the NORTHCOM Area of Responsibility and designed to facilitate the integration of federal systems and personnel with existing state and local resources. Even though the command has only been fully operational since October of 2006, it participated in the space shuttle Columbia recovery effort and supports an ongoing commitment for subsequent shuttle launches. At present the command only has the resources to provide two fully functional and simultaneously active mobile command posts to support any needs for Defense Support of Civil Authorities or homeland defense response activities.

PANEL ONE

Panel One addressed the specific case of Hurricane Katrina: Lessons Learned, cross-border implications for future events along the border. Katrina provided a recent example of the challenges presented by a natural disaster such as a hurricane occurring in a border region. The panel chair, LTG (Ret) Lawson Magruder – UTSA, executive director, Institute for the Protection of American Communities, introduced the panel with a recitation of some of the significant effects of Hurricane Katrina. Among the effects briefed by General Magruder were:

- 1,330 people died
- Impacted 93,000 square miles across 138 parishes and counties
- Hurricane force winds extended 103 miles from its center
- Storm surge crested at twenty-seven feet
- 80 percent of New Orleans was flooded and the city considered destroyed
- Eighty miles across Mississippi's Gulf Coast were destroyed
- 118 million cubic yards of debris left behind
- Storm devastated the regional power infrastructure in Louisiana, Mississippi and Alabama; 2.5 million people were without power
- Ten major oil spills; 7.4 million gallons poured into the Gulf

In addition to this, some \$97 billion in damages to goods and property occurred.

Mr. Michael Lowder briefed the response capabilities and organization of FEMA, as well as lessons learned from Hurricane Katrina. Critical lessons learned by FEMA included the need to:

- Improve ability to define the common operating picture
- Improve overall situational awareness and communications
- Improve visibility of actions and resource tracking
- Improve operational response team and disaster workforce capabilities
- Enhance Headquarters and Regional disaster response capabilities (NRCC, RRCC)
- Improve operational procedures and documentation
- Complete a strategic review of logistics capabilities to develop an all-hazards national footprint as part of implementing a state-of-the-art logistics support system
- Ensure better inter-agency and regional coordination
- Enhance catastrophic planning

The recommendations included in this list were cited repeatedly by the other panel members from their own or their organization's experience with Katrina, and focused significantly on refinement of information flow and control as well as fostering greater situational awareness across response organizations.

The importance of the learning points from Katrina is magnified by the sheer scope of the event. Katrina response resulted in a number of firsts for FEMA, which included the following:

- FIRST time the U.S. government evacuated U.S. citizens on U.S. soil
- FIRST use of the National Defense Reserve Fleet
- FIRST use of all National Defense Medical System (NDMS) components in response to a Catastrophic Event
- FIRST use of NDMS patient evacuation system for a mass casualty event in U.S.
- FIRST time all twenty-eight Urban Search & Rescue Task Forces deployed
- FIRST time mandatory evacuation ordered in New Orleans
- FIRST time foreign nations (130 nations) offered aide to U.S. disaster victims

The magnitude of Katrina taxed the existing planning, preparation, and organization of disaster response across the board, which tended to highlight gaps, seams, and deficiencies in the existing system, particularly in the areas of coordination and information management.

The interagency coordination ramifications of a catastrophic event on the magnitude of Katrina were discussed by Mr. Bear McConnell. As the head of the Interagency Coordination Directorate at USNORTHCOM, Mr. McConnell occupies a unique

position, in that USNORTHCOM is very unusual among DoD commands in having such a directorate. The nature of the command necessitates such an unusual step, and may provide a model for other DoD commands to follow in the future. Among the lessons learned from Katrina in the interagency world are:

- Emergency preparedness and response has traditionally involved civil-military relationships, especially in catastrophic events;
- International interagency coordination activities must be integrated into an overall Command Theater Security Cooperation (TSC) strategy – a maturing process; and
- Offers of international assistance highlighted interagency gaps and seams, leading to the creation of an International Assistance Manual

All this boiled down to one essential lesson for interagency coordination practitioners: “When you need a friend, it is too late to make one.”

BG Mark Graham, Deputy Commanding General, ARNORTH, emphasized the importance of developing a common operational picture (COP), maintaining compatibility between high- and low-tech systems and increasing the efficient use of abundant resources. According to General Graham, shortage of resources was not a problem in the response to Hurricane Katrina. Aid, he said, came from all directions and sources, using all modes of transportation. The difficulties arose in conveying information regarding the availability and location of those resources. This paradox – of scarcity in proximity to abundance – highlights the need for a common operating picture (COP) shared among responders and across organizational and jurisdictional boundaries. Such a COP must be supported by agreed data standards in order to convey an overall understanding of what is actually happening. The diversity of existing systems, as well as the challenge of harsh conditions that can overcome high-tech systems and solutions, require that standards be created to accommodate more primitive technology. In catastrophic conditions, the only available solutions may be more primitive and lower-tech than those fielded by responding units.

Captain Richard Gravel, Canadian Navy, and Director of Programmes at the Canadian Forces College, recounted his experience leading a Canadian maritime effort to assist the U.S. after Katrina, designated Operation Unison. He emphasized the importance of unity of command, or “having one dog to kick,” following his experience working to integrate with maritime-based relief efforts in the area effected by Katrina. Once again, abundant resources were available, but delivery of those resources was stymied by inefficiencies in command, control, and communications. Capt. Gravel recommended a “Whole of Government Approach” on the order of the recently established lead ministry in Canada – Public Security and Emergency Preparedness Canada (PSEPC).

Dr. Hector Gonzalez, Health Director, City of Laredo, described the success of the City of Laredo in achieving remarkable cross-border cooperation on medical issues. Dr. Gonzalez did not speak directly about the response to Hurricane Katrina, but rather about the ongoing and challenging task of coordinating health response across a very busy commercial border crossing. The border environment creates particular challenges for the fulfillment of typical public health responsibilities such as:

- Preventing epidemics and spread of disease,

- Protecting against environmental hazards,
- Preventing injury,
- Promoting healthy behaviors and mental health,
- Responding to disasters and assist communities in recovery,
- Assuring quality and accessibility of health services, and
- Maintaining surveillance

Despite those challenges, the City of Laredo, in cooperation with Nuevo Laredo across the international border, has achieved a remarkable level of coordination on public health matters. Although public health is only one of many challenging areas for international cooperation, the success achieved on the local level between the two Laredos offers reason for optimism.

PANEL TWO

The second panel, Preparing for the Avian Flu Pandemic was chaired by Captain James Terbush, USNORTHCOM Surgeon General, and dealt with the challenge and prospect of dealing with a pandemic disease catastrophe. Capt. Terbush introduced the panel by remarking that epidemics change civilizations (most of us have at least one ancestor who died as a result of an epidemic) and strong public health leadership taking timely action has been the key in the past to the success of communities that escaped the effects of an epidemic.

Dr. Chuck Bauer, University of Texas Health Science Center, introduced the range and variety of coordination vehicles in the south Texas area. There are multiple separate, but overlapping, coordinating organizations which have fostered a very successful environment of working together. He specifically highlighted the role of the Regional Medical Operations Center (RMOC) in distributing patients to available hospitals to handle surge requirements and the necessity of stockpiling supplies in advance of need. The probability of another flu pandemic is not at issue; the question is in the timing. Despite a robust medical response network, and organizational response planning, significant work remains to be done in terms of analyzing the potential effects of a pandemic event on the public, business, and the medical response communities. Some of the areas in which significant preparation is still required include:

- Impact on Business
- Impact on employees and customers
- Policies to be implemented during a pandemic
- Allocation of resources for the protection of employees and customers during a pandemic
- Communication and education for employees
- Coordination with external organizations and community assistance.

The threat of a flu pandemic posed by avian flu was specifically addressed by Dr. Cherise Rohr-Allegrini, from San Antonio Metro Health. Dr. Rohr-Allegrini was at pains to clarify that avian flu is not pandemic influenza. A significant alteration in current avian

flu would have to occur to make it more threatening to the human population as a potential pandemic. While there is no pandemic, there is the significant enough threat of one to justify planning against the possibility. Preparedness and prevention are the keys to success in the face of a pandemic, and this requires public awareness. The key goals of pandemic response include:

- Minimizing serious illness, hospitalizations, and mortality
- Preserving critical infrastructure
- Minimizing social disruption

There is currently a severe shortage of facilities to handle a pandemic-type event. Medicines, in particular, will be in short supply and likely to be distributed on a priority basis.

Dr. Waldo Lopez, City of Laredo, discussed the ramifications, on a national scale, of local events. Specifically, three events at the border in Laredo had national ramifications: detention of three Cuban nationals with suspected smallpox; a possible terrorist incursion at one of the bridge crossings; and detention of six Chinese illegals with SARS. In each case, established relationships and cross-border organizations were instrumental in containing the incident at the local level. The border environment introduces greater opportunity for local incidents to rise to a level of national significance. Still, the main activity is the routine of planning, coordinating, and exercising for the catastrophic circumstance, while maintaining a normal level of medical care in the face of resource constraints. The three main components of response to a pandemic event, which may be magnified in the border environment, are: availability of flu vaccine, control of the population, and prevention. Lack of adequate levels of resources force prioritization; the amount of commerce that traverses the border in Laredo magnifies the population control challenge; and the education efforts necessary to prevention are compounded by the fluid mixing of populations from each side of the border.

PANEL THREE

The third panel, Catastrophic Terrorism at the Borders, dealt with an intentional, man-made catastrophe rather than one of natural origins. The panel was led by Dr. Richard J. Kilroy, Jr., assistant professor, Political Science and Security Studies, ECU.

Dr. Abelardo Rodriguez, research associate at the Center for North American Strategic Studies, Mexico, discussed the past record of U.S.-Mexican security cooperation. He addressed changes occurring within Mexico regarding foreign policy and national security policy. Since 2000, an internal debate has been occurring over a possible shift in focus from internal security toward external security and foreign policy which may facilitate improved cooperation between the two countries on matters of common interest regarding security and response to natural and non-natural disasters. Recent actions taken by the United States in response to the 9-11 terrorist attacks, such as the creation of Northern Command, have challenged the improving situation by creating perceptions in Mexico of United States' goals to dominate the hemisphere in the interest of her own security. The opportunity exists to achieve greater cooperation

with Mexico after the 9-11 attacks, since Mexico perceived the attacks as a threat to their security as well.

Dr. Lee Maril, from ECU, presented findings from research he has done on the sociological ethnography of the U.S.-Mexico border. The border today he described as a place of:

- Mass flows of undocumented workers
- Mass suffering
- Mass drug smuggling
- Many other types of crime and smuggling, running both ways

In response to these conditions, he looked at the available means of addressing the problems. Specifically, he looked at existing and potential border issues through the lens of the Border Patrol, the organization charged with border security. He argued that the Border Patrol suffers from dysfunctional attitudes and processes that result in the misuse of resources already in short supply, and that the response to a cross-border terrorist incident would evidence the same characteristics. An increase in border security following a terrorist incident would likely decrease the flow of drugs, but do little or nothing to reduce the level of pain and suffering on the border. He recommended a focus on the human element to develop higher quality agents, better designed equipment for use in the field, and better developed personal relationships with counterparts across the border.

Dr. Todd Hataley, from the Royal Military College of Canada, discussed the Canadian perspective on catastrophic terrorism at the borders. His emphasis was on the trade effects of any incident that could result in border closure for security reasons. The border trade is critical to Canada; 82 percent of the country's trade goes south across the border. The majority of that trade crosses four main bridges. Severing four bridges could shut down the American auto industry in Michigan and cripple the Canadian economy. Political shutdown of the crossings for security or health reasons would have the same effect. Additionally, there are significant law enforcement issues that affect the border and require considerable coordination and cooperation: cigarette smuggling that is an important funding source for Hezbollah; high-volume marijuana smuggling in British Columbia; and human smuggling are examples of law enforcement challenges at the borders that not only tax normal law enforcement procedures, but also levy an increased requirement for intelligence gathering to make law enforcement efforts successful. Information sharing across the border can be critical to success in such situations..

Professor Jeff Addicott, director of the St. Mary's Center for Terrorism Law (introduced as the only center of its kind) contrasted the terrorism problems at the borders, north and south. While there is considerable potential for terrorist infiltration in the south, the only known incident occurred at the northern border, with two additional disrupted plans for cross-border terrorism occurring in Canada in 2003 and 2006. On both borders, there is increased cooperation through a variety of programs. Specifically, on the border with Canada where known incursion attempts have taken place, increased patrols and the institution of PSEPC represent significant attempts to address the challenges of countering terrorist activity at the border. Increased

cooperation and intelligence gathering are key to preventing future cross-border terrorist attacks.

Throughout the day, consistent themes emerged from each presentation. Perhaps the single most important theme was the need for accurate development, fusion, analysis, and distribution of information. Whether dealing with a natural, medical, or terrorist incident, the need for that information – to direct the response to and recovery from the incident – is critical. As the panel on Hurricane Katrina pointed out, even in a resource-rich environment, effective response and recovery can be severely inhibited by poor information and control. The panel on medical response illuminated the greater challenge to be faced in a resource-constrained environment. Even adequate planning, organization, and preparation will be challenged in the face of a flu pandemic just by the time needed to create, manufacture, and distribute a vaccine for the pandemic flu strain. Finally, in the case of a terrorist event, each of these challenges can be magnified by the secrecy and surprise utilized by terrorists to mask their intentions. The paucity of specific information puts a premium on intelligence, the development of information, and flexibility to implement standard operating procedures in response to a surprise event.

Lance Robinson is the Battelle Homeland Security Education program lead under contract to NORAD and USNORTHCOM to administer the Homeland Security and Defense Education Consortium (HSDEC). In that position, he has led the effort to implement the homeland security education vision of NORAD and USNORTHCOM through a series of regional and curriculum workshops, the two HSDEC annual symposia, the HSDEC internship program and the HSDEC funded research program. Dr. Robinson is a retired U.S. Air Force officer with over twenty-three years of service, including aviation operations, weapon system acquisitions, and five years teaching experience in Political Science at the U.S. Air Force Academy. He received his PhD in Political Science from the Claremont Graduate School in 1997. His published and presented work focuses on executive power and American political thought, in particular on the presidency of Theodore Roosevelt and the political thought of the progressive era.