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RESPONDING TO THE UNTHINKABLE:
A NUCLEAR WEAPON DETONATION IN THE HOMELAND

By Professor James Kievit and Lieutenant Colonel Jeff McNary

INTRODUCTION

Every day an already challenging security environment grows even more daunting with the continued proliferation of chemical, biological, radiological, nuclear, and high-yield explosive (CBRNE) capabilities throughout the world. Each can create clandestine devices for delivery by state-sponsored or non-state terrorists. Thus, in the future, perhaps the not so distant future, American political and military leadership actually may have to respond to "the unthinkable": a successful weapon of mass destruction (WMD) attack by terrorists within the borders of the nation. With that possibility in mind, the United States Army War College (USAWC) recently conducted a focused workshop bringing together over 100 participants from local, regional, state and federal entities at the Center for Strategic Leadership on Carlisle Barracks to review contemporary plans, policies and procedures and discuss developing programs to incorporate military, and especially reserve component (RC) forces into the responses to a hypothetical CBRNE attack within the borders of the United States. Three different attack scenarios were presented – one biological, one radiological, and one nuclear. This paper addresses the workshop's findings related to response to a nuclear weapon attack.

THE NUCLEAR DETONATION SCENARIO

The USAWC nuclear weapon attack scenario portrayed terrorists detonating an approximately 10 kiloton (KT) nuclear device concealed in a recreational vehicle parked near the grandstands during a major NASCAR event at the Pocono International Raceway located in Monroe County Pennsylvania. More than 100,000 people were in the immediate vicinity of the detonation, many of them transients from out-of-state. Blast and heat immediately destroyed or severely damaged most structures within 1000 meters of the detonation. An electromagnetic pulse damaged many electronic devices within about 5 kilometers (~ 3 miles). Injuries from flying debris occurred out to 6 kilometers (~ 3.7 miles). Temporary flash-blindness contributed to innumerable traffic accidents on nearby highways, including multi-vehicle pile-ups in both directions on nearby I-80. Radio-active fallout drifting east-southeast directly threatens the Stroudsburg, PA, area (pop. approx 30,000), with the potential to drift through New Jersey, perhaps as far as Newark, or even to Staten Island, NY.

WORKING GROUP PRELIMINARY FINDINGS

A large number of local, county, state and federal agencies would be involved in a matter of hours. In the Commonwealth of Pennsylvania the initial Incident Commander normally is from the lowest level first responder organization. In this particular case, however, it is likely that the local Township Volunteer Fire Chief and police personnel would be casualties at the scene of the detonation. Nonetheless, the Monroe County 911 Center likely would dispatch other fire fighters, EMS, local police and a county liaison officer. The Pennsylvania Emergency Management Agency would be notified and bring in state resources to assist; this almost certainly would include Pennsylvania National Guard elements including their WMD-Civil Support Team. The FBI would be called in, and due to the scope of consequence management needed the Governor would probably quickly request other federal aid from the President. Many participants felt that because of the broad national political and psychological implications associated with this particular type of attack, the President would quickly declare a national emergency and perhaps federalize many of the response efforts.

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POTENTIAL MILITARY CONSEQUENCE MANAGEMENT MISSIONS & COMMAND AND CONTROL ARRANGEMENTS

Although Pennsylvania has extensive civilian emergency response capabilities, which would be augmented by multiple Federal civilian capabilities, participants felt that any nuclear detonation attack will likely require that the RC military in a variety of duty statuses assist with radiological detection, decontamination, radiological monitoring, medical support, security, engineering support and provide communication capability. Medical and mortuary affairs augmentation must be accomplished by Title 10 (active component or federalized reserve) forces since the National Guard has only limited capability for these missions. Security/Law Enforcement augmentation is usually accomplished in either State Active Duty (SAD) or Title 32 status because of legal constraints on the use of federalized troops for law enforcement activities.

Participants identified multiple First Responders (Fire, Hazmat, Emergency Medical), Municipal & County Emergency Management Centers, Local, State & Federal Law Enforcement authorities, State and Federal Emergency Management Agencies, the Department Of Energy, the Department of Homeland Security, other federal Emergency Support Function (ESF) lead agencies, and private contractors as key entities with which responding military individuals and organizations would have to be prepared to interact.

After consideration of recent command and control successes, such as those for the Democratic and Republic National Conventions, and extensive discussion, the group recommended a generic command and control structure with a Joint Task Force (JTF) Commander exercising command over Title 10 forces and tactical control (TACON) and/or coordinating authority over Title 32 and SAD forces. The JTF Commander may be either a Title 10 officer or a dual-hatted National Guard officer; many participants felt the latter option provided the greatest flexibility and responsiveness.

ISSUES

The participants identified the following as major issues across the response spectrum, and proposed associated potential mitigating measures:

- Seam: Coordination and avoiding duplication of data collection from and dissemination among the multiple organizations participating (e.g., multiple elements taking same dose meter readings at same place). Mitigating Measure: Develop and field a DOD and DHS common operating picture system for HLS/HLD?
- Shortfall: Means of rapid identification of potential radioactive hot zone(s) and dissemination of that information to the local first responders. Mitigating Measure: Creation of crater/cloud analysis "keyhole" booklet for issue to all potential first responders for use until more detailed effects analyses can be determined and disseminated?
- Shortfall: On site tracking of current and cumulative radiation dosage among responders, and rotation of forces. Currently no centralized management system exists. Mitigating Measure: Identify a lead agency for centralized tracking and reporting (either for all incidents or for each incident) of exposed responders.
- Shortfall: Sufficient immediate treatment and medical evacuation capabilities. Mass casualties will overload local and state capabilities; federal assets cannot deploy in time to provide effective aid. Mitigating Measure: Triage; self-aid education; creation of a medical Quick Reaction Force structure.
- Shortfall: Immediate availability of sufficient specialized aircraft and crews to accomplish medical evacuation and movement of responders. Mitigating Measure: Sufficient airframes are probably available (civilian firms such as FEDEX and UPS may have numbers of uniquely configurable aircraft), but source of special materials and especially trained medical crews is uncertain.
- Shortfall: Victim registration and dose capture for all involved for purposes of life-long medical monitoring and liability issues. Mitigating Measure: Adapt a national standard / bar code ID system.
- Shortfall: Shortage of Mortuary Affairs capability. Mitigating Measure: Mass burial? Freeze dry? Fund and field additional force structure?
- Shortfall: Housing of displaced persons and emergency responders. Mitigating Measure: Temporary lodging facilities and funding. Rapid decontamination of houses to permit return of residents.

STRATEGIC ISSUES FOR FURTHER EXPLORATION

Participants felt the following were among the many strategic issues raised at the workshop most deserving of additional scrutiny:

a. Enemies are challenging our military dominance in a number of areas other than on the battlefield, including attacking our belief in our safety and security on the home front. From a strategic perspective the funding, equipping, and training of appropriate military reinforcements to provide support for civilian first responders may soon become as important as providing support for our deployed war fighters overseas?

b. The effectiveness of the U.S. military in defense of the homeland depends upon close coordination and interaction with multiple responders at the local and state level. But standards for decision tools and aids differ between DOD and local/state/federal civilian agencies, which creates both policy and legal issues that must be resolved by incidents commanders at the time [or by courts after the fact]. It may be necessary to create a standardized methodology and decision system and train first responders on how to effectively use the system?

c. The impact of NORTHCOM, STRATCOM, and DHS potentially automatically elevating their alert levels upon detonation may be significant. The restrictions and constraints of these higher alert levels, especially on communications and information conduits, or specified allocations of low-density capabilities to pre-conceived high-value locations, may degrade the ability to move physical capabilities to the affected site and/or create self-induced denials of service across cyber capabilities critical to the elements responding to the event itself. Avoiding this requires careful preparation of organizational initial response plans and full integration of those plans across the spectrum of organizations at every level.

d. Potential American public response(s):

   (1) Unrealistic expectations of what the government's capabilities are to respond, and at the same time insufficient education on what they personally can do to respond. To what degree can proactive pre-attack public affairs activities manage expectations, and a revitalization of local and national civil defense programs mitigate these tendencies?

   (2) Large-scale civil disturbances in the vicinity of the actual event (as people flee both real and perceived dangers, and opportunists take advantage of the situation) and more broadly across the nation (out of fear there may be more weapons or from a desire to strike out at perceived "enemies") may follow the initial detonation. Ensuring measured, coordinated, and appropriate civilian and military civil disturbance responses to such activities will require thoughtful planning, adaptive execution, and potentially significant forces?

   (3) Disbelief of the government's information. Throughout an event, it will be essential that the government be validly portrayed as "in control" and successfully implementing positive consequence mitigation and recovery measures. But identification of the "right" message(s) and the "right" organization(s) and individual(s) to pass it for multiple possible particular circumstances is not an inherently simple task.

e. Greater consideration to developing and implementing national-level civilian and military programs aimed at detecting, interdicting, and protecting against the effects of attempted clandestine nuclear attacks.

CONCLUSION

Any nuclear detonation attack on the homeland likely will engulf and consume local, state, and regional emergency response organizations. Unless very well-trained, many of the initial responders may become victims themselves. It is anticipated that very shortly after such a detonation, federal agencies – including the military – will aggressively respond to the event. The capabilities of the organizations responding and legal restraints on their employment could significantly influence their ability to provide effective assistance. Most likely, however, a federal emergency disaster order will be issued rapidly to eliminate the legal constraints. On the other hand, each potential consequence management mission identified led to corresponding concerns by participants relating to the logistics and medical support required for a long-term, complicated response. Response to an attack of this nature may well be qualitatively and quantitatively overwhelming.

Today's and tomorrow's civilian and military leaders must be comprehensively educated and trained for this new reality, and public and private sector vigilance and preparation collectively enhanced It is imperative, therefore, that all private and government Senior Leader Education Programs include both academic and experiential learning opportunities related to CBRNE-attack response challenges.

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U.S. ARMY WAR COLLEGE
Center for Strategic Leadership
650 Wright Avenue
Carlisle, PA 17103-5049

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