

Radiological Nuclear Detection Task Force: *A Real World Solution for a Real World Problem*

by Kevin L. Stafford

Editor's Note: The following article was originally published in one of the Simons Center's earliest editions of the InterAgency Journal in 2012. While the Radiological Nuclear Detection Task Force never came to fruition, in 2017 the Department of Homeland Security's Domestic Nuclear Detection Office became one of the components of the new Countering Weapons of Mass Destruction Office, which was then fully established and authorized by the Countering Weapons of Mass Destruction Act in 2018. The editors of the Journal invite our readers to ask themselves what has changed – for better or worse – since this article was originally published.

President Barack Obama's signing of Presidential Policy Directive 8 (PPD-8), *National Preparedness*, in March 2011 marked an evolutionary step in the development of a "secure and resilient nation." However, building core preparedness capabilities and establishing capability targets are of marginal value if the cumulative actions of federal, state, county, municipal, tribal, and territorial governments do not manifest themselves in the form of real world solutions. To meet the national preparedness goal, the U.S. must come to the realization that in all probability the mere issuance of guidance and conceptual frameworks to state and local agencies will not contribute to the development of core capabilities among the "whole-of-community" as outlined in PPD-8. If the nation is to make progress in accomplishing the President's vision, the U.S. must recognize and take advantage of existing opportunities to move beyond the practices of the past. The core capability frameworks discussed in PPD-8 can be constructed using tools and techniques that exist today. Specifically, there are structures that effectively integrate federal, state, and local assets and provide both the methods and resources necessary to build cross-mission, multi-jurisdictional teams with the full range of core preparedness capabilities.

While this article does not address all the hazards and threats described in PPD-8, it offers an innovative approach to enhancing the probability of detecting radiological and nuclear materials that may pose a threat to the U.S. The U.S. can build an "all-of-nation" capability through the unique application of task force operations—a technique that has been repeatedly tested and proven by both public agencies and private corporations for more than five decades. This task force concept would simultaneously provide radiological/nuclear detection assets to national and regional government

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core and surge operations to respond to events involving radioactive and/or nuclear materials.

Background

Public safety and health organizations face a wide array of potentially devastating risks, and many expect law enforcement and homeland security agencies to protect against random acts of violence by anticipating and preventing

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the unforeseeable. Initial efforts to develop capabilities that enhance the nation's capacity to protect citizens from these threats should focus on opportunities that maximize the use of existing resources. For example, within the weapons of mass destruction area, technology has made it possible to detect the presence of radioactive and nuclear materials before they can be weaponized and/or deployed. Since radiation is colorless, odorless, and tasteless and the effects of exposure to radiation are often delayed following an event, without a prevention capability, the U.S. must rely on terrorists to self-report their nefarious activities or wait and respond to an attack after the damage has been done.

In April 2005, the Department of Homeland Security (DHS) established the Domestic Nuclear Detection Office (DNDO) to:

“...[s]erve as the primary entity in the United States government to further develop, acquire, and support the deployment of an enhanced domestic system to detect and report on attempts to import, possess, store, transport, develop, or use an unauthorized

nuclear explosive device, fissile material, or radiological material in the United States, and improve that system over time....”

In entrusting these considerable responsibilities to DNDO, Congress was careful to balance the states' interests in protecting their citizens' safety with an affirmative burden on the U.S. government to “...enhance and coordinate the nuclear detection efforts of federal, state, local, and tribal governments and the private sector to ensure a managed, coordinated response....” In so doing, the statute and supporting implementation policies did not provide the DNDO with the authority to mandate, fund, or otherwise compel state, county, municipal, or tribal agencies to participate in preventive detection initiatives or programs. Nor did they provide DNDO with either the personnel or the equipment necessary to independently conduct preventive radiation/nuclear detection activities.

Through a number of Homeland Security Grant Programs (State Homeland Security Program and the Urban Area Security Initiative grants), the U.S. provides significant financial assistance to develop homeland security programs at the state and local levels. Based on the strategies developed and implemented by DHS, the U.S. government apparently believes that a combination of grant funding and strategic guidance will simultaneously empower and motivate state and local governments to build capabilities that will prevent acts of terrorism. In providing these and other financial resources, DHS enables state, county, municipal, and tribal agencies to identify, prioritize, and address their own unique planning, organization, equipment, training, and operational exercise needs. While these funds can be used to build radiological/nuclear detection capabilities, it is important to note that none of these grants sets aside funds that specifically encourage state, county, municipal, and tribal partners to develop a

radiological/nuclear detection program.

As the U.S. continues to develop and improve national preparedness goals and objectives, it must assess and understand the real world needs and capabilities of these partners. The federal government has overestimated the resources and capabilities of state, county, municipal, and tribal agencies to develop and deploy preventive and protective capabilities. The U.S. government should provide substantive operational, intelligence, and financial support, as opposed to merely providing counsel, advice, and guidance.

Historically, state, county, municipal, and tribal law enforcement agencies have not been responsible for detecting radiological/nuclear materials outside of regulatory control. As a result, few, if any, law enforcement agencies have developed a staff with the requisite knowledge, skills, and abilities to effectively engage in radiological/nuclear detection activities. Further, most law enforcement agencies see marginal value in using scarce personnel and financial resources to address what they may view as a low risk threat to their communities, especially when the threat is not supported by credible information. While state and local agencies may view the threat of a radiological or nuclear terrorist attack as an issue more appropriately addressed by federal agencies, the allocation of assets to engage in purely preventive search activities for radiological/nuclear material, in the absence of a credible threat, is outside their scope of responsibilities.

Current State

In December 2011, the DHS issued the Strategic National Risk Assessment (SNRA) based on a concerted effort by federal law enforcement, homeland security, and intelligence community agencies, which identified the potentially catastrophic events that posed the greatest risk to the security of the nation. Included in the SNRA were two terrorist scenarios that

involve adversaries engaged in separate and distinct acts of terrorism, one involving nuclear weapons and the other radiological materials. The first concerned a hostile, non-state actor acquiring fissile material and constructing an improvised nuclear device (IND) and then detonating the IND within a major, population center. The second scenario involved a hostile

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non-state actor acquiring radiological materials and dispersing them through explosives or other means (radiological dispersal device [RDD] or a radiological exposure device [RED]). The findings of SNRA addressing the potential risks to the U.S., stand in stark contrast to the nominal level of preparedness devoted to the prevention of a terrorist attack using radiological/nuclear materials.

In view of the documented risks associated with INDs, RDDs and REDs, has the U.S. done all it can to decrease the probability that an adversary could successfully possess, store, and/or transport a radiological/nuclear device or material in the U.S.? Are current strategies implemented by law enforcement agencies sufficient to detect, prevent, or deter a terrorist from using a radiological or nuclear device as described in either of the two SNRA scenarios?

Radiological Nuclear Detection Task Force (RNDTF)

The threats of nuclear and radiological terrorism are real and will require the U.S. to build the core capabilities described in PPD-8 and the National Preparedness Goal. And while the National Preparedness Goal recognizes

the need to develop core capabilities, it relies heavily on individual state and local agencies to use grant funds to address regional priorities and develop a global nuclear detection architecture (GNDA). The capabilities to address what are essentially national security issues will not spontaneously evolve from the existing federal policies and practices. Any expectations that the perpetuation of such strategies will yield the capabilities to detect radiological or nuclear materials required in PPD-8 are inconsistent with past experiences in the distribution of DHS grant funding. It is neither necessary nor practicable to require state and local agencies to bear the burden of building and deploying detection capabilities necessary to prevent such attacks. In the same instance, it is not reasonable for state and local agencies to assume that the risk of a terrorist attack involving the use of an IND, RED, or RND is so low that they do not need at least a basic detection capability. The solution, at least in part, is to establish a standing task force focused on radiological and nuclear detection.

To develop detection capabilities within state and local law enforcement, fire services, and other public safety and health agencies, the U.S. government must set aside funds that focus on developing and operating RNDTFs.

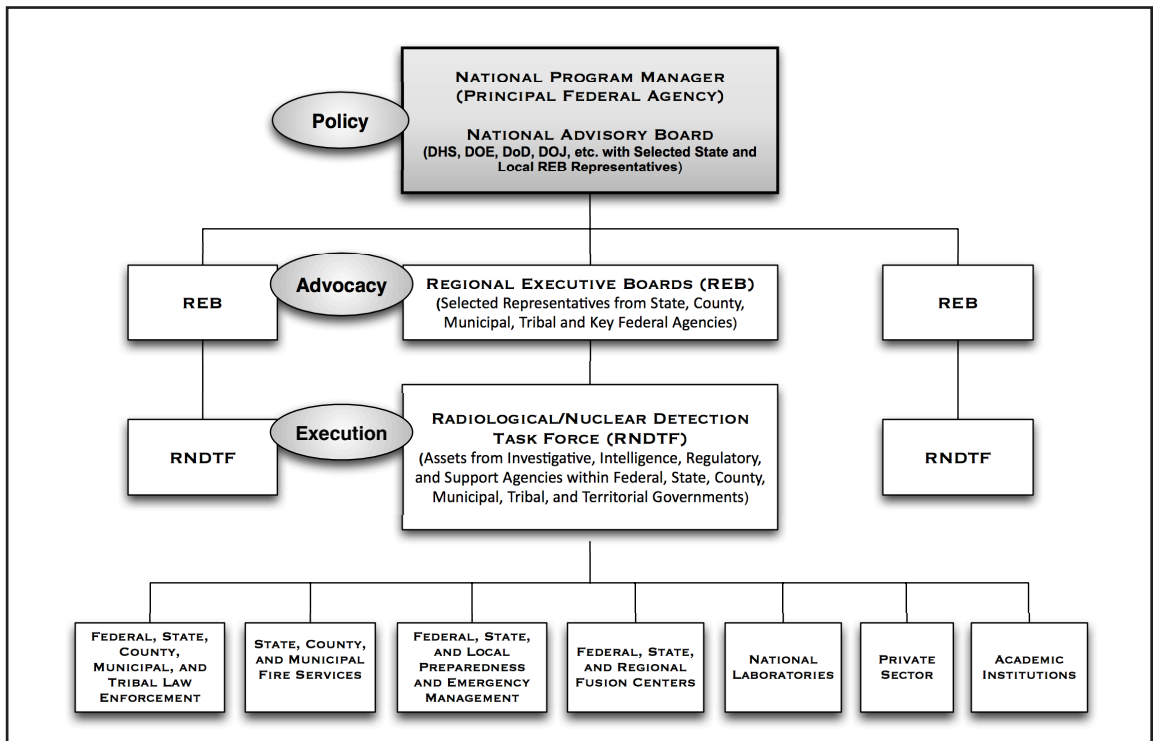
There are few, if any, state, county, municipal, or tribal agencies capable of building and sustaining preventive RND capabilities without financial support from the federal government. Current preventive RND efforts focus on developing federal capabilities in border areas and do not recognize the mutually dependent nature of these activities, nor the need to integrate support from federal, state, and local components to develop an “all-of-nation” capability. The RNDTF concept would

provide a platform to build and sustain these capabilities. Regions would be able to undertake the activities necessary to plan, organize, equip, train, and exercise task forces to prevent nuclear and radiological attacks. The National Advisory Board (NAB), Regional Executive Board (REB), and the RNDTF would coordinate and collaborate with federal, state, local, and tribal governments and the private sector to ensure the development and deployment of these “all-of-nation,” core capabilities. This structure would also facilitate the transition of deployed assets from prevention to response activities if an event develops.

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RNDTF Organizational Structure

The primary mechanism for developing policies, setting goals and objectives, coordinating resources, and obtaining funding for regional preventive RND activities would be the program manager for the principal federal agency, supported by a NAB. National program management responsibilities would be addressed based on existing agency statutory responsibilities. NAB assistance would come from a multi-agency executive board, composed of key stakeholders from within the federal government and select members of RNDTF REBs. A REB would consist of representatives from state and local agencies and key regional representatives of federal agencies that comprise the NAB. Based on the policies and guidance issued by the NAB, REBs would make strategic decisions regarding the expenditure of funds allotted to them by DHS. The REBs would maintain significant flexibility in allocating assets to their respective RNDTF to maintain regional priorities, address the unique concerns of their communities, and meet the National



Organizational Structure of the Radiological/Nuclear Detection Task Force Concept

Preparedness Goal. With the advice and counsel of the NAB and input from the REBs, the program manager would set policy and issue guidance to form the basis for national performance metrics.

Operational Activities

While national policy and guidance would come from the principal federal agency, operational activities would be conducted by regional RNDTF members, detailed from federal, state, and local law enforcement, fire departments, and other public health and safety agencies. The specific composition of the RNDTF would vary based on the availability and expertise of existing resources and would be at the discretion of the REBs. The REBs would serve as advocates for and provide strategic guidance to the RNDTFs.

The REBs would use the list of target capabilities developed by DHS as a guide to determine if regions develop and maintain

organic detection capabilities or build a cadre of part-time task force members. In either case, RNDTFs would draw on existing personnel and share equipment resources to address preventive activities.

The multi-mission, multi-jurisdictional nature of the RNDTF provides a unique opportunity to integrate the whole-of-community (law enforcement, fire departments, intelligence and operation centers, academic institutions, private sector businesses, and other public safety and health organizations) concept in addressing a national security risk. In addition to providing a structure for the development of prevention and protection frameworks, the RNDTF can also be integrated into activities to mitigate, respond, and recover should protection and prevention efforts fail.

In issuing national policy, the program manager, in consultation with the NAB and REBs, should establish and ensure the RNDTF adheres to a common set of operating procedures.

In an area as complex as radiological and nuclear detection, consistency in the integrity of the adjudication process is critical. A lack of common operating procedures may leave adjudication decisions to agencies that lack the operational experience and legal training to understand the subtleties involved in handling radiological and nuclear detection events.

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One of the most significant benefits of the RNDTF concept is its ability to be deployed to other jurisdictions. To ensure RNDTF assets serve as both regional and national detection assets, members would be cross-designated to enable the program manager, in coordination with NAC, REB, and the agencies participating in the RNDTF, to relocate and surge assets to other regions as needed. Accordingly, RNDTFs simultaneously provide regional stand-alone radiological/nuclear detection capabilities and can be integrated into a national surge asset.

The organizational structure of the RNDTF provides the means and resources necessary to develop the whole-of-community strategic vision envisioned in PPD-8. In addition, the RNDTF provides a support infrastructure that strengthens national and regional relationships and enhances cooperation, which leads to the development of capabilities that would not otherwise be possible. By having access to information concerning the nature and scope of the activities being conducted by federal, state, and local agencies, the U.S. would be in a better position to make informed decisions on the future development of a GNDA.

Based on the part-time, cross-mission, and multi-jurisdictional nature of task forces, developing a focused, training program that

meets the needs of federal, state, and local agencies is critical. Providing federally funded train-the-trainer and web-based training curriculums could facilitate the effectiveness and efficiency of this required training. The RNDTF setting provides a solid platform to share “best practices” and “lessons learned” among national detection assets, while enhancing the expertise of federal training resources such as DNDO, Department of Energy, and the Federal Emergency Management Agency.

The success of the RNDTF concept depends on the DHS to provide specific budget allocations for the operation of the regional task force efforts, as opposed to the current, homeland security grant programs. In creating the funding, it is critical for the federal agency with statutory responsibility for program management to also have the authority to allocate funding in support of task force initiatives. Under this concept, the DHS would prepare a national RNDTF budget based on comparative threat assessments and performance metrics established by program managers. In coordination with the REB, regional RNDTFs would be required to justify the need to develop or sustain the task force, and in so doing, build a consensus regarding the cost of task force operations across the region. On an annual basis, based in part on the region’s performance, regional executive committees would be allotted funding to develop and/or sustain preventive RND-related operations. Resource allocations, based on a combination of risk assessments and performance metrics, would assist in the development of both the regional and national aspects of a GNDA. The RNDTF would provide a reliable, long-term funding source to encourage regions to develop critical, national security, core capabilities.

Situational Awareness

In addition to the operational benefits, an RNDTF would facilitate the collection, analyses, documentation, and dissemination of the data/

information obtained from deployed detection assets by developing recommended information and data collection and reporting guidelines. These guidelines would provide uniformity in developing requirements and establishing tasks for collecting data and information. Issuing and adhering to these guidelines would significantly increase consistency in collection efforts among domestic agencies and significantly increase the accuracy of the information collected in support of the development of a GNDA. Enhanced accuracy in the information collected in the development of a GNDA would permit the U.S. to make more informed decisions regarding the allocation of personnel, equipment, and funding resources among RNDTFs. Most importantly, the timely and uniform reporting of detection events generated by the RNDTFs would assist in providing regional and national decision-makers with near, real-time, situational awareness regarding potential radiological/nuclear threats.

Legal/Constitutional Issues

A successful radiological/nuclear detection program must result in a thorough and timely adjudication of the event, and the RNDTF must conduct actions in a thorough, consistent, and timely manner. To ensure an appropriate adjudication of detection events, the RNDTF must have a basic understanding of the science behind preventive RND activities and how these activities may raise constitutional and civil liability issues. Integrating prosecutorial assets into the RNDTF would be critical to facilitate the development of procedures and protocols necessary to address potential legal issues at both the state and federal levels. Potential legal issues include the following:

- Do agencies involved have the statutory authority to engage in activities to detect illicit radioactive/nuclear material?
- Does the radiation detection equipment used for law enforcement purposes meet the relevancy and scientific reliability standards for admissibility under federal law?
- Does an individual law enforcement officer's testimony regarding his/her interpretation of the results from detection equipment and the subsequent adjudication of that event meet judicial standards established for relevancy and reliability of expert testimony?

As federal and state governments wrestle with the development of operational frameworks to meet preparedness goals, RNDTFs would permit agencies to evaluate the adequacy of existing statutes and regulations in facilitating investigative activities.

Conclusion

The development of the RNDTF would provide a structure that integrates the existing resources of federal, state, county, municipal, tribal, and territorial law enforcement, fire services, homeland preparedness, public safety, public health, and intelligence/information resources into real world capabilities that would greatly enhance the probability of detecting and preventing two of the most significant threats to national security. As the U.S. continues planning and drafting efforts to meet the requirements outlined in PPD-8 and the National Preparedness Goal, the RNDTF concept would enable federal, state, and local government to simultaneously develop the structures necessary to meet these requirements, while deploying real capabilities to the “whole-of-community”/“all-of-nation” to protect against threats involving INDs, RDDs, and REDs. To have resources available that would enhance the probability of interdicting and preventing a terrorist attack utilizing radiological or nuclear materials and not deploy them is not a lesson that we have to relearn. **IAJ**