Homeland Response Force Study:
Emerging Issues in Integrating the National Guard Homeland Response Forces and First Responders

October 2013

Prepared for
Department of Homeland Security
Directorate of Science and Technology
and National Guard Bureau
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HSSAI’s research is undertaken by mutual consent with DHS and is organized as a set of discrete tasks. This report presents the results of research and analysis conducted under

**Task 12-01.04.03, Homeland Response Force Study**

The purpose of the task is to examine the integration between the National Guard Homeland Response Force (HRF) and first responders. It is part of a research effort that seeks to examine the seams between homeland security and homeland defense by identifying potential gaps at the intersection of federal, state, local, tribal, and territorial disaster response operations. Specifically, this research focuses on emerging relationships between the Department of Defense (DoD) National Guard (NG) Homeland Response Force (HRF) and the first responder community at the state, local, tribal, and territorial (SLTT) level.

The results presented in this report do not necessarily reflect official DHS opinion or policy.
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HOWELAND RESPONSE FORCE STUDY: EMERGING ISSUES IN INTEGRATING THE NATIONAL GUARD HOMELAND RESPONSE FORCES AND FIRST RESPONDERS

October 2013

Prepared for
Department of Homeland Security Science and Technology Directorate and National Guard Bureau
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The author expresses appreciation to the many members of the first responder community, the National Guard, and the Department of Defense who took time out of their busy schedules to sit and be interviewed for this study. They shared their experiences with candor and with a universal understanding that the homeland security and homeland defense enterprises are inherently intertwined and will require the collaboration of all resources when our nation eventually faces a chemical, biological, radiological, nuclear or explosives incident or other complex catastrophe.

The author is indebted to the members of the West Virginia National Guard and the Ohio National Guard who made themselves available in the midst of both planning for the 57th Presidential Inauguration and an annual exercise evaluation to discuss this study, as well as the members of the First Responders Resource Group and the InterAgency Board whom have been involved from the beginning of this effort. The author especially wishes to single out Lt. Col. Clay McGuyer of the National Guard Bureau for acting as an advisor and liaison during this study and Steve Davis of Urbanareas.org for making his listserv available for distribution of the survey instrument used in this study.
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<th>Description</th>
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<tr>
<td>C2CRE</td>
<td>Command and Control CBRN Response Element</td>
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<tr>
<td>CBIRF</td>
<td>Chemical Biological Incident Response Force</td>
</tr>
<tr>
<td>CBRN</td>
<td>Chemical Biological Radiological Nuclear and Explosive</td>
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<tr>
<td>CCMRFS</td>
<td>CBRN Consequence Management Reaction Force</td>
</tr>
<tr>
<td>CERFP</td>
<td>CBRN Enhanced Response Force Package</td>
</tr>
<tr>
<td>COTS</td>
<td>commercial off the shelf [equipment]</td>
</tr>
<tr>
<td>DCRF</td>
<td>Defense CBRN Response Force</td>
</tr>
<tr>
<td>DHS</td>
<td>Department of Homeland Security</td>
</tr>
<tr>
<td>DoD</td>
<td>Department of Defense</td>
</tr>
<tr>
<td>DSCA</td>
<td>defense support of civil authorities</td>
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<tr>
<td>EMAC</td>
<td>Emergency Management Assistance Compact</td>
</tr>
<tr>
<td>FEMA</td>
<td>Federal Emergency Management Agency</td>
</tr>
<tr>
<td>GAO</td>
<td>Government Accountability Office</td>
</tr>
<tr>
<td>GOTS</td>
<td>government off the shelf [equipment]</td>
</tr>
<tr>
<td>HAZMAT</td>
<td>hazardous materials</td>
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<tr>
<td>HRF</td>
<td>Homeland Response Force</td>
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<tr>
<td>ICS</td>
<td>Incident Command System</td>
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<tr>
<td>JTF</td>
<td>Joint Task Force</td>
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<tr>
<td>NGB</td>
<td>National Guard Bureau</td>
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<tr>
<td>USNORTHCOM</td>
<td>United States Northern Command</td>
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<tr>
<td>S&amp;T</td>
<td>Department of Homeland Security Science and Technology Directorate</td>
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<tr>
<td>SLTT</td>
<td>state, local, tribal, and territorial</td>
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<tr>
<td>USTRANSCOM</td>
<td>United States Transportation Command</td>
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<tr>
<td>TTX</td>
<td>Tabletop Exercise</td>
</tr>
<tr>
<td>WMD</td>
<td>Weapon of Mass Destruction</td>
</tr>
<tr>
<td>WMD-CST</td>
<td>Weapon of Mass Destruction Civil Support Team</td>
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EXECUTIVE SUMMARY

This study examines the integration between the newly formed National Guard Homeland Response Force (HRF) and the first responder community at the state, local, tribal, and territorial (SLTT) level. It is part of a research effort that seeks to examine the seams between homeland security and homeland defense.

After a multi-year analytic effort, the Department of Defense (DoD) made the decision to restructure its existing Chemical, Biological, Radiological, and Nuclear (CBRN) domestic response forces. The new structure, which included the addition of 10 HRFs, was designed to speed military capabilities that were assessed as being most likely to be needed in the initial hours and days after an incident. In addition to process and procedure refinements, this change shifted DoD capability from the active component, or Title 10, force into the National Guard, where it could be geographically distributed for more rapid arrival at an incident site, more accessible by governors of individual states to support the response effort before federal involvement, and more closely connected to first responders. The Quadrennial Defense Review of 2010 indicated that previous DoD capabilities were too slow to meet first responder needs during large-scale emergency response and that military forces could be brought to bear more quickly through the redistribution of some assets from the existing federal force to National Guard forces operating under state control.

By September 2012, DoD had established, manned, trained, equipped, and validated as fully operationally capable 10 HRFs to complement the other DoD CBRN domestic response forces. Specifically, HRFs provide search and extraction, personnel decontamination, emergency medical, CBRN operations and planning, and site security on 12-hour-or-less alert that would arrive using organic ground transportation at an incident site and begin operating less than 24 hours after an incident. A fatality recovery capability was added to the HRFs in 2013 from existing Air National Guard units. Comprising Army National Guard soldiers and Air National Guard airmen, there is one HRF per Federal Emergency Management Agency (FEMA) region.

This study seeks to identify potential gaps in the integration of federal, state, local, tribal, and territorial disaster response operations. The methodology for this study was designed in four phases: a literature review; data collection through interviews, surveys, and field observations; analysis of data and validation of the findings and recommendations; and production and distribution of a final report.

This report yields two overarching and related findings that could be construed as gaps in the integration between the HRF and first responders. It also reveals numerous other issues that require attention. The gaps and issues are drawn from the numerous discussions with stakeholders during the course of this study.

Gap 1: First responders do not participate frequently enough in joint training and exercises with HRFs. There are too few interactions between HRFs and local first responders in their FEMA regions. On more than one occasion, first responders reported that they either had not exercised with the HRF (if they had heard of it) or had done so
perhaps once. This lack of interaction could lead to challenges in coordination between HRF personnel and local first responders during incident response.

Gap 2: The HRF personnel and first responders have a very limited and fragmented awareness of each other’s capabilities and limitations. This study revealed that there is a large gap between the HRF personnel and the first responder community in their awareness of each other’s capabilities and limitations, especially about the specific HRF capabilities that may be needed during CBRN incident response. It is important to emphasize that this gap cuts both ways. While the first responder community may have a very limited knowledge of the capabilities of the HRF (more accurately, an inconsistent knowledge: some know what it is; others have heard of it but lack detail; yet others have never heard of it), HRF personnel appear to have a limited knowledge of the extent and specific nature of first responders’ capabilities and limitations. Though some HRF members were first responders at other points in their careers, this individual knowledge is not standard across the whole force. The program as a whole has not yet developed close enough relationships with the first responder community to achieve seamless integration.

Perhaps the most important insight for National Guard leadership, Department of Homeland Security (DHS) leadership, and first responders is that addressing gap 1—joint training and exercising—will close the awareness gap, as well.

This report also makes the following recommendations:

- **Recommendation 1**: DHS should provide funding to support first responder participation in the National Guard collective training and exercise programs through its homeland security grant program. DHS should also emphasize the importance in its Strategies, Plans, and Implementation guides of responder-wide training integration focusing on routine, annual training and exercises with first responders and the medical community, beginning with the Urban Areas Security Initiative (UASI) regions that represent the urban areas that face a high threat risk, and expanding as funding allows.

- **Recommendation 2**: DHS (possibly through the DHS First Responder Resource Group) should coordinate with the National Guard Bureau (NGB) to conduct tabletop exercises (TTXs) with civilian responder leaders in each FEMA region to establish how HRF, CERFP, and WMD-CST capabilities will be integrated into emergency response. TTXs should focus on most high-risk locations (UASI regions and large cities) first and expand to cover lower-risk areas over time.

- **Recommendation 3**: NGB should develop guidance on how states can best leverage the full-time staff of the HRF and their interactions with the Joint Force Headquarters-States to maximize integration with local, state, and regional response assets and interoperability with first responders.

- **Recommendation 4**: NGB should develop an outreach program, potentially using first responder associations and organizations, as an avenue to educate first responders on DoD CBRN Enterprise capabilities.
• Recommendation 5: DHS and NGB should work together to create education modules on HRF and first responder capabilities to be used as part of the internal training programs for first responders and HRFs, respectively. DHS grant programs such as the UASI grants could include this training requirement as a means to spread awareness of HRF capabilities to incident management team members and first responders, in general.

• Recommendation 6: DHS and NGB should create a working group of local first responders (perhaps under FEMA or under the Council of Governors, and possibly drawn from the DHS First Responder Resource Group or the InterAgency Board) who can provide routine interaction with HRF leadership about requirements and capability development, and help develop a common language for the military and civilian capabilities to support interoperability.

• Recommendation 7: HRFs should plan and exercise for multiple simultaneous incidents, including multiple jurisdictional areas, and requiring fast deployment and robust, long-term logistical sustainment to test the operational concept.

• Recommendation 8: DoD and DHS/FEMA leadership should explore triggers for reclassification of the HRF as a Title 10 force. These scenarios should be validated through TTXs among senior leaders, and these thresholds should be discussed and ideally developed with the Council of Governors.

• Recommendation 9: DoD and DHS/FEMA should jointly lead a national conference to discuss needed national requirements and capabilities for a complex catastrophe. The conference should also involve stakeholders from other federal agencies and the private sector to provide a whole of community view of response requirements, existing capabilities, and gaps in those capabilities.

• Recommendation 10: NGB should work with the states and the Army to stabilize the membership of the HRF (and other National Guard CBRN response enterprise assets) as much as possible, while not reducing HRF personnel readiness to conduct National Defense Missions, to build the enduring relationships with the responder community critical to effective emergency response.

• Recommendation 11: DoD and DHS/FEMA should explore the development of enterprise-wide, joint doctrine for all-hazards response. For the defense support to civil authorities (DSCA) missions, this task will mean incorporating the procedures of SLTT first responders.

• Recommendation 12: DoD should develop standardized guidance for the CBRN Enterprise response forces on the collection and dissemination of lessons learned and best practices.

• Recommendation 13: NGB should emphasize the importance of, and provide funding for, HRF commanders and HRF senior officers for joint training, joint education, and joint assignment opportunities with their civilian counterparts, notably police chiefs, fire chiefs, and local emergency managers.
• Recommendation 14: NGB should undertake an assessment of the capacity for sustainment during a catastrophic response when resupply is needed, including a study of the effect of sharing equipment with responders. The National Guard should exercise the capability to resupply the HRF and other National Guard responders in a catastrophic CBRN incident response.
BACKGROUND AND PURPOSE

This study examines the integration between the National Guard HRF and civilian emergency responders. It is part of a research effort that examines the seams between homeland security and homeland defense by identifying potential gaps between federal, state, local, tribal, and territorial disaster response operations. Specifically, this research focuses on emerging relationships between the HRF and the first responder community at the SLTT level. The research is being conducted in light of several intersecting and significant changes in the disaster response domain.

DoD developed the HRF, a response force totaling approximately 5,700 personnel, to establish regionally dispersed capabilities closer to potential incidents, allowing for faster response times and keeping the units under the control of the governors of individual states. This effort shifted DoD lifesaving capability in the homeland from the active component, or Title 10, force into the National Guard, where it could be more accessible to the governors and more closely connected to first responders. Analytical studies indicated that the original, active duty-centric domestic CBRN consequence management force would be too slow to provide first response capabilities following a CBRN incident. The Quadrennial Defense Review of 2010 concluded that military forces could be brought to bear more quickly through the use of National Guard forces.

Figure 1. National Guard CBRN Enterprise map

1 Based on a National Guard Bureau map, 2013.
The goal of the HRF is to deploy within six to 12 hours of notification, via the Emergency Management Assistance Compact (EMAC) system\(^2\) if outside the host state, to CBRN events or for all-hazards response to other large-scale events such as complex catastrophes. The HRF is supported by Weapon of Mass Destruction Civil Support Teams (WMD-CSTs), which provide identification, advice, and assistance regarding CBRN hazards. The HRF may be augmented by CBRN Enhanced Response Force Packages (CERFPs), which provide additional search and extraction, decontamination, emergency medical, and fatality recovery capabilities. In structure, a HRF contains one CERFP element that can conduct eight hour operational shifts. For 24-hour operations, a HRF would need to be augmented by two CERFPs. HRFs also contain a command and control element that coordinates the activities of National Guard CBRN forces. The security element of the HRF can provide site security for CBRN response operations.

Table 1. HRF personnel elements

<table>
<thead>
<tr>
<th>Mission</th>
<th>Personnel</th>
</tr>
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<tbody>
<tr>
<td>Regional C2</td>
<td>180</td>
</tr>
<tr>
<td>Security Element</td>
<td>200</td>
</tr>
<tr>
<td>Fatality Search and Recovery</td>
<td>11</td>
</tr>
<tr>
<td>CBRN Response Element C2*</td>
<td>16</td>
</tr>
<tr>
<td>Search and Extraction*</td>
<td>50</td>
</tr>
<tr>
<td>Decontamination*</td>
<td>75</td>
</tr>
<tr>
<td>Emergency Medical*</td>
<td>45</td>
</tr>
<tr>
<td><strong>Total personnel</strong></td>
<td><strong>577</strong></td>
</tr>
</tbody>
</table>

*This personnel breakdown is identical to the existing CERFP composition.

By September 2012, DoD established 10 HRFs, one per FEMA region, comprising National Guard soldiers and airmen. HRFs provide search and extraction, personnel decontamination, emergency medical, CBRN operations and planning, and site security on 12-hour or less alert that would arrive using organic ground transportation at an incident site and begin operating less than 24-hours after an incident. A fatality recovery capability was added to the HRFs in 2013 from existing Air National Guard units. This force complements existing National Guard CBRN Response Enterprise forces, which includes 57 WMD-CSTs and 17 CERFPs, and the active component part of the CBRN Response Enterprise, including one Defense CBRN Response Force (DCRF) and two Command and Control CBRN Response Elements (C2CREs). Taken together, the HRFs, other National Guard CBRN assets, and Title 10 CBRN assets total almost 19,000

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\(^2\) The Emergency Management Assistance Compact (EMAC) is the nation's state-to-state mutual aid system. It has been ratified by Congress and enacted into law in all 50 states, the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands. More information can be found at http://www.emacweb.org/.
personnel, representing a significant investment in response capabilities for domestic incidents by DoD.

Figure 2. DoD CBRN response enterprise

3 Chemical, Biological, Radiological, and Nuclear Consequence Management (Joint Publication 3-41, 21 June 2012).
The domestic response environment has undergone a number of significant changes within recent years. Starting in 2011, FEMA led an interagency and intergovernmental revision of the National Response Framework (the third complete revision of the national emergency response policy in the last decade), including a shift to a focus on “core capabilities” as called for in Presidential Policy Directive 8. The second edition of the National Response Framework, published in May 2013, identified five mission areas—Prevention, Protection, Mitigation, Response, and Recovery—and outlined the core capabilities related to these areas. The National Response Framework provided updated structures and guiding principles for implementing policies and operational coordination.

4 Ibid.

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of domestic response efforts. Beyond the transition to the core capabilities, the document also incorporated the elements of the “whole of community” and “unity of effort” principles.\(^6\)

The Secretary of Defense recently issued new guidance on DSCA, specifically focusing on complex catastrophic events that might require CBRN response. This guidance includes *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*, otherwise known as the 2012 *Defense Strategic Guidance*, and the *Strategy for Homeland Defense and Defense Support to Civil Authorities*. The 2012 *Defense Strategic Guidance* reflects President Obama’s strategic direction for DoD and input from senior military leadership and policy makers, outlining the priorities for the joint force in light of the shifting defense environment and fiscal constraints. Within this document, DoD recognized DSCA as a primary Departmental mission for the first time.\(^7\) Within the *Strategy for Homeland Defense and Defense Support of Civil Authorities*, strategic guidance for maintaining preparedness to respond to domestic CBRN incidents focused on continuing efforts for domestic consequence management force restructuring that included the establishment of the HRFs within the National Guard and the DCRF and C2CREs within the active component.\(^8\)

Additionally, all parties involved in response, especially SLTT responders, have faced unprecedented cuts in funding due to the state of the U.S. economy over the past five years. This budget reduction has led to changes in force posture and, in many cases, changes (and reductions) in response assets and capabilities. SLTT staffing levels have changed, and many homeland security and public safety response teams (for example, HAZMAT teams) can no longer be sustained, nor can associated equipment that was purchased after 9/11 for CBRN incidents.

In light of these changes, it is appropriate look at where these three resources for national disaster response—DoD, DHS, and SLTT responders—intersect to see if any gaps exist, may emerge, or have been overlooked. This study seeks to identify those issues as they relate to the National Guard HRFs and recommend ways to address them, thus improving the effectiveness and efficiency of a multiagency response across DoD, DHS, and SLTT responders and enhancing unity of effort among responders. An *a priori* effort to discover such gaps or issues may allow decision makers to adjust plans or pursue efforts to eliminate those gaps, thereby improving our national response capability before a disaster occurs.

**Value to the Homeland Security Enterprise**

DHS, DoD, and SLTT governments have spent the post-9/11 decade developing capabilities to respond to CBRN and catastrophic events. All three bring important

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contributions to solving the problems of managing large and complex disasters. However, discussions with SLTT response leaders and after-action reports from incidents such as Hurricane Katrina offer anecdotal evidence that the three national response assets often plan and conduct operations separately. This isolation has resulted in the two federal entities operating in one silo and the SLTT response organizations in another. New initiatives, such as the Dual Status Command and the Unified Area Coordination Group concepts, have begun attempting to integrate these response efforts.

In that context, we believe this study will be of value to the stakeholders in the homeland security enterprise.

For DHS, this study may provide insight into the operational and planning assumptions at the FEMA regional level and within UASI regions with respect to integration of National Guard HRF forces and SLTT response assets. These insights may lead to improvements in planning or operational readiness across the FEMA regions.

For NGB and DoD, this study may provide insight into issues or gaps that may have been overlooked or unanticipated in the establishment of the HRF. It may provide insight into whether the response force posture is correct when looked at from a systematic view that includes DHS and SLTT response capabilities and requirements. Any issues that are identified could be addressed in future decisions regarding plans, operational requirements, or resource allocations decisions, and recommendations for the next Quadrennial Defense Review.

For SLTT responders, this study may better illuminate capabilities of the HRF, helping to enhance deliberate or operational planning for incidents involving the deployment of the HRF. It may also provide a venue for SLTT responders to give insight to HRF leadership regarding unforeseen issues or gaps in the HRF capabilities.

This study was funded by the DHS Science and Technology Directorate and was conducted jointly in cooperation with NGB and state National Guard leadership.

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9 Discussions with the InterAgency Board (IAB) first responders, 2012.

10 Dual Status Command, at the request of a governor and with approval of the Secretary of Defense, allows for a single commander to serve in two statuses (Title 32 and Title 10) and have operational control of both state National Guard and Active Duty forces. The dual status commander would have Title 32 and Title 10 deputy commanders and be supported by a combined Title 32/Title 10 staff. Though the chains of command between state and federal forces would remain separate, the Dual Status Command structure allows for one state-designated individual to maintain visibility over both sets of forces.

FEMA developed the Unified Area Coordination Group concept to allow for the FEMA Administrator to retain overall incident oversight and authority when a large or complex incident involved multiple federal coordinating officers or spans across multiple FEMA regions. The Unified Area Coordination Group would include the FEMA Administrator, states’ governors’ representatives, and other federal, state, and area coordinators. The aim of the group is to provide a means of coordinating the allocation and reallocation of resources and enable effective public information activities.
**Analytic Methodology**

This section describes the analytic methodology used in this report.

**Research Questions**

This study attempted to answer the following core research questions:

1. What are current or emerging gaps or issues in the integration between the HRF and first responders for responding to complex catastrophes?

2. Do assumptions, knowledge, or operations reveal critical issues at the intersection between the HRF, FEMA, and first responders in the following areas?
   - Strategy
   - Roles or missions
   - Authorities
   - Capabilities
   - Doctrine
   - Planning
   - Organizing
   - Equipping
   - Training
   - Exercising

**Technical Approach**

The methodology for this study was developed in four phases: a literature review; data collection through interviews, surveys, and field observations; analysis of data and validation of the findings and recommendations; and production and distribution of a final report.

Phase 1 included project planning with NGB staff and key DHS S&T stakeholders. An expert advisory panel was formed to serve as a sounding board for the direction of the study and to provide feedback and quality assurance. An abridged literature review was conducted, including an assessment of the landscape between homeland security and homeland defense. The review focused on roles, authorities, policies, plans, and after-action reports or studies of events involving DSCA, especially those related to the National Guard, FEMA, and SLTT responders. The review sought to identify the

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11 A list of the expert advisory panel members is in the appendices.
emergent seams between DoD and DHS and to uncover any historical issues that the study should monitor.

Phase 2 consisted of data collection via interviews, surveys, and direct field observation. Semistructured interviews were conducted with more than 50 stakeholders from the National Guard, DHS, and the SLTT first responder community. Interviews took place in group and one-on-one settings during site visits to Ohio in November 2012 and West Virginia in 2013. Additional interviews took place in Arlington, Virginia, at NGB and at the Pentagon, as well as at the offices of the Homeland Security Studies and Analysis Institute (HSSAI). Some interviews were conducted by phone.

A survey instrument was developed and sent to a listerv of more than 2,500 SLTT responders representing 64 cities drawn from the 2011 Urban Areas Security Initiative (UASI) regions. It was also distributed to the DHS Science and Technology First Responders Resource Group. The survey was distributed between February and March 2013.

Direct field observations took place during a site visit in December 2012 to observe one HRF exercise evaluation in progress. The study did not include an observation of an actual HRF response, as none occurred during the study period (although subcomponents of the HRF, including CST and CERFP units, participated in planning for the 57th Presidential Inauguration during this period).

Phase 3 included analysis of the data. During this phase, an advisory panel was used to provide feedback and validation of the findings and subsequent recommendations.

In Phase 4, feedback from the advisory group and interviewees were adjudicated and incorporated into the report. During this period, a second round of interviews provided additional feedback for the second review.

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12 A complete list of interviewees is included in the appendices.

13 This listserv is maintained by the regional UASI members via www.urbanareas.org.
FINDINGS

This section describes the findings from the interviews and field observations, as well as the results of the survey conducted to assess first responders’ awareness of the HRF.¹⁴

This report yields two overarching findings that could be construed as gaps in the integration between the HRF and first responders. Both gaps center on the limited contact between the HRFs and the first responder community over the two-year history of this new program, which became fully operational in September 2012. It is important to note that capabilities such as the WMD-CSTs that have been in existence since 2000 enjoy solid relationships with responders at the local, state, and federal levels. These relationships have made them the anchor point for integration for the DoD CBRN Response Enterprise capability. It is expected that the HRFs will eventually reach this level of familiarity in the responder community, and this report offers recommendations to help speed this integration to fruition.

This study also reveals other issues that require attention. The gaps and issues are drawn from the numerous discussions with stakeholders during the course of this study. All these gaps and issues are surmountable, requiring effort of both the National Guard and the first responder community.

**Gaps: Joint Training and Exercising and Awareness**

**Gap 1: Joint training and exercising with first responders occurs far too rarely.**

The military concept of “train as you fight” implies that personnel practice doing their job as a team before they are faced with doing their job during a real event. This concept applies as much in emergency response as it does in war. The National Guard accomplishes this military standard with the HRF through large-scale collective exercises. In these exercises, HRF members work with live role players, searching for them in a simulated collapsed structure, extracting them from that structure, decontaminating them while caring for any injuries, and providing medical treatment.¹⁵ These collective exercises ensure that the search and extraction specialists can interface appropriately with the decontamination specialists and emergency medical care personnel to help victims of a CBRN incident.

In a real emergency, HRF personnel will carry out their mission with, and in support of, first responders. Yet there are too few interactions with local first responders within their respective FEMA regions. In a March 2013 survey of first responders from UASI regions across the country, nearly 53 percent (out of 72 responses) reported that they had not trained with the HRF (if they had heard of it). Some indicated that this interaction had occurred, but only perhaps once. In many cases, responders indicated that this limited interaction was how they learned about the HRF and gained an understanding of their capabilities. Limited training and exercising could lead to flawed expectations on the part

¹⁴ Specific results from the survey are found in the appendices of this report.

¹⁵ Author’s field observations, 2012, and information provided by the National Guard Bureau, 2013.
of the HRF leadership. HRF leaders might come to believe that one or two drills or exercises (that might involve some first responders as participants or as observers) will fully prepare HRF to integrate with first responders.

Given turnover of staff on both sides, training every few years falls short of the kind of routine interactions required to build institutional relationships between the HRF and first responders. If first responders and HRF members do not train or exercise together, they lack the opportunity to hone their skills, learn from each other, and build trust that will extend into field operations. The result is that neither the National Guard nor the SLTT responders know each other’s standard operating guidelines, known in military parlance as tactics, techniques, and procedures. First responders, for example, have a wide range of standard operating procedures and equipment that vary from organization to organization and from state to state. One responder related their experience during an exercise and noting that more frequent interactions could help resolve any command and control issues, which would subsequently resolve issues with integrating the “boots on the ground” activities, and also increase the experience and exposure of the HRF.¹⁶

Appropriate training and exercises should take place at the tactical level, with skill-based training scenarios between HRF members and first responders, and at the strategic level, with TTXs between leadership. Routine, annual, joint training and exercising between the HRF and first responders is needed.

Some exercising opportunities exist that have driven interaction between HRFs and first responders and civilian emergency management. The VIGILANT GUARD program is a regional exercise program hosted by U.S. Northern Command (USNORTHCOM) and NGB. These exercises are hosted four times annually and provide realistic disaster response training for both civilian and military staffs. The exercise incorporates functional elements and field training events that allow military and civilian first responders to work together on the ground. Interviewees from both the National Guard and first responder community highlighted this exercise program as a valuable opportunity to interact. Both the planning processes leading to the exercise and the integration of liaisons during exercise execution allowed for the first responders and HRF personnel to learn the capabilities and skills that can contribute to response operations.¹⁷ This program should continue, with further efforts to integrate SLTT responders and civilian emergency planners. Some HRFs are also proactive in engaging first responders throughout their region on a regular basis to conduct TTXs or small functional exercises with proven results,¹⁸ but this type of robust exercise program is not standard for all HRFs.

¹⁶ Second round phone interview with first responder in October 2013.

¹⁷ As an example, the 2011 VIGILANT GUARD Exercise in Arizona allowed for face-to-face interactions between the Phoenix Fire Department, the Phoenix UASI Incident Management Team, and the CA HRF. The GA HRF participated in two VIGILANT GUARD exercises, one in 2012 and another in 2013, during which it was able to work with the civilian responders of the exercises’ host states, North Carolina and Florida, respectively.

¹⁸ The GA HRF conducts regular exercises, both in their home state and in different states within their region. For example, the HRF worked with first responders and the private-sector planners for the music
Though SLTT responders are encouraged to participate in these sorts of exercises, the cuts in funding for SLTT responders over the last five years pose a particular challenge to bring them together with the HRF to “train as you fight.” When reductions in SLTT responders staff have left some unable to sustain response teams, finding the funding to participate in collective exercises with HRF is more difficult still. This will require funding from DoD for the National Guard forces and from DHS for first responders.

**Recommendation 1:** DHS should provide funding to support first responder participation in the National Guard collective training and exercise programs through its homeland security grant program. DHS should also emphasize the importance in its Strategies, Plans, and Implementation guides of responder-wide training integration focusing on routine, annual training and exercises with first responders and the medical community, beginning with the UASI regions that represent the urban areas that face a high threat risk, and expanding as funding allows. For states that do not have UASI regions, the state capital and largest cities should be incorporated into the training and exercise program.

DHS should develop funding for a robust training and exercise program for SLTT first responders to participate in joint exercises with military partners. A joint review between first responders, DHS, and NGB should be conducted to ensure that HRFs are tactically interoperable with SLTT responders.

**Recommendation 2:** DHS (possibly through the DHS First Responder Resource Group) should coordinate with NGB to conduct TTXs with responder leaders in their FEMA region to establish how HRF, CERFP, and WMD-CST capabilities will be integrated into emergency response. TTXs should focus on highest-risk locations (UASI regions and large cities) first and expand to cover lower-risk areas over time.

*Perhaps the most important insight for National Guard Bureau leadership, DHS leadership, and civilian responders is that addressing this joint training and exercising gap will inherently close the following gap, as well.*

**Gap 2:** The HRF and first responders have a very limited and fragmented awareness of each other’s capabilities and limitations.

Interviews, the survey instrument, and similar studies revealed a large gap in the awareness of the capabilities and limitations between the HRF and the first responder community, especially regarding the specific mission areas for CBRN response and mass medical treatment. Only 53 percent of personnel out of 72 responders surveyed had been briefed on the HRF. Some had only heard of the HRF through participation in a joint exercise, of which there are few opportunities.

The force structure is new and not described in terms or built on standards that first responders use on a regular basis, contributing to this lack of understanding. Many first responders voiced concerns about what is going to show up. Over the past decade, DoD
has evolved a dizzying array of ever-changing forces in an effort to meet the DSCA and CBRN missions. From the U.S. Coast Guard’s Redeployment Assistance and Inspection Detachment, or RAID, teams to WMD-CSTs, from the Marine Corps Chemical Biological Incident Response Force (CBIRF) to DoD’s CBRN Consequence Management Reaction Force (CCMRF) to the new DCRF and HRF, the first responders have had to memorize acronyms and slide-deck briefings, punctuated by the occasional, every-few-years exercise. First responders expressed confusion regarding who and what would arrive when support was requested. For the most part, first responders do not draw a distinction between National Guard, Reserve, or active duty members, or even between the branches (Army or Air Guard, for example).\textsuperscript{19}

Changes in DoD and National Guard personnel also prevent first responders from building enduring relationships. They do not understand how the skills and proficiency of military responders are matched to the skills of the first responders. Although the HRF individual skills have been built on civilian standards, the skills inherent in the new HRF capabilities have not been well communicated. Full-time responders also expressed concern that part-time, frequently rotated soldiers and airmen cannot maintain proficiency in the special skills required to operate in a hazardous environment (e.g., as one responder stated, “Will part-time personnel do well in real time?”).\textsuperscript{20} One responder viewed the HRF as having a more generalized skillset rather than being CBRN-specific since the personnel were less experienced than the full-time civilian HAZMAT responders or the WMD-CST members.\textsuperscript{21} To be sure, DoD has used this model effectively for many years, with the mobilization of part-time soldiers providing critical support to the nation’s military capability. It is also important to note that operations in the CBRN environment are central to all military training, and that this background has also been leveraged in development of the CBRN Response Enterprise.

It is important to emphasize that this gap cuts both ways. While the first responder community may have very limited knowledge of the capabilities of the HRF (more accurately, a fragmented knowledge: some know what it is; others have heard of it, but lack detail; yet others have never heard of it), the HRF also appears to have limited knowledge of first responder capabilities. Though some HRF members have been first responders at some point in their careers, the program as a whole has not yet developed close enough relationships with the first responder community to achieve seamless integration. This process is underway but could be enhanced.

There is also a lack of understanding of the limits of each other’s capabilities. For example, one first responder leader in a major urban fire department who was interviewed had never heard of the HRF, despite the presence of an HRF in that state and routine interaction with other National Guard elements, such as a WMD-CST.\textsuperscript{22} From the other view, one National Guardsman indicated that while they were aware of some of the

\textsuperscript{19} Interviews with first responders, IAB, and DHS S&T First Responder Resource Group (FRRG), 2012 and 2013.

\textsuperscript{20} Phone interview with first responder, January 2013.

\textsuperscript{21} Second round interview with first responder in October 2013.

\textsuperscript{22} Author’s observations from field interviews, November 2012 and January 2013.
larger HAZMAT and search and rescue capabilities within their state, they did not have any indication of any other capabilities that might be available within their state.23

For their part, DoD personnel plan on the assumption that first responders could be limited in their ability to perform their jobs after a catastrophic incident. As with any National Guard force, DoD designed the HRF to be deployed after local capabilities are overwhelmed. Both the arrival of military capability that civilians are not familiar with and the lack of clarity of where DoD capabilities will be most appropriately employed are surmountable integration challenges, but they require additional coordination and experience that could be developed through joint training and exercising.

**Recommendation 3:** NGB should develop guidance on how states can best leverage the full-time staff of the HRF and their interactions with the Joint Force Headquarters-States to maximize integration with local, state, and regional response assets and interoperability with first responders. The main linkages that the HRF has with SLTT responders and civilian emergency management are through the Joint Force Headquarters in each state within their region and through the WMD-CSTs, which work with first responders on a more regular basis. Better leverage of these interactions could help improve the knowledge and potential points of interaction between the HRFs and first responders.

**Recommendation 4:** NGB should develop an outreach program, potentially using first responder associations and organizations, as an avenue to educate first responders on DoD CBRN Enterprise capabilities.

**Recommendation 5:** DHS and NGB should work together to create education modules on HRF and first responder capabilities to be used as part of the internal training programs for first responders and HRFs, respectively. DHS grant programs such as the UASI grants could include this training requirement as a means to spread awareness of HRF capabilities to incident management team members and first responders, in general.

**Recommendation 6:** DHS and NGB should create a working group of local first responders (perhaps under FEMA or under the Council of Governors, and possibly drawn from the DHS First Responder Resource Group or the InterAgency Board) who can provide routine interaction with HRF leadership about requirements and capability development, and help develop a common language for the military and civilian capabilities to support interoperability.

The two gaps identified here are overarching strategic issues that must be resolved in an interrelated fashion by DHS/FEMA, the National Guard (and DoD writ large), and the first responder community. DHS/FEMA and NGB are the appropriate organizations to serve as coordinating entities to facilitate opportunities and ensure that funds are available for enabling solutions to these gaps.

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23 Second-round phone interview with state National Guard personnel in September 2013.
Issues

In addition to these two overarching gaps, which require the effort of DHS/FEMA, NGB, and the first responder community to address, this study identified many specific issues that are mostly within the purview of the states’ National Guards, NGB, and DoD to address; a few require the collaboration of DHS. These issues concern strategy, roles or missions, authorities, capabilities, doctrine, organizing, and equipping.

Strategy

Strategy traditionally concerns the ends, ways, and means by which policy will be executed. One strategic issue requires further maturation and development within the HRF program.

- **Need to coordinate response to multiple, simultaneous incidents.** The HRF program is designed to provide response in a CBRN incident but can also be a resource for all-hazards use by states. The National Guard elements of the CBRN Response Enterprise assets may be used for all-hazards response, but they must still be able to respond to CBRN emergencies that occur while they are conducting all-hazards response. There is general agreement among DoD that state governors would cooperate on the deployment and movement of the HRF across state lines, within FEMA regions, and even across FEMA regions. Memoranda of Agreement have been established between governors of HRF host states and the governors of the other states within their region regarding the deployment of the HRF. But some uncertainty still exists about the adjudication of resources among simultaneous CBRN incidents nationally.24 This uncertainty raises three issues:

  o First, at a minimum, TTXs should be conducted among HRF leaders, governors and their staffs, and FEMA to work through scenarios that might test their assumptions about what resources will be shared when choices must be made between competing resource needs. These types of exercises are conducted by FEMA nationally; they should continue and should include discussion of responding to simultaneous events.

  o Second, the command-and-control elements for the HRF should be exercised and drilled in conducting area command operations for multiple units. For example, if multiple HRFs are operating in the same state, they would all fall under the control of a higher Joint Task Force (JTF), likely in a functional

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24 Interviews with current and former National Guard, NGB, and DoD leaders, 2012 and 2013. Generally, National Guard staff felt that this “had all been worked out.” Former officials were more skeptical, especially in scenarios that would require the decision to allocate limited resources between competing states.
arrangement such as a JTF-CBRN. This JTF-CBRN would report directly to the adjutant general or his designee.25

If the incident involves multiple states, then HRFs would likely align along state boundaries (one in each state) preserving state lines of authority and continuity of government. This type of exercise is also conducted by the National Guard and USNORTHCOM but would benefit from better integration with first responders and FEMA. Inclusion of regional FEMA assets and Incident Management Assistance Team representatives would improve regional and national synchronization. These relationships must be further detailed and tested.26

○ Third, the command assumptions regarding a widely dispersed incident, specifically one involving biological materials, will test the routine command and control mechanisms for the HRF, the National Guard, and all national constructs for the Incident Command System (ICS). They will also involve a far wider array of leaders from the health community, specifically the Department of Health and Human Services, state health directors, and local government health directors, outside of the typical FEMA coordinating mechanisms.27

A far-reaching biological scenario that affected a large portion of multiple cities, or even the entire nation, would quickly outstrip the strategic design of the CBRN Response Enterprise. However, the National Guard, and specifically HRFs, is leveraged in state response plans particularly for its ability to mobilize quickly, although some of its capabilities (search and extraction, for example) may not be as relevant in this scenario. A chemical, radiological, or nuclear event would be inherently more localized, with more easily defined boundaries, even if there are multiple incident sites, and will not present the same sort of command and control challenges.

- **The HRF is designed to respond to WMD events, but tension remains regarding its use as an all-hazard response force, as well.** While the majority of interviewees accepted and advocated the use of the HRF as an all-hazards response force, there was nevertheless an evident tension between its use in all-hazard response and its availability for CBRN events. For example, different perspectives were offered as to whether the HRF would be called upon following any large-scale domestic incident or would be more appropriately held in reserve in case of a WMD incident.28 With its large number of personnel, the HRF can be used often as an all-hazards response force, providing additional personnel to support many different types of operations. Currently, HRF elements can be

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25 The adjutant general of a state is the senior officer in charge of that state’s National Guard. The adjutant general reports directly to the governor.

26 NGB and National Guard staff, April 2013.

27 Interviews with first responders, IAB, and FRRG, 2012 and 2013.

28 Interviews with National Guard staff, 2012 and 2013.
leveraged for their quick deployment time to support all-hazards response; however, they must be prepared to divert to a CBRN event if one occurs while they are in use.

**Recommendation 7:** HRFs should plan and exercise for multiple simultaneous incidents, including multiple jurisdictional areas, and requiring fast deployment and robust, long-term logistical sustainment to test the operational concept.

**Roles or missions**

The HRF has a specific role and mission set that incorporates command and control, interoperable communications, medical support, CBRN assessment, mass decontamination, search and extraction, and fatality management. While, in general, interviewees supported the overall HRF mission, they brought up several issues that may require further examination to determine if the HRF is appropriately meeting that mission.

- **Some first responders suggest the HRF’s decontamination mission may be too late to make a difference.** The current construct is for HRFs to conduct mass decontamination operations on people. However, some first responders indicated that this mission may be too little, too late, no matter how aggressive the timeline for HRF operations.²⁹

Additionally, the majority of first responders are capable of creating mass gross decontamination processes in the aftermath of an event. Gross decontamination often involves using standard fire equipment to hose down potentially contaminated victims. This process lacks verification of the efficacy of decontamination and is difficult to use on injured or non-ambulatory victims. HRF decontamination is more robust than gross decontamination, incorporating the ability to verify reduction of contamination, process personal effects, address privacy concerns, and safely handle non-ambulatory individuals. HRF decontamination capability may also be prepositioned for planned events that face a high threat risk.

Some responders suggest the decontamination priority may be to conduct mass, technical decontamination on specific infrastructure, such as hospitals, or technical decontamination on equipment operating in hot zones for days in the aftermath of an event (as was the case in Japan after the Fukushima nuclear incident in 2011). The HRF decontamination team is modular in design and could respond to an incident site for mass decontamination operations on people and equipment, a hospital for patient decontamination, or at a shelter site. It provides a robust decontamination capability that can aid in the reduction of the spread of contamination.

Concerns regarding timing of response, however, may be due to a limited understanding and experience with HRF deployment. In the design of the CBRN

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²⁹ Interviews with first responders, IAB, and FRRG, 2012 and 2013.
Response Enterprise, the HRF and its smaller CERFP counterparts were positioned to cover more than 98 percent of the U.S. population within a five-hour drive. From this positioning, it is commonly said that National Guard lifesaving capability can be at an incident within 12 to 18 hours after notification. The HRF can deploy in a modular manner, with the full CERFP element of the HRF deploying by six hours after notification. In practice, however, HRFs have demonstrated the ability to deploy their full package in four hours following notification. Since, in most regions, a HRF can arrive and be operational within the first 24 hours of a response, it is still considered part of the immediate response phase. For the scale of incident for which a HRF would be involved, CBRN response operations would still be ongoing by the time the HRF arrives.30

Authorities

Authorities concern the legal and regulatory rules that permit the HRF to conduct its missions. While the authorities governing the use of National Guard forces in the homeland have matured over the last century, one issue requires additional study and development.

- What circumstances would raise the issue of federalizing the HRF under the direction of USNORTHCOM and the National Command Authority? While the HRF would normally operate in state active-duty or Title 32 status like any National Guard unit, its regional use assumes cooperation and agreement between governors. Should there be disagreement, at what stage would the National Command Authority need to be invoked by elevating the HRF to a Title 10 force and assigning it to USNORTHCOM under the command of the President? Are there other circumstances in which the HRF would be deployed in Title 10 status?

Interviews with Defense Coordinating Officers, the DoD representatives to FEMA Regional Offices, indicated that there has been little to no discussion on the federalization of the HRF because they do not believe it would ever happen. In some cases, they said that since they already have Title 10 assets like the DCRF and CBIRF, the HRF would not be considered despite the differences in response times. These individuals indicated that FEMA does not see the HRF as regional assets to be accessed by the federal government (that is, deployed in Title 10 status) without the approval of the host state’s governor.31 A recent DoD Instruction that allows for National Guard units in Title 32 status to receive mission assignments from federal departments and agencies have further reduced the likelihood that Title 10 authority would be sought.32

It should be noted that while some assume that placing National Guard personnel under Title 10 authority is related to the scale of an incident, policy and

30 Second round interview with first responder in October 2013.

31 From interviews with Defense Coordinating Officers conducted in September 2013.

32 DoD Instruction 3025.22, Use of the National Guard for Defense Support of Civil Authorities, 26 July 2013.
experience indicate that is not the case. The major indicator for transition to Title 10 authority is government incapacitation. This issue could apply to the case above, where a state was unable to share the federally funded HRF resource, and could also exist if a state government had been destroyed.

**Recommendation 8:** DoD and DHS/FEMA leadership should explore triggers for reclassification of the HRF as a Title 10 force. These scenarios should be validated through TTXs among senior leaders, and these thresholds should be discussed and ideally developed with the Council of Governors.

**Capabilities**

Capabilities concern the specific, articulated capacity of the HRF program, including the amount of lifesaving resources it can provide in a timely fashion in support of state and local first responders during a complex catastrophe. Several issues related to the capability of the HRFs were raised for discussion. In addition, one important issue was raised related to the capacity of DoD’s broader CBRN response capability. It is included here because it underlies a specific role of the HRF: to serve as a bridge between SLTT first responders and the larger DoD and other national response capabilities that would be brought to bear in a CBRN incident.

- **Is this enough force for a complex catastrophe, especially a CBRN incident?**
  While the total number of personnel in each HRF is listed at 577, the actual number of trained, operating personnel carrying out CBRN missions would be less than that. The CERFP element of the HRF, comprising 186 personnel, conducts the CBRN operations at an incident site. To conduct continuous, 24 hour operations, two additional CERFPs would be required. The regional command and control element of the HRF then manages the rotation of CBRN units to support sustained operations. In complex catastrophes, NGB expects multiple HRFs to be employed simultaneously.\(^{33}\)

- **The HRF’s operational cycles and risk guidelines should be synchronized with those of its civilian counterparts.** The conditions in which HRFs and first responders are allowed to operate, both in and out of a hazardous environment, must be synchronized by the incident command structure. Because of the HRF’s military nature, some have suggested that HRF personnel may be allowed to take greater risk than civilians; their civil counterparts are limited by strict exposure limits and physical assessments during the performance of hazardous incident operations.\(^{34}\) The military does not have to maintain the same standards, which potentially provides additional flexibility.

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\(^{33}\) Interviews with current and former DoD and National Guard staff, 2012 and 2013; personnel within the HRF system generally felt it was about right; personnel outside the system generally felt the force was too small for various worst-case scenarios. This is a reflection of gap 2.

\(^{34}\) The National Fire Protection Association, the Occupational Safety and Health Administration, the Environmental Protection Agency, and the U.S. Coast Guard govern many of the standards for hazardous materials response.
However, HRFs are prepared to operate within civil guidelines under a unified command and must be prepared to help deconflict issues that may arise between civilian and military responder organizations. The HRF relies first on the WMD-CST to act as a go-between among military and civilian officials to ensure HRF members and responders have access to the best information to make informed decisions about operational limits during an incident.

The HRF may also wish to establish relationships with other hazard risk assessment capabilities that it may encounter during response operations, such as other military environmental hazard units, which can also conduct hazard assessment for military and civilian officials. This link will ensure HRF members have familiarity with additional resources to make informed decisions during an incident.  

Additionally, given that a CBRN incident or complex catastrophe might require weeks of operations and additional personnel, the HRF may wish to explore its ability to function as a trainer for just-in-time training of non-HRF personnel in CBRN support. For many years, the National Guard has conducted just-in-time training for forces used on wildland fires; a similar training program may be useful to mitigate against the challenge of sustaining long-term operations.

- **How well will part-time National Guard personnel do in a real-world incident?**

  Is it really possible to maintain proficiency in a wide variety of special, technical response specialties (search and extraction, decontamination, hazardous operations) using part-time personnel who may have limited real-world experience? Some concern exists within the first responder community about the skillset and experience of HRF personnel, who serve in a part-time fashion within a force comprised of units that also serve other functions within the National Guard. Among the first responder community, a rule of thumb is that proficiency in special operations skills (such as technical rescue and HAZMAT) has a half-life of about six months—that is, without continued training or real world experience, those skills begin to degrade by half at the six-month mark and drop off from that. HRFs must perform at least two collective training events per year as part of their yearly training plan. This training construct supports the first responder rule of thumb, but HRF training cycles should be reviewed over the next two years by the HRF program leadership to ensure adequate training of proficiency is maintained. Some individual training cycles may require adjustment by NGB to manage these proficiencies.

- **If the HRF is designed to “bridge the gap” before extensive federal follow-on from other national assets, who constitutes that follow-on?**

DoD’s 2008 force

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35 U.S. Navy environmental health teams were used to assess the conditions in the New Orleans EOC after Hurricane Katrina, author’s personal observations, 2005.

36 Interviews with first responders, IAB, and FRRG, 2012 and 2013.

37 Ibid.

38 NGB staff, 2013.
structure plan included three brigade-strength (5,000-plus personnel each) CCMRF units to fill the DoD’s domestic CBRN capability. Following the results of the 2010 Quadrennial Defense Review and Secretary of Defense instruction, DoD reorganized the first CCRMF into the DCRF and the second and third CCMRFs into the two C2CREs. These forces comprise the DoD follow-on to the National Guard components and are intended to support other general purpose or specialized military forces requested by civil authorities. The planning for CBRN Response Enterprise response, including the doctrinal guidance found in Joint Publication 3-41, does not include much guidance on integration with external stakeholders. A complex catastrophe involving CBRN would necessitate a whole-of-community approach, including local, state, and federal resources (especially the Environmental Protection Agency, the Departments of Energy and Health and Human Services, and various DHS entities), as well as the private sector and foreign assets. Many of the scenarios developed by DHS fit into the category of complex catastrophes and may even overwhelm the current CBRN Response Enterprise construct. For this reason, further study with all the stakeholders is warranted.

Recommendation 9: DoD and DHS/FEMA should jointly lead a national conference to discuss needed national requirements and capabilities for a complex catastrophe. The conference should also involve stakeholders from other federal agencies and the private sector to provide a whole of community view of response requirements, existing capabilities, and gaps in those capabilities.

Recommendation 10: NGB should work with the States and the Army to stabilize the membership of the HRF (and other National Guard CBRN response enterprise assets) as much as possible, while not reducing HRF personnel readiness to conduct National Defense Missions, to build the enduring relationships with the responder community critical to effective emergency response.

Doctrine

Doctrine concerns the national policies, procedures, and guidelines that standardize the strategic and tactical approaches for planning and operations.

• Findings indicate a need for a more robust DoD and DHS enterprise-wide joint doctrine concerning all CBRN Enterprise response forces. This joint doctrine should include DHS/FEMA, National Guard, Reserve and active-duty CBRN forces, and first responders. While doctrine exists to guide DoD CBRN consequence management, the publication includes little guidance on integration with first responders beyond highlighting National Incident Management System and ICS principles. A more detailed joint effort could lay a more complete foundation for integration of DoD and SLTT forces. Doctrine should also examine

39 Chemical, Biological, Radiological, and Nuclear Consequence Management (Joint Publication 3-41, 21 June 2012).

40 Ibid.
integration of these forces during all-hazards response given the potential use of these forces for DSCA missions in a complex catastrophe.

- **HRF doctrine needs further integration with SLTT first responder doctrine, especially in relation to HAZMAT response, mass casualty treatment, and decontamination standards.** As indicated, first responders are guided by various national consensus standards and laws regarding HAZMAT operations.\(^{41}\) HRF doctrine was developed based on civilian standards, but mass casualty standards of care and the establishment of reduced medical standard-of-care protocols for disaster response are varied and in flux. Standards for what constitutes effective decontamination (“how clean is clean?”) also vary depending on the type of incident. While these SLTT standards are in various states of development and change, HRF leadership should be involved with and aware of the processes by which they are established and be able to loop lessons learned back into doctrinal changes.

- **Lessons and identification of best practices across the DoD CBRN enterprise seems limited.** The CBRN Response Enterprise does not seem to be capturing and distributing lessons in the same manner as the rest of DoD. For example, many DoD lessons from Haiti and from Japan’s Fukushima incident were not readily available or known to National Guard personnel interviewed.

**Recommendation 11:** DoD and DHS/FEMA should explore the development of enterprise-wide, joint doctrine for all-hazards response. For the DSCA missions, this task will mean incorporating the procedures of SLTT first responders.

**Recommendation 12:** DoD should develop standardized guidance for the CBRN Enterprise response forces on the collection and dissemination of lessons learned and best practices.

**Organizing**

Organization describes the specific structures and methods of coordinating and reporting (i.e., the organizational chart) that constitute the way any group is formed to conduct work.

- **Each sponsoring state uses different rotational cycles and different units to constitute the HRF.** As previously stated, rotational cycles will affect HRF operations and readiness. While the overall force construct of each HRF provides the same capabilities, each state that sponsors a HRF draws on different types of units and different rotation patterns to create the HRF. The balance between the National Guard’s domestic responsibilities and its warfighting mission in support

\(^{41}\) The National Fire Protection Association, the Occupational Safety and Health Administration, the Environmental Protection Agency, and the U.S. Coast Guard govern many of the standards for hazardous materials response.
of national security is a century-old challenge. Given that DoD has reduced the number of active duty forces dedicated to the CBRN mission, it may be prudent to increase the number of units dedicated to the HRFs, as opposed to rotating through units that serve within the HRF only during response and maintain other full-time responsibilities. In some states, these units are the only units that fill specific functions for their home state as their regular role and deployment with the HRF leaves the state without any redundancy to complete that function.

- **The HRF commanders will likely face command challenges that are greater than their military peers. The chain of command may become muddied in the face of a domestic incident, and an uncertain chain of command is anathema for a military officer. Nevertheless, this situation may reflect operational reality within the homeland.** A HRF commander may, in any given incident, be required to coordinate with a vast array of command structures at the local, state, or federal levels and operate across military and civilian domains. He or she must understand which assets, from which domains, can be applied best to support the emergency situation at hand. The commander must also understand the appropriate scale of response in light of the asset’s accessibility and specialization. This situation will require the selection of HRF commanders who are attuned to the competing tensions within the various chains of command, can foresee and navigate potential conflict, can support the unity of effort required to respond to domestic incidents of the magnitude that would require a HRF, and operate with meta-leadership principles. The military prides itself on the development of leaders, and it has developed some of our nation’s best. But the unique mission of the HRF may require additional personal and political skills that go beyond what a normal National Guard brigade commander may face.

- **The use of ICS and the National Incident Management System is still not universal.** While National Guard personnel have made great strides in learning, understanding, and operating following National Incident Management System principles and ICS structure over the past decade, it is still not universally employed. The greater DoD forces lack familiarity with the ICS structure and its implementation. One responder stated that the lack of understanding of ICS principles resulted in issues with the HRF internal processes integrating with the civilian incident management team processes. The HRF can play an important role acting as a translator between military command-and-control constructs and the first responder ICS structure.

- **More planning is needed to account for the integration of multiple CST and CERFP units under the HRF umbrella.** The CST and CERFP units still operate as independent units under the umbrella of the HRF, which is often hosted in

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43 Second-round interview with a first responder in October 2013.

44 Interviews with first responders, IAB, and FRRG, 2012 and 2013.
another state within the FEMA region. Some CERFP members have not drilled within the overarching HRF construct. Observations from an integrated exercise in 2011 highlighted some of the existing issues with how CERFPs and CSTs organize and operate under a HRF’s command and control.45 The National Guard plans to further integrate these operations through the use of regional training sites organized within each FEMA region.

- If possible, it will be important to co-locate civilian and military command structures in the event of an incident. The HRF brings a large command post and staff, which may have the unintended effect of isolating HRF from SLTT first responders. At a minimum, plans should be made for the exchange of liaison officers between the HRF and SLTT responders when the HRF deploys. The size and capabilities of an Army brigade command and control staff, on which the HRF command and control element is modeled, bring significant resources to an incident commander of a CBRN incident. The HRF command and control has a significant planning capability and other management elements similar to a Type I Incident Management Team.46 Co-location has occurred during exercises and allowed civilian responders a clarification on the HRF capabilities and HRF personnel a clearer understanding of incident management processes, such as showing HRF personnel how to request supplies through the civilian logistics section.47 Further study by NGB and FEMA, and familiarization between HRF command and control and their civilian counterparts, will uncover more ways to leverage the HRF command and control.

**Recommendation 13:** NGB should emphasize the importance of, and provide funding for, HRF commanders and HRF senior officers for joint training, joint education, and joint assignment opportunities with their civilian counterparts, notably police chiefs, fire chiefs, and local emergency managers.

**Equipping**

Equipping includes the operating equipment, tools, vehicles, and protective gear needed to sustain the HRF operational mission.

- Resupply of the HRF may be a challenge in complex catastrophes, for example if transportation infrastructure is damaged or multiple HRFs are deployed simultaneously. Each HRF is equipped for five days of operations. There is still some uncertainty in the responder community as to how the various logistics systems for resupplying the HRF will work together to maintain equipment on

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45 Second-round interview with a first responder in October 2013.

46 Incident management teams are typed based on complexity of the incident. Type 1 Incident Management Teams are national assets comprising approximately 60 federal, state, and local responders. These teams respond to complex incidents requiring all command and general staff positions along with their functional staffs within the ICS structure. Type 1 teams provide support for incidents covering multiple operational periods in support of local responders.

47 Second-round interview with a first responder in October 2013.
hand for resupply of multiple units or over an extended time. It was reported that there was equipment available to resupply the HRF for six to 10 additional days. Responder concerns were especially noted related to the number of personal protective equipment such as HAZMAT suits, boots, and mask filters available for HRF personnel.

HRF equipment consists of both standardized military equipment and equipment procured from civilian sources, called commercial off-the-shelf (COTS) equipment. Standardized military equipment, including radiation detection gear, for example, is procured and sustained through standard military systems supporting the entirety of DoD. COTS systems, such as civilian personal protective equipment, are procured by various means and sustained through a centralized support center.

With regard to COTS equipment, HRFs and civilian responders rely on the same industrial base. Responders were concerned that, in a catastrophic event, resupply of COTS equipment could be exhausted. In this case, the industrial base would have to be mobilized to sustain response efforts. There was also concern about how resupply could be affected if the transportation infrastructure were damaged, with suppliers unable to bring new resources into the affected area. Though the focus of the HRF is on response and lifesaving, the National Guard, as well as DoD entities, has the capability to contract with civilian partners for additional resources in the event of extended operations during a complex catastrophe. Additional supplies can also be obtained through the logistics section of the civilian incident management command.

- **The HRF should determine the strengths and weakness of using government-off-the-shelf equipment (GOTS) rather than COTS equipment.** GOTS equipment may be standardized among the military but also may depend on different sources of funding or capital improvement for replacement. There may be more flexibility in acquisition of COTS equipment since civilian responder logistical chains may be used for resupply and this equipment may have greater interoperability with first responder equipment. This issue was raised during several site visits and requires further study.

- **First responders may request use of HRF gear and supplies.** HRF commanders should be prepared for these requests and understand it may be appropriate, in some instances, to grant them, but that it also may reduce the time the HRF can sustain itself. During large domestic events, it is common for response assets to be pooled under a single logistics section for use by all responders. During a complex catastrophe, HRF equipment such as personal protective equipment, hazard detection devices, rescue and medical supplies, and communications gear may be needed by SLTT responders. One interviewee stated that it would be

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48 Interviews with HRF staff, 2012.
49 Second-round interview with a first responder in October 2013.
50 Interviews with HRF and NGB staff, 2012 and 2013.
unlikely for an HRF to share equipment with first responders, but that may not prove realistic during an event being overseen by political leadership. Likewise, the HRF should familiarize itself with common civilian equipment, which may be needed during sustained operations, especially if HRF and units SLTT are commingled.

It is important to note that equipment sharing must only be considered when both parties understand the capabilities and limitations of the equipment being shared. Sharing of protective suits and filters, for example, would be relatively straightforward between HRF members and responders. However, sharing of military detection gear could be more problematic. HRF members receive detailed training on capabilities and limitations of detection equipment that may not be understood by responders untrained on that equipment. Lack of understanding of the limitations of the equipment may translate to failure to detect a hazard. In the response phase of an incident, it may be better to integrate HRF personnel with SLTT responder teams to best leverage unfamiliar HRF equipment.

**Recommendation 14:** NGB should undertake an assessment of the capacity for sustainment during a catastrophic response when resupply is needed, including a study of the effect of sharing equipment with responders. The National Guard should exercise the capability to resupply the HRF and other National Guard responders in a catastrophic CBRN incident response.

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51 Interview with HRF staff, 2012.

52 This is a common occurrence at National Special Security Events, where DoD units are often formed together with civilian units into Joint Hazard Assessment Teams (JHAT).
CONCLUSION: SUMMARY OF RECOMMENDATIONS AND THOUGHTS FOR FUTURE STUDIES

The findings of this study indicate there are two key gaps in the effort to integrate the National Guard Homeland Response Forces with first responders, along with numerous other issues that are important to address to improve the effectiveness of the HRF mission.

The two gaps—limited opportunities and funding for joint, routine, and regular training and exercises between the HRF and first responders and lack of awareness of each other’s capabilities and limitations—can be closed. Notably, the best way to close those gaps may be to focus on addressing the first gap by integrating training and exercising. A robust, integrated training and exercise program with first responders and the HRF will inherently build mutual awareness of each other’s capabilities.

Additionally, NGB needs an effective marketing and engagement strategy with civilian responder organizations. This effort could include the joint development of training modules with DHS for HRF personnel and first responders as well as building outreach programs to spread knowledge and understanding.

Recommendations

The following 14 specific recommendations were made in this report, delineated here by the main agency or agencies that should take the lead in considering their implementation.

For Department of Homeland Security:

- Recommendation 1: DHS should provide funding to support first responder participation in the National Guard collective training and exercise programs through its homeland security grant program. DHS should also emphasize the importance in its Strategies, Plans, and Implementation guides of responder-wide training integration focusing on routine, annual training and exercises with first responders and the medical community, beginning with the UASI regions that represent the urban areas that face a high threat risk, and expanding as funding allows.

- Recommendation 2: DHS (possibly through the DHS First Responder Resource Group) should coordinate with the NGB to conduct TTXs with civilian responder leaders in each FEMA region to establish how HRF, CERFP, and WMD-CST capabilities will be integrated into emergency response. TTXs should focus on most high-risk locations (UASI regions and large cities) first and expand to cover lower-risk areas over time.
For Department of Homeland Security and the National Guard Bureau:

- Recommendation 5: DHS and NGB should work together to create education modules on HRF and first responder capabilities to be used as part of the internal training programs for first responders and HRFs, respectively. DHS grant programs such as the UASI grants could include this training requirement as a means to spread awareness of HRF capabilities to incident management team members and first responders, in general.

- Recommendation 6: DHS and NGB should create a working group of local first responders (perhaps under FEMA or under the Council of Governors, and possibly drawn from the DHS First Responder Resource Group or the InterAgency Board) who can provide routine interaction with HRF leadership about requirements and capability development, and help develop a common language for the military and civilian capabilities to support interoperability.

For Department of Homeland Security and the Department of Defense:

- Recommendation 8: DoD and DHS/FEMA leadership should explore triggers for reclassification of the HRF as a Title 10 force. These scenarios should be validated through TTXs among senior leaders, and these thresholds should be discussed and ideally developed with the Council of Governors.

- Recommendation 9: DoD and DHS/FEMA should jointly lead a national conference to discuss needed national requirements and capabilities for a complex catastrophe. The conference should also involve stakeholders from other federal agencies and the private sector to provide a whole of community view of response requirements, existing capabilities, and gaps in those capabilities.

- Recommendation 11: DoD and DHS/FEMA should explore the development of enterprise-wide, joint doctrine for all-hazards response. For the DSCA missions, this task will mean incorporating the procedures of SLTT first responders.

For the National Guard Bureau:

- Recommendation 3: NGB should develop guidance on how states can best leverage the full-time staff of the HRF and their interactions with the Joint Force Headquarters-States to maximize integration with local, state, and regional response assets and interoperability with first responders.

- Recommendation 4: NGB should develop an outreach program, potentially using first responder associations and organizations, as an avenue to educate first responders on DoD CBRN Enterprise capabilities.

- Recommendation 7: HRFs should plan and exercise for multiple simultaneous incidents, including multiple jurisdictional areas, and requiring fast deployment and robust, long-term logistical sustainment to test the operational concept.
Recommendation 10: NGB should work with the States and the Army to stabilize the membership of the HRF (and other National Guard CBRN response enterprise assets) as much as possible, while not reducing HRF personnel readiness to conduct National Defense Missions, to build the enduring relationships with the responder community critical to effective emergency response.

Recommendation 13: NGB should emphasize the importance of, and provide funding for, HRF commanders and HRF senior officers for joint training, joint education, and joint assignment opportunities with their civilian counterparts, notably police chiefs, fire chiefs, and local emergency managers.

Recommendation 14: NGB should undertake an assessment of the capacity for sustainment during a catastrophic response when resupply is needed, including a study of the effect of sharing equipment with responders. The National Guard should exercise the capability to resupply the HRF and other National Guard responders in a catastrophic CBRN incident response.

For the Department of Defense:

Recommendation 12: DoD should develop standardized guidance for the CBRN Enterprise response forces on the collection and dissemination of lessons learned and best practices.

Future Studies

This study was intended to provide insight into the current state of the HRF in its effort to integrate with civilian responders. For DoD, NGB, and DHS, a broader series of studies may also be insightful to improve its DSCA efforts.

There is a need to study the broader CBRN response forces. The HRF is but one component of a much broader enterprise. DoD should consider similar studies for the DCRF, the Air Guard’s urban search and rescue program, and the Marine Corps’ CBIRF.

DoD should conduct a more detailed requirements analysis for specific CBRN capabilities, especially for the HRF. For example, how much decontamination capability is needed, and what kind? Should the logistics or energy missions be added to the military DSCA portfolio? This effort should involve first responders who can help DoD articulate a robust series of requirements, based on the capabilities of both DoD and the first responder community.

We must study what the “whole of government” and “whole community” approaches to complex CBRN catastrophes will be. DoD and DHS should undertake similar studies of the complex catastrophes that incorporates active duty entities such as U.S. Army North, USNORTHCOM, Joint Task Force Civil Support; other National Guard entities such as the Domestic All-Hazards Response Team; other federal agencies such as the Department of Energy, the Environmental Protection Agency, and Health and Human Services; and the
private sector. The government has articulated worst-case scenarios, such as FEMA’s maximum of maximums.\textsuperscript{53} It is time to more robustly build capabilities toward them, or at least understand where capabilities will remain deficient, as part of the everyday trade-offs that society makes in managing risk.

- \textbf{It is time to determine the true capabilities of SLTT first responders.} The challenge of determining what capabilities actually exists for dealing with CBRN incidents such as HAZMAT, technical rescue, and medical surge resources. Once an account is taken, DoD, NGB, DHS, and others can determine how best to fill the gaps that exist between existing capabilities and requirements for complex catastrophes. Currently, there is too much guesswork and too little actual knowledge of what resources can be brought to bear in response to complex catastrophes.

- \textbf{The CBRN Response Enterprise should develop better performance measures.} The CBRN Response Enterprise has not done a good job of articulating outcome-based performance measurements. The enterprise must articulate and test more strategic outcome-based measures that go beyond the time-phased deployment of resources and equipment. Establishing clearer performance outcome measures will assist with fighting for and maintaining sustainable program support across the CBRN Enterprise in this political and fiscal climate.

This work is presented with the intent to help improve the nation’s response to the most complex catastrophes, and with appreciation for the hard work done by thousands of people every day to ensure the system will work when needed. It is a truly wicked challenge to build a robust capability to respond to the most unthinkable of events. Any errors or omissions are the responsibility of the author; please take them with that original intent in mind.

\textsuperscript{53} As part of its “Whole Community” strategy, FEMA introduced its “maximum of maximums” idea to encourage stakeholders to prepare for worst case scenarios. These disaster scenarios were meant to go beyond the capability of government resources.
BIBLIOGRAPHY


APPENDIX A. ADVISORY PANEL AND EXPERT REVIEWERS

These subject matter experts helped guide and shape this study and provided feedback and validation for its findings and recommendations. However, final wording, errors, or omissions remain the responsibility solely of the author.

Acting Fire Chief Loren S. Fuller

Deputy Fire Chief Scott Fuller serves as interim fire chief for the city of Las Vegas, Nevada. Chief Fuller has more than 21 years of service with Las Vegas Fire & Rescue, serving as a firefighter, engineer, captain, battalion chief, assistant fire chief, and deputy fire chief. As a deputy chief, Fuller has worked in operations, support services, business and planning, and homeland security. He is also a member of the Nevada Homeland Security Commission. Chief Fuller has also served more than 30 years in the National Guard. He is currently a colonel and commands the 65th Field Artillery Brigade, based in Utah.

Battalion Chief Robert Ingram

Robert J. Ingram is currently the Fire Department of New York’s branch chief of WMD and terrorism preparedness. He is a 33-year veteran of the fire service. He was chief in charge of HAZMAT operations from September 11, 2001, until August 2007. His current assignment in the FDNY’s Center for Terrorism and Disaster Preparedness involves WMD and disaster preparedness planning. Chief Ingram is a member of the National Fire Protection Association 472 Committee and an International Association of Fire Fighters master instructor. Chief Ingram has been a member of the InterAgency Board for the Standardization and Interoperability of CBRN Equipment since 1999 and served as chair for three years. Chief Ingram holds a bachelor’s degree in fire and emergency management; he is a graduate of the Naval Postgraduate School Executive Leadership Program and the FDNY’s Fire Officers Management Institute at Columbia University.

Admiral Timothy J. Keating

Adm. Timothy J. Keating is a member of the Naval Postgraduate School Board of Advisors and the Council on Foreign Relations. A board member of the Jamestown Foundation, he also serves the Naval Aviation Museum as a trustee and is a member of the Virginia Commission for Military and National Security Affairs and the Secretary of the Navy Advisory Panel. Before his retirement from active duty in 2009, Admiral Keating was commander of the U.S. Pacific Command, headquartered in Honolulu, Hawaii. Previous tours included command of the U.S. Northern Command and North American Aerospace Defense Command, director of the Joint Staff in the Pentagon, and several Navy operational commands including the U.S. Fifth Fleet and the USS Kitty Hawk battle group.

Lieutenant Colonel Clay McGuyer
Lt. Col. J. Clay McGuyer is the deputy division chief, Countering WMD Division at the National Guard Bureau Domestic Operations & Force Development Directorate. His primary responsibilities include program integration and management of the National Guard Weapons of Mass Destruction-Civil Support Teams, CBRN Enhanced Response Force Packages, and Homeland Response Forces. His duties include institutionalizing newly established CBRN response capabilities into Defense Department and interagency processes. His efforts directly support national security at the state, regional and federal level, and include building relationships with international partners. He has contributed to the development of the National Preparedness Goal with the Federal Emergency Management Agency, mass human chemical decontamination standards with the Department of Homeland Security, and the National Strategy on CBRN Standards and Grand Challenges for Disaster Reduction with the White House Office of Science and Technology Policy.

General Craig McKinley

Gen. Craig R. McKinley served as the 26th chief of the National Guard Bureau and as a member of the Joint Chiefs of Staff. In this capacity, he served as a military adviser to the President, the Secretary of Defense, and the National Security Council, and was the Department of Defense’s official channel of communication to state governors and to adjutants general on all matters pertaining to the National Guard. He was responsible for ensuring that the more than half a million Army and Air National Guard personnel remained accessible, capable, and ready to protect the homeland and to provide combat resources to the Army and the Air Force.

Chief James Schwartz

James Schwartz is chief of the Arlington County Fire Department in Arlington, Virginia. Before his appointment in 2004, he served in a variety of fire department positions including assistant chief for operations, responsible for all response-related activities, including fire, EMS, hazardous materials and technical rescue response, incident management, and operational training. In April 2003 he was assigned to the Office of the County Manager, where he served as the director of emergency management until his appointment as fire chief. Chief Schwartz chairs the International Association of Fire Chiefs’ Committee on Terrorism and Homeland Security. He is also a member of the Interagency Board on Equipment Standardization, and he serves on the Advisory Council for the Interagency Threat Assessment Coordinating Group at the National Counter Terrorism Center. In 2009 Schwartz was appointed by the Secretary of Homeland Security to the Homeland Security Quadrennial Review Advisory Committee. Schwartz served as incident commander at the Pentagon on 9/11.

Lieutenant General Guy C. Swan III

Lt. Gen. Guy C. Swan III currently serves as a vice president of the Association of the United States Army. During more than 35 years of active service, he commanded at every level through Army Service Component Command. A career armor/cavalry officer, his general officer assignments included commanding general of the U.S. Army North/Fifth Army; commanding general of the U.S. Army Military District of Washington and commander of the Joint Force Headquarters-National Capital Region; commanding
general of the Seventh Army Training Command, U.S. Army Europe/Seventh Army; chief of staff and director of operations of the Multi-National Force-Iraq during Operation Iraqi Freedom; director of operations, U. S. Northern Command; and chief of Army Legislative Liaison.
APPENDIX B. INTERVIEWEES

This appendix lists the persons who were interviewed for this study. Some interviews took place in groups, others in one-on-one sessions.

DHS Science and Technology Directorate, First Responder Resource Group

- Steve Vandewalle, San Diego Fire Rescue, Air Operations Division, California
- Jeff Rubin, Tualatin Valley Fire Rescue, Office of Emergency Management, Oregon
- Loren S. Fuller, Interim Fire Chief, City of Las Vegas Fire, Nevada, and Colonel, Utah National Guard, J3
- Tim Wiedrich, Emergency Preparedness & Response Section Chief, North Dakota Department of Health

InterAgency Board Strategic Planning Sub-Group (summer 2012 meeting, Baton Rouge, LA)

- Mark Anderson, Bellevue (Washington) Fire Department
- Robert Johns, Department of Homeland Security, Domestic Nuclear Detection Office
- Amy Donahue, University of Connecticut
- Deputy Chief Jeffrey Dulin, Charlotte (North Carolina) Fire Department
- Cheryl Gauthier, Massachusetts Department of Public Health, Bioterrorism Response Laboratory
- Chief John Gibb, Salem (New York) Volunteer Fire Department
- Battalion Chief Robert Ingram, Fire Department, City of New York
- John Koerner, Department of Health and Human Services, Assistant Secretary of Preparedness and Response, Office of Preparedness and Emergency Operations
- Carolyn Levering, City of Las Vegas (Nevada) Office of Emergency Management
- Lt. Col. J. Clay McGuyer, National Guard Bureau, J-3/7
- Raymond Mollers, Department of Homeland Security, Office of Health Affairs, Medical First Responder Coordination Branch
- Daniel O’Connell, Chicago (Illinois) Fire Department
- Assistant Chief Michael Sanford, Seattle (Washington) Police Department
- Thomas Sharkey, National Bomb Squad Commanders Advisory Board
• Assistant Chief A.D. Vickery, Seattle (Washington) Fire Department
• Arturo Mendez, New York Police Department, Counterterrorism Bureau
• Robert Tuohy, Homeland Security Studies and Analysis Institute

**State of Ohio**

• Maj. Gen. Deborah Ashenhurst, Adjutant General of Ohio, Ohio National Guard
• Brig. Gen. Dana McDaniel, Commander, Ohio Homeland Response Force
• Gen. Mark Stevens, Air National Guard Director of Joint Staff
• Col. Jeff McMullen, Air National Guard Air Deputy
• Col. Paul McAllister, Ohio Homeland Response Force
• Col. Scott White, Ohio Homeland Response Force
• Maj. Andrew Sabata, Ohio Homeland Response Force
• Maj. Audrey Fielding, Casualty Assistance Element, Ohio Homeland Response Force
• Capt. Jason Douthwaite, Logistics Chief, Ohio Homeland Response Force
• Nancy Dragani, Director, Ohio Emergency Management Agency
• Dennis Tomcik, Planning Section Chief, Ohio Emergency Management Agency
• Fire Chief Gregory A. Paxton, Columbus Division of Fire
• Chief David Whiting, Columbus Division of Fire
• Capt. Steve Saltsman, Bomb Squad Commander, Columbus Division of Fire
• Lt. Lee, FBI Joint Terrorism Task Force Liaison, Columbus Division of Fire

**State of West Virginia**

• Gen. James A. Hoyer, Adjutant General, West Virginia National Guard
• Col. Harrison B. Gilliam, West Virginia National Guard CERFP
• Lt. Col. Joseph Peal, West Virginia National Guard CERFP
• Lt. Col. Jeffrey Perkins, West Virginia National Guard CERFP
• Maj. Robert Wasser, West Virginia National Guard CERFP
• Capt. Walter S. Hatfield, West Virginia National Guard CERFP
Robert O. Smith, Director, Division of Protection and Programs

National Guard Bureau, Arlington, Virginia

- Maj. Gen. Gerry Ketchum, National Guard Bureau J-3/7, Director of Domestic Operations and Force Development
- Heinrich J. Reyes
- Lt. Col. Clay McGuyer
- Maj. Paul Best

Subject Matter Experts

- Hon. Paul McHale, former Assistant Secretary of Defense for Homeland Defense

Second Round Interviews

- Division Chief Amos Chalmers, Phoenix Fire Department
- Andrew Kuepper, CBRN Directorate, Office of the Assistant Secretary of Defense for Homeland Defense and Americas’ Security Affairs
- LTC John Ebbighausen, Planner for 2012 Democratic National Convention, North Carolina National Guard
- Matthew Parks, Assistant Director, Arizona Division of Emergency Management and Chairman, EMAC Executive Task Force
- MAJ Stephen Tucker, Deputy S3, Georgia National Guard HRF
- Steven O’Brien, Emergency Management Specialist, Defense Coordinating Element, FEMA Region X
- Steven Mogan, Operations Officer, Defense Coordinating Element, FEMA Region IX
APPENDIX C. SURVEY

This appendix lists the questions used in the electronic survey distributed during the course of this study.

A survey instrument was distributed to over 2,500 recipients from first responder communities via the DHS S&T First Responder Resource Group and the listserv maintained by urbanareas.org, representing the 64 UASI regions that were including in UASI funding until 2011. As such, they represent the areas that are notionally the highest risk populations to a WMD attack. The survey was open for a period of 10 days and 112 responses were received.

Survey Questions

Question 1: Please choose your UASI region. (If you are not from a UASI, please list your agency in the "other" category. Please note, this list reflects the FY2011, 64-area UASI list.)

- Albany Area
- Anaheim/Santa Ana Area
- Atlanta Area
- Austin Area
- Bakersfield Area
- Baltimore Area
- Baton Rouge Area
- Boston Area
- Bridgeport Area
- Buffalo Area
- Charlotte Area
- Chicago Area
- Cincinnati Area
- Cleveland Area
- Columbus Area
- Dallas/Fort Worth/Arlington Area
- Denver Area
- Detroit Area
- El Paso Area
Homeland Response Force Study

- Fort Lauderdale Area
- Hartford Area
- Honolulu Area
- Houston Area
- Indianapolis Area
- Jacksonville Area
- Jersey City/Newark Area
- Kansas City Area
- Las Vegas Area
- Los Angeles/Long Beach Area
- Louisville Area
- Memphis Area
- Miami Area
- Milwaukee Area
- Minneapolis/St. Paul Area
- Nashville Area
- National Capital Region Area
- New Orleans Area
- New York City Area
- Norfolk Area
- Oklahoma City Area
- Omaha Area
- Orlando Area
- Oxnard Area
- Philadelphia Area
- Phoenix Area
- Pittsburgh Area
- Portland Area
- Providence Area
- Richmond Area
- Riverside Area
- Rochester Area
Sacramento Area
Salt Lake City Area
San Antonio Area
San Diego Area
San Francisco/Bay Area
San Juan Area
Seattle Area
St. Louis Area
Syracuse Area
Tampa Area
Toledo Area
Tucson Area
Tulsa Area
Other (please specify your agency or whom you represent)

**Question 2: What is your primary first response discipline?**

- Law Enforcement
- Emergency Management
- Emergency Medical Services (EMS only)
- Fire Department (or Fire/EMS Department)
- Public Health
- Homeland Security (if separate from all the above; otherwise, please choose one of the above)
- Other (please specify)

**Question 3: Do you have responsibility for (check all that apply)?**

- Hazardous materials response (including Chemical, Biological, Radiological, or Nuclear incidents)
- Bomb squad, Explosive Ordinance Disposal
- Urban Search and Rescue
- Mass Casualty
- Medical Surge
- Mass Decontamination
☐ Incident Security
☐ Tactical Law Enforcement/SWAT
☐ Incident Management
☐ Fatality Recovery
☐ Other (please specify)

Question 4: Have you planned, trained, exercised, or conducted response operations with any National Guard units within the past 3 years?

☐ Yes
☐ No

Question 5: Have you heard about or been briefed about the National Guard’s Homeland Response Force (HRF) or its capabilities?

☐ Yes (if yes, go to the next question).
☐ No (if no, please proceed to Question 10).

Question 6: Has your agency or UASI partners exercised or trained with the HRF?

☐ Yes
☐ No

Question 7: Has your agency or UASI partners conducted planning with the HRF or included the HRF in your operational plans for response?

☐ Yes
☐ No

Question 8: Have you responded with the HRF, or its components (for example, the Civil Support Teams (CST) or CBRN Enhanced Response Force Package (CERFP)), to an actual incident?

☐ Yes
☐ No
Question 9: Do you know how to request a HRF response?

○ Yes
○ No

Question 10: Do you have any additional comments you wish to make regarding the HRF?

*Concerning your UASI’s first responder capabilities:*

Question 11: How has your UASI region’s capability to respond to a major catastrophic incident changed over the past decade?

○ Improved since 9/11
○ No change since 9/11
○ Decreased since 9/11
○ Other/varies (please comment)

Question 12: Please make any additional comments here.
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APPENDIX D. SURVEY RESULTS

In addition to the in-person interviews and field observations, the research also included the distribution of an online survey to first responders around the United States.

This section illustrates the results of the online survey used to provide a basic understanding of the level of awareness of the HRF by first responders in the 64 major urban regions that were designated to receive Urban Areas Security Initiative funds by the 2011 FEMA homeland security grant programs. These areas were selected because they represent the areas deemed by the DHS and Congress to face the highest risk in the Nation from terrorism. Additionally, access to over 2,500 representatives from these UASI areas was readily available through a listserv maintained by urbanareas.org. The survey was also sent to over 200 first responders who are members of the DHS S&T First Responder Resource Group.

The survey was distributed via email between 1 March and 11 March 2013. A total of 112 responses were received.

Answers to Question 4 and Question 5 indicate that 55 percent of all 112 respondents had worked with their National Guard counterparts in some capacity (either planning, training, or exercising) over the past three years, and 53 percent had been briefed on the HRF. However, the answers to Question 6 and Question 7 show that only 30 percent (34 of 112 respondents) have exercised or trained with the HRF, and only 27 percent (30 of 112 respondents) have conducted planning with the HRF. Question 8 indicates that 24 percent (27 of 112 respondents) have responded with one the National Guard CBRN assets, either a WMD-CST or CERFP.

Of note, there was a high percentage of respondents from the Denver UASI, which may have skewed the results of this survey (23 respondents of 112 indicated they were from the Denver UASI). Colorado is a CERFP host-state, and recently conducted a robust series of recovery planning exercises for WMD events; therefore, it would be expected that a high percentage of respondents would be familiar with the HRF. A quick analysis of individual answers revealed that 13 of the 23 respondents (57 percent) from the Denver UASI had been briefed on the HRF or were familiar with it, so it is unlikely that those respondents had a major effect on the results of this study. Therefore, the survey seems to appropriately indicate that about half of responders have heard or been briefed on the HRF, and fewer have planned, trained, or exercised with it. Overall, the survey appears to support the findings from the interviews that knowledge of the HRF is fragmented among first responders, with some familiarity (in whole or in part) and many still unfamiliar with its existence.

Further analysis was considered, however it fell beyond the timeframe and scope of the study, with likely a marginal return in significant insight, since the survey was designed to assess familiarity of the HRF.

54 After 2012, the designated UASI regions were reduced to 30 regions.
55 In 2011 and 2012, the Denver area hosted a series of DHS S&T Wide Area Recovery and Resiliency Program workshops involving DHS, DOD, HHS, EPA, and numerous SLTT responders and the private sector.
56 Further analysis was considered, however it fell beyond the timeframe and scope of the study, with likely a marginal return in significant insight, since the survey was designed to assess familiarity of the HRF.
The raw results of the survey are included here:

**Question 1: Please choose your UASI region. (If you are not from a UASI, please list your agency in the "other" category. Please note, this list reflects the FY2011, 64-area UASI list.)**

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denver Area</td>
<td>20.54%</td>
</tr>
<tr>
<td></td>
<td>23</td>
</tr>
<tr>
<td>San Francisco/Bay Area</td>
<td>4.46%</td>
</tr>
<tr>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Seattle Area</td>
<td>4.46%</td>
</tr>
<tr>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Cincinnati Area</td>
<td>3.57%</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Kansas City Area</td>
<td>3.57%</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td>National Capital Region Area</td>
<td>3.57%</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Charlotte Area</td>
<td>2.68%</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Chicago Area</td>
<td>2.68%</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Milwaukee Area</td>
<td>2.68%</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td>New York City Area</td>
<td>2.68%</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Anaheim/Santa Ana Area</td>
<td>1.79%</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Baltimore Area</td>
<td>1.79%</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Cleveland Area</td>
<td>1.79%</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Hartford Area</td>
<td>1.79%</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Minneapolis/St. Paul Area</td>
<td>1.79%</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Pittsburgh Area</td>
<td>1.79%</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Portland Area</td>
<td>1.79%</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Providence Area</td>
<td>1.79%</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Riverside Area</td>
<td>1.79%</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Syracuse Area</td>
<td>1.79%</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Tampa Area</td>
<td>1.79%</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Atlanta Area</td>
<td>0.89%</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

among a wider pool of responders. As the survey responses mirrored many of the responses from interviewees, it served that purpose.
<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbus Area</td>
<td>0.89%</td>
</tr>
<tr>
<td>El Paso Area</td>
<td>0.89%</td>
</tr>
<tr>
<td>Honolulu Area</td>
<td>0.89%</td>
</tr>
<tr>
<td>Indianapolis Area</td>
<td>0.89%</td>
</tr>
<tr>
<td>Jacksonville Area</td>
<td>0.89%</td>
</tr>
<tr>
<td>Jersey City/Newark Area</td>
<td>0.89%</td>
</tr>
<tr>
<td>Las Vegas Area</td>
<td>0.89%</td>
</tr>
<tr>
<td>Los Angeles/Long Beach Area</td>
<td>0.89%</td>
</tr>
<tr>
<td>Memphis Area</td>
<td>0.89%</td>
</tr>
<tr>
<td>Miami Area</td>
<td>0.89%</td>
</tr>
<tr>
<td>Nashville Area</td>
<td>0.89%</td>
</tr>
<tr>
<td>Oklahoma City Area</td>
<td>0.89%</td>
</tr>
<tr>
<td>Omaha Area</td>
<td>0.89%</td>
</tr>
<tr>
<td>Oxnard Area</td>
<td>0.89%</td>
</tr>
<tr>
<td>Phoenix Area</td>
<td>0.89%</td>
</tr>
<tr>
<td>Richmond Area</td>
<td>0.89%</td>
</tr>
<tr>
<td>San Diego Area</td>
<td>0.89%</td>
</tr>
<tr>
<td>Toledo Area</td>
<td>0.89%</td>
</tr>
<tr>
<td>Tulsa Area</td>
<td>0.89%</td>
</tr>
<tr>
<td>Albany Area</td>
<td>0%</td>
</tr>
<tr>
<td>Austin Area</td>
<td>0%</td>
</tr>
<tr>
<td>Bakersfield Area</td>
<td>0%</td>
</tr>
<tr>
<td>Baton Rouge Area</td>
<td>0%</td>
</tr>
<tr>
<td>Boston Area</td>
<td>0%</td>
</tr>
<tr>
<td>Bridgeport Area</td>
<td>0%</td>
</tr>
<tr>
<td>Buffalo Area</td>
<td>0%</td>
</tr>
<tr>
<td>Dallas/Fort Worth/Arlington Area</td>
<td>0%</td>
</tr>
<tr>
<td>Answer Choices</td>
<td>Responses</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Detroit Area</td>
<td>0%</td>
</tr>
<tr>
<td>Fort Lauderdale Area</td>
<td>0%</td>
</tr>
<tr>
<td>Houston Area</td>
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</tr>
<tr>
<td>Louisville Area</td>
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</tr>
<tr>
<td>New Orleans Area</td>
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</tr>
<tr>
<td>Norfolk Area</td>
<td>0%</td>
</tr>
<tr>
<td>Orlando Area</td>
<td>0%</td>
</tr>
<tr>
<td>Philadelphia Area</td>
<td>0%</td>
</tr>
<tr>
<td>Rochester Area</td>
<td>0%</td>
</tr>
<tr>
<td>Sacramento Area</td>
<td>0%</td>
</tr>
<tr>
<td>Salt Lake City Area</td>
<td>0%</td>
</tr>
<tr>
<td>San Antonio Area</td>
<td>0%</td>
</tr>
<tr>
<td>San Juan Area</td>
<td>0%</td>
</tr>
<tr>
<td>St. Louis Area</td>
<td>0%</td>
</tr>
<tr>
<td>Tucson Area</td>
<td>0%</td>
</tr>
<tr>
<td>Other (please specify your agency or whom you represent)</td>
<td></td>
</tr>
<tr>
<td>- National Guard, CST</td>
<td></td>
</tr>
<tr>
<td>- Milwaukee Fire Dept.</td>
<td></td>
</tr>
<tr>
<td>- Puerto Rico Homeland Security Region South</td>
<td></td>
</tr>
<tr>
<td>- Anderson, SC</td>
<td></td>
</tr>
<tr>
<td>- ND Dept. of Health/Association of State And Territorial Health Officers</td>
<td></td>
</tr>
<tr>
<td>- Charleston, SC</td>
<td></td>
</tr>
<tr>
<td>- Huntingdon County EMA, Pennsylvania</td>
<td>11.61%</td>
</tr>
<tr>
<td>- Cass County Sheriff's Office, Fargo, ND</td>
<td>13</td>
</tr>
<tr>
<td>- State of Florida Government</td>
<td></td>
</tr>
<tr>
<td>- State</td>
<td></td>
</tr>
<tr>
<td>- DHS Ops</td>
<td></td>
</tr>
<tr>
<td>- Jefferson County Alabama</td>
<td></td>
</tr>
<tr>
<td>- FEMA</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
</tr>
</tbody>
</table>
Question 2: What is your primary first response discipline?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Management</td>
<td>31.25%</td>
</tr>
<tr>
<td>Fire Department (or Fire/EMS Department)</td>
<td>30.36%</td>
</tr>
<tr>
<td>Law Enforcement</td>
<td>19.64%</td>
</tr>
<tr>
<td>Emergency Medical Services (EMS only)</td>
<td>5.36%</td>
</tr>
<tr>
<td>Public Health</td>
<td>5.36%</td>
</tr>
<tr>
<td>Homeland Security (if separate from all the above; otherwise, please choose one of the above)</td>
<td>5.36%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
</tr>
<tr>
<td>- HazMat Response</td>
<td>2.68%</td>
</tr>
<tr>
<td>Regional Homeland Security Planning and Exercise Analyst</td>
<td>3%</td>
</tr>
<tr>
<td>National Lab assisting emergency management</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
</tr>
</tbody>
</table>

Question 3: Do you have responsibility for (check all that apply)?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incident Management</td>
<td>74.11%</td>
</tr>
<tr>
<td>Hazardous materials response (including Chemical, Biological, Radiological, or Nuclear incidents)</td>
<td>47.32%</td>
</tr>
<tr>
<td>Mass Casualty</td>
<td>46.43%</td>
</tr>
<tr>
<td>Mass Decontamination</td>
<td>40.18%</td>
</tr>
<tr>
<td>Urban Search and Rescue</td>
<td>33.04%</td>
</tr>
<tr>
<td>Medical Surge</td>
<td>30.36%</td>
</tr>
<tr>
<td>Incident Security</td>
<td>22.32%</td>
</tr>
<tr>
<td>Tactical Law Enforcement/SWAT</td>
<td>21.43%</td>
</tr>
<tr>
<td>Fatality Recovery</td>
<td>17.86%</td>
</tr>
<tr>
<td>Bomb squad, Explosive Ordnance Disposal</td>
<td>16.96%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>27.68%</td>
</tr>
</tbody>
</table>

Note, spelling errors from the raw data for the “other” categories have been corrected by the author.
Homeland Response Force Study

- Utah State, Region II Liaison
- Planning and technical assistance
- Emergency Medical Services, Emergency Management, Fire Suppression
- Swift Water Rescue/Flood Dive
- Critical infrastructure Protection
- Planning for all of the above. Responding to assist with logistics on several
- Resource Mgmt. & EOC Operations
- Medical Countermeasures, Non-Medical Interventions, Public Health Risk Communications
- Preparedness, mitigation and recovery prioritization.
- Training
- Hazmat, we do the criminal investigation.
- Fire Arson Investigation
- Medical direction
- Helicopter operations (aerial firefighting, hoist rescue, 24 hr. capability)
- I’m an EM with a fire district; our agency has responsibility for Hazmat, USAR, MCI, and assisting with medical surge, but most of that is not within my immediate domain.
- Provide medical for wildland fires & mountain/wilderness rescue in our area.
- State Emergency Management
- Fire Investigation & Structure Stability
- Recovery
- Grants
- County level ESF 8, Point of Dispensing, Local Transfer Point Management
- All of the above planning and exercises including regional homeland security strategy
- Training, Exercising, and Credentialing
- planning to support the response
- EOC
- Training for all of the above
- Training for all of the above
- Grant administration
- Planning and technology development
- Transit Bus/ Rail
- Not a first responder

Total Respondents: 112

**Question 4: Have you planned, trained, exercised, or conducted response operations with any National Guard units within the past 3 years?**

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>55.36%</td>
</tr>
<tr>
<td></td>
<td>62</td>
</tr>
<tr>
<td>No</td>
<td>44.64%</td>
</tr>
<tr>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
</tr>
</tbody>
</table>
**Question 5: Have you heard about or been briefed about the National Guard’s Homeland Response Force (HRF) or its capabilities?**

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (if yes, go to the next question).</td>
<td>52.68%</td>
</tr>
<tr>
<td>No (if no, please proceed to Question 10).</td>
<td>47.32%</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
</tr>
</tbody>
</table>

**Question 6: Has your agency or UASI partners exercised or trained with the HRF?**

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>47.22%</td>
</tr>
<tr>
<td>No</td>
<td>52.78%</td>
</tr>
<tr>
<td>Total</td>
<td>72</td>
</tr>
</tbody>
</table>

**Question 7: Has your agency or UASI partners conducted planning with the HRF or included the HRF in your operational plans for response?**

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>41.67%</td>
</tr>
<tr>
<td>No</td>
<td>58.33%</td>
</tr>
<tr>
<td>Total</td>
<td>72</td>
</tr>
</tbody>
</table>

**Question 8: Have you responded with the HRF, or its components (for example, the Civil Support Teams (CST) or CBRN Enhanced Response Force Package (CERFP)), to an actual incident?**

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>36.99%</td>
</tr>
<tr>
<td>No</td>
<td>63.01%</td>
</tr>
<tr>
<td>Total</td>
<td>73</td>
</tr>
</tbody>
</table>
Question 9: Do you know how to request a HRF response?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>66.22%</td>
</tr>
<tr>
<td></td>
<td>49</td>
</tr>
<tr>
<td>No</td>
<td>33.78%</td>
</tr>
<tr>
<td></td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
</tr>
</tbody>
</table>

Question 10: Do you have any additional comments you wish to make regarding the HRF?

(44 answers)

- A positive use of State and Federal funds
- Further interaction seems to be forthcoming - meetings taking place between local EMA and National Guard in March/April.
- Would be nice to hear what they can provide in emergency response and exercising
- Full capabilities and resource availability need more "socialization" with local/regional partners.
- There appears to be some confusion on the HRF side regarding what roles and responsibilities they will assume when they arrive. The components that have had a working relationship (CST) understand, and should provide the model for the HRF to integrate with civilian authorities. The purpose and scope of the HRF has not been well presented to first responders, and there appears to be some question as to what the HRF will provide, and how, to the scene when the get there. On previous occasions, the HRF made presentations that make it appear that they don't understand, or embrace the incident command system. If this is the case, it is possible they will not even be allowed into the scene in Urban Areas. The integration of these assets into the operations ongoing at the scene will be the key to success for this new capability.
- Our interaction was during the DNC.
- Toledo Fire & Rescue HazMat team trains with the 52nd CST annually. In 2012, Toledo hosted a training exercise involving MI, OH, IN, and PA CSTs. In addition, we have responded to two real world incidents with 52nd CST.
- RE: Question #9-This was in briefed to me once, though have not retained the info on proper request for HRF.
- Not at this time.
- No
- Have not heard about the program in by 4 years as the SWAT Commander. I am also the UASI Sub committee Chair for Public Safety. We have had many large scale exercises and have not used the HRF.
- HRF is not a known resource to local responders. While they may be included on operational planning at a State or Federal level, they are not considered when responding to incidents that are dealt with at the County or Municipal level.
- In the 2008 Democratic National Convention in Denver the National Guard played a backup and support roll and were an integral part of our planning, prep and execution of the event. Air National Guard assets were integral to our safe use of Invesco Field for Candidate Obama's
acceptance speech. I was the night time IC and the cooperation and assistance provided by the
Guard was greatly appreciated. The Guard also helped us greatly in the 1993 Pope Visit helping
with water buffalos and field hospital for the kids who were dropping like flies because of
dehydration. Again a great collaboration on short notice when Arapaho County called for
assistance.

- no
- Never heard of them, would be a good idea to see what capabilities they have
- No.
- I use our CST as an integrated part of a large event and by protocol use them when incident
  conditions dictate. I have not had personal interaction with HRF other than CST. It would be
  beneficial if we could meet and develop a framework for escalation of response activation/requests
  for services from HRF. It would be extremely valuable for resource planning if a simplified asset
  and capability summary 'cheat sheet' was available for review.
- We have worked closely with our National Guard during the record flooding in 2009, 2010 and
  2011. We implemented Guard command elements into our Tactical Operations Center. I do not
  believe they were part of the HRF.
- Not familiar with HRF. I manage national Guard helicopters (MHEM) for large campaign fires
- The HRF is not a first response asset unless they are predeployed. They have not been currently
  trained to NFPA 1670 or 472 Technician Level Standards. The CST is an exceptional technical
  asset but is not designed for any large scale mitigation effort (26 members). A chemical release
  and decontamination requires a response in immediately if it is to be effective.....the NG resources
  and not capable of this time frame.
- I think it's an unrealistic solution looking for a problem. Given how much trouble the NG has had
  in staffing their CSTs, which have diminishing utility outside their immediate area, the idea of
  counting on a large team composed of part-time soldiers that'd be affected by the same incident
  affecting us seems highly unrealistic and not the best use of resources. I've worked CSTs since
  their inception; the capabilities and staff are impressive, and it's just kind of cool, but we could've
  gotten a lot more bang for the buck elsewhere. If I was farther from my CST than I've been, I'd
  probably be less aware and even more questioning as to cost/benefit.
- As a chief I have had good interactions w the NG's CRBRNE unit for the Denver metro area.
  Unfortunately our service district is on the other side of the Rocky mountains in the Western Slope
  portion of the state so aside from training events & the occasional call out from the air guard's
  training facility in Eagle, CO, by the super rural nature of our jurisdiction, we have very few
  opportunities and/or needs to interact w the Guard.
- 44th CST supported the RNC in Tampa last year. Florida Emergency Management as well as
  counties have a VERY close working relationship with the Florida National Guard and plans,
  trains and exercises with them on a monthly basis.
- No
- Would like more information
- Would like to more
- HRF is well equipped and personnel are well trained and show sincere dedication
- no
• We would be happy to train with HRF, given the opportunity.

• We are in the final planning stages for 2013 Vigilant Guard exercise in July 2013 and we will have a large HRF component with that. This is coordinated by the Colorado National Guard.

• Currently trying to partner with the guard on Vigilant Guard however it seems hard to integrate for the purpose of planning a large exercise with these units and civilians. Trying to plan an exercise this large between civilians and non-civilians is challenging when there is no outside facilitation to make sure that all training objectives are included in the planning effort. It is no fault to either side because both are trying. I would suggest an outside facilitation group to improve in planning these types support to civil authority exercises in the future. I do not think any civilians/regional or UASI partners will complete this exercise knowing what the HRF is, how to request it and what it looks like because that side of the exercise is only military personnel that already know these things.

• None

• Tampa UASI's local partnership with our HRF provides for an invaluable collaborative that enhances the health and fitness of our response protocol and our communities served.

• I have no experience or knowledge of the HRF, but the 10th CST from Camp Murray is highly visible and great ambassador for the NG.

• I am not a first responded; but, I have planned, trained and exercised with the National Guard through San Francisco Fleet Week.

• No

• An 8.5x11 HRF TO (top-bottom) break down would be very useful

• Worked Kansas City MLB all-Star game and had a Civil Support Team there.

• I didn’t know about them.

• The Nashville Fire Department, Nashville TN. has utilized the 45th CST several times for training related operations and found their expertise and professionalism to be extremely beneficial.

• The HRF is a potentially powerful capability but most are unaware of it including Federal Partners who would engage with them. The major challenge is how their support would be coordinated in support of state and local requests

• No

• Never heard of it
Concerning your UASI’s first responder capabilities:

Question 11: How has your UASI region’s capability to respond to a major catastrophic incident changed over the past decade?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved since 9/11</td>
<td>87.50%</td>
</tr>
<tr>
<td>No change since 9/11</td>
<td>3.57%</td>
</tr>
<tr>
<td>Decreased since 9/11</td>
<td>0%</td>
</tr>
<tr>
<td>Other/varies (please comment)</td>
<td>8.93%</td>
</tr>
</tbody>
</table>

- Individual agency response significantly improved. Coordinated response yet to be determined.
- Overall has improved since 9/11. Inter-operability has greatly improved. Large multi-jurisdictional and multidisciplinary exercises have helped hone our capabilities and highlighted areas of needed improvement (i.e. Operation Mountain Guardian, large table top Radiological Event at the Coliseum prior to the DNC, and DNC preparation. We are in a much better spot today than we were, however, these skills are perishable. We need to constantly train and advance as new technology arrives. UASI has provided that catalyst.
- Didn't know what their capabilities were before or after 9/11
- Some stuff is better, some worse. The overwhelming focus on terrorism and the kneejerk CYA attempts to force the same "solution" on all, regardless of merit, tends toward the idiotic (e.g., requiring every UA to develop a full metropolitan evac plan after Katrina, despite there being no realistic scenario for that outside Hurricane Alley or a nuke plant evac radius).
- Choices are limiting response -- UASI region has increased capabilities, BUT major problems remain such as non-standardized SOPs, resource mobilization, multi-agency / multi-jurisdictional coordination & decision making -- in effect, all the hard stuff -- equipment purchases & anecdotal training are easy to do
- Initial gains in capabilities have been offset by recent losses in local government workforce due to budget cuts. We know more, we have better tools, but we have fewer people to do the job.
- Not part of a UASI
- very good up until the funding stops (for the Cincinnati UASI) in 2014. Re-distributing lees funds pretty much per-capita through the state EMA's is a straw-man bureaucratic solution that has failed in Ohio. Per capita distribution is a managerial/leadership failure masquerading as "fair"
- Much improved. 180 Regional members trained in Rescue Disciplines very similar to Federal USAR Teams. Dedicated members on Rescues that can respond immediately to any emergency in our region and also State wide.
- Not a UASI

Total 112
Question 12: Please make any additional comments here.

(19 answers)

- Utah has a proven track record as being a self-reliant State that takes a proactive angle to community safety and emergency preparedness. It is indeed an over-site, when UASI funds were eliminated. Say what you may about the State of Utah, however, as a transplant to the Utah from California, That culture is what drives the success of the emergency preparedness program and discretionary energy. Respectfully, Retired PIO /Arson Investigator [name redacted].

- You may wish to take my responses for what they are: rear echelon. My duties are not as much in the response area as in planning and support for regional coordination in emergency management. My responses are based on my 2.5 years working for the Richmond UASI in that capacity.

- When answering above questions, all contact with the HRF has been with the 7th CST, and to some extent the 73rd CST as components. I did attend a regional meeting in KC during the early development and roll out of the HRF. In this meeting between civil authorities, DOD, Army, etc. a General stated, following a discussion of the integration with civil authorities, that "he didn't know what we (civil authorities) were talking about, they weren't going to part of the incident command system" inferring they (HRF would be in charge. That left a permanent, negative impression on us. The CST members, who were not then part of HRF, tried to come to our defense, but this fell on deaf ears. Integration of the HRF command function and capabilities into plans, like the 7 CST currently enjoys, will require interaction on multiple levels with each of the multiple disciplines represented by the HRF. A major component will be the HRF learning to integrate into the local unified command and operating within this structure like the 7th CST does. They are an incredible asset to us. [name redacted], Assistant Chief, Lee's Summit Fire Department

- Toledo Fire & Rescue Department has an excellent working relationship with the 52nd and 51st CSTs. In addition to real world response capability, the CSTs have provided us with valuable training and exercise opportunities. Deputy Chief [name redacted] Homeland Security/Special Operations Bureau Toledo Fire & Rescue Department

- RE: Question #11-Our capabilities and capacities have increased 200+% since 9/11. Mostly attributed to federal grant funds.

- None at this time.

- Interoperability of CAD and IMS systems are one of our biggest challenges. The projects from DHS S&T (vUSA and UICDS) do not address these challenges in the proper or sufficient manner. DHS S&T needs to stop these efforts and focus more on data standards and architecture. DHS S&T needs to stop using our community as justification for continuing efforts like these because we aren't adequately consulted on these tasks.58

- UASI has provided for Federal/State and Local event planning, all-hazards training, scenario training exercises. If Katrina showed any major failing it was the need for immediate federal/state/local cooperation and coordination. UASI has been instrumental in helping to improve our capabilities, but this is a moving target. The threats change. The technology changes. The players change. The skills fade if not periodically tested. UASI has fulfilled a vital role. The need for that role has not diminished.

- Although our knowledge and proficiency with complex incident response and management has improved, diminishing volunteer resources (well trained and credentialed) personnel to facilitate

58 CAD, computer aided dispatch. IMS, incident management system. VUSA, virtual USA. UICDS, unified incident command and decision support.
response is negatively impacting our capability. Economic factors seem to be a major influence shaping this challenge.

- Real need for interoperability between teams and disciplines i.e. Joint Hazard Assessment Teams
- Significant improvement in training, equipping and exercising at the regional level.
- Florida has 4 UASI's. UASI make up only a very small portion of a state’s overall response to an event. UASI's are NOT operational entities. The government structure that make up a UASI are the operational elements. UASI is only a mis-balanced funding source.
- In the survey does "you" mean the person taking the survey or that person's agency? I answered as if the question was to me not my agency.
- none
- All across the country we have improved, however we have a lot of work to do to still close capability gaps. Without funding we cannot sustain the current capabilities.
- San Francisco has a good relationship with the National Guard. I have enjoyed planning exercises with the Guard and look forward to working with you more in the future.
- The Homeland Security and UASI funding greatly enhanced our regional collaboration.
- It was steadily improving up until the grant assistance funding (UASI, HSGP, MMRS) was eliminated. Instead of cutting funding off sequestration-style, sustainment funding should have been set up by DHS/FEMA. Locals contribute (by far) the most in-kind resources (personnel, personnel training, administrative, and response) and the Fed mentality appears that "locals" need to fulfill the homeland security mission on their own\(^59\)
- Would like to know more about HRF capabilities and form a working relationship with area teams.

\(^{59}\) HSGP, homeland security grant program. MMRS, metropolitan medical response system.
APPENDIX E. SEMI-STRUCTURED INTERVIEW PROTOCOLS

This appendix outlines the interview protocol used during this study. This protocol was used to guide semi-structured interviews. As semi-structured interviews, the questions provided a framework for discussion between the interviewer and the subject.

Preamble discussion:

- Homeland Security Studies and Analysis Institute background
- Homeland Response Force Study background and objectives

Questions

- What is the history of Defense Support to Civil Authorities (DSCA), and what is the new DCSA strategy and how does it differ from the historical approach(es)?
- Can you tell me a little bit about the history of the Guard’s role in Defense Support to Civil Authorities and the evolving role of the Guard in DCSA?
- What are the new DHS/FEMA National Response Framework (NRF) and InterAgency Operation Plan (IOP) for Response, and how do they differ from the historical approach(es)?
- What is your interaction with FEMA, either at the regional level, or at the headquarters level?
- What are the changes in capabilities of SLTT first responder resources in the past decade?
- How often do you interact with first responders? Do you have a sense as to their capabilities for responding to catastrophes? To CBRN incidents? Given the state of the economy, how do you think/know their capabilities for response have changed?
- What is the NG Homeland Response Force and what are its operational planning assumptions for disaster response?
- Tell me about the HRF? What are its capabilities? What do you observe are its strengths and weaknesses?
- How is the NG HRF included in FEMA’s interagency operational plans?
- What are operational planning assumptions of state and local first responders for catastrophic disaster response?
• How do you ensure the HRF is included in FEMA or state and local plans for catastrophes? What happens when there is an event like Hurricane Sandy? Does the HRF respond as a HRF, or as a regular Guard unit?

• What are FEMA’s regional operational plans and do they account for the NG HRF?

• What are the state government operational plans and do they account for the NG HRF?

• What are local government operational plans and do they account for the HRF?

• Do you have a sense as to your capabilities for responding to catastrophes? To CBRN incidents? Given the state of the economy, how do you think/know your capabilities for response have changed since 9/11?

• How do you ensure that the HRF is ready to integrate with other responders?

• Do you have plans to integrate the HRF into plans for catastrophes?

• In your view, what are current or emerging issues in the development of the HRF, as related to the following? Do differences in military, FEMA headquarters, FEMA region, and SLTT assumptions, knowledge, or operations reveal critical issues or gaps at the intersection between the HRF, FEMA, and first responders in the following areas:
  • Issues or gaps in strategy?
  • Issues or gaps in roles or missions?
  • Issues or gaps in authorities?
  • Issues or gaps in capabilities?
  • Issues or gaps in doctrine?
  • Issues or gaps in planning?
  • Issues or gaps in organizing?
  • Issues or gaps in equipping?
  • Issues or gaps in training?
  • Issues or gaps in exercising?

• Overall, what would you say are the two or three critical issues that may still exist or could be improved in the helping the HRF and first responders perform effectively in the event of a complex catastrophe?
Appendix F. Summary of Recent Studies on CBRN DSCA Issues

This appendix outlines several reports and studies relevant to the HRF and DSCA mission. There have been numerous studies on the role of the National Guard in DSCA, the role of the military in CBRN response, and the strengths and weaknesses of the CBRN enterprise.

The RAND Corporation conducted a study in 2004 that focused on medical DSCA almost 10 years prior, revealing two issues that remain persistent a decade later. RAND identified problems with civilian-military coordination at historical events and ineffective matching of civilian requirements and DoD assets, largely due to lack of process by which states and localities can articulate their requirements to the military, “even broadly.”

In 2008, the Center for Strategic and International Studies’ Christine Wormuth and Anne Witkowsky released a report that became the precursor for many of the Obama Administration’s strategies related to DSCA. They called for the National Guard to have regional homeland security task forces with broad transportation, logistics, mass decontamination, medical services, CBRN assessment, maintenance, engineering, and communications as a bridge for three to five days until greater federal forces could arrive. It is noteworthy that while this report became the precursor to the development of the HRF, the key elements of transportation and logistics were not included.

DoD’s Cost Assessment and Program Evaluation office began a study in April 2008 on the CBRN consequence management system. The study looked at the entire CBRN enterprise at the time, considering whether existing CBRN-related forces or alternative force structures would best support civil authorities in the event of a domestic CBRN incident. The study concluded that a regionalized concept would be more appropriate for the timely employ of CBRN civil support forces. The time/distance model of consequence management units and capabilities used in this study provided the analytical basis for the option explored during the 2010 Quadrennial Defense Review.

The Government Accountability Office (GAO) conducted several studies of the defense DSCA mission. A 2009 GAO study found that DoD plans were not integrated with other federal plans; response times might not meet incident needs; some capabilities might be lacking; and resourcing the CCMRFs was challenging due to rotation of troops.

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In 2011, GAO looked at the 17 CERFPs to determine how well they were prepared for their mission, how effectively they coordinated with response partners, and the effectiveness of their command and control. This report was highly critical of CERFP readiness, coordination, and command and control. It cited challenges with proper equipment and adequately trained personnel. Coordination problems were rooted in lack of national guidance on how to coordinate. The findings in this GAO study mirror some of what we found in this study. Of note, approximately half of state emergency managers in the GAO study indicated there was little to no coordination with CERFP units in their state.\(^{64}\) The GAO called for an updated DSCA strategy in 2012, highlighting the need for inclusion of newer DoD initiatives, priorities, and policies.\(^{65}\)

In 2012, Paul McHale, the former Assistant Secretary of Defense for Homeland Defense, authored a critical piece on the readiness of forces for a catastrophic incident in the homeland. McHale argued that USNORTHCOM and the active-duty services have inadequate forces for response to the homeland and that state and local responders would likely be incapacitated or overwhelmed in the face of multiple, simultaneous attacks. McHale described the history of the development and planning assumptions for DoD, including the original three-plus-three strategy intended to respond to three initial and three follow-on simultaneous CBRN attacks, and later the development of the CCMRF, the existing 17 CERFPs, and the transition to the HRF structure.\(^{66}\)

Most recently, the 2013 Panetta Strategy for Homeland Defense and Defense Support of Civil Authorities outlined the objective to maintain defense preparedness for domestic incidents through the core capability of postured, rapidly deployable CBRN response forces, including 54 WMD-CST for identification and assessment, 17 CERFPs for regionally focused life-saving capabilities, 10 HRFs (one per FEMA region) for life-saving capabilities and command and control, one federal DCRF and two C2CREs.\(^{67}\)

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\(^{67}\) Strategy for Homeland Defense, 25. At the time of publication of this report, the DoD budget request had restored the WMD-CSTs to a total of 57 units.