



DUKE UNIVERSITY
Durham, North Carolina

CIVILIAN RESEARCH PROJECT

**THE ARMY'S ROLE IN DOMESTIC DISASTER RESPONSE:
PREPARING FOR THE NEXT CATASTROPHE**

by

Neal S. Mitsuyoshi

U.S. ARMY WAR COLLEGE
Carlisle Barracks, Pennsylvania

March 2014

Faculty Advisor, Duke University:
Faculty Advisory, U.S. Army War College:

Thomas W. Taylor
William G. Braun

Executive Summary

The military is a unique national asset that possesses the required personnel and resources to rapidly respond in a domestic disaster. Routine domestic disasters are frequently seen in the news, and catastrophic disasters involving significant loss of life, property, and/or critical infrastructure cannot have a successful response without federal support. There are some that even believe the military should play a dominant lead role in domestic disaster response. However, expanding the military's role should not be the recommended strategy to improving our nation's disaster response. The implementation of the National Response Plan, as well as other structural improvements at the federal, state and local levels since September 11 and Hurricane Katrina have confirmed that disaster response should continue to be led by civilians, and the military should continue its traditional role of support to civil authorities.

In accepting the current national framework for disaster response as the right one, there are some changes the US Army should make to ensure the nation is ready to respond when disasters overwhelm states and local governments. Despite an era of downsizing, one of the challenges for the Army will be to determine how it can improve its Defense Support to Civil Authorities (DSCA) mission, while concurrently balancing it with its combat mission. This paper will examine and answer the questions of

¹ This student paper was prepared in 2014 in partial completion of the requirements for the U.S. Army War College and the Sanford Counterterrorism and Public Policy Fellowship Program at the Sanford School of Public Policy at Duke University. The research, analysis, policy alternatives and recommendations contained in this paper are the work of the student who authored the document, and do not represent the official or unofficial views of the Sanford School of Public Policy or Duke University. The author relied in instances on information provided by interviews and related organizations and makes no independent representations as to its accuracy.

what should the role of the Army be in responding to catastrophic disasters, and how can the Army increase its ability to more rapidly respond to domestic disasters without significantly increasing force structure.

Significant changes have been made over the past 10 years. Improvements to the nation's response plan, military strategies, force structure, specialized capabilities, and systemic processes have all enhanced the US's ability to respond to disasters. However, changes to the Army's disaster response posture, capacity to more rapidly respond, and ability to provide a regional response in a disaster that comes without pre-warning can, and should, be improved before the next US catastrophe. The largest US domestic disaster was the 1900 Galveston Hurricane, which killed approximately 8,000 citizens. Although this disaster was devastating, the number of people that were killed was relatively small when compared to other major disasters around the world with death tolls exceeding 100,000. The US has never experienced a disaster of that magnitude. An earthquake along the New Madrid or San Andreas fault, or a chemical, biological, or nuclear attack by terrorists in multiple US cities are some of the nation's biggest domestic disaster threats.

By improving current processes and response times, increasing the Army's priorities and capacity to provide support, and establishing a standing Regional Domestic Response Force, the nation will be better postured to respond to a no-notice regional disaster. The recommendations offered in this paper will increase the readiness and effectiveness of military support by regionally aligning forces domestically; establishing better relationships at the state and local level through improved training and planning; and maximizing the capabilities of each Army component, while not

significantly increasing force structure. US citizens will continue to look to the federal government for assistance in catastrophic disasters, and the Army must be ready to support the nation's response effort.

TABLE OF CONTENTS

Executive Summary	i
I. Introduction	1
II. Background	3
III. Why Improve Domestic Response in an Era of Downsizing	5
A. Protect Americans on the Homeland	5
B. Unique and Critical Asset in Disaster Response	7
C. Urbanization	8
IV. Significant Improvements Following September 11 and Hurricane Katrina	9
A. National Level Improvements	9
B. Improvements in DOD Strategy	12
C. Improvements in Army Strategy	13
D. Improvements in Army Force Structure	14
E. Reassignment of DSCA Mission	16
F. Establishment of the Dual Status Commander	17
G. Improved Preparation between DOD and Civil Authorities	20
V. Improving the Army for the Next Catastrophic Domestic Disaster	21
A. Recommendation #1: Improve Process and Response Time	22
B. Recommendation #2: Increase Priority and Capacity for Domestic Disaster Response	27
C. Recommendation #3: Establish Standing Regional Domestic Response Forces	32
VI. Conclusion	37
VII. Abbreviations	39
VIII. Endnotes	41

This Page Intentionally Left Blank

The Army's Role in Domestic Disaster Response: Preparing for the Next Catastrophe

"The need for U.S. armed forces, and the Army in particular, to provide planning, logistics, command-and-control, and equipment support to civil authorities in the event of natural disasters continues to be demonstrated regularly and is unlikely to diminish."¹

General Raymond T. Odierno
Chief of Staff of the Army

I. Introduction

Domestic disasters have had a major human and economic impact on our citizens and country. Disasters in the United States (US) recently accounted for the highest economic damage of any country and for nearly half (49%) of the world's total disaster cost (\$98.5 billion).² In addition, the pace of "national disaster" declarations has dramatically increased over the past 16 years.³ During President George W. Bush's administration more Federal Emergency Management Agency (FEMA) declarations were issued than Presidents Reagan, George H. W. Bush, and Clinton combined, and in 2011 alone, President Obama issued more FEMA declarations than President Reagan did in eight years and President George H. W. Bush in four years.⁴

The trend for natural disasters continues to increase as economic damage in the US nearly doubled from 2011.^{5,6} Three of the top five most expensive disasters in the

² This student paper was prepared in 2014 in partial completion of the requirements for the U.S. Army War College and the Sanford Counterterrorism and Public Policy Fellowship Program at the Sanford School of Public Policy at Duke University. The research, analysis, policy alternatives and recommendations contained in this paper are the work of the student who authored the document, and do not represent the official or unofficial views of the Sanford School of Public Policy or Duke University. The author relied in instances on information provided by interviews and related organizations and makes no independent representations as to its accuracy.

world in 2012 occurred in the US, with Superstorm Sandy (Sandy) being the most expensive natural disaster during that period at an estimated \$50.0 billion. Trends and statistics do not absolutely reflect the future, and natural and man-made disasters will always be unpredictable. However, the Army's rapid response, specialized capabilities and enormous operational component save lives, reduce human suffering and ease the economic impact for citizens affected by these disasters. It does not appear to be a question of "if" another major disaster will strike, but a question of "when and where." The US Army is one of only a few organizations available to the nation that possess the manpower and resources to support domestic disaster response. Identifying the Army's future role in responding to "catastrophic disasters"⁷ may require reallocation of force structure, improvements in specialized force capabilities and changes in the way the Army approaches disaster response. As there have been substantial changes in domestic disaster response, particularly over the last ten years, much of the research sources for this paper are based on reports, studies and lessons learned that followed the events of September 11 and Hurricane Katrina (Katrina), as well as personal interviews with current and past senior leaders at FEMA, US Northern Command (NORTHCOM), US Pacific Command (PACOM), US Army North (ARNORTH), and local state emergency managers.

This paper will address the problem of how the Army can improve its rapid response and support to state and local civil authorities in a no-notice regional disaster. By examining improvements and changes over the last 10 years and identifying problems that currently exists, recommendations will be provided to improve the Army's total force (Active, Guard & Reserves) role in domestic disaster response.

II. Background

“The Department of Defense (DOD) protects the US homeland through two distinct, but interrelated missions: (1) homeland defense, which defends against threats such as terrorism, weapons of mass destruction, and cyber incidents; and (2) civil support, which involves supporting other federal agencies in responding to major domestic disasters, emergencies, and special events.”⁸ The DOD’s civil support mission is further divided into three types of assistance, 1) Defense Support to Civil Authorities (DSCA), which primarily consists of support during natural disasters, man-made disasters (e.g. terrorism), and special security events (e.g. the Olympics); Military Support to Civilian Law Enforcement Agencies (MSCLEA), which supports lead federal agencies (e.g. FBI and DHS) for activities such as counter-terrorism and counter-drug operations; and Military Assistance for Civil Disturbances (MACD), which occurs when the President employs armed forces to suppress insurrections or riots.⁹ This report primarily focuses on the DSCA mission in support of natural and man-made disasters.

The military is one of the nation’s most indispensable assets in supporting domestic disaster response. Every branch of service is capable of providing vital support to domestic disaster response; however, the Army is by far the largest service in the DOD. Nearly twice as large as its nearest sister service, the Army brings manpower and equipment in mass, as well as provides unique special capabilities. Additionally, US Army North’s sole mission is to conduct homeland defense and civil support operations as the Northern Command Joint Force Land Component Command and is the lead element for NORTHCOM in responding to homeland defense and Defense Support to Civil Authorities for the military.^{10,11}

Of the three components of the Army (i.e., Active, Reserve and National Guard), the Army's primary domestic disaster response force comes from the National Guard. The Army National Guard has a "dual-mission" that includes separate federal and state responsibilities and roles. In its federal role the National Guard provides trained units for war, national emergencies and other missions. In its state role, it prepares for domestic emergencies and other missions required by state law in direct support of its respective state. When the National Guard supports its state mission, units are commanded by the state or territory executive (typically the governor) unless they are specifically mobilized for a federal mission under Title 10.¹²

The Active Army and Army Reserves, on the other hand, will supplement states at the direction of lead federal agencies upon request by the state's governor when state resources are overwhelmed and the emergency is declared a "national disaster" by the President. There are basically three response sectors that the military is capable of supporting states with (and which the Army directly supports) in a catastrophic domestic disaster: 1) special skills corresponding to assistance of response operations; 2) command and control; and 3) general support in various response actions.¹³ The primary capabilities the Army currently brings to support local civil authorities in lifesaving operations or reduction of human suffering include public health and medical; logistics management; ground and aviation transportation; public works and engineering, including infrastructure and facility restoration; search and rescue; Chemical, Biological, Radiological, Nuclear and High Yield Explosives (CBRNE); situational and damage assessments; security and law enforcement; and communications.¹⁴ These ten "military disaster response capabilities" are needed in

most disasters and are an essential part of the nation's domestic disaster response effort.

III. Why Improve Domestic Response in an Era of Downsizing

The Army's responsibility to support domestic disaster response is clearly identified in legislation, policies and directives; however, there are more compelling reasons why the Army should increase its emphasis on preparing for domestic disasters.

A. Protect Americans on the Homeland

First, protection and security of the American people are ultimately the United States Government's most important responsibility. As our country draws combat operations to a close and enters a period of relative peace, it will be increasingly imperative for the Army to be prepared to support domestic disasters. The military's responsiveness in supporting natural and man-made disasters is not only what our nation's leadership dictates, it is what American citizens expect.¹⁵ Major General Jonathan Treacy, former Commander of US Northern Command (NORTHCOM), Joint Task Force - Civil Support, framed it succinctly by saying, "...when it comes to domestic disaster response, sometimes it has less to do with the capabilities that we bring to the table and everything to do with our nation's belief that when the military shows up ...no matter how bad the situation is ...people feel that they are going to be ok."

Our military's primary mission is "to fight and win our nation's wars."¹⁶ However, the Army has supported the domestic disaster response mission since the Civil War, and that will not change based on recent events (e.g. September 11 Terrorist Attack,

Hurricane Katrina), legislative mandates (e.g. Post-Katrina Emergency Management Reform Act of 2006, John Warner National Defense Authorization for Fiscal Year 2007, Homeland Security Act of 2002), executive policies (e.g. Presidential Policy Directive – 8 [PPD-8], National Preparedness and Homeland Security Policy Directive – 5 [HSPD-5]), and public sentiment. The DOD’s Strategy for Homeland Defense and Defense Support of Civil Authorities (SHDDSCA) explicitly states only two missions. The first is to “defend U.S. territory from direct attack by state and non-state actors, and second is to “provide Defense Support of Civil Authorities.”¹⁷ However, despite this critical domestic mission, disaster response has historically been considered a secondary mission to its war fighting mission, particularly over the last twelve years with combat operations in the Middle East.¹⁸ As combat operations end and the nation shifts towards domestic priorities, the Army will face budget and strength reductions that historically follow the end of a war or major conflict. This shift will not reduce the expectations of the military in supporting catastrophic disasters. There is an increased threat of both man-made and natural disasters on US soil, and high value continues to be placed on American lives. If the Army does not balance its combat mission with its disaster response mission there is a risk of severe consequences, and there will be no excuses if the Army fails.¹⁹

Arguably the most important reason for the Army to increase its emphasis on domestic disaster response is the trust and expectations its citizens have in times of crisis and despair. Often it is impossible for the military to not feel pressure to be involved even when a formal request for support has not been received. Regardless of whether support was formally requested, authorized or even needed, the Waldo Canyon

fire in Colorado Springs, Hurricane Sandy, and the Alabama tornados of 2011 all contained accounts of the public asking, “where is the military?”²⁰ The symbolic appearance of the Army on-scene and the lifesaving support it provides in a domestic disaster instill confidence, hope, and increases morale. Key personnel from state and federal organizations who were interviewed acknowledge there is a substantive positive “psychological benefit” that occurs when the military arrives with its equipment and uniformed personnel.²¹ Conversely, these actions are, and will continue to be, increasingly important for the Army to maintain a positive connection and relationship with the US civilian population, as the Army transitions from a very publicly visible combat role to a much more subdued one following the drawdown in the Middle East. The Abram’s Doctrine established that the nation must never go to war again without the involvement of the Guard and Reserves to ensure the support of the American people in combat operations.²² The concept of also connecting the American People to the military transcends war, and domestic disaster response is an important way for the Army to continue to strengthen that link.

B. Unique and Critical Asset in Disaster Response

Secondly, the military is the only national asset that has the readiness, capability and capacity to respond to the austere and chaotic environments of catastrophic disasters in “mass” without much notice.²³ Local and state emergency managers, as well as national emergency management leaders, acknowledge that it is physically impossible to effectively respond and recover from a major disaster without the military’s support. Doug Mayne, a current Vice-Director of State Civil Defense, who has emergency management experience in Hawaii, Kentucky, Oklahoma, Missouri, Idaho,

Washington, and Alaska said, “It would be difficult for states to respond to disasters without military support ...there are just too many capabilities that are only readily available in the DOD.”²⁴ The military has the manpower, equipment, training and organization necessary to gather the relief efforts required during catastrophic incident recovery. It would be difficult for state and local emergency managers to effectively respond to even certain minor disasters without the military’s help (particularly the National Guard).²⁵ The bottom line is domestic disaster response is the primary responsibility of state and local civilian agencies as the nation’s first line of defense. However, when there is a catastrophic disaster, the federal government will be responsible to support states in filling the gaps that overwhelm local governments, and that role continues to expand.^{26,27} In a domestic catastrophic disaster, states do not typically have a “Plan B” that can be internally supported beyond local first responders, and the military is a primary asset that they depend on to save American lives, prevent human suffering and protect key national interests.²⁸

C. Urbanization

Thirdly, urbanization has the potential to create the worst regional and complex disasters the US has ever seen. Although the overall population growth rate of the US has slowed to its lowest in over 70 years, technology, quality of life and the economy have led to increased population growth in our large cities.²⁹ Approximately 81 percent of Americans live in urban areas, and that trend has been increasing over the last decade.³⁰ Population growth will increase the number of people impacted and also increase the economic damage, particularly with a regional disaster that affects multiple population centers. Larger disasters require a larger response, and the Army, with

nearly 40% of the nation's total military strength, possesses the greatest capacity for a response in mass.³¹

IV. Significant Improvements Following September 11 and Hurricane Katrina

Lessons learned from previous domestic disasters and the increasing potential of future catastrophic threats (e.g. hurricanes, floods, tornados, industrial hazards, infrastructure failures, pandemic disease, wild fires, earthquakes, droughts, tsunamis and terrorist attacks) have caused the nation to make substantial changes to improve its ability to provide federal disaster support. The military has overcome its propensity to “take charge” of an operation to which they are assigned, and have come to understand and accept its “subordinate” and “support” role to local civil authorities; the nation has improved plans, framework, strategies and policies in providing clear guidance in responsibilities and priorities of its resources; gaps that prevented a unified response have been bridged. In looking at recommendations for improvement, it is important to be familiar with some of the critical national and military changes that have improved disaster response and why they were made, particularly with respect to the strategic changes following the terrorist attack on the World Trade Center in New York in 2001, and the operational and tactical changes following Katrina in 2005.

A. National Level Improvements

Significant changes were made to national level strategy, executive level directives, and plans and frameworks that have positioned the nation and the military to effectively respond to domestic disasters. One of the most significant changes following September 11 was the establishment of the Department of Homeland Security (DHS).

DHS was given the primary responsibility to prevent terrorism, secure the US and its borders, and ensure a resilient response to both man-made and natural disasters. It was also explicitly designated as the federal agency overall responsible for domestic disaster response. All other federal agencies are in a support role under the direction of the President and DHS. Another key improvement is the change made to national strategies, like the National Security Strategy (NSS). This relatively recent shift in the importance of responding to domestic natural and man-made disasters following September 11 and Katrina was the first time that the NSS incorporated and integrated homeland security and domestic disaster response in its strategy.³² The words “natural” or “man-made disaster,” or anything related to catastrophic domestic response is not even mentioned once in the previous NSS.³³

The President and DHS also clarified the military’s role in domestic disaster response. Two directives in particular, PPD-8, “National Preparedness” and HSPD-5, “Management of Domestic Incidents,” helped clarify the shared responsibility of government agencies responding to national disasters and emergencies. PPD-8 provided guidance on responsibility through an “all-of-Nation” capabilities approach that guide activities of agencies at all levels to a common goal.³⁴ HSPD-5 enhanced the ability of the US to manage domestic disasters by establishing a single comprehensive National Incident Management System (NIMS), that was incorporated into the National Response Framework (NRF) and explicitly directed the Secretary of Defense to “provide military support to civil authorities for domestic incidents as directed by the President or when consistent with military readiness and appropriate under the circumstances and the law.”³⁵

As required by PPD-8, the NRF changed the way our nation responded to disasters by providing a guide with flexible structure in disaster recovery support. The NRF established very clear roles and responsibilities, and provided a framework on how the nation responds to “all” types of disasters based on a scalable, flexible and adaptable concept. The NRF also clearly defined roles and responsibilities at all levels, making lines of responsibility clear for the DOD and National Guard. It explicitly identified 15 Emergency Support Functions (ESF) and the associated lead federal agency with each. The DOD (specifically the Army Corps of Engineers) was designated as the lead ESF coordinator for ESF #3, “Public Works and Engineering,” and was also one of the few federal agencies typically tasked to provide support to all 15 ESFs.

Another major improvement is the evolution of the Emergency Management Assistance Compact (EMAC). The EMAC greatly improved the ability for the nation to share resources and help states in need. This was very important for the military as the EMAC made it easier and faster to incorporate military resources in disaster response, particularly those of the National Guard. The EMAC is a national interstate assistance agreement (signed by 54 states and territories) that enables states and territories to share resources during times of disaster by authorizing governors to make direct requests to the Secretary of Defense for National Guard support (in Title 32 status) from another state.³⁶

Conceptually, one of the most significant changes was the military’s understanding and acceptance that “states are in-charge” in a disaster and the military is responsible for providing federal support that supplements the state’s requests. There has been debate after Katrina arguing that the federal government should have

responsibility over states in coordinating a separate disaster response. However, no governor is willing to give up responsibility of directing the disaster response of their state because they are politically accountable.³⁷ Even when disasters have national implications and affect multiple states, all disasters historically still occur at the local level.³⁸ In 2006, legislation (John Warner National Defense Authorization Act, HR 5122) was passed to increase the President's authority to federalize the National Guard, "without" the authorization of the state's governors, to restore public order and enforce the laws in a domestic disaster where the state was incapable of maintaining public order.³⁹ However, this act was repealed just two years later in entirety, and reverted back to the original language under the Insurrection Act allowing the President to use the militia and/or armed forces in a state only to quell insurrection, domestic violence, or conspiracy (as well as, some other very specific circumstances that affect national security to include potential nuclear threats or disasters).⁴⁰

B. Improvements in DOD Strategy

For the military, improvements at the DOD and the Army began with changes to align their strategies and policies in identifying the importance and priority of the homeland defense mission. In 2008, the National Defense Strategy (NDS) explicitly acknowledged for the first time that defense of the homeland (which included disaster response) was a core responsibility of the DOD, placed at the very top of the list of its five key objectives.⁴¹ The NDS further emphasized the need to maintain the capacity to support civil authorities in time of national emergencies for both man-made and natural catastrophes in a direct supporting role to the DHS. Changes in priority and emphasis continued in the National Military Strategy (NMS) and placed special emphasis on the

National Guard, stating that "...our Nation's most vital interests are the safety and security of our people and territory and our way of life. We will defend the homeland and play a critical role in supporting homeland security ...we must continue to dedicate, fund, and train a portion of the National Guard for homeland defense and defense support of civil authorities."⁴² Furthermore, the DOD's Strategy for Homeland Defense and Defense Support to Civil Authorities (SHDDSCA), recently released in March 2013, also established priorities for the first time in the areas of homeland defense and the DSCA mission that were consistent with the NSS and the Defense Strategic Guidance - "Sustaining U.S. Global Leadership: Priorities for 21st Century Defense" (DSG).

C. Improvements in Army Strategy

Additionally, the 2012 DSG, and the 2013 "Army Strategic Planning Guidance" (ASPG) both provide further guidance on the importance and priority of homeland defense and domestic disaster response and DSCA. One of the most significant shifts in the DSG is identifying the DSCA mission as one of its top 10 priority missions for the US Armed Forces. The ASPG also reinforced the importance of domestic disaster response at the Army's level and the need to be ready to support disasters at home, citing that "recent events such as Sandy also reinforce the requirement that the Army be ready to provide support to civil authorities."⁴³ These strategic improvements in emphasizing domestic disaster response were the most significant to date; however, relative to all the strategy and guidance changes, the Army's strategy and guidance put the least amount of priority on domestic disaster response in its mission compared to the updated national and DOD strategies.

D. Improvements in Army Force Structure

In addition to strategic changes, improvements were also made to the Army's force structure. The creation of "specialized forces" addressed capability gaps in local (and federal) responses to domestic disasters, as derived from the Quadrennial Defense Review (QDR) and also identified in the Strategic National Risk Assessment (SNRA). The most significant example was the development of Chemical, Biological, Radiological, Nuclear, and high-yield Explosives (CBRNE) forces which addressed and reduced the CBRNE threat. CBRNE type hazards are one of the most significant threats to the nation based on DHS's "Strategic National Risk Assessment (SNRA) - National Level Event threats." There are 23 identified SNRA threats, and of the 23 over one-third are CBRNE related. If the "Natural" threats are removed and only the "Adversary/Human Caused" and "Technological/Accident" threats are considered, CBRNE related events make up over half of the threats (8 out of 14).⁴⁴ The DOD's primary capability provider to support CBRNE events is the Army, and the majority of CBRNE unit members who support domestic disaster response are in the Army National Guard.

CBRNE specialized forces [e.g. Weapons of Mass Destruction - Civil Support Team (WMD-CST), Homeland Response Force (HRF) and CBRNE Enhanced Response Force Package (CERFP), Defense CBRNE Response Force (DCRF) and Joint Task Force - Civil Support (JTF-CS)] were specifically trained and equipped to support civil authorities in domestic disasters and had unique capabilities beyond their inherent ability to provide CBRNE support at an incident site. Those additional capabilities included search and rescue, fatality search and rescue, medical triage, and site security in direct support of civil authorities, as well as training to both military and

civilian standards. However, there are still identified shortfalls that exist in Active Duty civil support units. The Government Accountability Office (GAO) report on Homeland Defense stated it was unclear whether the DOD's DCRF could address potential gaps in responding to multiple (or regional), near-simultaneous, catastrophic CBRNE incidents.⁴⁵ The GAO report further stated additional concerns in the response time to meet incident requirements affected by the lack of sufficient capacity in some capabilities, and challenges in the DOD's strategy for sourcing all CCMRF (which are now called DCRF) units with available units.⁴⁶

The Active Army additionally created dual-mission Technical Escort Units (TEU) which provides regional CBRNE support to both federal homeland defense agencies and the intelligence community in peace and to combatant commanders in war.^{47,48} However, one of the most significant continuing challenges is the lack of a cohesive support structure in the event of a regional disaster. The authorization to establish the Active Duty DCRF (which is responsible to integrate assist local civil authorities with state response efforts),⁴⁹ and the National Guard Homeland Response Forces (HRF) (which provide regional control over multiple CERFP and WMD-CST units from multiple states in large complex disasters) were created to provide a more robust response to multi-state disasters.⁵⁰ The combination of HRFs with DCRFs provides the nation with a tiered response to CBRNE support to local civil authorities. There are currently 10 HRFs in the National Guard (one per FEMA Region) with 53 WMD-CSTs and 17 CERFPs, and approximately 5,600 Active Duty DCRF personnel spread out across 35 installations and 88 units.⁵¹ These joint units have expanded the military's and Army's role in providing rapid response forces by utilizing both combat units (which perform

dual civilian and military missions) and specialized forces dedicated to supporting the DSCA mission. Although, HRFs have a regional alignment to the 10 FEMA regions, they do not have capabilities beyond CBRNE decontamination, search & extraction, security and medical triage. DCRFs have additional expanded capabilities beyond HRFs that include aviation, communications and logistical support; however, they are not regionally aligned and currently do not have the same training validation requirements as HRFs or CERFPs. Additionally, the current lack of clarity regarding how command and control is conducted over Title 10 and Title 32 forces in a no-notice regional disaster (i.e. one or more man-made or natural disasters that affect an entire region, and do not allow time for preparation or pre-staging) must also be addressed.

E. Reassignment of DSCA Mission

Another significant organizational change for the Army was the designation of command responsibility for the DSCA mission in the contiguous US to ARNORTH (and subsequent transfer of their previous responsibility for Training Support and Pre-deployment Training to First Army), making homeland defense and security ARNORTH's sole responsibility.⁵² The change allowed ARNORTH to reorganize the Defense Coordinating Officer (DCO) and Defense Coordinating Element (DCE) by creating ten (10) dedicated full-time teams to each of the FEMA regions, and it allowed them to focus their work directly with federal and regional responders on a daily basis.⁵³ This shift in focus improved effective coordination at all levels (regional, state, and local civilian and military organizations) by providing a single point of contact in coordinating DOD activities.⁵⁴ Additionally, the re-designation of ARNORTH's mission and the ensuing reorganization of the DCO and DCE increased the Army's coordination and

familiarity between military and civilian emergency managers and understanding of each of their inherent capabilities and deficiencies.⁵⁵

F. Establishment of the Dual Status Commander

The last, and arguably most significant, change that the DOD and Army made to improve their role in domestic disaster response is their support in establishing “unity of command” between all components (Active, Reserve and National Guard). One of the major issues and impediments the military had during Katrina was “the requirement to properly configure command and control arrangements for state and federal military forces responding to domestic disasters.⁵⁶ The struggle between state governors and the federal government for unified control of different components of the military, as seen in Katrina, was greatly improved by the establishment of the “Dual-Status Commander” (DSC).

The current role of the military is well-defined by law and limited in scope and duration. The Constitution authorized the federal government to organize, arm and discipline the militia, and order the militia into federal service in defense of the nation. And current laws call for the National Guard to serve as a federal reserve while also fulfilling its mission to the state.⁵⁷ This provides the National Guard with the unique flexibility to perform under both federal (Title 10) or state (Title 32) status, depending on the circumstances, and provides governors with the authority to place National Guard service members on “State Active Duty” (SAD) which does not require federal approval.⁵⁸ The ability to utilize the National Guard to perform missions that cannot be executed under federal Title-10 status (such as performing law enforcement which is explicitly restricted by the Posse Comitatus Act),⁵⁹ as well as the speed to which states

can initiate their National Guard under SAD, create a significant advantage in their response to domestic disasters.

The National Guard's activation under Title 32 is significant because it allows personnel to remain under the control of their governor (identical to SAD), but receive federal pay and benefits (identical to Title 10 service members), alleviating a significant financial man-power burden from the state during disasters. The National Guard can also be activated to support natural disasters under a pure federal status (i.e. Title 10) [Under Title 10 U.S.C. § 12304, the President can activate up to 200,000 members of the National Guard (and other reserve components) into federal service to augment Active Duty forces for any operational mission].⁶⁰ Two potential objections to using Title 10 in disaster response are 1) personnel operate under the control of the President (not the governor) and 2) personnel are subject to the Posse Comitatus Act. Title 32 has demonstrated to be the most desired status by state governors because it offers the state the most flexible and unrestricted use of personnel and equipment, which is exactly what is needed in disaster response where saving time and applying a flexible response are critical.

The flexibility to be able to choose the appropriate status (Title 10, Title 32 or SAD) is important in disaster response, but the adoption of the Dual Status Commander (DSC) has dramatically improved the synchronization and unification of the military's response. The DOD has recently (2011) reached an agreement with the nation's governors to empower a Dual-Status Commander (DSC) to lead both federal (Title 10) and state (Title 32) forces in the event of a domestic disaster.⁶¹ However, although the National Defense Authorization Act of 2012 (Public Law 112-81) put the DSC into law,

the Pentagon has not clarified specific criteria and conditions for use of a Dual Status Commander, particularly in a “no-notice” disaster event.⁶² Additionally, DSCs does not currently apply to a regional command, potentially causing an issue of regional command and control over Title 10 and Title 32 forces and military resources.

To improve the integration of the military with FEMA and State-Level emergency management organizations, NORTHCOM pre-designated Title 10 Dual-Status Deputy Commanders to lead Joint Support Force Staff Elements that integrate with State-Level DSC staff in order to support unity of effort over both Title 32 and Title 10 forces.⁶³ Title 10 Dual-Status Deputy Commanders also establish close habitual relationships with the pre-designated DSC as advisors on Title 10 matters, and they engage with senior state leaders and develop close working relationships with key partners within their assigned FEMA regions.

The improvement in command and support relationships between NORTHCOM, PACOM and the National Guard in authorizing and embracing the “Dual-Status Commander” has been a landmark change. But, perhaps the most important change the Army (and military in general) made to improve the nation’s ability to respond to domestic disasters was to embrace the “willingness to change” and accept the new paradigm for conducting domestic disaster response. The adjustment for all the services and components to accept new roles and authorities, like the DSC, has changed the way the military responds to domestic disasters and has created the potential for addressing future problems in a different light. The success of the DSC has been endorsed by both Active Duty and Reserve component commanders at the highest levels, and proved to be successful in real world events from National Security Special

Events to domestic disasters. The most recent example can be found in the first unplanned use of DSCs in support of Sandy, where five DSCs were initiated in the States of New Jersey, New Hampshire, New York, Maryland and Rhode Island.⁶⁴ “The response to Sandy reaffirmed the value of a new command structure that Army Gen. Charles H. Jacoby Jr., the U.S. Northern Command commander, calls one of the most important initiatives to improve defense support of civil authorities in more than a decade.”⁶⁵

G. Improved Preparation between DOD and Civil Authorities

Lastly, the DOD and the Army have done a good job at increasing the preparation level for domestic disasters through exercises at the highest levels which strengthen working relationships with civilian emergency management agencies, local first responders, national neighbors, and military service members and DOD civilians. Joint exercises with military, local civilian and federal emergency managers, as well as nation neighbors are conducted each year by NORTHCOM (Ardent Sentry Exercise), ARNORTH (Vibrant Response Exercise) and PACOM (Pacific Theater Engagement Exercise). These exercises help the military’s senior commands develop new contingency plans, and gain familiarity with existing contingency plans and standard operating procedures. Additionally, they develop and build working relationships and trust with other military branches and components, as well as key civilian agencies that attain a clearer understanding of their capabilities, standards and shortcomings.

September 11 and Katrina were turning points in disaster response, and the military appears to have successfully made important improvements to address those shortcomings and solidify its position and responsibilities in domestic disaster response.

By adjusting its priorities, strategies and guidance, adding missing capabilities, effectively re-structuring and utilizing the total force (Active, Guard and Reserves), and sharing and redistributing responsibilities, the Army is better postured to support future domestic disasters.

V. Improving the Army for the Next Catastrophic Domestic Disaster

The Army has improved its posture to support our nation in a domestic disaster response. However, the Army should address shortcomings in areas related to regional responses, preparation and training at the lowest levels, and increase priority of the domestic response mission based on future threats.

There are some who argue the military should take the lead role in disaster response. However, there is limited political and public support for a military lead. This is not economically feasible and it would undermine the current process administered by the DHS and FEMA that has been proven to work. Such a change would also create situations the Posse Comitatus statute was created to prevent. President Bush attempted to shift responsibility to the DOD after the failed response to Katrina, but was unsuccessful primarily because 48 out of 50 governors wanted to remain in charge of their states' disasters. Although the military is an indispensable national resource in domestic disasters and although other nations, like China, use the military as a standing lead response to national emergencies, the US military should remain in a strong supporting role, prepared to supplement and complement the states' response. To do otherwise would contradict our constitution and conflict with state sovereignty, and could potentially adversely affect public trust.

The questions then become, where should the Army prioritize its resources, and how should it fill the gaps in domestic disaster response without increasing its force structure, particularly for no-notice complex disasters. All interviewed experts were concerned to some degree with the following problems and threats: 1) a catastrophic “no-notice” disaster that affects multiple jurisdictions, 2) the ability to improve response time (particularly in the first 72 hours), and 3) maintaining public trust. The ten (10) primary military disaster response capabilities through which the Army supports domestic disasters are all essential in a catastrophic disaster response.⁶⁶ But, current austere fiscal conditions and general downsizing of the military prevent increasing force structure. Furthermore, no expert encountered in this review recommended providing additional specialized forces or capabilities by the military exclusively for disaster response.⁶⁷

A. Recommendation #1: Improve Process and Response Time

Although the Army supports all phases of a disaster, the Army should play a more significant role in the preparation phase of disasters and increase its ability to respond faster, particularly in the first 72 hours. In past disasters, the Active Duty and federal civilian agencies have taken approximately 3 days to provide support even in an expected disaster, and states anticipate this initial gap in support.⁶⁸ This 72 hour delay is typically not an issue;⁶⁹ however, when catastrophic disasters overwhelm state and local government resources immediately that buffer disappears causing severe consequences.⁷⁰ Currently, the majority of the Army’s support goes to the response phase. However, increased emphasis in planning and training for a disaster is equally

important. Increased involvement by the Army at the lowest levels will lead to a clearer understanding of local and regional problems that will be faced in a disaster and help in advanced movements and preparation to respond.

Response Time

One of the biggest challenges in improving the response time is the current process for requesting military support. DOD requires a Request for Assistance (RFA) from the identified lead federal agency (e.g. FEMA) to provide military support, and that process can take an extended period due to approval required by the Secretary of Defense. Federal responses can be further delayed because the RFA starts with a request generated by the State, and that request requires good situational awareness and assessments which may not be available in a catastrophic disaster.

Under the DOD's "Immediate Response Authority," a local commander can immediately provide short duration support without a RFA in order to save lives, minimize hardship and suffering, and/or mitigate great property damage. However, for all other more enduring requirements, a RFA is required. Lieutenant General Dubie, Deputy Commander for NORTHCOM said, "...these RFA's are driven by local and state specific shortfalls, and are subsequently endorsed by the Lead Federal Agency, which could take days to process. As a result there is a lag from when the communities cite a need and when the DOD is formally tasked for the mission. This lag is mitigated by the DCOs embedded within the FEMA regions, Emergency Preparedness Liaison Officers (EPLOS) at the State Joint Operations Centers and installations, and Liaison Officers (LNO) assigned to our federal partners."⁷¹ These enablers anticipate possible DOD requests based on capabilities that are historically required, then alert and pre-stage the

capabilities in anticipation of receiving the formally approved RFA.⁷² However, if the states' cannot identify the requirement, the Army cannot support it. Increased involvement by the Army in state and regional planning at the lowest levels, as well as local assessments, particularly by the Army National Guard will help.

Training & Exercises with Local Governments

Anticipation by the Army minimizes the processing lag; however, most of the large domestic disaster events recently supported had significant time to prepare before the disaster. Therefore responders and the military had time to pre-position and pre-coordinate anticipated needs. Also, the typical response preparation is based on experience from disasters that have actually occurred. In a no-notice disaster, there will be no time for preposition, and additionally a no-notice catastrophic multi-state disaster may initially overwhelm local and state emergency managers to the point where they will not be able to effectively assess the unique situation of the disaster to submit timely request or pre-coordinate with the DCO, causing even further delays in response time. The Army (ARNORTH) serves as the lead for NORTHCOM, and although the Army has successfully restructured its use of critical lead coordinating and liaison positions (i.e., DCO, DCE, EPLOS and LNOs) at the regional level, there should also be increased unit training at the operational and tactical level. The subsequent increase in training with state emergency responders directly involved with lower level units, like DCRF units, will allow for localized relationships and procedural development at the planning stage, based on state and county after action reviews.

One counter argument is that if states allow the Army to be involved in the planning that might indirectly make a political statement that states are unprepared to

support their respective governors. However, the state emergency managers that were interviewed, covering experience in eight different states, all acknowledged that the military plays an indispensable complementary role in disaster response, not an adversarial one.⁷³ Additionally, seven states are structured for their National Guard commander (i.e., the Adjutant General) to concurrently serve as the head of emergency management, reporting directly to the governor.⁷⁴ In the event of catastrophic disasters, emergency managers did not believe it would be possible to respond effectively without critical general and specialized military disaster response capabilities. In fact, they indicated there is always a desire to have maximum military involvement at all levels in state and local exercises. These exercises help pre-identify gaps in disaster response and establish trust relationships and familiarity with key personnel and military capabilities. However, they were also sensitive to the balance commanders must make within priorities between preparing for their combat and DSCA missions.⁷⁵ Increased emphasis at all levels prior to disasters will allow the Army to positively influence plans, increase coordination, establish trusted relationships and improve its localized awareness, as well as project its expertise in what it is inherently experienced at-- planning military response operations.

Another counter argument and perception with increased Army involvement in training and planning, particularly at the operational level, is that disaster relief is considered a secondary mission and there is a traditional concern that any greater emphasis on essentially civilian or non-military operations will detract from combat preparedness, and weaken its priority towards national defense (...as the military is the “only” national asset that can fight and win our nation’s wars).^{76,77} However, increasing

training will not only help the Army prepare for the domestic disaster response mission, but it will have secondary and tertiary benefits.

Senior military leaders believe disaster response directly translates into areas that support combat operations. Of the four general officers that were interviewed, each with extensive experience in both emergency management and combat operations, all agreed that the DSCA mission and responding to disasters provides real training value for combat operations. Major General Treacy, recent commander of JTF-CS, NORTHCOM, stated that “we need to tap capability that is inherent in our military in disaster response and train for disaster response ...when we organized and practiced it, what we found out was that practicing and planning for the domestic response mission translated to improving standard operating procedures, Tactics Techniques and Procedures (TTPs), command and control of forces, and our ability to work with civil authorities ...that helps our war fighting capability from commanders down to the individual Soldiers. Domestic disaster response training have developed unique perspectives and sharpened our ability to plan and work with country teams and civilians in Iraq and Afghanistan.”⁷⁸ Although Active Duty troops have a much shorter response time to mobilize and must maintain a higher level of readiness than National Guard or Reserve units, it is not impossible to support both missions with high levels of readiness in both. Based on the Army’s recent combat operations in Iraq and Afghanistan, experience gained in planning and training for disaster response will unquestionably increase the Army’s ability to deal with civilians and civil leaders, which is a paramount skill on the modern battlefield and will continue to be in the future.⁷⁹

Training is particularly needed the most at the state and local level to improve coordination and familiarization with local first responders and emergency managers. Knowing the players, procedures and standards at all levels cannot be over emphasized, as "coordination and synchronization between civilian and military actors is essential during an emergency and is what saves time and lives."⁸⁰ Having Soldiers and officers at the tactical and operational level working in cooperation with local civilian police, fire services and first aid providers on a regular basis will give those actually performing the work a deeper understand of how they fit into to a successful response as a supporting element. State emergency managers indicated that although the Active Duty military is both capable and ready to provide support during disasters, without joint civilian and military exercises conducted at the state and local levels there will be time lost in detailing, identifying, and satisfying the most urgent priorities.⁸¹ The realization of this deficiency is often addressed only after a major disaster has impacted an area. By increasing training at the lowest levels the Army will support and improve the planning process with states, increase its influence in the planning and preparation process, and expand its emphasis on the disaster response to the tactical and operational levels.⁸²

B. Recommendation #2: Increase Priority and Capacity for Domestic Disaster Response

The Army has made some significant changes to better position our national preparedness in responding to the next disaster; however, there is an opportunity for the Army to improve in this area even further by increasing the priority of the DSCA mission. Major General (ret) Vern Miyagi, who was the Deputy Commander of PACOM and is currently a state Emergency Manager, said "there is definitely a strong

willingness and commitment to support domestic disaster response operations in PACOM ...and the key to making this work is the priorities set by the Title 10 commander.”⁸³ The Army should reinforce its commitment to DSCA by reflecting those priorities in strategies and guidance like the ASPG, and also highlight the Army’s important role in domestic disaster response, aligning its mission with national priorities and strategies. The ASPG should increase its focus on the primary role the reserve component plays and the supplementing role the Active Duty Army plays in disaster response. The current Army discussion of the reserve component relates to “depth” and an “operational reserve,” and there is only a single sentence relating to “DSCA” in the 23 page ASPG document, with no direct reference to disaster response.⁸⁴

States understand and accept that the military’s combat mission is the priority. However, disaster response training indirectly develops combat operation capabilities. It is therefore not in competition with that objective, but instead directly supports the combat mission. It is worth noting that during Katrina, part of the military’s challenges had less to do with capability and more to do with challenges related to redundant coordination of tasks, unity of command, pre-establishing relationships, expediting support requests and understanding legal limitations. Domestic disaster response is a capability that is inherent to the military. The DOD and Army at the highest levels (NORTHCOM, PACOM and ARNORTH) are completely vested in training and have initiated major exercises to support the domestic disaster response priority. In addition to emphasizing domestic disaster response, the Army should promote the training and execution benefits of preparing for disaster response to develop relationships, work with

civilians and coordinate processes that could improve combat-related skills needed for future combat operations.

To increase the Army's involvement in DSCA at the operational and tactical level selected units should include the DSCA mission in their Mission Essential Task List (METL).⁸⁵ METL selection based on a unit's rotational deployment cycle provides off cycle units the opportunity to exercise critical disaster response skills during their off cycle. The Army could require the DSCA mission be included on the METL of units that are typically needed in disaster response, based on their rotational cycle. Consideration should also be given to units based on regional and unique capabilities that translate to supporting domestic disaster response. The units most valuable to disaster response are typically combat support and combat service support units.

The Army should develop a system to assign these tasks directly to select logistical support units, utility and cargo aviation helicopter units, transportation units, medical service units and heavy engineering units that are not anticipated for rapid deployment, and carry a "dual-mission" for a determined number of years. The technical requirements of those disaster response support tasks are very similar to tasks that those units would train to perform in combat, and proficiency could be obtainable with minimal additional expenditure of resources or time. In the National Guard, it is common for a unit to have both a combat and a domestic disaster response mission on their METL. In fact, all CERFP and HRF units in the National Guard operate with this dual-mission requirement. They are made up of different types of MTOE (Modified Table of Organized Equipment) units based on what is available in the state. While there is a trade-off in combat readiness for disaster response readiness, it is a relatively small

one. National Guard units with dual-missions can close the combat readiness gap and deploy for combat within 100 days.

If a task is not a METL requirement it will not be a priority for a unit commander. Major General (ret) Vern Miyagi said, “DSCA operations should be considered in the METL of all operational Title 10 (i.e. Active Duty) units, and collaboration with civil authorities in their potential DSCA operational areas is a good idea.”⁸⁶ METL requirements for Active Duty Army units will require them to be trained and familiar with NIMS, the Incident Command (IC) standard that HRFs, CERFPs, WMD-CST, DCO/DCEs, and federal and state emergency managers train to. Training to support the DSCA mission will improve the Army’s preparation, planning and readiness for domestic disaster response, and improve warfighting capability by improving 1) team building, 2) reconstruction efforts and work with civilian populations and governments, 3) adaptive problem solving, and 4) proficiency in mission command.⁸⁷

Finally, and maybe most importantly, it helps build and solidify relationships with local civilian authorities and the community, and it allows the Army to maintain important visibility with the public and build trust equity as the nation transitions to peace. After the most recent Ardent Sentry Exercise in 2013, a senior military officer said, “...more needs to be done to balance a disaster response system designed to pull the resources it needs with supporting organizations anxious to push assistance. And more education is needed across all ranks of the military, particularly among federal forces, to increase awareness about defense support of civil authorities.”⁸⁸

Change is initiated from the top; and, in any large organization, fundamental shifts in thinking do not change overnight. The Army’s response to DSCA is better than

it was 10 years ago, and the overall effort by the DOD to prioritize disaster response as a primary mission has had a dramatic effect on the effectiveness and efficiency in domestic disaster response. Exercises are taking place at the highest levels (ARNORTH and NORTHCOM, PACOM, USARPAC); however, effective disaster response improves with established relationships and familiarity with strengths and weaknesses. “Discussion and coordination must be done before the event... and depends on personal relationships developed between the civilian emergency manager, the National Guard and the Active Duty ...state and local emergency managers must understand what the Active Duty can bring to the event and the military must understand what capabilities state and local managers will ask for way ahead of any disaster.”⁸⁹ Familiarity becomes exponentially important when a disaster occurs without pre-warning and is an unplanned scenario.

Likewise the National Guard could improve its readiness and training outside of the state in preparation for regional support requirements. The National Guard typically does domestic readiness training with its local state emergency managers through local response exercises. This training is closely tied to the emergency management command and control structure of their state. However, the Army National Guard does not conduct a significant amount of regional training, except for CERPFs and WMD-CSTs. Looking ahead, creating joint RDRFs would help eliminate this shortfall and improve the Army and National Guards response role.

C. Recommendation #3: Establish Standing Regional Domestic Response Forces

The Army should improve its ability to provide regional domestic disaster support and play a larger role by establishing a standing Regional Domestic Response Force (RDRF). The Army appears well positioned to support domestic disasters that it has previously experienced, particularly when there is an early warning to prepare.

However, the greatest threats are the ones our nation has not been tested on under our current disaster response framework. Disasters, like Katrina, cause major shifts in thinking about how we approach domestic disasters. Disaster response needs are often unanticipated or considered after a catastrophic disaster happens. As Major General Jonathan Treacy stated, "...one of the biggest concerns relating to domestic disaster response for the Commander of NORTHCOM is a "complex no-notice disaster.""^{90,91}

A complex no-notice disaster could potentially affect more than one region. Examples would include a CBRNE terrorist attack in one or more major population centers, or a major earthquake along the Ramapo Fault that also causes a reactor failure at the Indian Point Energy center on the Hudson River (24 miles north of New York City). These types of scenarios compound response challenges, and have proven to be the most challenging for the military. Lieutenant General Dubie further expanded by saying, "we (NORTHCOM) are most concerned with a large-scale, multi-state disaster that is likely to cross multiple jurisdictions, causing extraordinary levels of mass casualties, damage or disruption that severely affects the population, infrastructure, environment, economy, national morale, and/or government functions. These complex, catastrophic events will not only test federal, state and local capabilities and will likely necessitate an adjustment to the normal federal request process ...they may also

change DOD's normal role in a disaster—perhaps not only supporting during the 'response' phase of a disaster, but also heavily involved during the 'recovery' phase for the long term."⁹²

Preparations made within the states will be insufficient in the event of a catastrophic complex regional disaster. As the number of states involved and the scale of the disaster increases, the case for federal leadership will grow stronger, and in turn the role of the Army will increase. The balance between providing a timely regional response while also allowing the disaster to be controlled by the states will be one of the biggest challenges. According to Rand Corporation (2011), the best way to improve the Army's response to a disaster of this magnitude is to empower the National Guard for a regional focus.⁹³ A regional response force that is made up of dual-mission units would fill a gap that currently exists by providing the mass capabilities needed while also providing command and control over units in multiple states, multiple jurisdictions and possibly over multiple regions. The DOD should create a regionally aligned defense response force composed of tailored military capability sets of all units in the region to include both Reserve Component and Active Duty service members (Active Duty Army, as well as Air Force, Navy and Marines depending on the geographic location of key resources). An alternative approach could be to use the dual-mission concept with both Active Duty and National Guard forces on a rotational basis. This approach would require designated RDRF units assigned for one or two years with their priority mission being domestic disaster response. These units would assume some risk in their combat mission readiness.

This sounds very similar to NORTHCOM's Defense CBRNE Response Forces (DCRF). However, DCRFs are Title 10 assets and are primarily meant to respond to provide NORTHCOM with a responsive Title 10 CBRNE, aviation, medical and logistics response. RDRF should be more flexible and more capable in other areas that are also typically important to domestic disaster response beyond CBRNE response, to include typical military disaster response capabilities that are needed to supplement states. Ideally, they would also be multi-component and able to share the responsibilities as a "dual-mission" force, allowing flexibility in assigning units from the right component to support the needed response task. For example, Military Police units needed to support the a law enforcement or security mission in the RDRF would come from the National Guard and not be in violation of the Posse Comitatus Act, while emergency power infrastructure support, particularly within the first 24 hours, could come from the Active Duty Army's 249th EN (Prime Power) where there is unique expertise.

An additional alternative is to establish RDRFs exclusively from the National Guard and Reserves. Where the National Guard is composed of primarily combat units (aviation, infantry, field artillery, armor, etc.), engineering, medical service, transportation, logistics and communications units, needed in supporting disaster response, are typically in the Combat Support and Combat Service Support units located in the Reserves. The combination of the Army National Guard and Reserves will provide the needed capacity and capability, and legal and operational flexibility for a regional response. The Reserves are also similarly geographically dispersed like the National Guard, and not located on Army installations like Active Duty units. The Reserves' structure is also similar to the National Guard and can easily follow the

National Guard's dual mission model with minimal changes. Finally, the Reservists, like the National Guard, typically serve their entire career in the same state and are intimately familiar with the geography and culture. Geographic stability and cultural familiarity has the added benefit to developing and sustaining long-term relationships with state and local emergency managers.

The RDRF concept would be most effective if these units were organized around and dedicated to each of the 10 FEMA regions (see Figure 1).⁹⁴ Depending on its size, having one RDRF for each of the 10 FEMA regions may not be possible without significant cost and force structure increases. Creating even three trained brigade sized RDRFs, strategically located based on anticipated risks and threats, would help improve



Figure 1. FEMA Regions Aligned With Regional Response Forces⁹⁵

flexibility, depth and response time. The advantage of having a RDRF assigned to each FEMA region is that each unit would be responsible for operational and tactical multi-

state planning aligned with FEMA regions. This would facilitate understanding regional cultures, threats, history, key civilian emergency management personnel and first responders, military assets and state DSCs.

The National Guard and Reserves are well-positioned to respond to events at the regional level, particularly if legislation is not passed to expand the Title 10 role in domestic disaster response. Priority of federal resources will remain with civilian leaders at DHS and FEMA; however, a regional Dual-Status Commander role may be required. The challenge will be to designate an arrangement which allows governors to retain control of their states while having a single military officer regionally control Title 10 and Title 32 forces over multiple states. Maintaining unity of command will be tricky, but not impossible with everyone's cooperation. The command arrangement would depend on mutual cooperation similar to the case with EMAC support that has worked in the past. Additionally, designing and tailoring RDRF to maximize existing force structure and local unit capabilities will result in a regionally unique force.

Lastly, a RDRF would help the Army increase its role in supporting assessments to emergency managers to improve situational awareness. Although NORTHCOM does not favor increased involvement in disaster assessment (leaving that responsibility with FEMA, state and local and federal agencies), disaster assessments were a capability that some local emergency managers felt could benefit from military support.^{96,97} As mentioned earlier, the first step in obtaining federal support is submission of a RFA; however, the concern is whether the local or state agency that has been overwhelmed, particularly in a no-notice catastrophic disaster, are even capable of conducting the incident assessments to obtain DOD or federal assistance.⁹⁸ Additionally, this high

resource and man-power intensive task is critical to gaining early situational awareness in the first 72 hours and is one of the core principles for Incident Management in the NSHS.^{99,100} Establishing pre-designated personnel and teams that are already intimately familiar the region at key locations will greatly increase the speed and accuracy needed in saving lives and requesting the right kind of support.

An RDRF will help provide the Army with greater familiarity and a clearer understanding of the unique risks and threats of each distinctly different region, and provide a quicker more flexible response. In turn, this will help make operational recommendations and decisions on how to best allocate resources, as well as employ resources to DHS. The concept of a RDRF has similar benefits as the Army's Regionally Aligned Forces (RAF) concept and is a logical expansion for additional response capability in concert with the existing Homeland Response Force (HRF).

VI. Conclusion

Until the US experiences a no-notice complex disaster, it is difficult to fully appreciate the challenges the Army will face in its domestic disaster role. Since September 11, the Army has made significant progress in improving the nation's resiliency in domestic disasters. The recommendations offered in this paper could increase the readiness and effectiveness of military support by regionally aligning forces domestically, establishing relationships through increased training and planning, and maximizing the capabilities in each Army components. This regionally aligned cross component synergy is necessary to concurrently balance budget reductions and improve combat readiness.

With DSCA, the Army's most pressing challenge is how it will respond to a regional no-notice domestic catastrophe. The US has been fortunate relative to the rest of the world when dealing with catastrophes. A stable geographic location, high facility and infrastructure standards, and technology have certainly reduced some of the risk. However, the deadliest US disaster was the 1900 Galveston Hurricane in Texas which killed 8,000 and the US has never experience a catastrophic disaster that has killed hundreds of thousands of people. Natural or man-made disasters like major earthquakes, CBRNE terrorist attacks, or infectious disease pandemics are catastrophic threats, and the Army should balance the risks and the cost of defense abroad and at home. A major earthquake on the New Madrid Fault in the central United States or the San Andreas Fault in the west coast, a man-made or natural pandemic in multiple population centers, or multiple nuclear or radiological terrorist attacks are all real threats. The country expects the military to be there, and the Army must ensure that it is prepared when the next catastrophe strikes.

“Given the certainty of catastrophes on our soil – no matter how unprecedented or extraordinary – it is our collective duty to provide the best response possible.”

The National Strategy for Home Homeland Security, October 2007

VII. Abbreviations

9/11	Terrorist Attack on September 11, 2001
AHRQ	Agency for Healthcare Research & Quality
ARNORTH	US Army Northern Command
ASPG	Army Strategic Planning Guidance
CCMRF	CBRNE Consequence Management Reaction Force
CERFP	CBRNE Enhanced Response Force Package
CBRNE	Chemical, Biological, Radiological, Nuclear and High Yield Explosives
DCRF	Defense CBRNE Response Force
DCE	Defense Coordinating Element
DCO	Defense Coordinating Officer
DHS	Department of Homeland Security
DOD	Department of Defense
DSC	Dual Status Commander
DSG	Defense Strategic Guidance
DSCA	Defense Support to Civil Authorities
EMAC	Emergency Management Assistance Compact
EPLOS	Emergency Preparedness Liaison Officers
ESF	Emergency Support Functions
FBI	Federal Bureau of Investigation
FEMA	Federal Emergency Management Agency
GAO	Government Accountability Office
HR	House of Representatives
HRF	Homeland Response Force
HADR	Humanitarian Assistance Disaster Relief
HSPD	Homeland Security Policy Directive
JTF-CS	Joint Task Force Civil Support, US Northern Command
LNO	Liaison Officer
MACD	Military Assistance for Civil Disturbance
MEB	Maneuver Enhanced Brigade
METL	Mission Essential Task List
MOS	Military Occupational Specialty
MSCLEA	Military Support to Civilian Law Enforcement Agencies
NORTHCOM	US Northern Command
NDS	National Defense Strategy
NGB	National Guard Bureau
NPG	National Preparedness Goal
NRF	National Response Framework
NRP	National Response Plan
NSHS	National Strategy for Homeland Security
NSS	National Security Strategy
NMS	National Military Strategy
PACOM	US Pacific Command
PPD	Presidential Policy Directive

QDR	Quadrennial Defense Review
RAF	Regionally Aligned Forces
RDRF	Regional Domestic Response Force
RFA	Request for Assistance
SAD	State Active Duty
SHDDSCA	Strategy for Homeland Defense and Defense Support of Civil Authorities
SNRA	Strategic National Risk Assessment
SPP	State Partnership Program
TEU	Technical Escort Unit
TTP	Tactics Techniques and Procedures
US	United States of America
USC	United States Code
WMD-CST	Weapons of Mass Destruction-Civil Support Teams

VIII. Endnotes

¹General Raymond T. Odierno, Chief of Staff, US Army, *“The U.S. Army in a Time of Transition - Building a Flexible Force,”* Commentary for Foreign Affairs, Council of Foreign Relations (May/June 2012): 2.

²Centre for Research on the Epidemiology of Disasters, Institute of Health and Society, Universite catholique de Louvain, *Annual Disaster Statistical Review 2012 - The Numbers and Trends* (Ciaco Imprimerie, Louvain-la-Neuve: Belgium, August 2013), 13-16.

³Steven P. Bucci, Ph.D., David Inserra, Jonathan Lesser, Ph.D., Matt A. Mayer, Brian Slattery, Jack Spencer and Katie Tubb, *“After Hurricane Sandy: Time to Learn and Implement the Lessons in Preparedness, Response, and Resilience,”* Special Report #144, The Heritage Foundation, October 24, 2013, 20; available from <http://www.heritage.org/research/reports/2013/10/after-hurricane-sandy-time-to-learn-and-implement-the-lessons>; Internet; accessed January 15, 2014.

⁴Steven P. Bucci, Ph.D., David Inserra, Jonathan Lesser, Ph.D., Matt A. Mayer, Brian Slattery, Jack Spencer and Katie Tubb, *“After Hurricane Sandy: Time to Learn and Implement the Lessons in Preparedness, Response, and Resilience,”* Special Report #144, The Heritage Foundation, October 24, 2013, 20; available from <http://www.heritage.org/research/reports/2013/10/after-hurricane-sandy-time-to-learn-and-implement-the-lessons>; Internet; accessed January 15, 2014.

⁵Ibid., 13-29.

⁶Center for Research on the Epidemiology of Disasters – CRED, The International Disaster Database – Natural Disaster Trends; available from <http://www.emdat.be/natural-disasters-trends>; Internet; accessed October 20, 2013.

⁷“Catastrophic Disaster:” As defined by the National Response Framework (NRF), is any natural or man-made incident, including terrorism, which results in extraordinary levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, national morale, and/or government functions.

⁸Government Accountability Office Report, GAO-13-128, “DOD Needs to Address Gaps in Homeland Defense and Civil Support Guidance,” October 24, 2012.

⁹Department of Defense, Joint Homeland Security Doctrine, p. IV-4.

¹⁰Department of the Army, Center for Army Lessons Learned, Catastrophic Disaster Response Staff Officer’s Handbook, Handbook 06-08, May 2006, Chapter 3; available from <http://usacac.army.mil/cac2/call/docs/06-08/ch-3.asp>; Internet; accessed February 17, 2014.

¹¹www.us.army.mil, US Army North; available from <http://www.army.mil/info/organization/unitsandcommands/commandstructure/usarnorth/>; Internet; accessed November 10, 2013.

¹²Department of the Army, FM 1 U.S. Army, June 2005, 15; available from <http://www.army.mil/fm1/chapter2.html>; Internet; accessed December 3, 2012.

¹³John Y. Schrader, "The Army's Role in Domestic Disaster Support: An Assessment of Policy Choices," *The Role of the Military in Disaster Response in the US*, *European Journal of Economic and Political Studies*, (Santa Monica: RAND Corporation: AD-A282 31, 1993), 25.

¹⁴Naim Kapucu, "The Role of the Military in Disaster Response in the U.S.," 2011, 8; available from http://www.academia.edu/4164096/The_Role_of_the_Military_in_Disaster_Response_in_the_US; Internet; accessed December 4, 2013.

¹⁵U.S. Department of the Army & The Marine Corps, Domestic Support Operations, Field Manual 100-19 (Washington, DC: U.S Department of the Army and The Marine Corps, July 1993), 5-1.

¹⁶Department of the Army, "The Official Home Page of the United States Army, Mission;" available from <http://www.army.mil/info/organization/>; Internet; accessed January 23, 2014.

¹⁷Department of Defense, "Strategy for Homeland Defense and Defense Support of Civil Authorities," February 2013, 9 & 14.

¹⁸2012 Army Strategic Planning Guidance, John M. McHugh, U.S. Secretary of the Army & General Raymond T. Odierno, U.S. Army Chief of Staff, April 19, 2012, 3.

¹⁹For strategic Army priorities by the U.S. Secretary of the Army and U.S. Army Chief of Staff see, see "2012 Army Strategic Planning Guidance" which identifies "Defend the Homeland and Provide Support to Civil Authorities" and "Conduct Humanitarian Disaster Relief" as two of the priorities under *Missions of the US Armed Forces from "Sustaining US Global Leadership: Priorities for 21st Century Defense*," April 19, 2012, 3.

²⁰Jeffrey Larsen, "Responding to Catastrophic Events: Consequence Management and Policies," Palgrave Macmillan, New York, May 2013, 1.

²¹Doug Mayne, Vice-Director of Civil Defense, State of Hawaii and former Federal Coordinating Officer (FCO) for disasters in KY, OK, MO, ID, WA and AK; Interview with Major General (ret) Vern Miyagi, former Commander, Hawaii Army National Guard; Mobilization Assistant to the Commander (which is the principal advisor to the commander on Reserve Component readiness and operations, and Homeland Security activities between the state, National Guard, active military and federal agencies), PACOM; and current Emergency Manager, State Civil Defense, State of Hawaii, LTG Michael Dubie, Deputy Commander, NORTHCOM, interviewed by author, Chapel Hill, NC, January 10-15, 2014.

²²Department of Defense, "Comprehensive Review of the Future Role of the Reserve Component," Office of the Vice Chairman of the Joint Chiefs of Staff and Office of the Assistant Secretary of Defense for Reserve Affairs, April 5, 2011, 15.

²³Definition of a Catastrophic Incident (FEMA): "A catastrophic incident is defined as any natural or manmade incident, including terrorism that results in extraordinary levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, national morale, or government functions. U.S. Department of Homeland Security, National Response Framework (Washington, D.C.: U.S. Department of Homeland Security National Response Framework, Chapter 2: Response Actions, 42; available from <http://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf>; Internet; accessed May 20, 2013).

²⁴Doug Mayne, Vice Director of Civil Defense, State of Hawaii and designated Federal Coordinating Officer (FCO) for disasters in KY, OK, MO, ID, WA and AK, interviewed by author, Chapel Hill, NC, January 20, 2014.

²⁵Elisabeth Fischer, "Disaster Response: The Role of a Humanitarian Military," 2011, 1; available from <http://www.army-technology.com/features/feature125223/>; Internet; accessed January 7, 2014.

²⁶*Congressional Research Service Report for Congress*, Jennifer K. Elsea and R. Chuck Mason, "The Use of Federal Troops for Disaster Assistance: Legal Issues," 7-5700, RS22266, November 28, 2008, 4.

²⁷Donald F. Kettle and Jonathan Walters, *Governing*, "The Katrina Breakdown," December 2005; available from <http://www.governing.com/topics/economic-dev/The-Katrina-Breakdown.html>; Internet; accessed on November 13, 2013.

²⁸*Ibid.*

²⁹Lisa Lambert, "More Americans Move To Cities in Past Decade-Census," March 26, 2012, 3; available from <http://www.reuters.com/article/2012/03/26/usa-cities-population-idUSL2E8EQ5AJ20120326>; Internet; accessed January 28, 2014.

³⁰Lisa Lambert, "More Americans Move To Cities in Past Decade-Census," March 26, 2012, 3; available from <http://www.reuters.com/article/2012/03/26/usa-cities-population-idUSL2E8EQ5AJ20120326>; Internet; accessed January 28, 2014.

³¹Defense Manpower Data Center, Office of the Secretary of Defense, September 19, 2013; available from <https://www.google.com/#q=total+military+personnel+and+end+strength+by+service+july+31%2C+2013>; Internet; accessed on November 12, 2013.

³²National Security Strategy, Barrack Obama, Washington, D.C.: The White House, May 2010.

³³National Security Strategy, George Bush, Washington, D.C.: The White House, September 2002.

³⁴Presidential Policy Directive – 8, "National Preparedness," Barrack Obama, Washington, D.C.: The White House, March 30, 2011.

³⁵Homeland Security Presidential Directive – 5, "Management of Domestic Incidents," George W. Bush, Washington, D.C.: The White House, February 28, 2003.

³⁶Emergency Management Assistance Compact, "What is EMAC?," available from <http://www.emacweb.org/index.php/learnaboutemac/what-is-emac>; Internet; accessed January 30, 2014.

³⁷CNN, "Admiral Takes Over Katrina Relief," September 9, 2005, available from http://www.cnn.com/2005/POLITICS/09/09/katrina.washington/index.html?section=cnn_us; Internet; accessed on January 5, 2014.

³⁸Kenneth Ring, "Military Disaster Response: Strategy Leadership, And Actions – Closing the Gap," Strategic Research Project, Carlisle Barracks, PA: US Army War College, March 2008, 5.

³⁹John Warner National Defense Authorization Act, HR 5122[109], sec 1072-333 (2007).

⁴⁰*Ibid.*

⁴¹National Defense Strategy, Robert M. Gates, US Secretary of Defense, Department of Defense, June 2008, 6.

⁴²The National Military Strategy of the United States 2011, "Redefining America's Military Leadership," 2010, 10.

⁴³2012 Army Strategic Planning Guidance, John M. McHugh, U.S. Secretary of the Army & General Raymond T. Odierno, U.S. Army Chief of Staff, April 19, 2012, 3.

⁴⁴Department of Homeland Security, "The Strategic National Risk Assessment in Support of PPD-8: A comprehensive Risk-Based Approach toward a Secure and Resilient Nation," Washington, D.C.: December 2011, 2.

⁴⁵Government Accountability Office Report, GAO-13-128, "DOD Needs to Address Gaps in Homeland Defense and Civil Support Guidance," October 24, 2012.

⁴⁶Government Accountability Office Report, GAO-13-128, "DOD Needs to Address Gaps in Homeland Defense and Civil Support Guidance," October 24, 2012.

⁴⁷Department of Defense, "*Briefing on US Army Technical Escort Unit*," September 13, 2008, 1; available from <http://www.defense.gov/transcripts/transcript.aspx?transcriptid=3850>; Internet; accessed February 1, 2014.

⁴⁸ASMRB, "*United States Army Technical Escort Unit*," 2013, 2; available from <http://asmrb.pbworks.com/w/page/9958793/DG%20TEU>, Internet; accessed February 1, 2014.

⁴⁹Randy Hall, Division Chief for Training, Readiness and Exercises, Joint Task Force Civil Support, US Northern Command; Interview by Kelley Vlahos, July 3, 2012; available from <http://www.hstoday.us/channels/fema/single-article-page/public-safety-today-cbrn-protection-from-ccmrf-to-dcrf-changing-letters-for-better-results/8d0a0e4756f7f68e79e8e3f9933ac965.html>; Internet; accessed February 21, 2014.

⁵⁰Texas National Guard, "*Understanding National Guard Specialized Capabilities for Providing Support to Civilian Authorities*," available from http://www.agd.state.tx.us/JTF71/media/NG_support_to_civilian_authorities.pdf; Internet; accessed January 31, 2014.

⁵¹Randy Hall, Division Chief for Training, Readiness and Exercises, Joint Task Force Civil Support, US Northern Command; Interview by Kelley Vlahos, HS Today, July 3, 2012; available from <http://www.hstoday.us/channels/fema/single-article-page/public-safety-today-cbrn-protection-from-ccmrf-to-dcrf-changing-letters-for-better-results/8d0a0e4756f7f68e79e8e3f9933ac965.html>; Internet; accessed February 21, 2014.

⁵²Tanya Schilling, "Reorganization of Defense Coordinating Officer and Element," Kansas, Ft Leavenworth: United States Army Command and General Staff College, School of Advanced Military Studies, 2012, 17.

⁵³Laverm Young, "Defense Coordinating Officers Point of View on Catastrophe Readiness/Response," Denton, Texas: United States Northern Command, FEMA Region, 2009, 10.

⁵⁴Tanya Schilling, "Reorganization of Defense Coordinating Officer and Element," Kansas, Ft Leavenworth: United States Army Command and General Staff College, School of Advanced Military Studies, 2012, 18.

⁵⁵*Ibid.*, 19.

⁵⁶Donna Miles, "Sandy Response Reaffirms Value of Dual-status Commanders," American Forces Press Service, January 11, 2013, 1; available from <http://www.defense.gov/news/newsarticle.aspx?id=118975>; Internet; accessed January 13, 2014.

⁵⁷Steve Bowman, Lawrence Kapp, Amy Belasco, "Hurricane Katrina: DOD Disaster Response," CRS Report for Congress, Order Code RL 33095, Congressional Research Service, The Library of Congress, September 19, 2005, CRS-6.

⁵⁸Definition of "State Active Duty": State Active Duty status is funded by the State and has traditionally been used to authorize the National Guard to respond to domestic natural and man-made disasters such as terrorism, hurricanes, earthquakes, tornados, forest fires, floods, etc. It has also been used to control domestic violence and crowd control. Increasingly, after the terrorist attack on September 11th, states/governors call the National Guard to protect critical infrastructure in their states, such as transportation hubs, nuclear power plants, water facilities, etc. from potential terrorist attacks.

⁵⁹The Posse Comitatus Act (18 U.S.C. 1385), in conjunction with related laws and administrative provisions do not allow the military to perform civilian law enforcement unless otherwise expressly authorized by the Constitution or an act of Congress. In light of 9/11 Congress has passed exceptions to the act which allows military involvement in law enforcement in a few specific scenarios. Example: Congress has enacted a number of statutes that authorize the President to use military forces to suppress insurrections and domestic violence (10 U.S.C. 331-335). The President could also use active or reserve components to put down a rebellion or to control domestic violence if states were to be invoked or if there was a nuclear threat.

⁶⁰"Armed Forces," Title 10 U.S.C., § 12304, 2011; available from <http://www.google.com/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=2&sqi=2&ved=0CDAQFjAB&url=http%3A%2F%2Fwww.gpo.gov%2Ffdsys%2Fpkg%2FCPRT-112HPRT67344%2Fpdf%2FCPRT-112HPRT67344.pdf&ei=fA7wUsjPMY322AXTtYHACg&usg=AFQjCNEdEi4uGmmHRfsJVZFPUDvKQ0wcHw&bvm=bv.60444564,d.b2l>; Internet; accessed February 3, 2014.

⁶¹Congress revised the statutes governing National Guard officers called into federal service in the National Defense Act for FY 2004. Prior to this revision, National Guard personnel called to full-time duty in active military service of the US were automatically relieved from duty in their state's National Guard. Section 516 ...allow officers of the Army or Air National Guard, called to active duty for the purpose of commanding a unit composed of both active duty and reserve component personnel, to retain and exercise their Army or Air National Guard state commissions if authorized by the President and the governor. Such National Guard officers would have the authority to command subordinate active duty personnel by virtue of their own active duty status and also retain the authority to command National Guard personnel in a nonfederal status.

⁶²Mickey McCarter, US National Guard Pentagon To Update Guidance on Dual-Status Commander, Cybersecurity Response, October 26, 2012; available from <http://www.hstoday.us/channels/us-national-guard/single-article-page/pentagon-to-update-guidance-on-dual-status-commander-cybersecurity-response/c8fcd0b0b502ce7d7cd4ed5aaea32c2.html>; Internet; accessed December 10, 2014.

⁶³United States Northern Command, USNORTHCOM Publication 3-20, Title 10 Support to Dual Status Commander Led Joint Task Force Standard Operating Procedure, January 31, 2012.

⁶⁴Donna Miles, "Sandy Response Reaffirms Value of Dual-status Commanders," American Forces Press Service, January 11, 2013, 1; available from <http://www.defense.gov/news/newsarticle.aspx?id=118975>; Internet; accessed January 13, 2014.

⁶⁵Ibid.

⁶⁶Naim Kapucu, "The Role of the Military in Disaster Response in the U.S.," 2011, 8; available from http://www.academia.edu/4164096/The_Role_of_the_Military_in_Disaster_Response_in_the_U.S; Internet; accessed December 4, 2013.

⁶⁷Doug Mayne, Vice-Director of Civil Defense, State of Hawaii and former Federal Coordinating Officer (FCO) for disasters in KY, OK, MO, ID, WA and AK; Major General (ret) Vern Miyagi, former Commander, Hawaii Army National Guard; Mobilization Assistant to the Commander (which is the principal advisor to the commander on Reserve Component readiness and operations, and Homeland Security activities between the state, National Guard, active military and federal agencies), PACOM; and current Emergency Manager, State Civil Defense, State of Hawaii, LTG Michael Dubie, Deputy Commander, NORTHCOM, interviewed by author, Chapel Hill, NC, January 10-15, 2014.

⁶⁸Jill D. Rhodes and James Jay Carafano, "State and Regional Responses to Disasters: Solving the 72-Hour Problem," available from <http://www.heritage.org/research/reports/2006/08/state-and-regional-responses-to-disasters-solving-the-72-hour-problem>; Internet; accessed January 6, 2014; available from <http://www.heritage.org/research/reports/2006/08/state-and-regional-responses-to-disasters-solving-the-72-hour-problem>; Internet; accessed January 6, 2014.

⁶⁹Within the first 72 hours local and state first responders typically have the critical assets needed. This was largely the case even during terrorist attacks, such as the bombing of the Alfred P. Murrah Federal Building in Oklahoma City and both attacks on the World Trade Center in New York City

⁷⁰Jill D. Rhodes and James Jay Carafano, "State and Regional Responses to Disasters: Solving the 72-Hour Problem," available from <http://www.heritage.org/research/reports/2006/08/state-and-regional-responses-to-disasters-solving-the-72-hour-problem>; Internet; accessed January 6, 2014; available from <http://www.heritage.org/research/reports/2006/08/state-and-regional-responses-to-disasters-solving-the-72-hour-problem>; Internet; accessed January 6, 2014.

⁷¹Lieutenant General Michael Dubie, Deputy Commander, NORTHCOM, interviewed by author, Chapel Hill, NC, January 10-15, 2014.

⁷²Lieutenant General Michael Dubie, Deputy Commander, NORTHCOM, interviewed by author, Chapel Hill, NC, January 10-15, 2014.

⁷³Doug Mayne, Vice-Director of Civil Defense, State of Hawaii and former Federal Coordinating Officer (FCO) for disasters in KY, OK, MO, ID, WA and AK; Major General (ret) Vern Miyagi, former Commander, Hawaii Army National Guard; Mobilization Assistant to the Commander (which is the principal advisor to the commander on Reserve Component readiness and operations, and Homeland Security activities between the state, National Guard, active military and federal agencies), PACOM; and current Emergency Manager, State Civil Defense, State of Hawaii, Major General Darryl Wong, Adjutant General and Director of State Civil Defense, State of Hawaii, Lieutenant General Michael Dubie, Deputy Commander, NORTHCOM and former Adjutant General of Vermont, interviewed by author, Chapel Hill, NC, January 10-15, 2014 interviewed by author, Chapel Hill, NC, January 10-15, 2014.

⁷⁴Federal Emergency Management Agency, State Offices and Agencies of Emergency Management; available from <http://www.fema.gov/state-offices-and-agencies-emergency-management>; Internet; accessed March 12, 2014.

⁷⁵Doug Mayne, Vice-Director of Civil Defense, State of Hawaii and former Federal Coordinating Officer (FCO) for disasters in KY, OK, MO, ID, WA and AK; Major General (ret) Vern Miyagi, former Commander, Hawaii Army National Guard; Mobilization Assistant to the Commander (which is the principal advisor to the commander on Reserve Component readiness and operations, and Homeland Security activities between the state, National Guard, active military and federal agencies), PACOM; and current Emergency Manager, State Civil Defense, State of Hawaii, Major General Darryl Wong, Adjutant General and Director of State Civil Defense, State of Hawaii, Lieutenant General Michael Dubie, Deputy Commander, NORTHCOM and former Adjutant General of Vermont,

interviewed by author, Chapel Hill, NC, January 10-15, 2014 interviewed by author, Chapel Hill, NC, January 10-15, 2014.

⁷⁶Steve Bowman, Lawrence Kapp, Amy Belasco, CRS Report for Congress, Order Code RL33095, Hurricane Katrina: DOD Disaster Response (Washington, D.C.: Congressional Research Service, The Library of Congress), September 29, 2005, CRS-13.

⁷⁷United States Army Combined Arms Center, "*Center for Army Lessons Learned - Handbook 06-08*, The Department of Defense Role in Incident Response," Fort Leavenworth, KS: May 2006), Chapter 3.

⁷⁸Major General Jonathan Treacy (US Air Force), Former Commander, Joint Task Force Civil Support, US Northern Command, interviewed by author, Chapel Hill, NC, January 27, 2014.

⁷⁹Major General (AF) Jonathan Treacy, former Commander, Joint Task Force – Civil Service and Deputy Director, Antiterrorism and Homeland Defense (Pentagon), interviewed by author, Chapel Hill, NC, January 7-15, 2014.

⁸⁰Elisabeth Fischer, "Disaster Response: The Role of a Humanitarian Military," 2011, 1; available from <http://www.army-technology.com/features/feature125223/>; Internet; accessed January 7, 2014.

⁸¹Doug Mayne, Vice-Director of Civil Defense, State of Hawaii and former Federal Coordinating Officer (FCO) for disasters in KY, OK, MO, ID, WA and AK; Interview with Major General (ret) Vern Miyagi, former Commander, Hawaii Army National Guard; Mobilization Assistant to the Commander (which is the principal advisor to the commander on Reserve Component readiness and operations, and Homeland Security activities between the state, National Guard, active military and federal agencies), PACOM; and current Emergency Manager, State Civil Defense, State of Hawaii, LTG Michael Dubie, Deputy Commander, NORTHCOM, interviewed by author, Chapel Hill, NC, January 10-15, 2014.

⁸²Commission on the National Guard and Reserves - Final Report to Congress and the Secretary of Defense "Transforming the National Guard and Reserves into a 21st-Century Operational Force," Arlington, VA: January, 31, 2008, 99.

⁸³Major General (ret) Vern Miyagi, former Commander, Hawaii Army National Guard; Mobilization Assistant to the Commander (which is the principal advisor to the commander on Reserve Component readiness and operations, and Homeland Security activities between the state, National Guard, active military and federal agencies), United States Pacific Command (PACOM); and current Emergency Manager, State Civil Defense, State of Hawaii, interviewed by author, Chapel Hill, NC, January 7-15, 2014.

⁸⁴2012 Army Strategic Planning Guidance, John M. McHugh, U.S. Secretary of the Army & General Raymond T. Odierno, U.S. Army Chief of Staff, April 19, 2012.

⁸⁵Mission Essential Tasks List (METL) is the priority tasks that are determined by the commander and drive an Army unit's training plan for the year.

⁸⁶Major General (ret) Vern Miyagi, former Commander, Hawaii Army National Guard; Mobilization Assistant to the Commander (which is the principal advisor to the commander on Reserve Component readiness and operations, and Homeland Security activities between the state, National Guard, active military and federal agencies), United States Pacific Command (PACOM); and current Emergency Manager, State Civil Defense, State of Hawaii, interviewed by author, Chapel Hill, NC, January 7-15, 2014.

⁸⁷ Major General (AF) Jonathan Treacy, former Commander, Joint Task Force – Civil Service and Deputy Director, Antiterrorism and Homeland Defense (Pentagon), interviewed by author, Chapel Hill, NC, January 7-15, 2014.

⁸⁸ Donna Miles, “Sandy Response Reaffirms Value of Dual-status Commanders,” American Forces Press Service, January 11, 2013, 1; available from <http://www.defense.gov/news/newsarticle.aspx?id=118975>; Internet; accessed January 13, 2014.

⁸⁹ Major General (ret) Vern Miyagi, former Commander, Hawaii Army National Guard; Mobilization Assistant to the Commander (which is the principal advisor to the commander on Reserve Component readiness and operations, and Homeland Security activities between the state, National Guard, active military and federal agencies), United States Pacific Command (PACOM); and current Emergency Manager, State Civil Defense, State of Hawaii, interviewed by author, Chapel Hill, NC, January 7-15, 2014.

⁹⁰ Major General Jonathan Treacy (US Air Force), Former Commander, Joint Task Force Civil Support, US Northern Command, interviewed by author, Chapel Hill, NC, January 27, 2014.

⁹¹ Ludwig J. Schumacher, “Dual Status Command for No-Notice Events: Integrating the Military Response to Domestic Disasters,” Homeland Security Affairs; available from <https://www.hsaj.org/?fullarticle=7.1.4>; Internet; accessed February 19, 2014.

⁹² Lt. General Michael Dubie, Deputy Commander, NORTHCOM, interviewed by author, Chapel Hill, NC, January 10-15, 2014.

⁹³ Lynn E. Davis, “*Force of the First Resort – Katrina Offers Lessons for Improving the National Guard Response to Catastrophic Domestic Emergencies*,” RAND Corporation, May 8, 2011, 3.

⁹⁴ Commission on the National Guard and Reserves - Final Report to Congress and the Secretary of Defense “Transforming the National Guard and Reserves into a 21st-Century Operational Force,” Arlington, VA: January, 31, 2008, 100.

⁹⁵ Federal Emergency Management Agency, Regional Contact Information; available from <http://www.fema.gov/rm-main/regional-contact-information>; Internet; accessed on December 3, 2013.

⁹⁶ Major General Darryl Wong, Adjutant General and Director of State Civil Defense, State of Hawaii; Doug Mayne, Vice-Director of Civil Defense, State of Hawaii and former Federal Coordinating Officer (FCO) for disasters in KY, OK, MO, ID, WA and AK; Lt. General Michael Dubie, Deputy Commander, NORTHCOM, interviewed by author, Chapel Hill, NC, January 10-15, 2014.

⁹⁷ Major General Darryl Wong, Adjutant General and Director of State Civil Defense, State of Hawaii, interviewed by author, Chapel Hill, NC, January 10-15, 2014 interviewed by author, Chapel Hill, NC, January 10-15, 2014.

⁹⁸ Steve Bowman, Lawrence Kapp, Amy Belasco, “Hurricane Katrina: DOD Disaster Response,” CRS Report for Congress, Order Code RL 33095, Congressional Research Service, The Library of Congress, September 19, 2005, CRS-14.

⁹⁹ Doug Mayne, Vice-Director of Civil Defense, State of Hawaii and former Federal Coordinating Officer (FCO) for disasters in KY, OK, MO, ID, WA and AK; Interview with Major General (ret) Vern Miyagi, former Commander, Hawaii Army National Guard; Mobilization Assistant to the Commander (which is the principal advisor to the commander on Reserve Component readiness and operations, and Homeland Security activities between the

state, National Guard, active military and federal agencies), United States Pacific Command (PACOM); and current Emergency Manager, State Civil Defense, State of Hawaii; Major General (AF) Jonathan Treacy, former Commander, Joint Task Force – Civil Service and Deputy Director, Antiterrorism and Homeland Defense (Pentagon); Lt. General Michael Dubie, Deputy Commander, NORTHCOM, interviewed by author, Chapel Hill, NC, January 10-15, 2014.

¹⁰⁰National Strategy for Homeland Security, George W. Bush, Washington, D.C: The White House, October 2007, 47.