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THESIS

THE DSCA CORPS: BRIDGING THE GAP BETWEEN THE PROFESSION OF ARMS AND DOMESTIC OPERATIONS

by

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December 2017

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Defense Support to Civil Authorities (DSCA) is an important mission for the Army and the Department of Defense. Inherent to this mission, and critical in its execution, is effective liaison, coordination, and integration of Army forces into the emergency response structures of local, state, and federal civilian agencies. An examination of two cases, the 2012 response to Hurricane Sandy and the 2016 Cascadia Rising earthquake response exercise, identifies several shortfalls in integration and coordination between the Army, other service components, and civil authorities. This thesis examines these shortfalls and provides a potential solution to correct them for future DSCA missions. This thesis suggests that a creation of a functional area and force structure within the Army that is dedicated to the Army's DSCA mission would bridge the gap between the Army and its civilian partners at all levels. The new DSCA Corps would be responsible for civil-military liaison, relationship building, and integrated planning prior to a disaster. During a disaster, the DSCA Corps would provide a core of DSCA subject matter experts (SMEs) to facilitate the rapid deployment and integration of Title 10 and Title 32 forces in support of the civilian Incident Command System (ICS).

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THE DSCA CORPS: BRIDGING THE GAP BETWEEN THE PROFESSION OF ARMS AND DOMESTIC OPERATIONS

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ABSTRACT

Defense Support to Civil Authorities (DSCA) is an important mission for the Army and the Department of Defense. Inherent to this mission, and critical in its execution, is effective liaison, coordination, and integration of Army forces into the emergency response structures of local, state, and federal civilian agencies. An examination of two cases, the 2012 response to Hurricane Sandy and the 2016 Cascadia Rising earthquake response exercise, identifies several shortfalls in integration and coordination between the Army, other service components, and civil authorities. This thesis examines these shortfalls and provides a potential solution to correct them for future DSCA missions. This thesis suggests that a creation of a functional area and force structure within the Army that is dedicated to the Army's DSCA mission would bridge the gap between the Army and its civilian partners at all levels. The new DSCA Corps would be responsible for civil-military liaison, relationship building, and integrated planning prior to a disaster. During a disaster, the DSCA Corps would provide a core of DSCA subject matter experts (SMEs) to facilitate the rapid deployment and integration of Title 10 and Title 32 forces in support of the civilian Incident Command System (ICS).

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LIST OF ACRONYMS AND ABBREVIATIONS

AAR	After Action Report
AC	Military: Active Component; Civilian: Area Command/Commander
ACERT	Army Computer Emergency Response Team
ADP	Army Doctrine Publication
ADRP	Army Doctrine Reference Publication
AGNOSC	Army Global Network Operations and Security Center
AOC	Area of Concentration
AOR	Area of Responsibility
ARCYBER	United States Army Cyber Command
ARFORCYBER	Army Forces Cyber Command
ARNORTH	United States Army North
ASD(HD&ASA)	Assistant SecDef for Homeland Defense and Americas' Security Affairs
CALL	Center for Army Lessons Learned
CBRNE	Chemical, Biological, Radiological, Nuclear, and High-Yield Explosive
CDX	Cyber Defense Exercise
CERFP	CBRNE Enhanced Response Force Package
CJCS	Chairman of the Joint Chiefs of Staff
COE	Center of Excellence
CONPLAN	Contingency Plan
CONUS	Continental United States
COP	Common Operating Picture
CPB	Cyber Protection Brigade
CR16	Cascadia Rising 2016
CRE	CBRNE Response Enterprise
CSZ	Cascadia Subduction Zone

DA	Department of the Army
DCE	Defense Coordinating Element
DCO	Defense Coordinating Officer
DHS	Department of Homeland Security
DL	Distance Learning
DOD	Department of Defense
DODD	Department of Defense Directive
DODI	Department of Defense Instruction
DODM	Department of Defense Manual
DSC	Dual-Status Command/Commander
DSCA	Defense Support to Civil Authorities
EMAC	Emergency Management Assistance Compact
EOC	Emergency Operations Center
EPLO	Emergency Preparedness Liaison Officer
ESF	Emergency Support Function
EXORD	Execution Order
FA	Functional Area
FBI	Federal Bureau of Investigations
FCO	Federal Coordinating Officer
FEMA	Federal Emergency Management Agency
FORSCOM	Forces Command
FRAGO	Fragmentary Order
GAO	Government Accountability Office
GCC	Geographical Combatant Command
GWOT	Global War on Terror

HAZMAT	Hazardous Materials
HD	Homeland Defense
HRC	Army Human Resources Command
HRF	Homeland Response Force
HSC	Homeland Security Council
HSPD	Homeland Security Presidential Directive
IC	Incident Command/Commander
ICS	Incident Command System
INSCOM	Army Intelligence and Security Command
IRA	Immediate Response Authority
IS	Independent Study
JBMDL	Joint Base McGuire-Dix-Lakehurst
JCE	Joint Coordinating Element
JCS	Joint Chiefs of Staff
JDOMS	Joint Director of Military Support
JFCOM	Joint Forces Command
JFHQ	Joint Forces Headquarters
JFO	Joint Field Office
JIACG	Joint Interagency Coordination Group
JLOTS	Joint Logistics Over the Shore
JOA	Joint Operating Area
JOC	Joint Operations Center
JOC-TC	Joint Operations Center Training Course
JP	Joint Publication
JRSOI-TC	Joint Reception, Staging, Onward Movement, and Integration Training Course
JSTC	Joint Staff Training Course
JTF	Joint Task Force

LFA	Lead Federal Agency
MA	Mission Assignment
MOS	Military Occupational Specialty
NCO	Noncommissioned Officer
NCTC	National Counterterrorism Center
NETCOM	Army Network Enterprise Technology Command
NG	National Guard
NGB	National Guard Bureau
NGO	Non-Governmental Organization
NIMS	National Incident Management System
NORAD	Northern Air Defense Sector
NPD	National Preparedness Doctrine
NRF	National Response Framework
NRP	National Response Plan
NSC	National Security Council
OPTEMPO	Operational Tempo
PCA	Posse Comitatus Act
PDSI	Professional Development Skill Identifier
POTUS	President of the United States
PPD	Presidential Policy Directive
SAD	State Active Duty
SCO	State Coordinating Officer
SecDef	Secretary of Defense
SEOC	State Emergency Operations Center
SME	Subject Matter Expert

SSI	Strategic Studies Institute
TACON	Tactical Control
TDA	Table of Distribution and Allowances
TF	Task Force
TTP	Tactics, Techniques, and Procedures
U.S.C.	United States Code
UC	Unified Command
USACE	United States Army Corps of Engineers
USASMDC	Army Space and Missile Defense Command
USCYBERCOM	United States Cyber Command
USNORTHCOM	United States Northern Command
USPACOM	United States Pacific Command
USSOUTHCOM	United States Southern Command
USSTRATCOM	United States Strategic Command
USTRANSCOM	United States Transportation Command
VOCO	Verbal Orders of the Commanding Officer
WAMD	Washington Military Department
WEMD	Washington Emergency Management Division
WMD	Weapons of Mass Destruction
WMD-CST	Weapons of Mass Destruction Civil Support Team

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EXECUTIVE SUMMARY

The system that facilitates Department of Defense (DOD) support of civil authorities during homeland security emergencies requires that local, state, and federal civilian resources be exhausted or in danger of exhaustion before DOD support can be provided. This system and its authorities are outlined in the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), enacted into federal law in 1988 as an amendment to the existing Disaster Relief Act of 1974. Defense Support to Civil Authorities (DSCA) is the method by which DOD provides federal military support to civilian authorities during homeland emergencies. Joint Publication 3-28, which governs DSCA within the DOD, states, "DOD resources are provided only when response or recovery requirements are beyond the capabilities of local, state, and federal civil authorities, and when they are requested by a federal agency with lead responsibility and approved by SecDef" (Department of Defense, JP3-28–DSCA, viii-ix).

Historically, this has worked well most of the time. The Army has successfully provided support to civil authorities since the founding of the U.S. in 1776, but this support is not always as effective as it could be. The DOD has taken steps over the years to make the support more efficient, largely through improved policy and training. Since 9/11, the Army has engaged in wars in Iraq and Afghanistan, which have stretched the Army and its soldiers to their limits. Training for DSCA missions was neglected for over a decade, while the Army struggled to maintain a combat-ready force. Consequently, an integration problem developed that became apparent in the response to Hurricane Katrina in 2005. National Guard forces in the affected states were largely deployed overseas when the hurricane struck. Active Army forces from all over the U.S., many of which had recently returned from combat rotations, were sent to provide DSCA. Their lack of training in this important mission set was never more obvious than when Lieutenant General Russel Honore, the Task Force Commander, went on television stating that the Army was in control of operations in New Orleans. Army forces attempted to conduct DSCA in the same manner they would combat operations against enemy forces. Conducting operations within the U.S. independent from direction by civil authorities is a

violation of Federal Law and the laws in most states. Honore's statements gave the impression that the military was in command of the hurricane response efforts, rather than providing resources to support the civilian emergency management command structure. In DSCA, unlike conventional operations, the military does not direct operations or control territory; it must only serve in a supporting role (Wombwell, 2009, 157).

The problem lies with the Army; it has both a lack of understanding of the civilian emergency response structures and processes and also a tendency to take charge of operations rather than deferring to civil authorities. In order to save lives and mitigate property damage, it is important for multiple agencies to rapidly integrate and cooperate to respond to disasters. The Army needs to find a way to improve its ability to integrate with civil authorities rapidly and effectively in order to make a positive impact on disaster response operations rather than detracting from them. This thesis will research the current conditions and how we can improve upon them.

According to the National Response Framework (NRF), civil authorities must first exhaust all other options for resources at the local, state, and federal level before requesting resources from the DOD. The federal military resources must be formally requested through the Federal Emergency Management Agency (FEMA). It is important to note that civil authorities do not request specific types of military units, but rather a certain type of capability; the military then decides which services and units have that capability to be used to provide the requested support. The Army has modeled its approach to DSCA after the NRF and the National Preparedness Doctrine (NPD), as outlined in Presidential Policy Directive 8 (PPD8). The NPD calls for an 'all-of-nation approach' to incident management, with the purpose of saving lives, alleviating suffering, and protecting property foremost in all aspects of a disaster response. Rather than a top-down approach, the NRF calls for a bottom up approach in responding to disasters. This means that civil authorities at the local level take the lead, with all higher levels providing support to the local Incident Commander (IC). The Army provides DSCA as a part of this tiered response, when local, state, and federal resources are exhausted.

Major disasters require rapid and effective coordination and integration between military forces and civil authorities. In these situations, lives can be saved or lost based on the effectiveness of interagency coordination and the time elapsed from a request for resources to resources arriving at the incident. To illustrate this, two cases will be examined. First, the military response to Hurricane Sandy in October 2012 will be addressed in detail. Second, the military's participation in the Cascadia Rising earthquake response exercise in June 2016 will be addressed. These cases are different in that one is a real-world response, while the other is an exercise. One is on the east coast, the other is on the west coast. One is a hurricane response, the other is an earthquake response. These cases are also similar in that they included active duty, reserve, and National Guard forces integrating with civil authorities across multiple states and jurisdictions. From examination of these cases, several shortfalls or gaps in the Army's DSCA responses come to light.

The most significant gap is a lack of education or knowledge of DSCA within the ranks of the Army. Many leaders receive training, but the majority of the soldiers on the ground responding to an incident have little knowledge of DSCA in any form. The next gap is ineffective liaison and integration between the Army and civilian agencies prior to and during the initial response phase of a major disaster. This includes building relationships with federal, state, and local agencies, integrating DSCA into civilian emergency response plans, and integrating Army forces into civilian structures rapidly during an emergency response. The last gap is a shortfall in integration of planning between military and civilian agencies prior to an event, including anticipation of needs following a catastrophic disaster. When the Army responds, the soldiers are un-trained to conduct their mission, know nothing about the civilian agencies with which they will work, and have not been integrated into any civilian emergency response plans. The job gets done—that's what the Army does—but it could be so much more effective.

There is one potential solution that could solve all of the problems listed; the creation of a new functional area within the Army with a sole focus on the Army's DSCA mission. The Army currently has 28 branches and 15 functional areas within its force structure. There are currently no branches or functional areas with a DSCA or Homeland

Security mission. In reality, the only certification a soldier can gain in DSCA is a voluntary Personnel Development Skill Identifier (PDSI), D7A–DSCA Specialist. This PDSI is gained by completing seven hours of Distance Learning (DL) training and attending a three-and-a-half-day course, which is taught by personnel from the National Guard Bureau (NGB), United States Northern Command (USNORTHCOM), and Army North (ARNORTH). The purpose of the DSCA Corps would be to bridge the gap between civil authorities and military forces before, during, and after a catastrophic disaster within the U.S. and its territories. The DSCA Corps fills this gap by providing force structure and a corps of subject matter experts who can develop and maintain relationships with civil authorities, facilitate the rapid deployment of Army units to support disaster response operations, and provide expert command and control of Army and joint forces during disaster response operations.

The Army and DOD have made efforts since Hurricane Katrina to correct many shortfalls and gaps that have been identified in after action reports (AARs). Various entities throughout the Army, especially in the National Guard, have made efforts to improve integration and coordination between military and civilian agencies. Most of these efforts have been at the federal level between USNORTHCOM, ARNORTH, NGB, and partnering civilian agencies such as FEMA and the Federal Bureau of Investigations (FBI). These efforts have had limited success in correcting the functional shortfalls experienced during real-world disaster response situations. A major change is needed to correct these problems once and for all.

The creation of a DSCA functional area within the Army would provide a set of units filled with DSCA specialists who can be the lead element in the Army for all DSCA missions. These units would be responsible for conducting liaison and relationship building with civilian agencies at every level of government, from federal to local. They would integrate into the planning processes for civilian agencies with the goal of anticipating their needs and facilitating the rapid deployment of Title 32 and Title 10 forces during a disaster. These soldiers would also serve as key facilitators of communication between civilian agencies and traditional Army formations, ensuring cohesive and integrated operations during any disaster response.

The DSCA Corps concept needs to be implemented immediately within the Army. In spite of the budgetary restrictions the Army currently faces and the challenges presented by this change, our responsibility as soldiers and Americans is to do all we can to provide life-saving assistance to civilians during their time of greatest need. Failing to do everything in our power to ensure we can be readily and rapidly deployed where and when we are needed is counter to the Army values and our mission to defend the United States against all enemies, both foreign *and domestic*.

References

Department of Defense. *Joint Publication 3-28: Defense Support of Civil Authorities.* Department of Defense, Washington, D.C., July 31, 2013.

Wombwell, James A. "Army Support during the Hurricane Katrina Disaster." T*he Long War Series*, Occasional Paper 29, United States Army Combined Arms Center, 2009.

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"Leadership is not about being appreciated, it is about responsibility.

It doesn't matter that the burden is heavy, it matters that you carry it."

— Anonymous

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I.   INTRODUCTION

A.   PROBLEM STATEMENT

Since the terrorist attacks on September 11, 2001, U.S. Army forces have responded to several disasters within the United States, such as Hurricane Katrina and Hurricane Sandy. These responses require rapid integration of agencies at the local, state, and federal level in order to save lives, minimize damage to property, and help communities recover. In most cases, emergencies are handled by civil authorities; however, when civil resources are exhausted the military is called in to provide the necessary support to complete the disaster response operation. The military, which includes the Army, Navy, Air Force, and Marine Corps, supports civil authorities by providing resources, but are never the lead agency for a response within the U.S.

The system that facilitates DOD support of civil authorities during homeland security emergencies requires that local, state, and federal civilian resources be exhausted or in danger of exhaustion before DOD support can be provided. This system and its authorities are outlined in the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), enacted into federal law in 1988 as an amendment to the existing Disaster Relief Act of 1974. DSCA is the method by which DOD provides federal military support to civilian authorities during homeland emergencies. Joint Publication 3-28, which governs DSCA within the DOD, states, "DOD resources are provided only when response or recovery requirements are beyond the capabilities of local, state, and federal civil authorities, and when they are requested by a federal agency with lead responsibility and approved by SecDef."[1]

Historically, this has worked well in most cases. The Army has successfully provided support to civil authorities since the founding of the U.S. in 1776, but in recent years the support has run into problems. Since 9/11, American engagement in wars in Iraq and Afghanistan stretched the Army and its soldiers to their limits. While the Army

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[1] Department of Defense, "Joint Publication 3-28: Defense Support of Civil Authorities," Department of Defense, Washington D.C., July 31, 2013, viii-ix.

struggled to maintain a combat-ready force, training for DSCA missions faced neglect over the past decade. Consequently, an integration problem developed that became apparent in the response to Hurricane Katrina in 2005. National Guard forces in the affected states were largely deployed overseas when the hurricane struck. Active Army forces from all over the U.S., most of which had recently returned from combat rotations, were sent to provide DSCA. Their lack of training in this important mission was never more obvious than when Lieutenant General Russel Honore, the Task Force Commander, went on television stating that the Army was in control of operations in New Orleans.[2] Army forces attempted to conduct DSCA in the same manner they would combat operations against enemy forces. Conducting operations within the U.S. independent from direction by civil authorities is a violation of Federal Law and the laws in most states. Honore's statements gave the impression that the military was in command of the hurricane response efforts, rather than providing resources to support the civilian emergency management command structure. In DSCA, unlike conventional operations, the military does not direct operations or control territory; it must only serve in a supporting role.

The response to 9/11 also highlighted a number of issues with interagency coordination and integration during disasters, especially related to command and control, planning, and communications. The NRF, which replaced the National Response Plan (NRP) in 2008, was designed and implemented to correct these problems. Since then civil authorities have pushed hard to implement the components of the NRF, including the National Incident Management System (NIMS) and the Incident Command System (ICS). These systems have vastly improved the ability of civil authorities to plan for and respond to disasters effectively. The Army has incorporated these systems into its DSCA policy in an effort to improve DSCA's effectiveness, but training on these systems within the Army is virtually nonexistent. This presents problems; when soldiers arrive at an incident, they do not understand the systems, processes, and authorities governing incident response or the Army's role in the same.

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[2] James A. Wombwell, "Army Support During the Hurricane Katrina Disaster," The Long War Series, Occasional Paper 29, United States Army Combined Arms Center, 2009, 157.

The problem lies with the Army; it has both a lack of understanding of the civil response structures and processes and also a tendency to take charge of operations rather than deferring to the civil authorities. In order to save lives and mitigate property damage, it is important for multiple agencies to rapidly integrate and cooperate to respond to disasters. The Army needs to find a way to improve its ability to integrate with civil authorities rapidly and effectively in order to make a positive impact on disaster response operations rather than taking away from them. Therefore, this thesis researches the current conditions and offers strategies of improvement.

B.   RESEARCH QUESTION(S)

1. How can Defense Support of Civil Authorities (DSCA) coordination and integration between military and civilian agencies be improved?
2. How would the creation of a Defense Support of Civil Authorities (DSCA) functional area within the U.S. Army improve the way the Army provides DSCA?

C.   LITERATURE REVIEW

1.   Overview

This thesis focuses on publications dated after 9/11 for two reasons. First, scholarship on these subjects is minimal prior to 9/11; the attacks on the World Trade Center and Pentagon highlighted a void in policy and academic writings, forcing an examination of existing policies on interagency coordination and therefore, more literature. Second, publications prior to 9/11 hold little relevance to the current global environment. The homeland security landscape changed radically after 9/11 with the new threat of global terrorism and the creation of the Department of Homeland Security (DHS); DSCA policy and doctrine had to follow suit. This analysis will increase the relevance of this thesis so it can be used to improve the way the Army conducts DSCA. This literature review is separated into two primary categories. The first category describes doctrine for DSCA at the DOD level, covering all branches of the Armed

Forces. The second discusses DSCA solely within the Army, to include the active component, Army Reserve and Army National Guard.

2.   DSCA and the DOD

A review of DSCA literature requires an understanding of the doctrine that governs DSCA within the DOD. First, there are two relevant DOD Directives (DODDs). DODD 5111.13, published in 2009, updated policy related to the Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs (ASD(HD&ASA)) and DODD 3025.18, published in 2010, established the current policy for DSCA within the DOD.[3] These documents together updated and modernized existing DOD policy for DSCA and for the oversight of DSCA policy within the DOD. Next, there are two DOD Instructions (DODIs) that provide detail on specific portions of the DSCA policy outlined in DODD 3025.18. The first is Department of Defense Instruction (DODI) 3025.16, which was published in 2011 and details the Emergency Preparedness Liaison Officer (EPLO) program within the DOD. The EPLO program puts active military personnel into liaison roles with other federal agencies like DHS and FEMA.[4] The second, published in 2013, is DODI 3025.22, which defines the use of the National Guard for DSCA operations.[5] This instruction reflects a new view on the National Guard as an operational force, rather than a strategic reserve. Finally, there are DOD Manuals (DODMs), which provide specific guidelines for executing operations. The DODM covering DSCA is DODM 3025.01, which is divided into three volumes, all of which were updated in 2016 to reflect current policy guidance and incorporate lessons learned from previous

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[3] Department of Defense, "Department of Defense Directive 5111.13: Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs (ASD(HD&ASA))," Department of Defense, Washington D.C., January 16, 2009, 1. Department of Defense, "Department of Defense Directive 3025.18: Defense Support of Civil Authorities (DSCA)," Department of Defense, Washington D.C., December 29, 2010, 3-6.

[4] Department of Defense, "Department of Defense Instruction 3025.16: Defense Emergency Preparedness Liaison Officer (EPLO) Programs," Department of Defense, Washington D.C., September 8, 2011, 4-6.

[5] Department of Defense, "Department of Defense Instruction 3025.22: The Use of the National Guard for Defense Support of Civil Authorities," Department of Defense, Washington D.C., July 26, 2013, 2-4.

operations.[6] DODM 3025.01 is the basis for nearly all subordinate DSCA policies and regulations within the DOD.

In recent years, the DOD has strongly pursued the incorporation of Joint Operations into all of its doctrine and publications. Joint publications (JPs) differ from DOD publications mainly in their target audience. DOD publications are aimed at the operations of the DOD itself and administrative policies to govern all service components. JPs are oriented on actions taken by each service component when operating in a joint environment. There are three JPs that are relevant to the study of DSCA. First and foremost is JP 3-28, published in 2013, which "sets forth joint doctrine to govern the activities and performance of the Armed Forces of the United States in DSCA operations, and […] the doctrinal basis for interagency coordination during DSCA operations."[7] Second is JP 3–41, covering Chemical, Biological, Radiological, Nuclear, and High-Yield Explosive (CBRNE) consequence management within the DOD. A large portion of the DOD's DSCA mission is related to CBRNE consequence management, especially within the National Guard.[8] Finally, JP 3–08 provides guidance for interagency coordination during joint operations; it is written to include interactions with foreign governments, different service components within the DOD, and civil authorities within the U.S. These guidelines are the basis for DOD's conduct of DSCA operations.[9] All Army DSCA publications must adhere to the policies and doctrine outlined in these DOD and Joint publications.

In order to set the direction of the DOD, the Secretary of Defense (SecDef) establishes long-range strategies for different lines of effort within the DOD, one of which is DSCA and Homeland Defense (HD). The current strategy document, entitled *Strategy for Homeland Defense and Defense Support of Civil Authorities*, was published

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[6] Department of Defense, "Department of Defense Manual 3025.01, Volume 1: Defense Support of Civil Authorities: Overview," Department of Defense, Washington D.C., August 11, 2016, 8-10.

[7] Department of Defense, "Joint Publication 3-28: Defense Support of Civil Authorities," Department of Defense, Washington D.C., July 31, 2013, vii-xi.

[8] Department of Defense, "Joint Publication 3-41: Chemical, Biological, Radiological, and Nuclear Consequence Management," Department of Defense, Washington D.C., June 21, 2012, vii-xii.

[9] Department of Defense, "Joint Publication 3-08: Interorganizational Coordination during Joint Operations," Department of Defense, Washington D.C., June 24, 2011, ix-xvi.

in 2013 to cover the years 2012 through 2020. A large part of this document is devoted to current and projected future fiscal constraints facing the DOD and how the SecDef intends to accomplish the DOD's missions under those constraints. Of note, the current strategy document is the first in this series to address the DOD's response to complex catastrophes. Inclusion of this in the DOD's primary strategy document reflects the SecDef's stance on improving DSCA policy to make the DOD more responsive.[10]

In order to provide support to operations throughout the world, the DOD has divided the planet into Geographical Combatant Commands (GCCs). The GCC responsible for DSCA is USNORTHCOM, which has developed a series of Contingency Plans (CONPLANs) that are designed to be taken 'off the shelf' when an incident occurs to facilitate rapid planning and deployment of forces. USNORTHCOM CONPLAN 3501–08, the current version of which was published in 2008, directs specific actions that will be taken immediately and over time by each of the service component commands within the U.S. in the event the military is requested to support a civilian disaster response.[11] This CONPLAN was updated following Hurricane Katrina and again following Hurricane Sandy to incorporate lessons learned from each of these major events.

Following a thorough review of DOD publications related to DSCA, it is appropriate to review some documents that provide a deeper insight into DOD's DSCA operations. The Government Accountability Office (GAO) is an arm of the U.S. Congress that performs in-depth investigations of federal programs to determine if they are spending money responsibly and meeting the intent for which they were conceived and created. Related to DSCA, there are two categories of reports; Civil Support (an older term for DSCA) and Homeland Defense. Three recent Civil Support reports that stand out in this literature review are as follows. GAO-13-763 reports on actions needed to improve

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[10] Department of Defense, "Strategy for Homeland Defense and Defense Support of Civil Authorities," Department of Defense, Washington D.C., February 25, 2013, 1-3.

[11] United States Northern Command, "USNORTHCOM CONPLAN 3501-08: Defense Support of Civil Authorities (DSCA)," Department of Defense, Washington D.C., May 16, 2008, v-xii.

DOD's planning for complex catastrophes.[12] As previously stated, the current DOD DSCA strategy document, published around the same time as this GAO report, is the first to address complex catastrophes in any real way. This shows a possible correlation between recommendations in GAO reports and policy modifications within the DOD. GAO-15-686T reports on actions the DOD has taken to strengthen its support to civil authorities. This report is a follow-up document designed to determine if faults found during an initial investigation (called an audit) have been corrected or not.[13] It is evident by the recent publication dates of most of DOD's DSCA publications that steps have been and are being taken to make the DOD more effective at providing support to civil authorities. Published very recently, GAO-16-332 addresses the need for DOD to clarify its DSCA roles during cyber incidents. As an emerging threat to homeland security, cyber-attack is being addressed by the DOD, but current DSCA publications do not address this threat as a stand-alone threat outside of a standard information technology threat.[14]

On the other side, there are two recent Homeland Defense reports from GAO that are worth mentioning in this review. GAO-10-386 addresses the DOD's failure to identify resources and capabilities that can support civil authorities during disaster response operations. While listed under the HD category, this report has a decidedly DSCA bent to it. The chief assertion of this report is that the DOD needs to make it easier or simpler for civil authorities to request military resources by categorizing military capabilities into the same Emergency Support Functions (ESFs) civilian emergency managers use to categorize resources.[15] GAO-13-128 addresses gaps in DOD guidance

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[12] Government Accountability Office, "GAO-13-763: Civil Support: Actions Are Needed to Improve DOD's Planning for a Complex Catastrophe," Government Accountability Office, Washington D.C., September 2013, 1-5.

[13] Government Accountability Office, "GAO-15-686T: Civil Support: DOD Is Taking Action to Strengthen Support to Civil Authorities," Government Accountability Office, Washington D.C., June 10, 2015, 1-3.

[14] Government Accountability Office, "GAO-16-332: Civil Support: DOD Needs to Clarify Its Roles and Responsibilities for Defense Support of Civil Authorities During Cyber Incidents," Government Accountability Office, Washington D.C., April 2016, 1-4.

[15] Government Accountability Office, "GAO-10-386: Homeland Defense: DOD Can Enhance Efforts to Identify Capabilities to Support Civil Authorities During Disasters," Government Accountability Office, Washington D.C., May 16, 2013, 1-4.

for HD and DSCA operations.[16] These GAO audit reports indicate the DOD is making progress in improving DSCA capabilities, but not to the degree recommended by GAO. This shows that the DOD is committed to improving its ability to effectively conduct DSCA, but that DSCA remains low in the DOD's list of priorities.

Official documents aside, much has been written by students at military schools such as the United States Army War College, the United States Army Command and General Staff College, and the Naval Postgraduate School on the subject of DSCA. To begin, a book written by Bert B. Tussing and Robert McCreight provides an overview of the concepts and policies related to HD and DSCA. This book's main focus is the military's role as a supporting agency during DSCA operations, while it is the lead federal agency for HD operations.[17] This is an important and relevant piece of literature as it points to the main issue of integration between DOD forces and civil authorities and the fact that the DOD is never in the lead role during DSCA operations. Another important document is a Congressional report written by Alice R. Buchalter, which provides a synopsis of current DOD policy for DSCA and how it ties in to current homeland security doctrine. A main focus of this report is the request process used by the DOD to provide resources to civil authorities.[18] Delving further into the request process, a thesis co-written by Charles W. Dunphy, Jr. and Christophe Radel examines request processes at the local, state, and federal levels and how they tie in to the DOD's process for providing resources. Their key assertion is, "the exact role of the Defense Department […] remains misunderstood by a number of key individuals and organizations."[19] This lack of understanding of roles and responsibilities is a common thread in the literature. Beyond these theses and documents, the remaining literature revolves around

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[16] Government Accountability Office, "GAO-13-128: Homeland Defense: DOD Needs to Address Gaps in Homeland Defense and Civil Support Guidance," Government Accountability Office, Washington D.C., October 2012, 1-3.

[17] Bert B. Tussing and Robert McCreight, *Introduction to Homeland Defense and Defense Support of Civil Authorities (DSCA): The U.S. Military's Role to Support and Defend*, 1st ed., CRC Press, 2014, 1.

[18] Alice R. Buchalter, "Military Support to Civil Authorities: The Role of the Department of Defense in Support of Homeland Defense," The Library of Congress, Washington D.C., February 2007, 1-3.

[19] Charles W. Dunphy, Jr. and Christophe Radel, "Assessment of Local, State and Federal Request Processes for Defense Support of Civil Authorities in the United States," MBA Professional Report, Naval Postgraduate School, 2009, v.

recommendations to improve various problems with DOD's DSCA processes and capabilities. This is important because confusion over roles and responsibilities can lead to inefficient response as noted during post-Katrina response efforts.

Two theses investigate unity of command between Title 10 (federal) forces and Title 32 (state) forces. The first, written by John H. Ebbighausen, focuses on legal authorities for the different types of forces. Ebbighausen's conclusion is that the National Guard (Title 32) should have the lead role during DSCA operations because it "is well integrated with local and state emergency management authorities."[20] The second, written by Caroline R. Prosch, uses case studies from Florida and Israel to examine which force should have the lead role during DSCA. While Prosch provides no specific recommendation as Ebbighausen does, she recommends further action be taken to make such a determination.[21]

Similar to these theses, there are two others that examine the issues between DOD forces and civil authorities and who has the lead role. Tony S. Lombardo wrote in 2007 that the relationship between DOD forces and civil authorities used to be strong, but has recently suffered a lapse. He asserts, "Changes to disaster statutes, doctrine, and authoritative policies along with a contentious debate over the DoDs role in the domestic disaster arena have aided in deteriorating their relationship."[22] He suggests that this poor relationship contributed to the DOD's slow response during Hurricane Katrina.[23] Juliana M. Walker furthers this discussion by examining the issues in determining the lead federal agency during the Hurricane Katrina response. In her 2006 thesis, she states, "Many concerned with the federal response to Katrina believed that America's homeland security system could not aptly respond to a large-scale natural or man-made catastrophe

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[20] John H. Ebbighausen, "Unity of Command for Homeland Security: Title 32, Title 10, or a Combination," Master's Thesis, United States Army Command and General Staff College, 2006, iii.

[21] Caroline R. Prosch, "Getting to One from Title 10 + Title 32: Unity of Effort in the Homeland," Master's Thesis, Naval Postgraduate School, 2011, 1-3.

[22] Tony S. Lombardo, "Collaboration or Control?: The Struggle for Power in Catastrophic Disaster Response," Master's Thesis, Naval Postgraduate School, 2007, v.

[23] Ibid., 1-4.

without the military in a lead role."[24] Federal laws and policies dictate that the DOD is always in a supporting role during DSCA.[25] The fallback here is the U.S. Constitution, which places civil authorities over military forces at all times except during combat operations in defense of the U.S. or its allies. This is where the difference between HD and DSCA is important. The only exception to this in federal law is the Insurrection Act of 1807, which allows the President of the U.S. to deploy federal forces within the U.S. to put down lawlessness, insurrection, and rebellion when state National Guard forces are unable to handle the problem. The Insurrection Act was used by President Abraham Lincoln to commence the American Civil War.

There are several academic works that recommend changes to DSCA policies. In a 2012 thesis, Michael Bentley writes that there are several impediments to efficient DOD support to civil authorities. He recommends two changes, "amend the Posse Comitatus (PCA), and allow federal forces to serve in a tactical control (TACON) relationship under the governor of a state while supporting civil support operations inside of the United States."[26] It makes sense for the governor to control military operations within their state to ensure all military forces follow the laws of the land, which differ widely from state to state. Another author also recommends changes to the PCA. Ray A. Zuniga focuses his entire 2009 thesis on the PCA and the barriers it poses to effective DSCA operations. He goes further than Bentley, however, stating, "The Posse Comitatus Act (PCA) needs to be repealed and a new Interagency Coordination Act needs to put in its place."[27] Another issue is with interagency coordination, which is examined in depth by Derek Wessman in his 2007 thesis. He discusses in depth the failure of coordination during the Hurricane Katrina response and what has been done since then to improve coordination between federal agencies. He recommends the formation of a standing joint

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[24] Juliana M. Walker, "The Military and Domestic Disaster Response: Lead Role Revealed through the Eye of Hurricane Katrina?," Master's Thesis, Naval Postgraduate School, 2006, v.

[25] Ibid., 1-3.

[26] Michael Bentley, "The Role of Military Forces in Disaster Response: Remove the Impediments," Master's Thesis, United States Army War College, 2012, 29.

[27] Ray A. Zuniga, "The Posse Comitatus Act: A Hindrance to National Security in Need of a Change," Research Report, United States Air Force Command and Staff College, 2009, 1.

task force (JTF), used solely for DSCA missions, rather than using existing combat units.[28] In a supporting thesis, written in 2006, Jason T. Garkey identifies four issues that need to be corrected.

> 1) better integration between existing state National Guard (NG) and Active Component (AC) command and control systems, 2) development of an aggressive NRP and NIMS education program within units stationed in the USNORTHCOM and [United States Pacific Command] USPACOM [Area of Responsibility] AOR, 3) USNORTHCOM develops a domestic exercises branch to provide exercise support across the interagency arena for DOD support to the [Lead Federal Agency] LFA, and 4) developing an aggressive public information response cell to assist the LFA during the initial phases of federal support.[29]

This literature collectively recommends major changes in DOD policy related to DSCA, but it does not get to the core of the issues with DOD forces integrating with civilian agencies during DSCA missions.

Beyond the literature that recommends specific changes to policies within the DOD, there are several documents that discuss general improvements that can be made to existing policy. These more moderate changes are aimed at correcting deficiencies in current policy, rather than changing policy entirely. This makes them more useful because they are more likely to be implemented as the DOD continuously adjusts its policies over time. The first of these is a thesis written by Thomas J. Langowski in 2008, in which he argues the DOD needs to put more of an emphasis on DSCA as a primary mission. In his thesis, he states, "DOD should view DSCA as a core mission and, irrespective of the current military operational tempo, they must seasonally source forces, for planning purposes, to satisfy the most likely DSCA response."[30] In a different vein, a thesis written by Eric L. Leshinsky in 2006 focuses specifically on the DOD's Immediate

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[28] Derek Wessman, "Defense Support of Civil Authorities: Critical Capability or Vulnerability? Optimizing DOD's Domestic Range of Military Operations," Manuscript, United States Naval War College, 2007, 5-6.

[29] Jason T. Garkey, "In Support of the Common Domestic Defense: Unity of Command between Federal and State Controlled Military Forces," Master's Thesis, United States Naval War College, 2006, 10.

[30] Thomas J. Langowski, "Defense Support of Civil Authorities," Monograph, United States Army Command and General Staff College, 2008, 3.

Response Authority (IRA), which gives federal forces the authority to respond to emergencies without authorization if they occur near a federal military installation. Leshinsky states, "The research identifies current barriers to the IRA provision's effectiveness, such as strategic guidance, oversight, and training, and also provides recommendations to help eliminate these barriers to eventually improve the overall effectiveness of this valuable resource for city, state, and federal first responders."[31] Another thesis, written in 2008 by Rodney Liberato, has a different take on the issues with DSCA. He uses vignettes from the National Planning Scenarios to show that the DOD's validation and approval process for DSCA missions is hampered by current DOD policy and regulation. He recommends using existing DOD expeditionary force structures as DSCA response forces.[32] Finally, a 2015 report authored by a group at the RAND Corporation discusses how the DOD can better support FEMA's All-Hazards Plan. By preparing to fill identified shortfalls in civilian response agencies, the DOD could improve its responsiveness when called on for support.[33]

There is some literature that delves more deeply into different aspects of the DSCA problem. First is a thesis written by Robert B. Gaston, wherein he proposes adapting current processes for battle staff into the DSCA mission-set. He says, "To preclude repeating frequent failures in timeliness, preparation and coordination a standard framework must be developed to synchronize existing and evolving processes and capabilities."[34] Another example is the thesis written by William W. Johnson where he recommends the formation of an active component rapid response force, which "will be trained and equipped to respond to an incident of national significance characteristic of

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[31] Eric L. Leshinsky, "Prepared for Disaster? Improving the Department of Defense's Immediate Response Authority," Master's Thesis, Naval Postgraduate School, 2006, v.

[32] Rodney Liberato, "A New Department of Defense Framework for Efficient Defense Support of Civil Authorities," Master's Thesis, Naval Postgraduate School, 2007, 1-3.

[33] Michael J. McNerney et al., *Improving DOD Support to FEMA's All-Hazards Plans*, RAND Corporation, 2015, 1-4.

[34] Robert B. Gaston, "Standardizing Readiness and Response in Defense Support of Civil Authorities," Master's Thesis, United States Army War College, 2011, 1.

those most prevalent within the specific region of action."[35] In an attempt to correct issues with command and control during DSCA missions following Hurricane Katrina, the DOD created the Dual Status Command (DSC) program wherein a single military commander can control both Title 10 and Title 32 forces. The DSC is examined in depth and through the lens of continuous process improvement in a paper written by Ryan Burke and Sue McNeil. In this document, the authors examine the issues present during Hurricane Katrina and compare them to the issues faced during Hurricane Sandy.[36] This is an important comparison because their research illustrates how DOD's policy changes following Hurricane Katrina were then implemented and tested during Hurricane Sandy. In general, research showed improvements in response times of DOD forces though advanced deployment and coordination between Title 10 and Title 32 commands through the use of the DSC.

The DSCA literature also highly stresses the need for better education and training for military personnel on the range of DSCA missions. A thesis that deals solely with the issue of training officers for interagency positions was written by Clifford A. Nancarrow. He proposes the establishment of a "Homeland Defense College and suggests that military officers be awarded credit for joint tours through service with non-DOD agencies."[37] By making it easier for military personnel to receive training and experience in DSCA and emergency management subjects, the DOD can improve its ability to respond to requests for support. In this same vein is a paper written by a group from the U.S. Army War College Center for Strategic Leadership, led by Bert B. Tussing, which investigates ways the reserve component could be leveraged to improve the DOD's DSCA responsiveness. This paper shows that the reserves are dispersed throughout the states and are better positioned to directly support civil authorities without

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[35] William W. Johnson, "Active Component Rapid Response Force: The Answer to the Military's Issues with Efficient and Effective Support during Response to and Recovery from Incidents of National Significance?," Monograph, United States Army Command and General Staff College, 2007, iii.

[36] Ryan Burke and Sue McNeil, "Maturing Defense Support of Civil Authorities and the Dual Status Commander Arrangement Through the Lens of Process Improvement," Manuscript, United States Army War College, 2015, ix-x.

[37] Clifford A. Nancarrow, "Preparing Military Officers for Effective Service in an Inter-Agency Environment," Master's Thesis, Naval Postgraduate School, 2005, v.

the long response times of active component units stationed only at federal installations.[38]

To conclude this section is an examination of two additional documents that focus attention on USNORTHCOM specifically. First is an overview of USNORTHCOM and its mission as the lead DOD command for DSCA operations, written by a group of professors from the U.S. Army Command and General Staff College. In this document, the authors examine the missions required of USNORTHCOM and its ability to conduct those missions. They also look at past failures, especially during Hurricane Katrina, and what has been done to fix them.[39] In his thesis, Steven Osterholzer focuses on the issue of a lack of education of critical stakeholders contributing to USNORTHCOM's ineffectiveness. He proposes that USNORTHCOM make an effort to conduct education and outreach for its critical stakeholders before the DOD is needed for a real emergency.[40]

Having examined the many facets of literature related to DSCA and the DOD as a whole, the gaps in the literature begin to become apparent. First, there is a significant lack of academic literature on this subject outside of the military service schools. The vast majority of the literature is policy, regulation, doctrine, and the professional writings of military officers. This shows a gap in perspective, with the customer (i.e., civilian agency partners, law enforcement officers, emergency management professionals, etc.) missing from the conversation to a large extent. Second, there is a great deal of difference between publishing doctrine and policy and actually implementing it within the DOD. Personal experience tells me that these subjects are not regularly taught or addressed within the Army. Overall, the military often lacks an understanding of its role with regard to emergency response down at the lowest level. It is important to separate the Army's

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[38] Bert B. Tussing, James F. Roth, and Richard W. Dillon, "Improving the Military's Domestic Crisis Response: Leveraging the Reserves," United States Army War College Center for Strategic Leadership, August 2006, 1-2.

[39] United States Army Command and General Staff College, *An Examination of USNORTHCOM's Ability to Respond to Domestic Catastrophes in Support to Civil Authorities*, Department of the Army, Fort Leavenworth, KS, 2014, 1-3.

[40] Steven Osterholzer, "Education in Action: Educating USNORTHCOM's Critical Stakeholders at the Away Game," Master's Thesis, Naval Postgraduate School, 2008, 1-2.

role in DSCA from the other services as it is the defense institution used most frequently to respond and therefore, needs to be trained to deal with the issues. The next section of this literature review will show policy and scholarship on the Army specifically and its role in DSCA, including the Army Reserve and the Army National Guard and their special roles.

3.   DSCA and the United States Army

In this section, the focus is on Army-specific literature as it is related to DSCA. The chief among these is Army Doctrine Publication (ADP) 3-28, which provides an overview of the Army's role in DSCA. This publication focuses on the operational force within the active Army, Army Reserve, and National Guard.[41] As a supplement to ADP 3-28, the Army has also published Army Doctrine Reference Publication (ADRP) 3-28, which goes into greater depth on how Army units conduct DSCA.[42] Both of these documents support the doctrine outlined in DOD policies and regulations.

There are other regulations and policies closely related to these, but they do not provide any additional information pertinent to the general DSCA literature review. Relative to the number of regulations for Army combat operations, there are extremely few for DSCA. For this reason, some commands within the Army have produced various handbooks to augment existing regulations and provide more useful information for commanders in the field. One such handbook is entitled, *How the Army Runs: A Senior Leader Reference Handbook*, and was produced by the Army War College. This handbook covers a wide range of topics, but it devotes an entire chapter to DSCA; this is a major departure from handbooks produced in the decade following 9/11, which were focused entirely on overseas operations in Iraq and Afghanistan, and needless to say was not adequate for covering issues such as hurricanes.[43]

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[41] Department of the Army, "Army Doctrine Publication 3-28: Defense Support of Civil Authorities," Department of the Army, Washington D.C., July 2012, 3-5.

[42] Department of the Army, "Army Doctrine Reference Publication 3-28: Defense Support of Civil Authorities," Department of the Army, Washington D.C., June 2013, iv-v.

[43] United States Army War College, "How the Army Runs: A Senior Leader Reference Handbook, 2011-2012," United States Army War College, December 2011, 499-509.

As is the case for official publications, the additional literature on the Army and its role in DSCA is relatively thin. Roughly half of the literature discusses the Army's role in DSCA generally with few specifics. First among these is a RAND Corporation report written by Eric Larson and John Peters (2001) entitled, *Preparing the U.S. Army for Homeland Security*. This report addresses the national security strategy and homeland security strategy following the 9/11 attacks and how these strategy documents impact the Army.[44] Another RAND Corporation report, written by John Y. Schrader, examines the Army's role in natural disaster support. This report is somewhat dated, but includes a great deal of foundational information on the Army's DSCA response plans; it just leaves out a lot about terrorist attacks and instead focuses on natural disasters.[45] Yet another RAND Corporation report, written by Jeremy Shapiro, examines how the Army can maintain its readiness for DSCA missions while engaged in wars in both Iraq and Afghanistan. This report is important in that it attempts to balance competing requirements. The issues identified became a reality during Hurricane Katrina when the majority of the DOD forces that could have responded quickly to the disaster were overseas fighting in Iraq at that time.[46] To expand on this document, the United States Army War College Strategic Studies Institute commissioned a report, written by Antulio Echevarria II, to examine the strategic implications of DSCA on the Army's future strategy. Echevarria believes the Army can maintain its current engagements in Iraq and Afghanistan while still meeting DSCA requirements by considering alternative force structures to make the Army more modular. This would mean smaller, more versatile and self-sustainable units.[47]

Furthering the review of the Army and DSCA is a thesis written by Terry Ethridge that examines the updated National Security Strategy's impact on the Army by

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[44] Eric Larson and John Peters, *Preparing the U.S. Army for Homeland Security: Concepts, Issues, and Options*, RAND Corporation, 2001, 1-2.

[45] John Y. Schrader, *The Army's Role in Domestic Disaster Support*, RAND Corporation, 1993, 1-3.

[46] Jeremy Shapiro, *The U.S. Army and the New National Security Strategy*, Edited by Lynn E. Davis, RAND Corporation, 2003, 1-2.

[47] Antulio Echevarria II, "The Army and Homeland Security: A Strategic Perspective," United States Army War College Strategic Studies Institute, Carlisle Barracks, PA, 2001, 1-5.

providing "an explanation of the interrelation between the two strategies and the military's roles in these strategies."[48] Further, Terrence K. Kelly writes in his thesis that the Army's sole focus on overseas combat operations has reduced the Army's ability to support DSCA operations. He cites the preamble to the U.S. Constitution as a foundation for a presumed focus on domestic security and support to the citizens of the United States.[49] Richard C. Townes further supports this argument with his thesis, where he argues that HD and DSCA need to be the Army's primary mission, rather than wars overseas. He holds the viewpoint that protecting the homeland can be done better from the homeland, rather than taking the fight to other countries and depleting out own resources.[50]

The RAND Corporation provides additional literature to support the Army's DSCA role. Two documents authored by RAND teams, with Lynn E. Davis as the lead author of both, are relevant. The first report, *Army Forces in Homeland Security*, looks at how the Army can better prepare its resources for use in DSCA missions by identifying existing shortfalls in the civilian infrastructure: "They conclude that the nation needs to decide whether to bear the costs today in order to hedge against future risks."[51] The second report specifically looks at the Army's response to Hurricane Katrina and what can be done to improve such a response in the future. The report identifies several areas for the active Army, Army Reserve, and Army National Guard to improve responsiveness and ability to respond.[52] The use of the reserve component has been mentioned before, and was a key to the response to Hurricane Katrina. Two papers were written discussing how the Army Reserve in particular can be better utilized during DSCA operations. The first, written by Edwin C. Domingo, looks at ways "the U.S. Army Reserve can leverage

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[48] Terry Ethridge, "Homeland Security and Defense: The One Army Approach," Research Project, United States Army War College, 2006, 1.

[49] Terrence K. Kelly, "Transformation and Homeland Security: Dual Challenges for the US Army," *Parameters*, 2003, 36-37.

[50] Richard C. Townes, "The U.S. Army's Role in Homeland Security: What Changes Are Needed?," Research Project, United States Army War College, 2002, 1.

[51] Lynn E. Davis et al., *Army Forces for Homeland Security*, RAND Corporation, 2004, 1.

[52] Lynn E. Davis et al., *Hurricane Katrina: Lessons for Army Planning and Operations*, RAND Corporation, 2007, 1-3.

its force structure and core competencies with local, state, and federal governments to support consequence management operations and enhance Homeland Security."[53] The Reserve is spread out in areas other than federal installations, meaning it is postured to support civil authorities more quickly. The second, written by James K. Rowsey, is in the same vein. He looks at the Army Reserve as a solution to a fiscally constrained Army, and concludes that the Reserve has the ability to support DSCA missions without the funds required for the active Army; the reserves only require full funding when activated.[54]

The Center for Army Lessons Learned (CALL) produces a periodic newsletter entitled, *Civil Support and the U.S. Army* which began publication in 2009. CALL's mission is to share current lessons learned from various Army operations all over the world with the rest of the Army in the hope that this information will continuously improve operations. The Civil Support newsletter is CALL's DSCA arm. In its inaugural issue, the newsletter asserts, "the 'homeland battlefield' could be a coastal city hit by a catastrophic hurricane, a location on the U.S. border, a container and shipyard, a street riot in major city, a championship-level football game, a bridge collapse, or even a political party's convention."[55] This speaks to the growing understanding of DSCA and how the Army can better support civil authorities.

Two final documents related to the Army and DSCA are also important to include in this review. The first is a thesis written by Jeffery M. Daigle. He suggests that the Army should follow suit with other services such as the Navy and Air Force in creating a special skill identifier or occupational specialty for DSCA and Homeland Security: "Additionally, a holistic analysis of the current DOD definition of Homeland Security demonstrates the fallacy of current Army doctrine in regards to Homeland Defense and

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[53] Edwin C. Domingo, "U.S. Army Reserve Roles: Consequence Management in Support of Homeland Security," Research Project, United States Army War College, 2002, ii.

[54] James K. Rowsey, "An Examination of the Role of the United States Army Reserve in Support of the Defense Support of Civil Authorities (DSCA)," Master's Thesis, United States Army Command and General Staff College, 2014, 1-2.

[55] Center for Army Lessons Learned, "Civil Support and the U.S. Army," *CALL Newsletter*, no. 10–16 (December 2009), i.

Defense Support of Civil Authorities."[56] Continuing with a comparison of the Army to other services, a document examining the Navy's DSCA capabilities provides an important insight. The thesis written by Kevin McClellan provides a detailed description of the Navy's doctrine and capabilities for providing DSCA. He also compares the Navy's policies with other services, including the Army, which provides a different perspective on Army DSCA policies and operations.[57]

Building on the literature covering the DOD as a whole, the Army-oriented literature continues to highlight a gap in perspective from civilian partners and a lack of understanding the application of doctrine and policy by soldiers at the lowest levels. What's missing here is something within the Army to bridge the gap between the Army's combat mission role and the on-call mission of DSCA. DSCA is a mission that provides little notice or time to prepare and requires a set of competencies on which Army personnel, for the most part, do not train. This creates a twofold problem. First, soldiers are not ready to respond quickly. Second, when they do respond, soldiers do not understand how to respond. They are unclear on what laws and regulations govern their operations, how the command and control system is structured, etc. It is essential to start addressing these gaps.

4.   Conclusion

This review has covered a wide range of literature related to DSCA operations at both the DOD and Army levels. It attempts to show both the doctrinal basis for DSCA and existing scholarship on the subject. There are gaps in the literature that can be further explored in this thesis. The literature on the Army's role in DSCA is very sparse, and most of that literature is more than 10 years old, making its relevance questionable. Also, much of the literature on the Army is written by RAND Corporation researchers, which does not diminish its value, but puts into question how much has been done in academia to evaluate current and ongoing issues. The DOD and the Army are slow-moving beasts

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[56] Jeffery M. Daigle, "Does the Army Need a Homeland Security Skill Identifier?," Master's Thesis, United States Army Command and General Staff College, 2011, iv.

[57] Kevin McClellan, "Are the U.S. Navy's Current Procedures for Responding to Homeland Defense and Security Tasking Adequately Designed?," Master's Thesis, Naval Postgraduate School, 2009, 1-4.

when it comes to change. It is evident by a review of the existing literature that the DOD is making strides toward improving its doctrine based on lessons learned and recommendations from various levels. It is also evident from the literature that there is a great deal more that needs to be improved in order to make the DOD a more responsive and efficient engine for supporting civil authorities in their time of greatest need. The Army plays a large role in the DOD's ability to conduct effective DSCA, but its role needs to be seriously improved.

D.   RESEARCH DESIGN

1.   Object/Sample: This thesis examines existing doctrine, policies, and regulations at the DOD/Joint and Army levels related to DSCA. It focuses on the Army, but DOD/Joint documents provide an overarching framework that is still applicable.

2.   Selection: The topic of this thesis was selected for two main reasons. First, the author is a soldier in the Army, so issues associated with the Army and its role are of particular import, in addition to an established familiarity with its doctrine, policies, and regulations. Second, research into this subject indicates that the Army is behind its sister services in its conduct of DSCA; thus marked improvements can be made within the Army.

3.   Limits: A study of the entirety of the DOD was beyond the scope of this project. Additionally, there are no comparisons made between the Army and other service component within the U.S. or outside it, again because it is beyond the thesis's scope. Review of applicable literature is limited to current editions of documents published since 9/11 due to many significant changes that this event brought about.

4.   Data Sources: There is minimal literature available on the subject of DSCA and the Army. Most information will come from doctrinal publications, regulations, policies, and after-action reviews. There are news and journal articles that are relevant as well. Available scholarly sources are used, but they represent a small part of the total list of sources used.

5.   Type and Mode of Analysis: This thesis involves a policy analysis of Army DSCA doctrine, policy, and regulation. The process is to first understand existing policy, analyze its strengths and weaknesses, and then recommend changes. Bardach's policy analysis method is used, which involves the following steps: Define the Problem; Assemble Some Evidence; Construct the Alternatives; Select the Criteria; Project the Outcomes; Confront the Trade-offs; Decide; Tell Your Story.[58]   Also, an abbreviated version of Yin's case study method is applied to the two cases in Chapter III using the following steps: Define the case; Justify the choice of a single- or multiple-case study; Deliberately adopt or minimize theoretical perspectives.[59]

6.   Output: The final product of this thesis is a recommendation to create a new functional area, the DSCA Corps, within the Army. The DSCA Corps concept is designed to correct identified shortfalls with integration, coordination, training, and expertise with regard to DSCA operations.

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[58] Eugene Bardach, *A Practical Guide for Policy Analysis: The Eightfold Path to More Effective Problem Solving*, 4th ed., Washington D.C.: CQ Press, 2012, xvi.

[59] Robert K. Yin, *Case Study Research: Design and Methods*, 5th ed., Sage Publications, 2013, 1.

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II.   DSCA IN THE U.S. ARMY

A.   INTRODUCTION

This chapter covers the basic structure and purpose of DSCA within the Army. It then details the processes for the Army to provide DSCA, from the time resources are requested to the time forces are on the ground responding. Using historical examples, this chapter will show how the Army has provided DSCA since the founding of the U.S. and continues to do so. This chapter also highlights the areas of Army DSCA that have been changed since 9/11 and Hurricane Katrina to improve DSCA. It provides a description of the NRF and NIMS, which govern civilian responses and were implemented post-9/11. Next, it covers the DSC concept, which was implemented post-Katrina. Following these two major changes, other points will be covered, including IRA, the Emergency Management Assistance Compact (EMAC), and the FEMA request process (including the relationship between the Federal Coordinating Officer (FCO) and Defense Coordinating Officer (DCO)). The purpose of this chapter is to provide an overview of the concept and practice of DSCA in the Army. This foundation of knowledge is important in order for the reader to understand the gaps addressed in subsequent chapters and the thesis's core conclusions and recommendations.

B.   DEFINING DSCA

This thesis examines the U.S. Army's role in DSCA, which is outlined in detail in ADP 3-28, the Army's DSCA manual. ADP 3-28 defines DSCA as:

> Support provided by United States Federal military forces, DOD civilians, DOD contract personnel, DOD component assets, and National Guard forces (when the Secretary of Defense, in coordination with the Governors of the States, elects and requests to use those forces in title 32, United States Code, status) in response to requests for assistance from civil authorities for domestic emergencies, law enforcement support, and other domestic activities, or from qualifying entities for special events.[60]

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[60] DA, "ADP 3-28," 3.

There are two important points to note from this definition. First, DSCA involves *federal* military support, which means Army National Guard forces only fall under this definition when federalized under Title 10 of the United States Code (U.S.C.). Second, DSCA is conducted only when *requested* by civil authorities. The Army cannot decide on its own to conduct DSCA missions, even if there is a disaster in the immediate vicinity of a military installation.[61] Federal law governs the conduct of DOD forces within the borders of the U.S. It also outlines the circumstances under which the DOD can provide support to civil authorities, all of which must be provided under the command and control of those civil authorities.

C.   LAWS GOVERNING DSCA

Federal law, known as the U.S.C., dictates what the Army is and is not legally allowed to do while operating within the borders of the U.S. There are three laws in particular that are applicable to DSCA and are worth a brief overview. The first is the Stafford Act, which outlines the criteria for the President of the U.S. (POTUS) to make a federal disaster declaration. This federal disaster declaration is required before military forces can be deployed within the U.S. to conduct DSCA. The second is the Posse Comitatus Act (PCA), which makes it illegal to use federal military forces to conduct law enforcement activities within the U.S. The third is the Insurrection Act, which was written as an exception to the PCA and allows the POTUS to use federal military forces for law enforcement within the U.S. only if the expressed purpose is to quell an insurrection or rebellion.

The Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) governs federal disaster assistance for natural or man-made disasters throughout the U.S. "The Stafford Act authorizes the President to use Federal assets to supplement State and local efforts and capabilities to save lives, protect property, public health, and ensure safety thereby alleviating damage, loss, hardship, and suffering."[62] Under the Stafford

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[61] An exception to this is the DOD's Immediate Response Authority (IRA), which is discussed in detail later in this chapter.

[62] Lombardo, "Collaboration or Control," 8.

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Act, the President can declare federal disasters or emergencies under a number of different criteria, each of which has a different set of financial obligations from the federal government to the affected state. A Presidential disaster declaration releases financial and material support from FEMA and also allows the DOD to provide DSCA as requested by civilian agencies involved in the response efforts. It is understood that a Presidential disaster declaration comes after a state has declared a state-level disaster and has exhausted or will soon exhaust its available resources and EMAC resources.[63]

The Posse Comitatus Act (PCA) became law in 1878, following the presidential election of 1876. During this highly-contested election, President Ulysses S. Grant unilaterally sent federal military forces to aid federal marshals in securing polling locations in South Carolina, Louisiana, and Florida. The PCA prohibits "the use of the military 'as a posse comitatus or otherwise to execute the laws.'"[64] Initially, the PCA only applied to the Army (and the Air Force when it began as the Army Air Corps), but the DOD subsequently extended the PCA through regulation to apply to the Navy and Marine Corps as well. The PCA specifically does not apply to the Coast Guard, which has a peacetime domestic law enforcement mission under Title 14 of the U.S.C., or the National Guard when in state service; the PCA applies to the National Guard only when federally activated under Title 10 U.S.C.[65] The PCA applies only to federal forces or federalized National Guard forces under Title 10 U.S.C. All active and reserve components of the DOD fall under Title 10 U.S.C., so the PCA applies to all DOD forces except the National Guard while in a state status.

When the National Guard is activated for domestic operations, there are three possible statuses under which it can be activated. The first and most common is called State Active Duty (SAD), which is used when the National Guard is activated by the Governor for limited operations within the homeland. The state is responsible for the costs associated with SAD mobilization until or unless reimbursed by the federal

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[63] Ibid., 8-9.

[64] Matthew Carlton Hammond, "The Posse Comitatus Act: A Principle in Need of Renewal," *Washington University Law Review*, Volume 75, Issue 2 (January 1997): 953-84, accessed April 18, 2017, 965.

[65] Hammond, "The Posse Comitatus Act," 963.

government. The second status is Title 32 U.S.C., which is used when National Guard forces are activated for national disasters as declared by the President under the Stafford Act. National Guard personnel are still under the control and authority of the governor of the state within which they are operating. The final status is Title 10 U.S.C., which is used for federal activation for overseas contingency operations.[66] Figure 1 shows the distinction between the three different duty statuses under which National Guard forces can provide DSCA.

	State Active Duty	**Title 32**	**Title 10**
Command & Control	Governor	Governor	President
Where	IAW State Law	CONUS	Worldwide
Pay	State	Federal	Federal
Mission types	IAW State Law (Riot control, Emergency Response, etc.)	Training, And other federally authorized.	Overseas Tng, & as assigned after mobilization
Discipline	State Military Code	State Military Code	UCMJ
Support Law Enforcement	Yes	Yes	Limited by *Posse Comitatus*

Figure 1.   Comparison of Duty Statuses for National Guard Soldiers[67]

The PCA applies primarily to military support to law enforcement operations and whether military units can carry weapons while operating in the homeland or not.

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66 Ibid., 963-968.

67 Source: Peter A. Topp, "What Should Be the Relationship Between the National Guard and United States Northern Command in Civil Support Operations Following Catastrophic Events," Master's Thesis, Naval Postgraduate School, 2006, 13.

Personnel that fall under Title 10 U.S.C. may not conduct law enforcement operations or support law enforcement personnel by conducting arrests, searches, or seizures. Other indirect support, such as manning unarmed checkpoints or conducting welfare checks are allowed. This means Title 10 forces may not support law enforcement operations in any way except to provide materiel support to law enforcement personnel (i.e., food, water, and shelter). In addition, Title 10 forces may not carry weapons while conducting domestic operations; weapons must remain stored in a secure vault at the unit's duty station. If law enforcement support is needed, National Guard forces under SAD or Title 32 may carry weapons and conduct law enforcement operations within the homeland as long as the governor of the state within which they are operating gives permission for the National Guard to do so.

The only exception to the PCA is the Insurrection Act of 1807, which allows the President to use Title 10 military forces "to suppress, in any State, any insurrection, domestic violence, unlawful combination, or conspiracy."[68] Essentially, this means Title 10 forces can be used conditionally to put down rebellion within the homeland.

D.   THE ARMY DSCA PROCESS

In order for the Army to provide DSCA, civil authorities must first exhaust all other options for resources, then must formally request military support through FEMA. It is important to note that civil authorities do not request specific military assistance or force, but rather a mission support request; the military decides which resources to use to accomplish this mission. The Army is activated for DSCA missions when local, state, and federal civilian agencies are unable to provide needed resources which can be provided by the Army.

The Army has modeled its approach to DSCA after the NRF and the NPD, as outlined in Presidential Policy Directive (PPD) 8. The NPD calls for an 'all-of-nation' or 'whole community' approach to incident management, with the purpose of saving lives, alleviating suffering, and protecting property foremost in all aspects of a disaster

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[68] Danielle Crockett, "The Insurrection Act and Executive Power to Respond with Force to Natural Disasters," accessed April 18, 2017, https://www.law.berkeley.edu/library/resources/disasters/Crockett.pdf.

response. Rather than a top-down approach, the NRF calls for a bottom up approach in accomplishing the NPD. This means that civil authorities at the local level take the lead, with all higher levels providing support to the local IC. The Army provides DSCA as a part of this tiered response, when local, state, and federal resources are exhausted. This tiered response begins at the state level with the affected state's National Guard.

Governors have the ability to activate their state's National Guard during a state disaster declaration under one of two different duty statuses. First, they can be activated in a SAD status, which is fully funded by the state (i.e., no federal funding). National Guard forces in this status are actually categorized as state employees; they do not get the same benefits (insurance, housing allowance, subsistence allowance, etc.) as they would on federal active status, and any injuries incurred on duty are processed as Workman's Compensation claims. Each state's budgetary allocation for SAD funding differs, but generally states do not retain enough funding to activate their National Guard for long durations or major disasters. For this reason, National Guard forces can be activated under Title 32 U.S.C., which is still not a federal duty status—meaning the Governor retains control of the forces—but is backed with federal funding for long duration or large scope disaster responses. An example of this would be the National Guard support to the Southwest Border in 2006, known as Operation Jump Start, or the response to Hurricane Katrina in 2005.

If the National Guard force structure within an affected state does not have the right mix of resources for the disaster at hand, National Guard forces from other states can be requested by the affected state. The mechanism for this is the EMAC, which is a standing mutual support agreement between the 54 states and territories. EMAC forces are placed either in SAD or Title 32 status and fall under the control of the supported state's National Guard command structure and Governor. Figure 2 depicts the Army's 'all-of-nation' approach to DSCA.

All-of-Nation approach to incident management (in national preparedness doctrine)

The military's primary contribution is **defense support of civil authorities (DSCA).**

DSCA definition: Support provided by U.S. Federal military forces, Department of Defense civilians, Department of Defense contract personnel, Department of Defense Component assets, and National Guard forces (when the Secretary of Defense, in coordination with the Governors of the affected States, elects and requests to use those forces in title 32, United States Code, status) in response to requests for assistance from civil authorities for domestic emergencies, law enforcement support, and other domestic activities, or from qualifying entities for special events. (DODD 3025.18)

Primary purposes
- Save lives
- Alleviate suffering
- Protect property

Primary characteristics
- State and federal laws define how military forces support civil authorities.
- Civil authorities are in charge, and military forces support them.
- Military forces depart when civil authorities are able to continue without military support.
- Military forces must document costs of all direct and indirect support provided.

Army organization — Tiered, unified response

State governors command
State National Guard forces
(National Guard in title 32 duty status)

President commands
Federal military forces
(National Guard in title 10 duty status, Regular Army, and Army Reserve)

Primary Army tasks
- Provide support for domestic disasters.
- Provide support for domestic CBRN incidents.
- Provide support for domestic civilian law enforcement agencies.
- Provide other designated support.

CBRN incident — chemical, biological, radiological, or nuclear incident
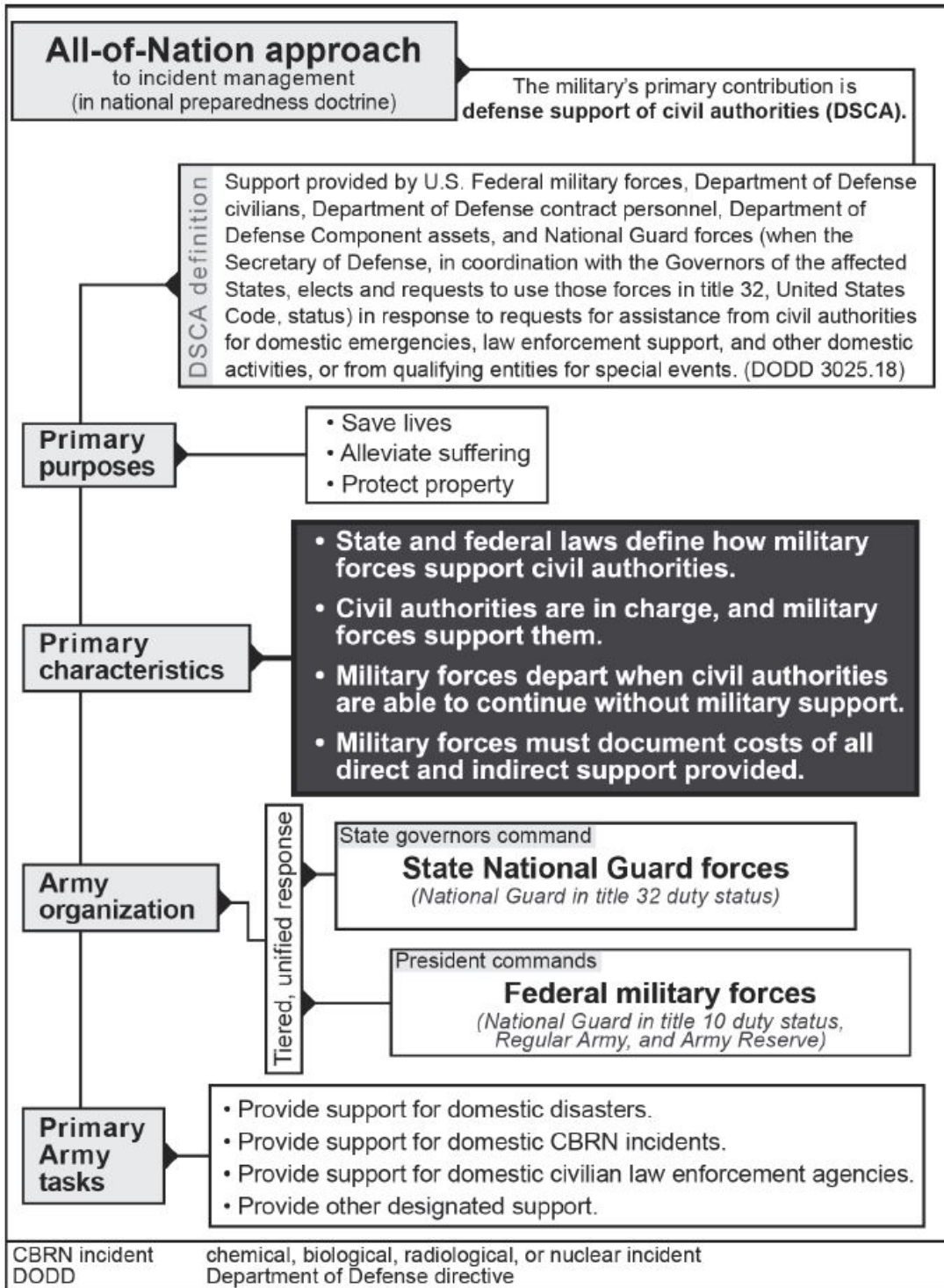DODD — Department of Defense directive

Figure 2.   Overview of DSCA[69]

[69] Source: DA, "ADP 3-28," iv.

When a disaster is too big for a state to handle with National Guard forces in SAD or Title 32, and all avenues of support through EMAC have been exhausted, the next tier of response is federal forces under Title 10 U.S.C., which can come from either the Army Reserve or the Active Army, depending on the types of resources needed and the location of the disaster. A Presidential Disaster Declaration under the Stafford Act and a request from the affected state are required before Title 10 forces can be committed to a DSCA mission in support of a disaster. At this point, a DSC is implemented. A DSC places a single commander and command staff over all forces regardless of duty status. The DSC normally comes from the affected state, and is generally a one- or two-star general officer. The DSC exercises command and control over both Title 32 and Title 10 forces, and reports through the DOD to the President and through the affected state's Joint Force Headquarters (JFHQ) to the Governor. Figure 3 outlines the DSC's role.
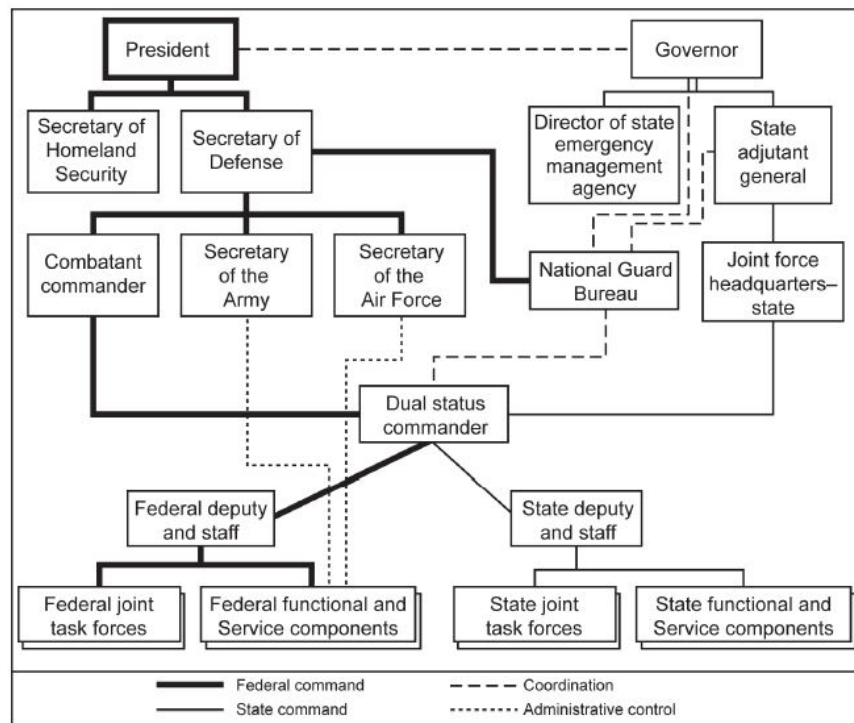

Figure 3.   Dual-Status Command Structure[70]

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[70] Source: DA, "ADRP 3-28," 3-10.

There are existing constructs in place within the DOD to facilitate the request for and activation of Army forces for DSCA missions. The first of these is the EPLO program. The purpose of the EPLO program is to integrate select DOD personnel into civilian agencies for the purpose of coordinating preparedness, planning, and response activities in support of the DSCA mission. Each service component is directed to implement and manage an EPLO program independently. EPLOs are Reserve officers in the rank of O5 or O6 who are trained in DSCA and charged with conducting civil-military and interagency liaison on behalf of their service component. The second is the DCO program, which places a team of military personnel in each FEMA region to coordinate directly with the FCO at the regional level. The DCO's responsibility is to facilitate the process of requesting military support. States request support through their regional FCO, who then simultaneously sends the request up to FEMA and through the DCO up to the DOD. In this way, military units are already preparing to move by the time the formal request process is complete, which cuts down on the time it takes from requesting support to support arriving at a disaster response. Figure 4 provides more detail on the DCO and Defense Coordinating Element (DCE) responsibilities as well as regional alignment.[71]

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[71] DOD, "Strategy for DSCA," 23-24. DOD, "DODI 3025.16," 5-7.
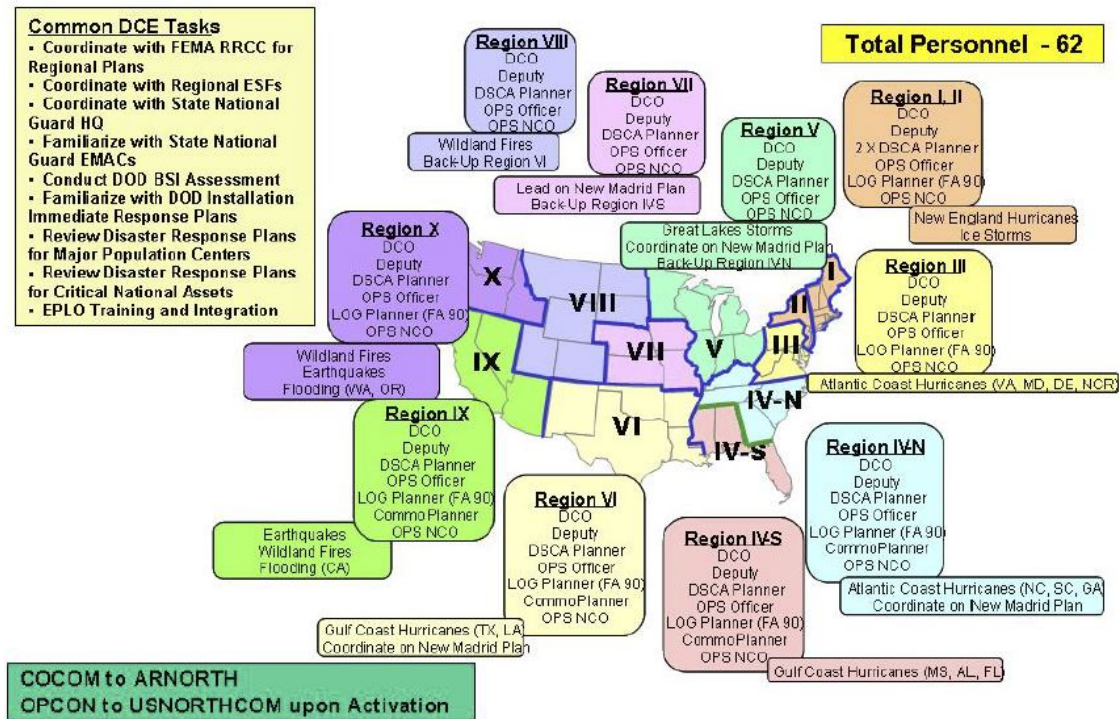
DCO / E Regional Structure and Functions

Figure 4.   DCO and DCE Organization, Tasks, and Functions[72]

The primary method of integrating military and civilian federal response to major disasters is the DCE. The DCE is led by a DCO and consists of nine personnel, including the DCO. There is a DCE and DCO collocated with each FEMA regional headquarters, for a total of 10 DCEs across the country. The DCO is the single DOD point of contact within the Joint Field Office (JFO) during a federal disaster response, and works closely with the FCO and State Coordinating Officer (SCO) for the affected state (or states). The DCE receives requests for military assistance from the FCO and SCO, validates them based on six criteria, and forwards them through DOD approval channels to the unit to be activated.[73]

A resource request is only sent to the DCO for consideration and forwarding if the FCO determines that no other state or federal civil entities have the capability to fill the

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[72] Source: United States Northern Command, "USNORTHCOM CONPLAN 2501-05: Defense Support of Civil Authorities," Department of Defense, May 8, 2006, C-19-5.

[73] Langowski, "DSCA," 27-29.

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request. While National Guard forces can be activated at the state level, either within the affected state or through EMAC from other states, federal military forces cannot be activated in any other way than by request from FEMA's FCO through the DCO. (As already discussed, IRA is an exception to this rule). When a request does come to the DCO, he or she must screen the request using the following six criteria before forwarding it through DOD channels for approval: legality, lethality, risk, cost, readiness, and appropriateness. These criteria are designed to ensure a support request is legally and operationally correct before it is forwarded through the DOD approval channels, thus increasing the speed of approval by avoiding the request being sent back for correction.[74]

E.   HISTORICAL EXAMPLES

The origins of DSCA can be traced back to the founding of the United States. Initially, federal military resources were limited in capability due to a general dislike of the idea of a standing army. Following the War of 1812, military assistance to civil authorities increased in scope. "Between 1868 and 1898 the military delivered succor on seventeen occasions involving fires, epidemics, floods, storms, tornadoes, and a locust plague."[75] Prior to the Federal Relief Act of 1950, there was no specific law governing federal disaster assistance or DSCA. States had to request aid from the federal government on a case-by-case basis. In 1979, the Federal Emergency Management Association was formed at the request of many state Governors to serve as a central agency to coordinate emergency management nationally.[76]

There are several specific examples of DSCA through American history. One example was an order by then Secretary of War William W. Belknap for federal forces to send aid in the form of clothing and provisions to the victims of the Chicago Fire of 1871. At the mayor's request, over 1,000 troops were sent to Chicago to assist with maintaining law and order. In response to the Galveston, TX hurricane in 1900, and at the request of then Governor of Texas J. D. Sayers, President McKinley sent thousands of rations, tents,

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[74] Ibid., 29.

[75] Edward L. P. Shepherd, "Reserve Component Field-Grade Officer Preparation for Natural Disaster Relief," United States Army War College, Carlisle Barracks, PA, March 2013, 3.

[76] Shepherd, "Field-Grade Officer Preparation," 3-4.

and other supplies to the stricken town. In addition, the Navy sent several ships to assist in disaster recovery efforts. In 1906, following the San Francisco earthquake, military units in the area acted under IRA to provide assistance to civil authorities within the crumbling and burning city. Not only were rations and supplies provided, but also thousands of troops to assist firefighters to control the fires burning around the city and assist law enforcement in maintaining law and order. These are only three of hundreds of examples of state and federal military support to civil authorities during their time of greatest need. This level of support has remained consistent to the present day in spite of the many post-9/11 changes in homeland security structures and modifications to DSCA doctrine following the Hurricane Katrina response.[77]

F.   NRF AND NIMS FOLLOWING 9/11

The NRF and NIMS guide the conduct of disaster preparedness and response activities throughout the U.S. These were outlined in Homeland Security Presidential Directive #5 (HSPD #5), *Management of Domestic Incidents*, which was enacted in February 28, 2003. HSPD #5 incorporates many of the lessons learned by federal agencies during the response to the 9/11 terror attacks, and changes that were recommended by the 9/11 Commission in its report published in 2003. One of the most significant problems during the response to the 9/11 attacks was a failure of coordination between different agencies engaged in the response. The NRF and NIMS are complimentary. The NRF provides the overarching framework within which preparedness and response activities are conducted in order to bring all agencies at the local, state, and federal level onto a common set of operational practices. NIMS specifically directs activities in response to a disaster.[78]

In order to be widely accepted and used, the NRF was made to be flexible and adaptable so it could apply to a wide variety of circumstances. Therefore, rather than directing specific tasks or organizational structures for emergency management agencies

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[77] Lombardo, "Collaboration or Control," 28-32.

[78] Terrence J. Alvarez, "Earth, Wind, Flu, Flood, and Fire: Early Evolution of U.S. National Policy for Natural Disaster Response," Master's Thesis, United States Army Command and General Staff College, 2009, 139-140.

at the state, tribal, and local levels, it focuses more on how the federal government is organized to support these agencies before, during, and after a disaster response. There are five key principles outlined in the NRF: "engaged partnerships, tiered response, scalable, adaptable, and flexible operational capabilities, unity of effort through unified command, and readiness."[79] The NRF is important to the Army's DSCA mission because the Army must be capable of integrating into this framework during response operations. A portion of the NRF outlines Emergency Support Functions (ESFs), which is a method of categorizing resources into specific types and kinds in order to ensure a broader understanding of the capabilities of different resources. The ESFs are outlined in Figure 5. The Army must categorize its own personnel and equipment into the ESFs prior to a disaster to facilitate rapid mobilization of the correct resources when they are requested by civil authorities. Civilians may not know the difference between an Apache Helicopter and a Blackhawk Helicopter, but they do know they need a resource with the capability to rescue stranded people from residential rooftops in a flooded area. Civilians request the capability they need (rooftop rescue of 10 civilians in flooded area), then send the request through channels to the DOD, which then mobilizes two UH-60 Blackhawk helicopters to fill the request.[80]

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[79] Alvarez, "Earth, Wind, Flu, Flood, and Fire," 143.

[80] Ibid., 142-143.

Figure 5.   Emergency Support Functions and their Associated Lead Federal Agencies[81]

Within the NRF is the NIMS, which provides a framework for response to incidents across the full spectrum, from a small traffic accident to a major, multi-jurisdictional disaster. There are five components that make up the NIMS framework: "Preparedness, Communications and Information Management, Resource Management, Command and Management, and Ongoing Management and Maintenance."[82] Of these components, the Army fits into the first four, with ongoing management and maintenance following an incident falling entirely on civil authorities. The first component, preparedness, is the responsibility of each individual agency and represents what is known as 'steady-state' operations, or all operations that occur before an incident takes

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[81] Source: Edwin A. Hurston, "Defense Support of Civil Authorities," SlidePlayer, September 21, 2012, accessed June 26, 2017, http://slideplayer.com/slide/4575595/.

[82] Alvarez, "Earth, Wind, Flu, Flood, and Fire," 141.

place. This includes planning, organizing, equipping, training, and exercising response systems and processes. DHS gathered best practices in emergency management from all over the country to formulate NIMS and subsequently update it in 2008 to include lessons learned from Hurricane Katrina and other disasters. A major component of NIMS is the ICS, which dictates command structures and processes to be used by all agencies during all types of response operations. ICS was created by the fire service initially and was modeled after a military command structure. A key component of the NRF is unity of effort through unified command; this is where ICS really becomes important. For the purposes of ICS, NIMS, and the NRF, unified command "enables organizations with jurisdictional authority or functional responsibility for an incident to support each other through the use of mutually developed incident objectives."[83] This principle allows police officers to exercise command authority over fire fighters and Department of Energy personnel to command Department of Transportation personnel. Each agency maintains its own independent authority and command structures, but the resources engaged in an incident response fall under the temporary authority of the ICS and the IC.[84]

The process to get Army resources activated and deployed in response to a disaster is long and involved, which can slow the response time and delay needed resources arriving when they are needed. In the preparedness and planning phases of operations, it is important for planners and emergency managers to prepare for this process by having resource requests ready for expected incidents and establishing relationships with the various agencies involved in this process to facilitate rapid flow of information. As stated, the NRF and NIMS call for a tiered response to disasters within the U.S., which starts at the local level with first responders.

Figure 6 shows how a tiered response is supposed to work. Incidents start out at the local level, with first responders conducting immediate lifesaving and disaster mitigation activities. As an incident expands, the resources at the local level can become exhausted, at which time the local level requests assistance from the state. The state sends

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[83] Department of Homeland Security, "National Response Framework," Department of Homeland Security, Second Edition, May 2013, 6.

[84] Alvarez, "Earth, Wind, Flu, Flood, and Fire," 139-141.

in resources from other areas within the state that are not affected by the incident and from other states who voluntarily release their own resources to assist the affected state (who must then reimburse them for the cost). It is at this point that Army and Air Force National Guard resources can be mobilized by order of the Governor, and can be sent from other states by order of that state's Governor. When resources at the state level are exhausted, the state requests resources from the federal level through FEMA. Federal agencies of all types provide resources to the state and ultimately to the local IC managing the incident. Federal resources come from civil government agencies until or unless they become exhausted or the specific type of resource needed is not available within the civil government. At that point, federal military forces can be activated and sent to assist with the incident response.[85]
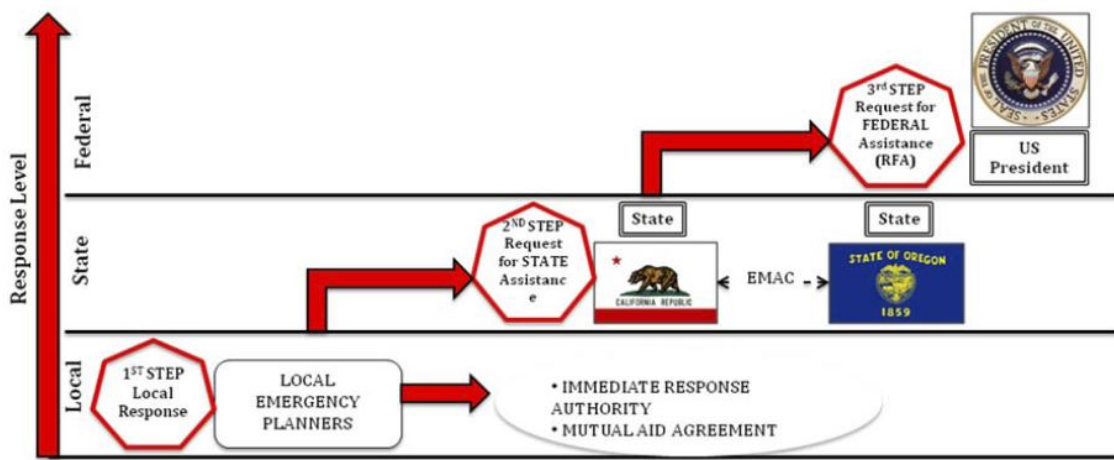
Figure 6.   Tiered Response Process Map[86]

Federal military forces are activated and deployed through what is called a Mission Assignment (MA). This is a somewhat different process than that required to activate civil government resources. First of all, a Presidential Emergency or Presidential Disaster Declaration must be in place as required by the Stafford Act. This authorizes federal funding to support the incident response. This declaration initiates the formation

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[85] Dunphy and Radel, "Request Processes for DSCA," 47-48.

[86] Source: Ibid., 48.

of a JFO, managed by FEMA, with representatives from all of the federal and state agencies involved in the incident response. The JFO is led by the FCO, who is appointed from the LFA managing the incident. Two other key members are the SCO, representing the affected state's Governor and Department of Emergency Management, and the DCO, representing the DOD and USNORTHCOM. Figure 7 shows how a state's resource request results in federal forces being deployed. The request goes to FEMA at the JFO, where it is converted to an MA and sent to USNORTHCOM by the DCO. USNORTHCOM sends the MA to the Joint Director of Military Support (JDOMS) under the Joint Chiefs of Staff (JCS), who then sends the MA to the SecDef for approval. Once the SecDef signs the MA as approved, an execution order (EXORD) is sent through Joint Forces Command (JFCOM) to Forces Command (FORSCOM), who orders a specific unit to mobilize to execute the MA. This process requires a great deal of coordination in order for an MA to flow seamlessly from the state level to the unit that will execute the mission, generally in less than 24 hours. This process is fairly effective and has been streamlined to increase the speed of approval. In many recent events, the DOD has mobilized resources ahead of a disaster so they are ready to deploy as soon as an MA is received, further reducing the time lag between request and response. Figure 7 graphically depicts the MA approval process.[87]

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[87] Ibid., 50-51.
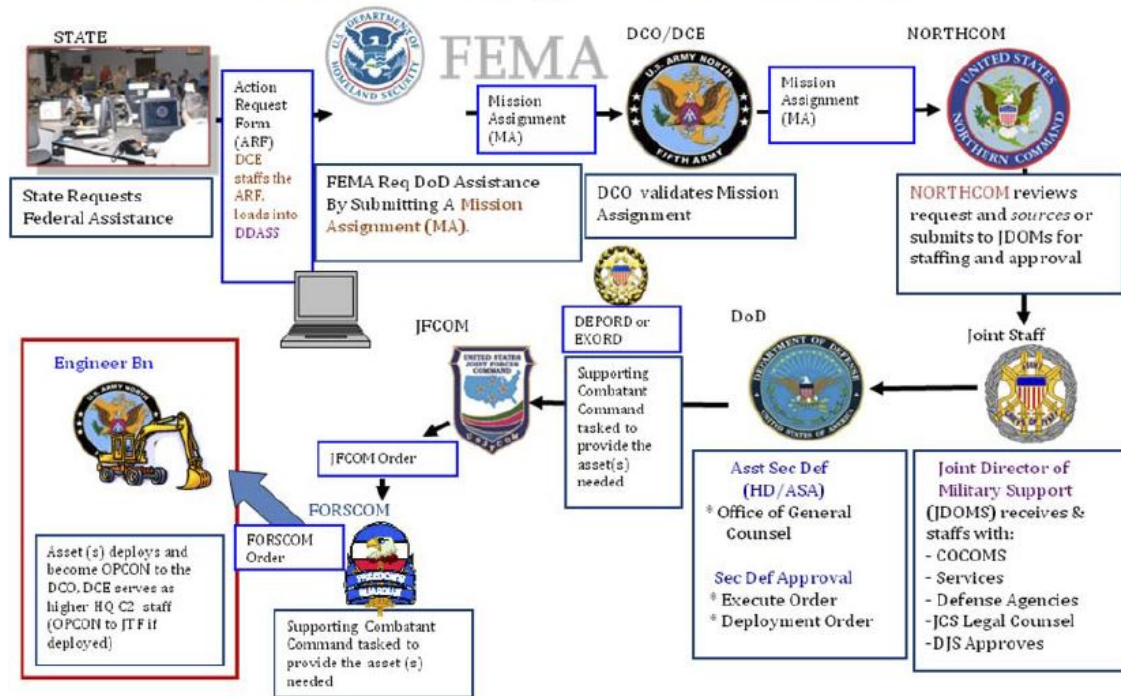
Figure 7.   DOD Mission Assignment Process Map[88]

G.   DUAL STATUS COMMAND

An overall slow and uncoordinated response to Hurricane Katrina, which affected much of the U.S. Gulf Coast region in 2005, gave rise to a new concept within the DOD. This concept was formalized in Joint Publication 3-28–Defense Support to Civil Authorities (JP 3-28) as DSC. The issue with the Hurricane Katrina response, at least from the DOD perspective, was that there was no established method of combining federal military forces (under Title 10 U.S.C.) and state military forces (under Title 32 U.S.C.) under a single chain of command and a single commander who could exercise command authority over all forces under his or her command for the duration of the DSCA mission. The lack of a single coordinating entity resulted in confusion during the hurricane response efforts, ultimately reducing the effectiveness of both the Title 10 and Title 32 forces responding. The DSC is responsible both to the President and to the

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[88] Source: Ibid., 52.

Governor of the state or states within which the DSC is supporting operations. Mission assignments come to the DSC from either the FCO, who reports to FEMA, or the SCO, who reports to a State Department of Emergency Management (DEM). The DSC then sends mission assignments down to either Title 10 or Title 32 forces operating under various Area Commands (ACs), Unified Commands (UCs), or ICs according to the details of the mission assignments. Once an MA has been assigned to a unit, that unit falls under the direct authority of the civilian AC, UC, or IC for the duration of the mission, with the DSC providing sustainment to the unit in the form of food, water, and maintenance for equipment.[89] Current doctrine designates the DSC as the preferred or most common command structure for military forces conducting DSCA missions.

In 2010, the DSC concept born from Hurricane Katrina was formalized and enacted into law in an update to Title 32 U.S.C. Generally, a Dual Status Commander is an Army or Air Force National Guard one- or two-star general activated in Title 32 status and given authority to command Title 10 forces. These officers must be trained and certified prior to a disaster's occurrence so they fully understand all applicable laws and statutes governing Title 10 forces conducting DSCA as well as Title 32 forces conducting DSCA within their home state. The DSC can be a Title 10 officer, but it is preferred that it be a Title 32 officer who is more familiar with the laws governing military operations within the supported state. The first real test of the DSC came during the Hurricane Sandy response, in which both New York and New Jersey enacted DSCs to manage the military responses within each state. The DSC's performance during this response was cumbersome and presented some problems due to ambiguity in the DSC doctrine outlined in JP 3-28. In addition, there is no real consensus on exactly how the DSC is supposed to be structured and implemented, leaving it up to each state to determine specific command and control relationships. Further complicating the DSC structure, during multi-state disasters, each affected state has the option of establishing its own separate DSC. This will be further addressed in Chapter IV.[90]

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[89] Chad E. Thomson, "Employment of a Dual Status Commander in a Multi-State Disaster Operation," Master's Thesis, United States Army Command and General Staff College, 2016, 6-7.

[90] Thomson, "Dual Status Commander," 26-28.

H.   EMERGENCY MANAGEMENT ASSISTANCE COMPACT AND IMMEDIATE RESPONSE AUTHORITY

The FEMA MA process is not the only way for a state to receive support from military resources during a disaster. Each state has Army and Air Force National Guard resources available for use at the Governor's discretion (following a state disaster or emergency declaration). Each state's National Guard has a different composition and strength, which means not all states have the same types or kinds of resources available to them. This is where the EMAC comes into play. Developed in 1992 following the devastation of Hurricane Andrew, the EMAC is an interstate compact signed by all 54 states and territories. It details the process to request assistance from other states (both civil and National Guard) and the process for providing assistance to a requesting state, including requirements for reimbursement of expenses by the supported state. The Governor of the requesting state assumes operational control of all National Guard assets that are sent in through EMAC until they are demobilized; the period of time these forces will work in the requesting state is agreed upon ahead of time. EMAC is especially important when a Governor declares a state disaster, but that declaration is not followed by a presidential disaster declaration (thus freeing up federal funding). In this case, additional resources must come from other states. EMAC facilitates this process by having agreements signed prior to a disaster occurring.[91]

Another means for the Army to provide assistance to civil authorities outside of the auspices of a formal MA is known as IRA. Under IRA, local military commanders have the authority to provide immediate assistance to civil authorities in their local area (i.e., the county that surrounds a military installation) when requested by civil authorities. For a commander to provide resources under IRA, no prior approval from higher headquarters or the DOD is needed, nor is a Presidential Disaster Declaration needed. IRA has been used many times in the past, including in response to the Oklahoma City bombing in 1995 and Hurricane Katrina in 2005. IRA is not formalized by federal law, but it is codified in several DOD publications. Once a commander mobilizes resources

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[91] Shawn P. Fitzgerald, "Organizing the National Guard to Provide Effective Domestic Operations," Master's Thesis, Naval Postgraduate School, 2011, 15-16.

under IRA, they generally have 72 hours to either return those resources to their installation or gain approval through the MA process for those resources to continue their mission in support of civil authorities.[92]

I.   CONCLUSION

This chapter was designed to form a foundation of knowledge on DSCA doctrine and regulations and the laws governing federal and state military operations within the U.S. It is important to begin with this understanding in order to comprehend fully the research questions that this thesis attempts to answer. Before the shortfalls in current DSCA execution can be clearly seen, one must fully understand how DSCA is intended to function. With this foundation of knowledge in mind, the following chapter will examine two DSCA cases to identify the successes and shortfalls in DSCA operations.

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[92] Leshinsky, "Prepared for Disaster," 57-58.

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III. MANAGING HURRICANES AND EARTHQUAKES: SHORTFALLS IN INTEGRATION

A. INTRODUCTION

There are numerous instances where Army units and personnel have been deployed to support civil authorities, to include 9/11, Hurricane Katrina, and Hurricane Sandy. In addition, Army personnel have been used to secure airports and seaports following 9/11, to augment Border Patrol personnel on the U.S.-Mexico border, and provide humanitarian assistance to Americans in the wake of tornadoes, hurricanes, floods, fires, earthquakes, and a host of other natural disasters. In the days following the 9/11 terrorist attacks on the Pentagon and the World Trade Center, over 9,000 Army and Air Force National Guard personnel from New York, New Jersey, Maryland, Virginia, and the District of Columbia were activated to assist with the search and rescue missions and provide aviation and logistics support to civil authorities. Within days, Secretary of Defense Donald Rumsfeld recommended to President Bush that up to 50,000 National Guard and Reserve troops be activated to secure the borders, airports, and key infrastructure throughout the country.[93]

Major disasters such as this require rapid and effective coordination and integration between military forces and civil authorities. In these situations, lives can be saved or lost based on the effectiveness of this interagency coordination and the time elapsed from a request for military support to that military support arriving at the incident. To illustrate this, two cases will be examined. First, the military response to Hurricane Sandy in October 2012 will be addressed in detail. Second, the military's participation in the Cascadia Rising earthquake response exercise in June 2016 are considered. These cases are different; one is a real-world response, the other is an exercise; one is a hurricane response, and the other is an earthquake response. They are also similar in that they included active duty, reserve, and National Guard forces

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[93] Thom Shanker and Eric Schmitt, "Rumsfeld Asks Call-Up of Reserves, as Many as 50,000," *The New York Times*, last modified September 14, 2001, accessed June 25, 2017, http://www.nytimes.com/2001/09/14/international/rumsfeld-asks-callup-of-reserves-as-many-as-50000.html.

integrating with civil authorities across multiple states and jurisdictions and they both had ample time for planning and preparation before the disaster response phase of operations.

B.   CASE STUDY 1: HURRICANE SANDY

Two main sources guide this study. First is the FEMA After Action Report (AAR) for Hurricane Sandy, dated July 1, 2013. This AAR gives a civilian perspective on the response effort, so it focuses more on how military resources were used during the response than how they were deployed and integrated. Second is a report from the U.S. Army War College's Strategic Studies Institute (SSI) entitled, *Toward a Unified Military Response: Hurricane Sandy and the Dual Status Commander*, dated April 2015. Written for a military audience, this report emphasizes the first use of a DSC in an actual response (as opposed to an exercise), showing what did and did not work with the implementation of the DSC. These documents together provide two perspectives on the Hurricane Sandy response efforts, both civilian and military. The SSI document provides a great deal of information related to the military response, while the FEMA document focuses more on the civilian federal response.

1.   Overview

Hurricane Sandy made landfall at Brigantine, NJ on October 29, 2012 at around 11:30 p.m. Eastern Standard Time. Sandy was the largest and most damaging hurricane to hit the Atlantic coast of the U.S., surpassed by Hurricane Katrina only in total cost. The response to Sandy saw over 4,000 Army, Navy, Air Force, Marine Corps, and National Guard personnel activated for DSCA operations in New York alone. Of note, the response to Sandy was the first time that the DSC concept, created following Hurricane Katrina, was actually employed during a disaster response operation. Six states were given authorization to employ a DSC—New York, New Jersey, Maryland, New Hampshire, Massachusetts, and Rhode Island—but only two states eventually activated their DSC to manage military response operations—New York and New Jersey. The other states chose not to activate their DSCs because they did not expect a significant

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Title 10 response, thus the DSC would not be needed. Figure 8 depicts Hurricane Sandy's path and landfall location.[94]
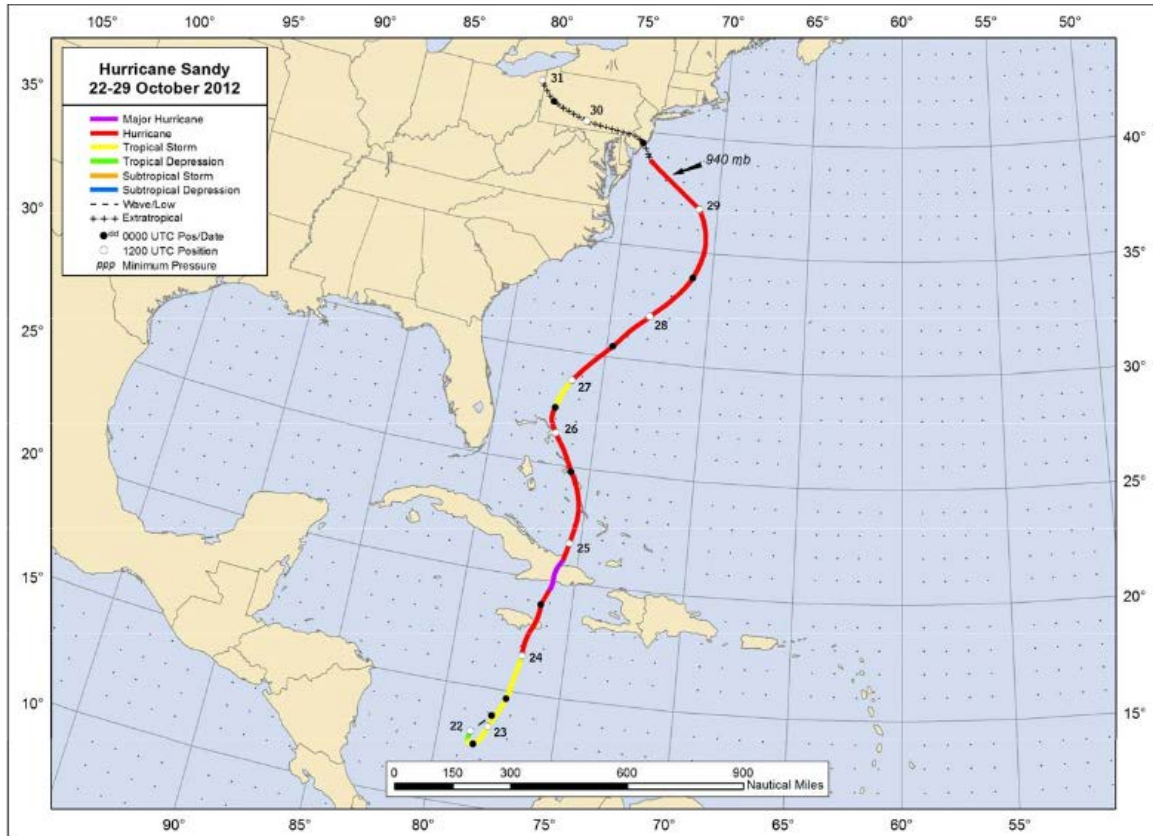
Figure 8.   Hurricane Sandy Path to Landfall in New Jersey[95]

Sandy, which was at one point a hurricane, was downgraded to a tropical storm by the time it made landfall along the Atlantic coast, affecting coastal cities from Washington, D.C., to New York City. In preparation for the storm's landfall, beginning on October 22, the National Guards from each of the potentially affected states began activating personnel to prepare to respond. On October 27, DOD and USNORTHCOM

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[94] Ryan Burke and Sue McNeil, "Toward a Unified Military Response: Hurricane Sandy and the Dual Status Commander," U.S. Army War College, Strategic Studies Institute, Carlisle Barracks, PA, April 2015, 23-32. Federal Emergency Management Agency, "Hurricane Sandy FEMA After-Action Report," Department of Homeland Security, Washington D.C., July 1, 2013, 1-8.

[95] Source: National Weather Service, "Hurricane Sandy – October 29, 2012," National Oceanic and Atmospheric Administration, accessed October 2, 2017, https://www.weather.gov/okx/HurricaneSandy.

issued orders to send personnel, equipment, and supplies to Joint Base McGuire-Dix-Lakehurst (JBMDL) in northern New Jersey to pre-stage and prepare for a Title 10 response to the storm. On October 28, President Obama signed emergency declarations for Connecticut, Maryland, Massachusetts, New York, New Jersey, and Washington, D.C., When the path and strength of the storm became clearer on October 29, the President signed additional disaster declarations for Rhode Island, Delaware, and Pennsylvania and upgraded the declarations for New York and New Jersey to major disaster declarations.[96]

The military response to Sandy in New York lasted until November 9, 2012. Over 375,000 people were evacuated from New York City prior to the storm hitting the city. Within New York State, more than 305,000 homes were damaged or destroyed with an estimated 2,700 homes and businesses destroyed within New York City itself. This was largely the result of a massive storm surge, rather than high winds and rain. The state's losses from damage exceeded $19 billion dollars, $5 billion dollars of which was from damage to the transportation infrastructure. This case study shows an example of a multi-state, multi-jurisdiction response to a major disaster. It is also the first example of the use of a DSC during a response, which means the response involved both Title 10 and Title 32 personnel.[97]

2.   Successes

a.   *Interagency Coordination*

The mission assignment process as outlined in the NRF can be a slow and unwieldy bureaucratic process. This is counter to the need for rapid support and assistance to the victims of the storm. Due to this slow process hampering operations, the military command structures involved began assigning missions using a verbal orders of the commanding officer (VOCO) process. This was accomplished by phone and radio calls directing the movement of military resources, rather than paper or computer

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[96] Burke and McNeil, "Toward a Unified Military Response."

[97] Ibid.

documentation. While this did result in confusion at times, overall it facilitated rapid military assistance where it was needed. The biggest problem that occurred during the response was a Marine Corps unit self-deploying from a Navy ship off the coast of New York City onto Staten Island without any coordination with the DSC. This could have presented a significant problem for the entire response, not to mention challenging the sovereignty of New York by landing federal forces without prior approval. By using the VOCO process, the DSC took control of the Marines on Staten Island and began directing their activities as a part of the larger JTF.[98]

b.   *Liaison Activities*

The nature of no-notice disaster responses requires multiple agencies to quickly find ways to effectively work together toward a common goal. This means that forces work closely with an agency with which they have never worked before and have no knowledge of their capabilities or limitations. For this reason, the practice of exchanging liaison officers between different agencies becomes extremely important. Liaisons facilitate shared knowledge and understanding between functionally and geographically separate entities in a way that phone, email, and radio communications cannot. Liaisons can educate the supported agency about the supporting agencies capabilities and limitations, participate in planning sessions, and actively communicate back to the supporting agency. Hurricane Sandy was no exception to this. Military liaisons were placed throughout the Joint Operating Area (JOA), such as at the JFO, FEMA, and military service component headquarters. Many senior commanders considered the practice of exchanging liaisons to be one of the most significant contributions to success during the Hurricane Sandy response.[99]

c.   *Strategy*

The forward-leaning strategy employed by USNORTHCOM and the National Guards from each of the affected states was effective at providing immediate support to

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[98] Ibid., 54-57.

[99] Ibid., 57-58.

civil authorities following the storm's landfall. The DOD was criticized following Hurricane Katrina of responding too slowly. The DOD did not initiate preparation and movement of federal forces until after they had been requested. Later with Sandy, the DOD and USNORTHCOM anticipated the requests that would come and deployed an array of forces to JBMDL, NJ so they would be able to respond immediately when requested. "This push vs. pull approach is a paradigm shift of sorts for DOD compared to past response efforts. Placing personnel and equipment assets on standby status in geographic proximity to the JOA offered the DSC additional capabilities to consider during the response, which ultimately proved beneficial."[100] In the past, DOD resources were not deployed to a staging area until they were requested. The time it takes to deploy resources can significantly delay their employment. By deploying resources before they are requested, the DOD can reduce the time from request to response to only hours rather than days. It is important to note that while this method was politically expedient, given the slow federal response to Hurricane Katrina and the upcoming 2008 presidential election, mobilization of Title 10 forces is extremely expensive, especially if the mobilized resources are ultimately not requested. In the case of Hurricane Sandy, the ability of the DOD to respond rapidly to resource requests made a difference in the overall response effort. Detailed analysis of resource gaps in various jurisdictions is needed in order for the DOD to deploy the resources that are most likely to be needed for a disaster response.

3. Shortfalls Highlighted by Case Study

a. *Dual Status Command*

There were several issues with the DSC in New York during the Hurricane Sandy response. First, the command structure between National Guard (Title 32) and federal (Title 10) forces changed several times in the first three days of the preparation and response phases. Several unit commanders were unaware that the DSC existed at all and continued to report directly to the Joint Coordinating Element (JCE), which had been

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[100] Ibid., 59.

established at JBMDL to coordinate federal forces responding to the storm. The DSC construct directs that the DSC reports directly to both the ARNORTH commander and the Adjutant General of the state that established the DSC. At that time, DOD doctrine and policy had not yet been updated to include guidance for the implementation of the DSC during DSCA operations. By implementing the JCE, which had never been done before, USNORTHCOM confused the command structure for Title 10 forces throughout the operation. This primarily affected the command structure of the military responders, rather than affecting the response efforts in the disaster zone. The larger issue with the JCE is the fact that USNORTHCOM changed the established response process during the response.

b.   *Mission Assignment Process*

Leading up to and following Sandy's landfall, directives from the President and the commander of USNORTHCOM to the forces assisting in New York were to move as rapidly as possible and provide support whether they had been asked to provide it or not. A fragmentary order (FRAGO) from USNORTHCOM on November 2, 2012, directed the following:[101]

•   Get missions. Start with menu of DOD capabilities in the JOA that can be applied to support FEMA requirements.

•   Do not wait for mission assignment paperwork. Coordinate with FEMA and the DCOs.

•   Apply total force capabilities to accomplish missions. Operate on VOCO mission assignments when possible.

•   When you get a mission: execute. Clean up paperwork later by coordinating with FEMA and the DCO.[102]

This undermined the mission assignment process outlined in the NRF. Requests for support are supposed to come from the local level to the county level, then to the state level, then to FEMA. At every level, the lead agency provides resources to meet the

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[101] Ibid., 62–64.

[102] Ibid., 63.

request if possible or forwards the request on if that level's resources have been exhausted and cannot fill that request. This established process was circumvented from the highest levels of government, which resulted in a great deal of confusion at lower levels of command.[103]

c.   DSCA Education

This case study shows evidence that many senior commanders and government officials within the DOD, USNORTHCOM, and the units providing support during Hurricane Sandy did not have the needed education and familiarity with DSCA in order to be effective. Several unit commanders did not understand the DSC command structure and many did not understand, or chose to ignore, the mission assignment process. Senior officials gave orders to subordinates to reduce red tape and find missions, including pushing the use of VOCO orders. All of this expedited support, certainly, but at the expense of command and control, coordination, and in some cases legal and regulatory authorities. Federal law prohibits Title 10 from operating within the U.S. except when requested by civil authorities under the Stafford Act. Military commanders do not have the authority to deploy their forces to support an incident response without a valid request for assistance.

4.   Conclusions Derived from Case Study

a.   Lean, but Do Not Push Forward

Leaning forward, or preparing for a disaster response before it happens when possible, is a practice the DOD and the Army should sustain for future operations. In a situation like that faced leading up to Hurricane Sandy's landfall, where there were several days prior to the disaster to prepare for it and pre-position resources for a more rapid response, the DOD must act before the event occurs. That said, leaning forward should not extend to self-deployment or employment of military assets without a request from civil authorities to justify the employment, such as the Marine Corps landing in

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103 Ibid., 62-64.

New York City. Incidents like that result in confusion, delaying response efforts and ultimately putting lives at risk. Military resources are in a supporting role during DSCA, not in the lead. Civil authorities direct actions and operations in accordance with the NRF and in coordination with affected states and FEMA.[104]

b.   *Delineate Chain of Command before Deploying Forces*

When possible, the Title 32, Title 10, and DSC chain of command needs to be established and circulated within the DOD prior to DOD forces being sent forward for disaster response operations. Once established, the chain of command and command structures should remain unchanging where possible, recognizing the fact that disaster response operations can be unpredictable. In addition, the JCE concept caused confusion in the command structure between the DSC and the JCE. DSCA doctrine relies on the DSC for command, control, and coordination of all Title 32 and Title 10 military forces. By establishing the chain of command before deployment, we can reduce confusion and achieve unity of effort in support of our civilian partners.[105]

c.   *Maximize the Use of Liaisons*

One of the most important functions during DSCA is liaison between military and civilian agencies and between military service components and command elements. Liaisons facilitate open communication and coordination between different agencies and command structures, with the goal of maintaining a common operating picture (COP) and shared knowledge and understanding throughout the disaster response enterprise. Liaisons must be trained on the regulatory and legal frameworks within which their element operates as well as the doctrine for DSCA so they can confidently and accurately coordinate with whatever agency they have been assigned.[106]

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[104] Ibid., 80-81.

[105] Ibid., 81-83.

[106] Ibid., 92-93.

d. *Expand DSCA Education for DOD Personnel*

The most significant problems with the Hurricane Sandy response can be traced back to ineffective training or a lack of education on topics related to DSCA, especially among Title 10 commanders and staff. "Active Component forces demonstrated a degree of ignorance or disregard to the mission assignment process that was reaffirmed through command guidance. By abandoning processes and procedures, some Title 10 forces supplanted (rather than supported) local authorities' efforts."[107] This undermines not only the DSC and the military command authorities, but also undermines the authority and autonomy of the supported state and the state's Governor. There are serious legal implications for some of the actions taken by Title 10 forces during the Sandy response, especially the unauthorized self-deployment of Marines onto Staten Island.[108] The political environment at the time played a role in this; the storm made landfall only days before the 2008 presidential election, so there was major pressure from the highest levels of government to make sure there was not a repeat of the response to Hurricane Katrina.

C. CASE STUDY 2: CASCADIA RISING

Information for this case study is drawn from two main sources. First is the FEMA After Action Report for the Cascadia Rising 2016 Exercise, dated September 6, 2016. Second is the Washington Emergency Management Division (WEMD) After Action Report for the same exercise, dated January 5, 2017. These documents provide two perspectives on the Hurricane Sandy response efforts, both civilian and military. The WEMD document provides a great deal of information related to the military response, while the FEMA document focuses more on the civilian federal response.

1. Overview

Cascadia Rising 2016 (CR16) was a four-day functional exercise that took place across dozens of counties, cities, and tribes within Washington, Oregon, and Idaho. CR16

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[107] Ibid., 107.

[108] Ibid., 107-108.

was based on a Cascadia Subduction Zone (CSZ) rupture that produced a magnitude 9.0 earthquake along the 700-mile long CSZ fault line that stretches from Vancouver Island in British Columbia, Canada all the way to Northern California. Following the earthquake, massive tsunamis would strike the coastline causing major flooding throughout Washington and Oregon coastal areas. Figure 9 shows the Cascadia Subduction Zone in relation to the U.S. Pacific coast.[109]

Figure 9.   Cascadia Subduction Zone Fault Map[110]

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[109] Federal Emergency Management Agency, "Cascadia Rising 2016 Exercise: Cascadia Subduction Zone (CSZ) Catastrophic Earthquake and Tsunami – Functional Exercise: June 7-10, 2016 – Joint Multi-State After-Action Report," Department of Homeland Security, Washington D.C., September 6, 2016, iv & 1-2.

[110] Source: Federal Emergency Management Agency, "Map of the Cascadia Subduction Zone," Department of Homeland Security, last modified February 2, 2016, accessed October 2, 2017, https://www.fema.gov/media-library/assets/images/115834.

The purpose of the CR16 exercise was to test the state's catastrophic disaster response plans for a CSZ event. In addition, the exercise was meant to test the ability of county and state emergency operations centers (EOCs) to establish themselves and communicate and coordinate with outside agencies to deliver resources to the affected areas. In addition to the state-level events of CR16, three other federal-level exercises were conducted concurrently. The following is a list of the concurrent exercises, their dates, and the focus of each exercise:

- Cascadia Rising Exercise (June 7–10, 2016) – Emergency Operations/ Coordination Centers
- Vigilant Guard Exercise (June 5–13, 2016) – National Guard support to civil authority
- Ardent Sentry Exercise (June 7–15, 2016) – National Defense support to civil authority
- Joint Logistics Over the Shore Exercise (June 10–15, 2016) – Disaster relief by sea[111]

In total, these exercises in Washington State saw the activation and deployment of six brigade-sized task forces to provide DSCA to 26 counties and 12 tribal nations. In addition, federal agencies such as FEMA, USNORTHCOM, ARNORTH, U.S. Transportation Command (USTRANSCOM), the U.S. Army Corps of Engineers (USACE), and many others participated in the Vigilant Guard, Ardent Sentry, and Joint Logistics over the Shore (JLOTS) exercises.[112]

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[111] Washington Military Department, "Washington State 2016 Cascadia Rising Exercise After Action Report: Catastrophic Earthquake and Tsunami Scenario," State of Washington, Tacoma, WA, January 5, 2017, 1.

[112] FEMA, "Cascadia Rising 2016 Exercise," iv & 31-32. WAMD, "2016 Cascadia Rising Exercise AAR," C1-C4.

2. Successes

a. *Civil-Military Cooperation*

For two years leading up to the CR16 exercise, the Washington Military Department (WAMD) conducted a program of outreach and liaison between Washington National Guard personnel and county, city, and tribal leaders throughout Western Washington. This systematic effort ensured that planning for the CSZ scenario was vertically integrated from the local to state level and contributed a great deal to the successes of the exercise. The Washington National Guard assigned soldiers and airmen who lived and worked in various counties to be National Guard liaisons with their local emergency management personnel. These soldiers and airmen had a vested interest in the success of the planning and the exercise because the impacts of the CSZ scenario affected themselves and their families directly. They were also subject matter experts on the local areas in which they lived and worked.[113]

b. *Use of National Guard and EMAC Forces*

The CR16 validated the effectiveness of the use of National Guard forces from other states requested through the EMAC. "The Guard has a direct connection to the community, is available to conduct pre-planning, connects to the intent of the Governor, is an 'operational reserve' of the total force, and is less likely to impact national mission assurance requirements."[114] It is important to remember that the resources that can arrive in the shortest amount of time and with the greatest capability is the resource that can be used. At times, that means Title 10 forces will be used before Title 32 forces. The benefits of using the National Guard in a scenario such as this are massive.[115]

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[113] WAMD, "2016 Cascadia Rising Exercise AAR," E8.

[114] Ibid., E6.

[115] Ibid.

c. Command and Control Structure

The DSC construct requires the DSC staff to report through two chains of command. First, they must report to the Adjutant General of the supported state, which is a two-star command. Second, they must report to USNORTHCOM, a four-star command, or one of the subordinate service component commands, such as ARNORTH, which are three-star commands. The requirements for the DSC staff to conduct reporting to these higher-level commands increase as the level of command increases. During a DSCA response of this magnitude, the DSC staff is already overwhelmed with tasks to support the civil support operations on the ground. During CR16, USNORTHCOM established an intermediary Joint Task Force, called JTF-X, which was established as a two-star command and was responsible for Title 10 forces across Washington, Oregon, and Idaho. This intermediary staff was at the same level at the Adjutant Generals in each state, which did two things for the DSC. First, it relieved the DSC of the administrative requirements to report to a three- or four-star command. Second, it put tasking authority of Title 10 forces at the same command level as the Title 32 authority of the Adjutant Generals, which ensured that Title 10 forces working under higher command levels did not trump Title 32 command levels because of the rank of the commander.[116]

3. Shortfalls Highlighted by Case Study

a. Understanding of ICS/NIMS

It is important for military personnel conducting DSCA to have an understanding of the NRF, NIMS, and ICS prior to providing support to civil authorities. These concepts are the foundation of how civil authorities organize themselves and conduct disaster response operations. During CR16, it was found that below the senior staff level, the majority of soldiers and airmen have no familiarity at all with the NRF, NIMS, or ICS, and therefore challenges occurred in integration of military and civilian resources to provide a rapid and effective response to the disaster scenario.[117]

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[116] Ibid., E13.

[117] Ibid., E8.

b.   *Liaison Capabilities*

The effectiveness of liaison between military and civilian entities can make or break a disaster response operation, especially one of this magnitude. During CR16, it was discovered that the technical proficiency of the selected liaisons was not where it needed to be. Most liaisons had minimal, if any, experience and had little knowledge of the operating areas within which they were working. In addition, the liaisons needed to have an understanding of not only their own operating area, but also the operating areas of all adjacent, higher, and lower command elements in order to provide accurate counsel to civil and military command elements. It was also discovered that the liaison officers with existing relationships with civil authorities, established during the planning phases leading up to CR16, were noticeably more effective than the liaisons who did not have pre-established relationships.[118]

c.   *State-Level Integration*

Integration of liaison functions at the State Emergency Operations Center (SEOC) with the Emergency Support Function (ESF) representatives was severely lacking during CR16. First of all, there were not enough military liaisons at the SEOC to assist multiple ESFs at the same time. Secondly, the liaisons at the SEOC were not technically proficient in DSCA or knowledgeable about National Guard and Title 10 capabilities and limitations to the degree needed to be effective at that level.

4.   **Conclusions Derived from Case Study**

a.   *Sustain Civil-Military Relationships*

The relationships established between military personnel and their civilian partners at all levels were important contributors to the overall success of the CR16 exercise. The military functions using a very linear chain of command. Authority is derived from rank structures and command levels, which largely takes the importance of

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118 Ibid., E9-E10.

personal relationships out of the equation when it comes to executing operations. Conversely, civilian agencies do not function on a defined, linear chain of command. Each city, county, tribe, and state has a different composition of personnel and functions. The operations chief in one county will likely have a different set of duties and authorities than the operations chiefs of any neighboring counties. For this reason, the importance of personal relationships during operations cannot be overstated. Not only do these relationships facilitate communication during operations, but they also facilitate the rapidity of the request for forces process, mission assignments, and integration of military forces into the civilian command structures.[119]

b.   *Improve Education of Military Personnel*

CR16 made it clear that training and education related to the NRF, NIMS, ICS, and all applicable laws and regulations that govern DSCA was severely lacking throughout the force. There was a focus on training senior leaders in these subjects prior to execution of CR16. Still other personnel had received this training in various forms during the performance of other related duties. In spite of this, the majority of personnel, especially at the task force level, had little or no training in these areas. This lack of training made it difficult for military formations to rapidly and effectively integrate with the civilian command structures and provide life-saving support to victims of the CSZ scenario.[120]

c.   *Improve Liaison Capabilities*

Across the board, CR16 highlighted the need for competent, trained, and knowledgeable liaisons at every level of operations. Liaisons need to be familiar not only with the capabilities and limitations of their own state's National Guard formations, but also with Title 10 capabilities and limitations for all service components. Liaisons also need to be trained and proficient in the NRF, NIMS, ICS, and the laws and regulations that govern DSCA. At the state level, the liaisons need to also have a working knowledge

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[119] Ibid., E8.

[120] Ibid., E10.

of the ESFs and how military resources fit in with the ESF designations. During a disaster response is not the time to train these liaison personnel. They must be trained and identified during the planning phases of operations, which will not only make them more effective during a disaster response, but also gives them an opportunity to establish relationships with various civilian agencies. These relationships pay dividends during operations.[121]

D.   CONCLUSION

These two cases are overall very different. The Hurricane Sandy case tells the story of a massive state and federal response to a real-world catastrophic event on the east coast of the U.S. The CR16 case is a planned exercise involving a large number of state-level agencies, but a minimal federal presence below the senior command level, for a response to an event on the west coast of the U.S. In spite of the differences between these two cases, there are striking similarities that provide common ground for analysis. Both events involved both Title 32 and Title 10 forces operating across multiple states, both included the activation of multiple DSCs and the establishment of a USNORTHCOM intermediary command element (the JCE for Sandy and the JTF-X for CR16), and both involved integration of military forces with civilian response agencies. The shortfalls identified in each of these cases have similarities as well, which allow us to derive some common conclusions for improvements that need to be made in military DSCA operations.

This chapter has identified several shortfalls in the Army's ability to provide effective DSCA during either a real-world or exercise disaster response. It is obvious at this point that the most significant shortfall is the Army's inability to effectively integrate with civil authorities during DSCA operations. The case studies for Hurricane Sandy and the Cascadia Subduction Zone are only two of many examples where failure to effectively integrate resulted in major problems for DSCA missions. The next chapter will address each of these shortfalls in more detail.

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[121] Ibid., E10-E12.

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IV. CURRENT SHORTFALLS

A. INTRODUCTION

This chapter shows the gaps that exist in the current Army DSCA structure. The most significant gap is a lack of education/knowledge of DSCA within the ranks of the Army. Many leaders receive training, but the soldiers on the ground responding to an incident have basically no knowledge of DSCA in any way. The next gap is a lack of liaison and integration between the Army and civilian agencies prior to a catastrophe. This includes building relationships with federal, state, and local agencies, integrating DSCA into civilian emergency response plans, and integrating Army forces into civilian structures rapidly during an emergency response. The last gap is a shortfall in integration of planning between military and civilian agencies prior to an event, including anticipation of needs following a catastrophic disaster. This chapter is meant to paint a picture; when the Army responds, the soldiers are un-trained to conduct their mission, know nothing about the civilian agencies they will work with, and have not been integrated into any civilian emergency response plans. The job gets done, that's what the Army does, but it could be so much more effective.

B. CIVIL-MILITARY LIAISON

Both of the cases in Chapter III highlighted the importance and necessity of effective liaison between military and civilian agencies and between military formations at different command levels and from different service components. Liaisons facilitate communication and shared knowledge and understanding between elements that may never before have worked together. In addition, during a catastrophic disaster scenario, traditional forms of communication may be degraded or unusable. A trained, proficient, and knowledgeable liaison can be the difference between success and failure when lives are on the line following a major disaster. Commanders need to select liaisons who are knowledgeable not only in their area of expertise within the military, but also knowledgeable on the NRF, NIMS, ICS, and the applicable laws and regulations that govern DSCA. This training cannot wait until a disaster occurs for it to be done. It must

be done during steady-state operations so these liaisons can effectively integrate with civilian agencies and other military formations immediately.

Liaison is a commonly used function within the Army. When different units join together as a task force or joint task force, each unit sends one or two personnel to the other unit or units to facilitate communication and integration in support of the mission. "Liaison is a form of communication for establishing and maintaining mutual understanding and cooperation […] ensuring unity of purpose and action."[122] The liaison is not a decision-maker or director of operations; rather, the liaison ensures that the efforts of both elements are integrated and that both elements have a shared COP. At the DOD, USNORTHCOM, ARNORTH, and NGB levels, civil-military liaison with other federal civilian agencies such as DHS, Department of State (DOS), and the FBI is common. There is also a standing Joint Interagency Coordination Group (JIACG) under USNORTHCOM that meets regularly with dozens of federal military and civilian agencies to coordinate homeland security and homeland defense efforts related to the DOD.[123]

While liaison is a common function in military operations, the duties of a liaison are generally not taught in formal military education programs. The result of this lack of training is generally ineffective interagency coordination efforts. By the time a liaison learns his or her job and forms the needed relationships with civilian partners, they are reassigned and the process starts all over again with the next selected individual. Liaisons have the potential to be 'combat multipliers' during DSCA operations. The liaison function is never more critical than in a DSCA environment, especially in response to a catastrophic disaster.

> The principal value added by [liaisons] lies in their contribution to an environment where dialogue can more readily occur. They also serve to cut through layers of bureaucracy to find the right action officer at their sending service when needed. In an inter-agency environment, [liaisons]

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[122] William H. Stevenson, "Enhancing the Effectiveness of National Guard Support of Civil Authorities by Improving Interagency Coordination," Master's Thesis, Naval Postgraduate School, 2008, 49.

[123]Stevenson, "Improving Interagency Coordination," 46-49.

would serve as interpreters of DOD culture and would bring to the table perspective and knowledge of DOD unique capabilities.[124]

Liaisons are also the key to establishing professional and personal relationships with interagency partners and civilian agencies at all levels. The combination of established relationships and effective liaison are the lynch-pin to an effective DSCA operation.

C.   PRE-DISASTER RELATIONSHIP BUILDING

In addition to liaison, relationships are extremely important in the conduct of operations with civilian agencies. Civilian agencies do not function the same way that military formations function. There are not the same clean lines of authority and chains of command. This presents a number of challenges, especially with integrating outside agencies and military forces into said civilian agency. Personal relationships become important. Knowledge of the key personnel at the agency or county government can facilitate rapid integration and employment of military forces in support of the disaster response.

With the exception of the DCO/DCE integrating with each of the 10 FEMA regional headquarters, there is little in the way of pre-disaster integration between military and civilian agencies below the USNORTHCOM/ARNORTH level for federal forces or the state level for National Guard. Having established relationships down to the local level does two things for the Army. First, it facilitates integrated planning between the Army and civil authorities before a disaster occurs, which in turn expedites the request process for military support and thus the arrival of military support when it is needed. Second, it facilitates mutual education between the Army and civil authorities; each has an opportunity to learn about the function and organization of the other.

Civilian agencies function differently than military organizations. The military strictly adheres to a linear rank structure and chain of command. This structure facilitates command and control of forces during combat operations by placing decision authority at the command level at every echelon of forces. Commanders make decisions based on

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[124] Nancarrow, "Preparing Military Officers," 76.

input from their staff and operations are executed. The civilian ICS was developed using the military as a model, but it has many key differences due to the foundational difference between military and civilian agencies. Civilian agencies are often bureaucratic in nature and have the influence of political appointees to consider. Rather than an IC making decisions and the entire command structure responding to them, the IC is more of a coordinator working to build consensus. The nature of civilian agencies makes personal relationships more important than rank structures. For the military to be effective, it must work to establish personal relationships with civilian partners at all echelons from local to federal. "Engaging the partnerships of agency leaders while engaged in interagency and organizational response is essential to preparedness. These preparedness activities must be conducted well in advance of an incident response."[125]

The NRP and NRF recognize the need for effective interagency and interdisciplinary coordination and integration for effective disaster response and recovery. The 'whole community' approach has been proven to be the best way to respond to, mitigate, and recover from a major disaster. It is incumbent upon the leaders of civilian and military response agencies and ESFs to proactively build relationships with agency partners at all levels. The potential result of failing at this task is loss of life during a disaster due to slow, uncoordinated response efforts. This idea has been eloquently stated by Leonard H. Guercia, Jr. in his thesis entitled *Integration of Training Civilian and Military Disaster Responders*.

> Effectively preparing for emergency response takes collaboration. The best plans have little practical impact in a real-world response if emergency and risk coordinators do not work effectively together at all levels of a response. This starts on the ground at the scene of the emergency or outbreak by field teams and transition to collaborating among all levels of local, state, and federal response.[126]

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[125] Leonard H. Guercia, Jr., "Integration of Training Civilian and Military Disaster Responders," Master's Thesis, Naval Postgraduate School, 2011, 14.

[126] Guercia, "Integration of Training," 22.

D. SOLDIER EDUCATION AND TRAINING

Another common problem between these two cases is the level of education of military personnel in a number of DSCA-related subjects. This was especially evident during Hurricane Sandy among Title 10 forces and senior officials. There is a large difference between DSCA and traditional military operations. First of all, the laws that govern DSCA, such as the Stafford Act and the Posse Comitatus Act, are critical knowledge for military personnel operating within the homeland. Secondly, the NRF, NIMS, and ICS must be fully understood in order for military personnel and formations to rapidly and effectively integrate into these ad-hoc civilian incident command structures and provide assistance to civilians in need. In addition, the military command structures that are used for DSCA, such as the DSC, need to be fully understood in order for military units from multiple service components to combine into an effective joint force. Traditional chains of command still exist and are still used, but failure to integrate into the DSC during a DSCA mission is a recipe for disaster, as was seen when the Marines landed on Staten Island during the Hurricane Sandy response.

Further, it is not only important to train commanders and senior staff officials on these subjects. All personnel need to have a familiarity with the basics of a DSCA mission and where the military fits into the civilian command. At the lowest level, junior officers and noncommissioned officers (NCOs) are the ones leading troops on the ground and interfacing directly with incident command staffs and civilian first responders. At times, young NCOs will lead small teams alongside civilian search and rescue or law enforcement personnel conducting independent operations. These personnel need to know what they can and cannot legally do in support of civil authorities. They need to know where they receive guidance and direction for operations and where they will sleep, eat, and go to the hospital in case of injury. These structures exist and are very robust, but they are also very different than military structures. Terminology is also different, with the same terms meaning different things between military and civilian operations.

According to CALL, a clearinghouse for after action reports and current tactics, techniques, and procedures (TTPs), the Army is generally unprepared to conduct DSCA missions.

Defense support to civil authorities (DSCA) within the United States is not a new mission for the military. Despite this, Center for Army Lessons Learned collection and analysis teams routinely report that tactical units do not understand the constraints placed upon them by the body of statutes, regulations, and presidential orders pertaining to responding to disasters and incidents at home. This is because the primary mission of tactical units is expeditionary warfare, and that has been their focus for the past eight years in Afghanistan, Iraq, the Horn of Africa, and the Philippines.[127]

There is no requirement for soldiers in the Army to be trained on DSCA operations or integration with civil authorities. There is specialized training available for personnel assigned to positions such as DCO or DSC, but for the majority of soldiers, the first experience they have with civil authorities is during an actual mobilization for a DSCA mission. This presents a problem when Army units deploy to support ICs during a disaster response. Soldiers are trained to perform their jobs under a military command structure in combat operations. During a DSCA mission, the Army and other elements of the DOD are in a supporting role, under the operational control of the IC or whatever civil authority is in the leading role for the disaster response.

Current training available for topics related to DSCA and Homeland Security are minimal. ARNORTH provides a DSCA course that consists of three phases for a total of 30 hours of training. The Joint Forces Staff College offers a 40-hour Homeland Security Planners Course that is focused on training field grade officers (O4 to O5) and federal civilian agency leaders. NGB offers three courses related to Joint Staff and Joint Operations Center (JOC) operations and mobilization of resources for domestic operations, each of which is three to five days in length. The directive behind these course offerings is to provide "specific training in military units most likely to be involved in military support to civil authorities."[128] This is a rather vague directive, and it has been left up to each service component within the DOD to develop and implement the training they deem necessary to meet this requirement. There are two main problems with these course offerings. First, they are all focused on training mid- to senior-level

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[127] Daigle, "Homeland Security Skill Identifier," 18.

[128] Randy J. Amundson, "How to Prepare the National Guard's Leadership for Successful Venture in Homeland Security," Master's Thesis, Naval Postgraduate School, 2009, 18.

leaders on the basics of DSCA. This is a good thing, but it leaves out the majority of the personnel who will be involved in a DSCA mission, namely the junior leaders leading troops on the ground. Second, these courses are optional unless soldiers are assigned to USNORTHCOM, ARNORTH, or a related senior command element. Again, the format of this training leaves out the majority of the personnel who will actually be interacting and liaising with civil authorities during a disaster response.[129]

E. KNOWLEDGE AND EXPERTISE

There is generally a large disparity in DSCA experience between Title 10 and Title 32 personnel. National Guard personnel are activated routinely all over the country to provide support to flooding, major storms, wildfires, and a host of other natural and man-made disasters. This gives National Guard personnel a wealth of experience in DSCA that the majority of Title 10 personnel do not receive. In addition, since 9/11 the focus for the Army overall has been overseas deployments in support of the Global War on Terror (GWOT). These deployments are borne primarily by title 10 forces, though the National Guard has deployed thousands of soldiers overseas in support of GWOT operations. When disasters do occur, laws, regulations, and budgetary limitations require Governors to rely first on their National Guard formations before requesting federal support. Even then, the majority of federal support comes from federal civilian agencies, rather than from the Active military. For this reason, and "due to the complexity of the homeland operating environment, traditionally educated military officers are typically not adequately prepared to be successful in that environment."[130]

In addition to the gap in knowledge of DSCA operations, there is a gap in knowledge of the DSCA area of operations (AO), which is the communities within the U.S. where disasters occur. Active Duty soldiers are stationed all around the country and overseas, but they are generally not experts on the area in which they are stationed. Few are stationed where they lived before joining the Army and most are transferred to a new installation every two to three years. For this reason, the Army must rely on the regional

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[129] Amundson, "Venture in Homeland Security," 18-22.

[130] Daigle, "Homeland Security Skill Identifier," 20.

expertise of local civil authorities in preparing for and executing DSCA missions. This need reinforces the necessity of liaison and relationship building between the Army and civil authorities addressed earlier in this chapter.

In 2007, the ASD(HD&ASA) published guidance on the needed competencies for personnel involved in DSCA. Table 1 is a recreation of the published competencies table provided in the November 14, 2007 memorandum.[131]

Table 1.   Homeland Defense/Homeland Security Professional Competencies[132]

In-Depth Knowledge	Understanding	Awareness
High Importance	Medium Importance	Medium Importance
Threats to national security	Budgeting and planning	NCTC
Critical Infrastructure Protection	Land, Air, Maritime, Space and Cyber Domains	Contract/Acquisition operations
National Security Policy, HLS policy, national strategies	Information sharing and Intelligence Analysis	State & Local Fusion Centers
NSC/HSC	Domestic Counterintelligence	Strategic Missile Defense
Interagency Coordination, Interagency Relationships	CBRNE Consequence management	Goldwater Nichols/ Beyond Goldwater Nichols
Dept of Defense/Homeland Defense Policy	Congressional Oversight/ Understanding of authorities/laws	Research and education networks
Government and Strategic Communications	International Affairs and Cooperation/Assistance	Operational programs and capabilities
Role of National Guard	15 National Planning Scenarios, NRP/NIMS/ICS	Human capital and resources operations
DOD Organization, Role of USNORTHCOM/NORAD, Role of USPACOM/ USSOUTHCOM, Use of military forces in CONUS	All Hazards: Natural Disasters & Hazards, Infectious Diseases & Health Affairs, Domestic Nuclear Detection, WMD/ Proliferation, Terrorism/ Counterterrorism	Resiliency of social, political and economic processes, infrastructure and institutions
Strategic planning process	Public Affairs	Continuity of Government
Local/Tribal/State/Federal Government Relationships & Coordination (HS Field)	Systems of Government (fed, state, county, local, municipal) Executive/ Legislative/Judicial	
Civil-Military Relationships Civil liberties	Risk/Crisis planning and management	
CJCS DSCA EXORD Information Management	Cyber, Transportation, Agriculture & Food Security	
DHS Organization & Roles	Roles and capabilities of NGOs and the private sector	

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131 Ibid., 28-29.

132 Ibid., 29.

F.   PLANNING AND ANTICIPATION OF NEEDS

Each of the cases discussed in Chapter III shows the stark reality of a catastrophic disaster and the effect it can have on basic services needed to sustain life. Electricity, clean water, food, shelter, and a myriad of other services that most Americans take for granted become instantly unavailable. Transportation networks fail, preventing victims from leaving an area and first responders from entering to assist. The NPD directs that Americans be capable of sustaining themselves and their families for up to 72 hours (three days) until assistance can arrive from local, state, or federal agencies. The vast majority of Americans are not capable of sustaining themselves for this long. Many high risk populations such as the young and the elderly are in desperate need as soon as the power goes out. Life sustaining technologies run on electricity from either the power grid or a separate generator. Generators need to be refueled, medication needs to be refrigerated, and the first responders in the affected areas are themselves victims of the disaster.

The realities of a catastrophic disaster require state and federal agencies to anticipate needs before such an event occurs. The DOD and National Guard are no different. The National Guards for multiple states were activated and staged in anticipation of Hurricane Sandy's landfall. DOD and USNORTHCOM sent units to JBMDL, NJ in anticipation of immediate needs following Sandy's storm surge. This attitude of anticipation was a far cry from the 'wait and see' attitude held by military commanders during Hurricane Katrina, and it may have resulted in lives saved and property damage reduced from what it could have been. Anticipation must not extend to self-deployment without prior approval. The processes in place to request resources from the local level and then fill resources first from the state level and then from the federal level must be followed. It can be assumed that in a major hurricane or CSZ earthquake scenario, Title 10 forces will likely be needed to assist in the immediate aftermath. Under this assumption, forward-staging of resources is prudent because it massively reduces the time it takes to deploy these resources when they are requested to fill a valid need.

This anticipation needs to be factored into the planning for these disasters, as was demonstrated during CR16. Two years of planning culminated in a four-day exercise, all

based on the assumption that local and state resources would be immediately overwhelmed and outside forces through EMAC and from Title 10 would need to deploy immediately following an earthquake. This planning needs to be integrated at all levels, from city to county, county to state, and state to regional and federal. It needs to include a plan for the civilian and military command structures that will be used, such as the DSC, and how Title 10 and Title 32 forces will be integrated.

Army commanders are faced with a challenge when it comes to DSCA. Their primary mission is to prepare their units for deployment overseas for combat operations. They are responsible for their federal mission above all else. This leaves little time for commanders to devote to preparing for DSCA missions. This means that units that are sent to support civil authorities must rapidly prepare themselves and their equipment to perform what is often a completely different mission than they would normally perform. Still, the types of missions Army units perform during DSCA are not wholly different than what they would do in combat operations. Hurricane Katrina provides a good example of the wide range of capabilities the DOD was called upon to provide in support of the recovery from the storm. The following is a list of mission assignments that DOD resources performed during the Katrina response:

- Conduct search-and-rescue operations

- Perform security-capabilities assessment and provide security-capabilities advice and technical assistance

- Collect and evacuate live persons to temporary processing centers

- Collect and remove bodies of deceased persons

- Restore flood-control systems

- Transport and distribute ice, water, food and medical supplies

- Disease prevention and control

- Planning for the quarantine of areas within New Orleans

- Quartering and sustaining of FEMA headquarters support element and relief workers

- Health and medical support

- Debris removal

- Restoration of basic utilities and key transportation routes (land and water)

- Geospatial-surveillance products and evaluations

- Logistical support at key air and sea distribution nodes

- Temporary housing

- Long-range communications between headquarters nodes and firefighting[133]

Knowing these are the types of things civil authorities need from the Army allows Army leaders to plan for these operations in their DSCA planning. It also requires Title 10 and Title 32 entities to coordinate their planning efforts to ensure coverage of all requirements in pre-disaster plans. If the National Guard in a particular state has the capability to conduct water purification operations, perhaps the Title 10 water purification assets should be planned for a state that does not have that capability. This kind of detailed planning affects command elements at every echelon, from DOD to the smallest National Guard unit. Detailed planning also prevents parallel work by different elements. It is counterproductive for both the National Guard and ARNORTH to write independent contingency plans for a particular scenario. In these cases, when a disaster occurs, there are different plans being executed at the Title 32 and Title 10 levels, which can cause confusion and delays in resources reaching the areas where they are needed.[134]

Hand-in-hand with planning for DSCA operations is the anticipation of the needs of victims and civil authorities. Anticipating needs during the planning process is nothing new for the Army, but there is a difference between anticipating the sustainment requirements for Army personnel and equipment during missions and anticipating mission assignments before resources are requested. It requires an in-depth knowledge of

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[133] Lombardo, "Collaboration or Control," 55-56.

[134] Ibid., 69-71.

emergency response plans for dozens of different scenarios and an understanding of the resource needs of different jurisdictions.

The slow DOD response to Hurricane Katrina highlighted the problems inherent in the current mission assignment process. According to law and regulation, the DOD must wait until they are requested to mobilize resources in support of a major or catastrophic disaster. DOD resources are readily available, but they take time to mobilize and deploy. From the time of request, it can be days before DOD resources arrive at a disaster staging area to provide support. In response to this, the response to Hurricane Sandy featured a policy of anticipating needs rather than waiting for requests. While this presented its own set of problems, it did improve the DOD's reaction time in providing support following the hurricane's landfall and storm surges in New York and New Jersey.

This method of providing support is known as 'push,' as opposed to 'pull,' where resources must be pulled down to the lowest level rather than pushed there before they are requested. A push system allows for much shorter reaction times from when resources are requested to when they are employed, but it requires a thorough risk assessment be done. If the DOD forward-stages assets that end up not being requested, then taxpayer money has been wasted by staging those assets. Conversely, if a requested resource has not been pre-staged when it is requested, the same problematic slow response will be required regardless of the pre-staging efforts with other assets.

G.   CONCLUSION

Clearly there are shortfalls in the Army's ability to provide effective DSCA. In the years following Hurricane Katrina and Hurricane Sandy, the Army has made changes to improve its DSCA capabilities. The earthquake exercise also highlighted some important issues. Significant gaps remain, namely in liaison and relationships, knowledge and education, and planning and anticipation of needs. Each of these gaps plays a role in the effectiveness of integration between the Army and its civilian partners during DSCA missions. The Army must make changes to how it conducts DSCA in order to remedy these shortfalls. The next chapter will address a possible solution that the Army can employ to correct these shortfalls.

V. A DSCA CORPS: A POSSIBLE SOLUTION?

A. INTRODUCTION

This chapter outlines a possible solution to the problems listed in Chapter IV. By creating a new functional area and associated force structure within the Army, comprised of DSCA specialists with extensive training in DSCA, the state can respond effectively to homeland crises. This DSCA Corps will have a primary mission to conduct DSCA, rather than a primary mission to deploy overseas for combat operations. The recently-created Cyber Warfare branch of the Army provides a template for this new DSCA functional area. DSCA force structure must be created within the Active Army, Army Reserve, and Army National Guard in order to balance capabilities, with a goal of aligning forces regionally to create a core group of leaders that are subject matter experts (SMEs) in their particular region. This new branch will remove the three major gaps identified in Chapter IV without changing DSCA operations in any fundamental way.

B. SOLUTION

One potential solution to the problem faced during crisis in our case studies is the creation of a new functional area within the Army with a sole focus on the DSCA mission. The mission of these DSCA Corps units is to integrate into civilian agency emergency response plans, form and maintain relationships with civilian partners, and be the first Army elements to respond to a DSCA mission. During a response, the DSCA Corps will bridge the gap between civilian response agencies and the rest of the Army and other DOD forces. The Army currently has 28 branches and 15 functional areas within its force structure. Table 2 provides a list of these branches and functional areas.

Table 2. List of Army Branches and Functional Areas[135]

Branch/Functional Area Title	Numerical Identifier
Medical (Six Specialties)	Various
Infantry	11
Engineer	12
Field Artillery	13
Air Defense Artillery	14
Aviation	15
Cyber Warfare	17
Special Forces	18
Armor	19
Telecommunications Systems Engineering (FA)	24
Signal	25
Judge Advocate General	27
Electronic Warfare (FA)	29
Information Operations (FA)	30
Military Police	31
Strategic Intelligence (FA)	34
Military Intelligence	35
Financial Management	36
Psychological Operations	37
Civil Affairs	38
Space Operations (FA)	40
Adjutant General	42
Public Affairs (FA)	46
U.S. Military Academy Professor (FA)	47
Foreign Area Officer (FA)	48
Operations Research/Systems Analysis (FA)	49
Force Management (FA)	50
Acquisition (FA)	51
Nuclear and Counterproliferation (FA)	52
Information Systems Management (FA)	53
Chaplain	56
Simulation Operations (FA)	57
Strategist (FA)	59
Chemical	74
Transportation	88
Logistics	90
Ordnance	91
Quartermaster	92

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[135] Department of the Army, "Department of the Army Pamphlet 600-3: Commissioned Officer Professional Development and Career Management," Headquarters, Department of the Army, Washington D.C., December 3, 2014.

Perusing the list in Table 2, it is evident that there are no branches or functional areas with a DSCA or Homeland Security related title. In reality, the only certification a soldier can gain in DSCA is a voluntary Personnel Development Skill Identifier (PDSI), D7A–DSCA Specialist. This PDSI is gained by taking seven hours of DL training and attending a three-and-a-half-day course, which is taught by personnel from the NGB and USNORTHCOM/ARNORTH. This training is far from sufficient to train soldiers to meet the myriad of challenges inherent in DSCA operations.

For the purposes of this thesis, the DSCA Functional Area (FA) has been designated FA20. The numerical designation 20 has no significance other than it is not currently in use by any other branch or FA. The numerical designation would likely change were this proposed new FA be adopted by the Army.

C.   FUNCTIONAL AREA 20 – DSCA

The purpose of the DSCA Corps (FA20) is to bridge the gap between civil authorities and military forces before, during, and after a catastrophic disaster within the U.S. and its territories. FA20 fills this gap by providing force structure and a corps of subject matter experts who can develop and maintain relationships with civil authorities, facilitate the rapid deployment of Army units to support disaster response operations, and provide expert command and control of Army and joint forces during disaster response operations.

1.   Mission

The Defense Support to Civil Authorities Functional Area (FA20) fulfills the Army's obligation to provide support to the citizens of the United States during their time of greatest need. Whether in response to a natural disaster, terrorist attack, or pandemic outbreak, the Army must be prepared to provide resources in the form of supplies, equipment, and personnel to augment the capabilities of civil authorities when they become overwhelmed.

2. Proponent

DSCA is an FA aligned under the Operations Support functional category. All branches and FAs in the Army are categorized under one of three functional categories; Operations, Operations Support, and Force Sustainment. The Operations Support functional category includes the functions associated with intelligence, communications, cyber warfare, and training, developing, and educating the force.[136] The Commander, ARNORTH is the proponent for DSCA. A proponent is defined as, "an Army organization or staff that has been assigned primary responsibility for material or subject matter in its area of interest."[137] For FA20, ARNORTH is in the perfect position to serve as the proponent; it already reports directly to USNORTHCOM and has responsibility for operations within the United States, which includes all DSCA missions.

3. Purpose

DSCA is a unique mission for the Army in that it does not involve training for combat operations. As such, DSCA soldiers and leaders have an entirely different focus than their counterparts in more traditional Army formations. The purpose of the DSCA Corps is to facilitate the rapid deployment of military assets to any location within the United States and its territories to provide immediate assistance to civil authorities for disaster recovery operations. DSCA units serve as JTF headquarters, providing a command and control element with subject matter expertise in everything related to DSCA and facilitating the interface of traditional Army formations, as well as formations from other service components, with the civil authority's command structure. DSCA personnel are experts in the NRF, NIMS, and ICS. They develop relationships with partners in federal and state civil agencies which can be leveraged during disaster response operations.

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[136] DA, "DA PAM 600-3," 11.

[137] Department of the Army, "Army Regulation 25-1: Knowledge Management and Information Technology," Headquarters, Department of the Army, Washington D.C., May 14, 2008.

DSCA missions are undertaken constantly all over the country, primarily by the National Guard. According to the 2018 National Guard Bureau Posture Statement, "on any given day we have more than 4,000 Guard members conducting domestic operations."[138]   While the DSCA Corps is not designed for deployment overseas for combat operations, military support within the homeland is in high demand and will keep the DSCA Corps occupied. The DSCA Corps will be constantly interfacing with civil authorities so, when a disaster occurs, the DSCA mission can be executed rapidly and the right resources can be mobilized immediately.

4.   Functions

The DSCA Corps has three primary functions. First, it must conduct liaison with civil authorities during steady-state operations in order to establish relationships that can be leveraged during disaster response operations. Second, it must prepare contingency plans for response to various natural and man-made disasters within each FEMA Region, in coordination with USNORTHCOM and ARNORTH. Third, it must provide forces to serve key command, control, and liaison functions during disaster response operations, serving as the core of a JTF or Dual Status Command staff structure.

5.   Military Occupational Specialty (MOS) Structure

MOSs are alpha-numeric designators that denote a soldier's skill qualifications. For FA20, there are two primary MOSs. 20A is the MOS for most officers and 20C is the MOS for most enlisted soldiers. These are the basic MOSs for the majority of DSCA Corps personnel. There are four additional MOSs that have been identified as well, which are for more specialized personnel. 20B is for officers who have already been qualified as a 20A and have subsequently been trained as a DCO. 20D and 20E are for enlisted personnel who have already been qualified as a 20C and have subsequently been trained as either a DCE or EPLO specialist. 20Z is for enlisted soldiers who are qualified as a

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138 National Guard Bureau, "2018 National Guard Bureau Posture Statement: Building a Force for the Future," National Guard Bureau, Washington D.C., April 19, 2017, 15.

20C, 20D, or 20E and then reach the rank of E8 or higher. Table 3 depicts these MOSs in a different format.

Table 3.   Proposed List of FA20 Military Occupational Specialties[139]

Officer/Enlisted	MOS	Title
Officer	20A	DSCA Generalist
Enlisted	20B	Defense Coordinating Officer (DCO) (O6 and Above)
Enlisted	20C	DSCA Specialist
Enlisted	20D	Defense Coordinating Element (DCE) NCO
Enlisted	20E	Emergency Preparedness Liaison NCO (EPLO)
Enlisted	20Z	Senior DSCA NCO (E8 to E9)

6.   Training and Education

The current program of instruction for DSCA consists of one DL phase with 10 hours of training and one three-and-a-half-day resident phase. This certifies soldiers as 'DSCA Specialists' and grants them the PDSI D7A. This is a total of around 30 hours of training on DSCA, which is nowhere near the amount of time needed to qualify soldier as an FA20. The amount of training needed, in both time and content, for each branch and functional area in the Army varies widely, and is in addition to initial entry training. The content of training for FA20 soldiers should take the current DSCA program of instruction (POI) and expand upon it. Table 4 shows the minimum requirements for FA20 qualification.

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[139] DA, "DA PAM 600-3."

Table 4.   Training Requirements for FA20 Qualification[140]

Course Title	Training Hours	Delivery
IS-100.b – Introduction to Incident Command System (ICS)	3	DL
IS-200.b – ICS for Single Resources and Initial Action Incidents	3	DL
ICS-300 – Intermediate ICS for Expanding Incidents	24	Resident
ICS-400 – Advanced ICS for Command and General Staff – Complex Incidents	16	Resident
IS-700.a – Introduction to National Incident Management System (NIMS)	3	DL
IS-800.b – Introduction to National Response Framework (NRF)	3	DL
Hazardous Materials (HAZMAT) Awareness	8	DL
L449 – ICS Curricula Train-the-Trainer (ICS-TTT)	32	Resident
K146 – Homeland Security Exercise & Evaluation Program (HSEEP)	16	DL / Resident
DSCA Phase 1	10	DL
DSCA Phase 2	20	Resident
Joint Reception, Staging, Onward Movement and Integration Training Course (JRSOI-TC)	24	Resident
Joint Staff Training Course (JSTC)	24	Resident
Joint Operations Center Training Course (JOC-TC)	32	Resident
TOTAL	**218 (28 Days)**	

In order to facilitate training for Active Army, Army Reserve, and Army National Guard soldiers, the majority of branch and functional area qualification training course are offered in two formats. The first is oriented to the Active Army and requires soldiers to attend the entirety of the training period in residence. In this case, this would mean 28 days of training in residence at an Army base. The second is oriented to the Army Reserve and Army National Guard and combines a DL phase 1 and resident phase 2 consisting of up to 15 days (including travel to and from the training location). In this case, it would mean limiting the resident training to 13 days (two days are required for travel, totaling 15 days) and converting 15 days (120 hours) of training to a DL format. This could either be synchronous, as is done with the FA30 Information Operations DL training, or asynchronous, as is done with most other branch and FA DL training.

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[140] All IS/ICS training information is from the FEMA Emergency Management Institute (EMI) website, https://training.fema.gov; all DSCA and Joint training information is from the secure National Guard Bureau (NGB) J371 website, https://gko.ngb.army.mil.

Army branch and functional area proponents develop Centers of Excellence (COEs) to serve as central training and qualification management activities. For the DSCA Corps and FA20, a Center of Excellence (COE) should be created at the ARNORTH headquarters at Fort Sam Houston, TX. The Homeland Defense and Security Center of Excellence would serve as the ARNORTH executive agent for proponent actions.

7.   Insignia

Each branch and functional area has a distinctive collar insignia that represents the branch or FA in some way. The Infantry Branch has crossed muskets, the Transportation branch has a ship's steering wheel, and the Signal branch has crossed signal flags overlaying a torch. All of these symbols have heraldic significance to the origin and nature of the branch or functional area. The DSCA Corps needs a unique and significant collar insignia of its own. Figure 10 is a proposed FA20 collar insignia. It is a golden torch overlaying a black shield. The torch represents the advanced elements of a formation, also known as a vanguard or advanced party. This refers to the idea that the DSCA Corps units and personnel are the first to provide assistance to civil authorities, even before an event occurs, and then they lead the way for all follow-on forces. The shield represents defense of the United States against all enemies. It is black because the nature and scope of each DSCA mission is not known until a disaster occurs, which could be of any type or any scope.

Figure 10.   Proposed DSCA Corps (FA20) Collar Insignia

In addition to a unique collar insignia, the DSCA Corps needs a shoulder patch for soldiers to wear on their uniforms. The ARNORTH mission has been habitually given to the U.S. 5th Army. It is fitting then that the DSCA Corps units should wear the shoulder patch of their proponent, ARNORTH, and thus the patch of the 5th Army as depicted below. According to the Army Institute of Heraldry, the significance of the ARNORTH shoulder patch is as follows: "The flag colors of red, white, and blue are self-explanatory. The outlined figure of the mosque is symbolic of the country in which Fifth Army, the previous designation of the unit, was originally activated. The letter 'A' indicates 'Army', and conforms in general, to designs used by the First and Third United States Armies."[141]   The 5th Army was constituted in Oujda, French Morocco on December 1, 1942, immediately following the Allied invasion of North Africa, known as Operation Torch. Figure 11 depicts the 5th Army shoulder patch.[142]

Figure 11.   ARNORTH and 5th Army Shoulder Patch[143]

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[141] The Institute of Heraldry, "US Army North," Office of the Administrative Assistant to the Secretary of the Army, Washington D.C., accessed July 13, 2017, http://www.tioh.hqda.pentagon.mil/Catalog/HeraldryMulti.aspx?CategoryId=6198&grp=2&menu=Uniformed%20Services.

[142] United States Army North, "World War II," United States Army North, accessed July 13, 2017, http://www.arnorth.army.mil/History/Pages/default.aspx.

[143] Source: Institute of Heraldry, "US Army North."

D. FORCE STRUCTURE

USNORTHCOM is the GCC responsible for North America and its territories, including DSCA within the U.S. ARNORTH is the Army Service Component Command (ASCC) subordinate to USNORTHCOM which is responsible for directing all Army operations within the USNORTHCOM AOR. ARNORTH is also the proponent for the DSCA Corps and is responsible for directing all DSCA Corps operations within the U.S. and its territories.

The DSCA Corps is organized into two DSCA Groups, each with five subordinate DSCA Battalions. The DSCA Groups are each responsible for five FEMA regions, and each DSCA Battalion is aligned with one FEMA Region. The composition of each of these battalions differs depending on the FEMA Region to which it is aligned. Generally, there will be one DSCA Company for each state within the FEMA region. Larger states may have two companies aligned with them, and some companies may be responsible for two or more small states.

Another unique component of the DSCA Corps units is that they are comprised of more than one component of the Army. DSCA Groups are Title 10 active component, DSCA Battalions are Title 10 Army Reserve, and DSCA Companies are Title 32 National Guard. This is done for several reasons, which are detailed in subsequent paragraphs. Figure 12 depicts the general structure and makeup of a DSCA Group.[144]

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[144] The personnel and force structure needed to create the DSCA Corps would need to be taken from other branches and functional areas that already exist in the Army, unless Congress were to authorize a net increase in the Army's end strength to accommodate the increase. This is addressed further in Chapter VI.
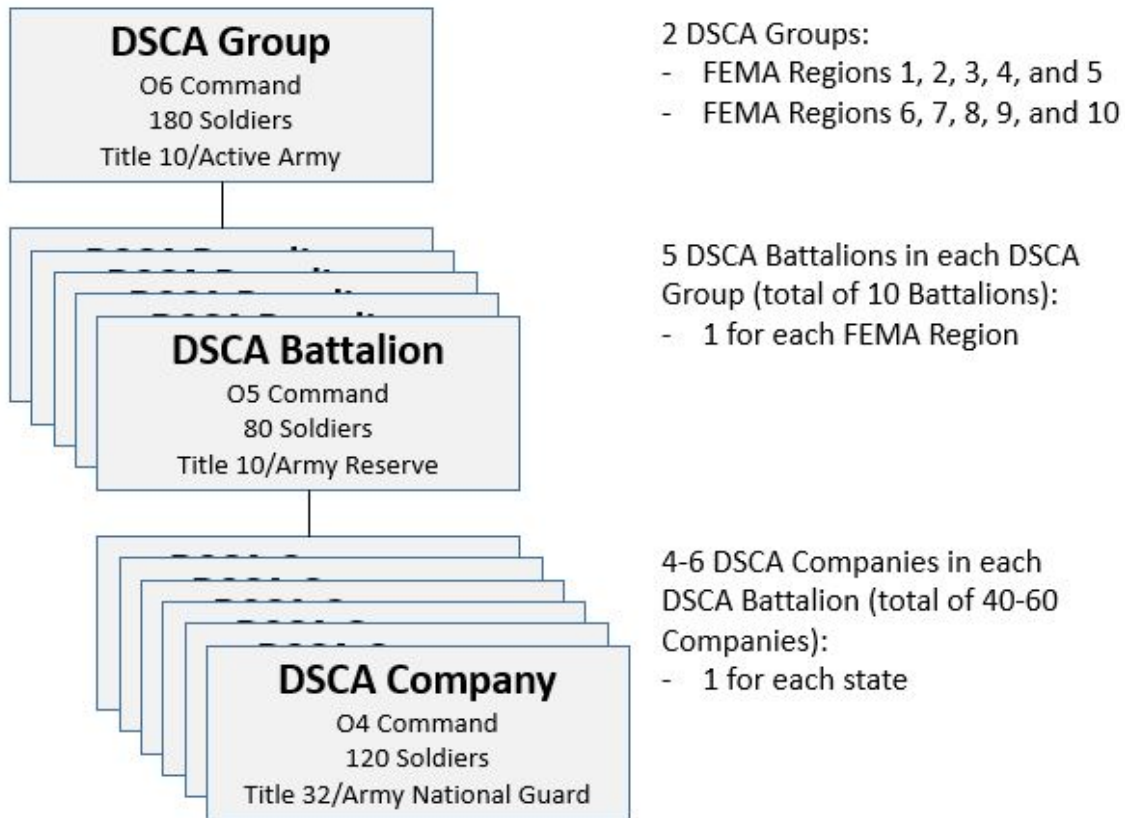
DSCA Group
O6 Command
180 Soldiers
Title 10/Active Army

2 DSCA Groups:
- FEMA Regions 1, 2, 3, 4, and 5
- FEMA Regions 6, 7, 8, 9, and 10

DSCA Battalion
O5 Command
80 Soldiers
Title 10/Army Reserve

5 DSCA Battalions in each DSCA Group (total of 10 Battalions):
- 1 for each FEMA Region

DSCA Company
O4 Command
120 Soldiers
Title 32/Army National Guard

4-6 DSCA Companies in each DSCA Battalion (total of 40-60 Companies):
- 1 for each state

Figure 12.   DSCA Group Force Structure (Proposed)

1.   DSCA Groups

Each DSCA Group is commanded by a Colonel (O6) and is responsible for DSCA activities within five FEMA Regions. The 1st DSCA Group, headquartered at Fort Gordon, GA, is responsible for the eastern United States and the 2nd DSCA Group, headquartered at Fort Sam Houston, TX, alongside ARNORTH and the HDS-COE, is responsible for the western United States. A DSCA Group receives guidance on DSCA operations from ARNORTH and passes down guidance to its five subordinate DSCA Battalions. DSCA Groups are made up of roughly 180 Active Army (Title 10) soldiers. During disaster response operations, a DSCA Group can deploy as a JTF, DSC Title 10 Staff, or augmentation for other federal command and control elements.

2.   DSCA Battalions

Each DSCA Battalion is commanded by a Lieutenant Colonel (O5) and is responsible for DSCA activities within a single FEMA Region. DSCA Battalions are comprised of Army Reserve soldiers and are stationed as close as possible to the FEMA Regional Headquarters for their FEMA Region. DSCA Battalions receive mission guidance from their higher headquarters, either the 1st or 2nd DSCA Group, and push guidance down to their subordinate DSCA Companies operating in each state within the DSCA Battalion's designated region. DSCA Battalions number roughly 80 soldiers (Title 10 reservists), the vast majority of which are traditional reservists with duty one weekend per month and 15 days in the summer for annual training. DSCA Battalions can deploy as staff augmentation to a JTF or DSC Title 10 Staff. They can also serve as a Task Force (TF) Headquarters when another headquarters is not available. At its core, the Battalion's primary mission is to interface with civil authorities during operations to ensure the flow of communication and coordination remains open at all times.

3.   DSCA Companies

Each DSCA Company is commanded by a Major (O4) and is responsible for DSCA activities within a single state. Comprised of roughly 120 National Guard (Title 32) soldiers, DSCA Companies are stationed collocated with the state National Guard headquarters element. DSCA Companies receive guidance from their higher DSCA Battalion and from the state National Guard headquarters. The majority of the soldiers in a DSCA company are traditional Guardsmen who perform duty one weekend per month and 15 days in the summer for annual training. DSCA Companies deploy as directed by the state's Governor or the President to support missions within the state, region, or nationally as needed. The DSCA Company's mission is to conduct liaison between military elements and civil authorities in small teams. They can also be activated to augment the state's JTF or JOC at the state level.

4.   Additional Force Structure – DCE/EPLO

Creation of the DSCA functional area within the Army does not change the form or function of the DCE or the EPLO program. These programs are funded and managed by the DOD, not the Army, and thus can be filled with personnel from any service component as long as they have been deemed qualified for the duty. A great deal of coordination is needed between the DCE and the regional DSCA Battalion and between the EPLO program and the DSCA Groups. This coordination is needed because DSCA Corps formations have no authority to direct the actions of the DCE or EPLO. In fact, the DSCA Corps and its capabilities actually augment the mission and capabilities of the DCE and EPLO to make them more effective.

E.   STATIONING

1.   Regional Alignment

ARNORTH and the Homeland Defense and Security COE are headquartered at Fort Sam Houston, TX, along with one DSCA Group with responsibility for the five western FEMA Regions. The second DSCA Group is stationed at Fort Gordon, GA, with responsibility for the five eastern FEMA Regions. Each DSCA Battalion is stationed at an Army or Joint installation within their assigned FEMA Region, preferably as close as possible to the FEMA Regional Headquarters location. Figure 11 shows how each of the DSCA Groups and Battalions could be aligned with each FEMA region.
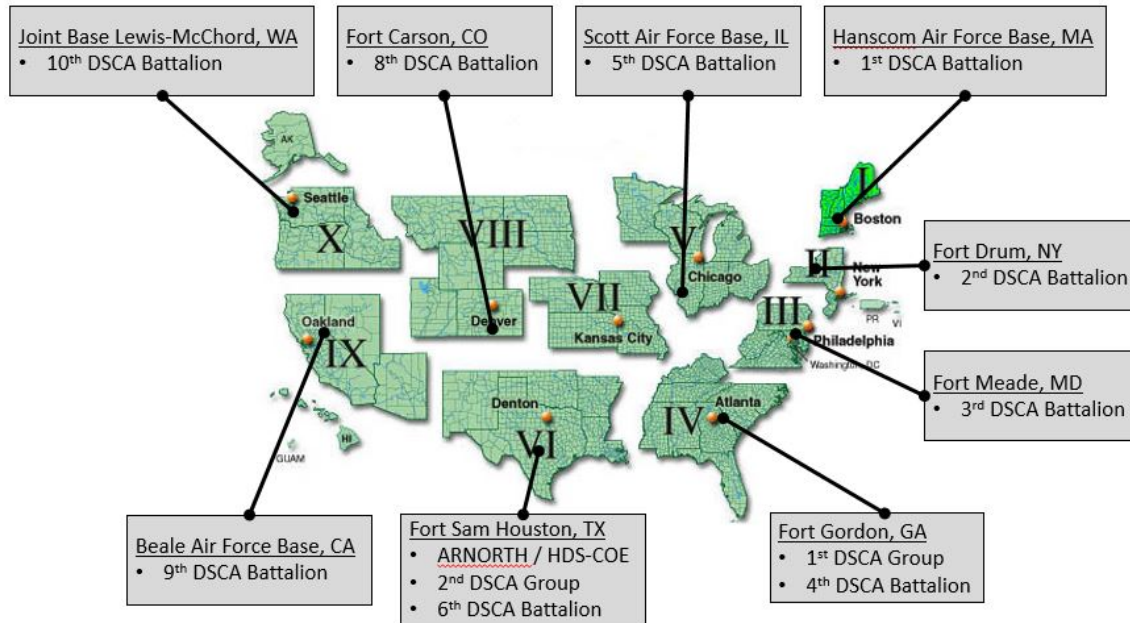
Figure 13.   DSCA Group and DSCA Battalion Stationing (Proposed)[145]

In the stationing plan depicted in Figure 13, Fort Sam Houston, TX, and Fort Gordon, GA, are the two main installations where the Active Army portions of the DSCA Corps will be stationed. The DSCA Battalions are all Army Reserve elements, and thus are only staffed with their full complement of personnel during monthly drill assemblies and annual training periods. Therefore, the stationing requirements for these battalions is significantly less than the requirements for the Active Army DSCA Groups. For the DSCA Companies, each state's National Guard Headquarters is depicted in Figures 14–23, as well as the location of any Army Reserve and Active Army DSCA Corps elements within that region.

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[145] Adapted from FEMA data.
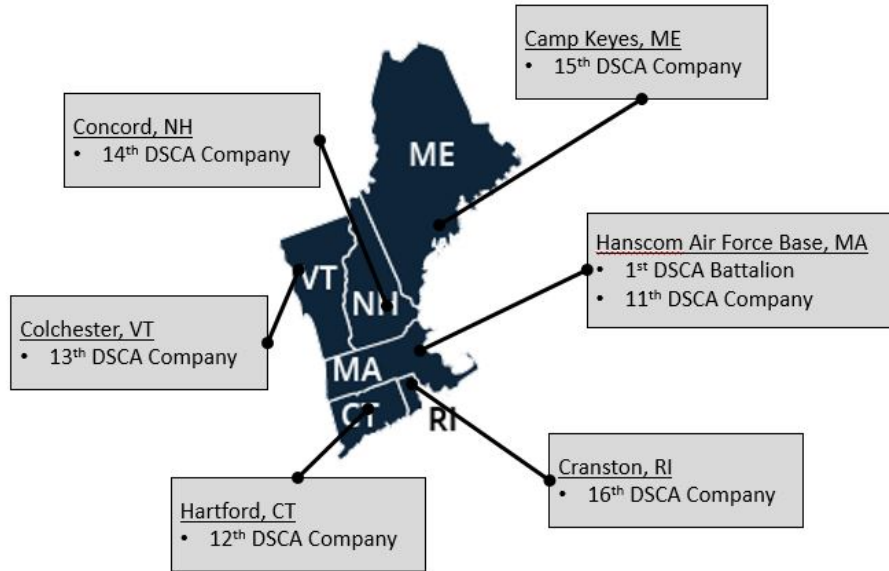
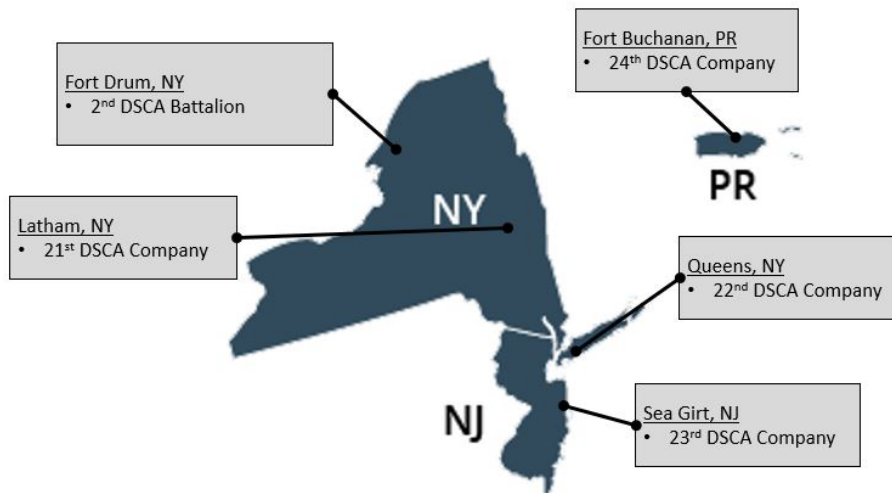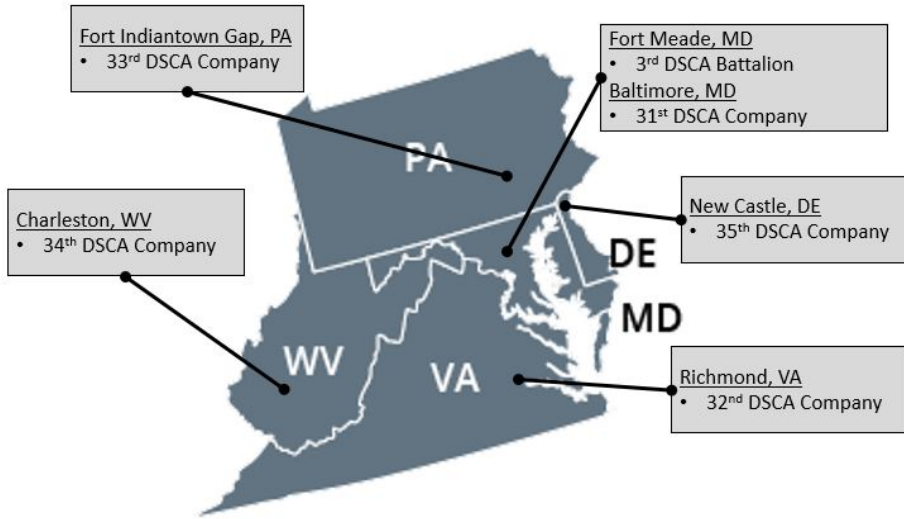Figure 14.   FEMA Region 1 DSCA Company Alignment (Proposed)[146]

Figure 15.   FEMA Region 2 DSCA Company Alignment (Proposed)[147]

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[146] Adapted from FEMA data.

[147] Adapted from FEMA data.
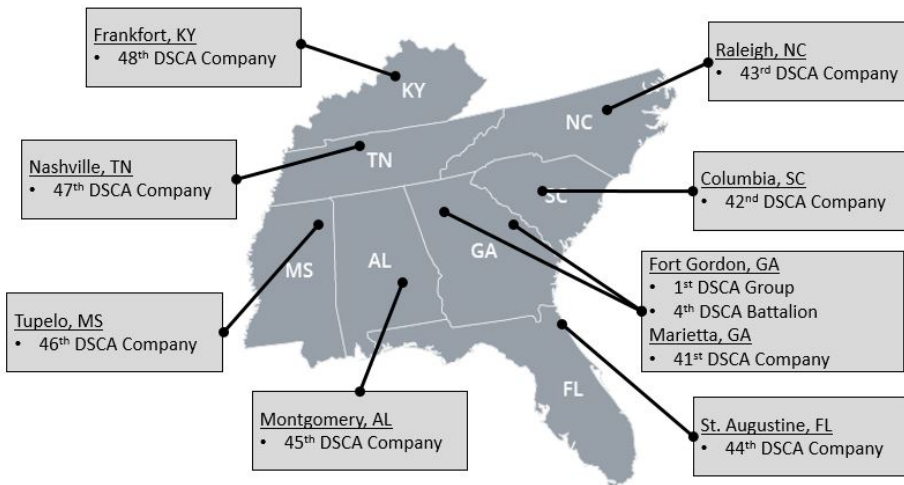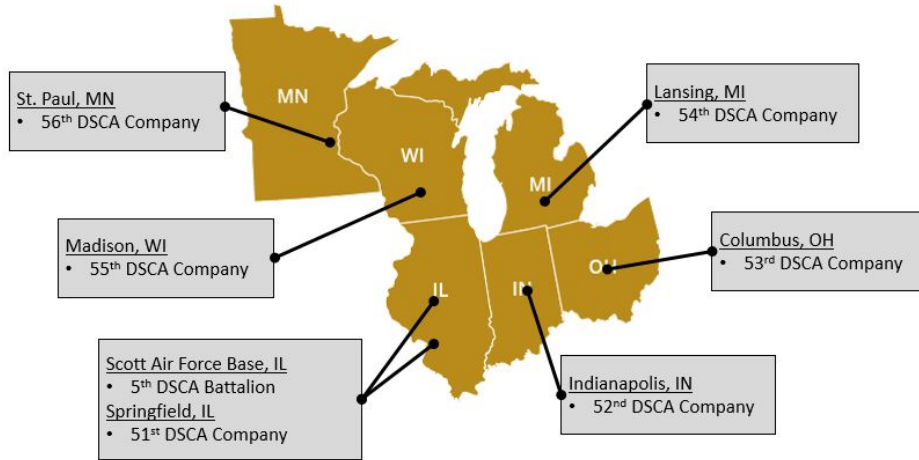
Figure 16.   FEMA Region 3 DSCA Company Alignment (Proposed)[148]

Figure 17.   FEMA Region 4 DSCA Company Alignment (Proposed)[149]

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[148] Adapted from FEMA data.

[149] Adapted from FEMA data.

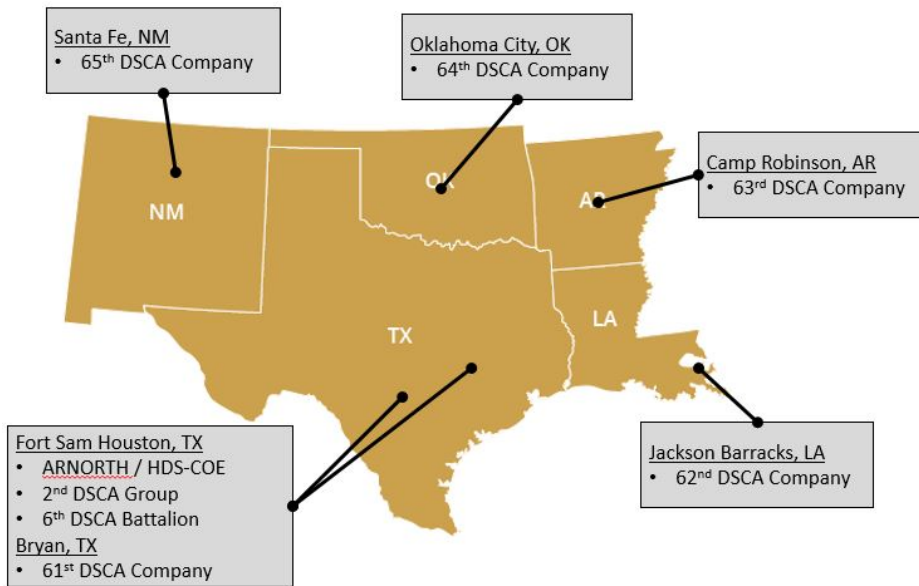Figure 18.   FEMA Region 5 DSCA Company Alignment (Proposed)[150]

Figure 19.   FEMA Region 6 DSCA Company Alignment (Proposed)[151]

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[150] Adapted from FEMA data.
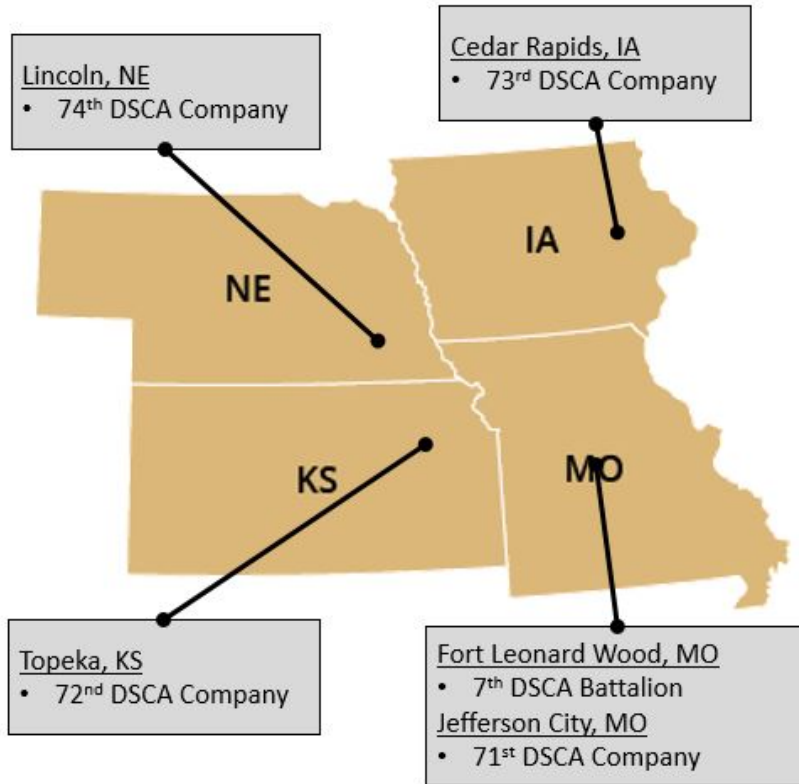
[151] Adapted from FEMA data.

Figure 20.   FEMA Region 7 DSCA Company Alignment (Proposed)[152]
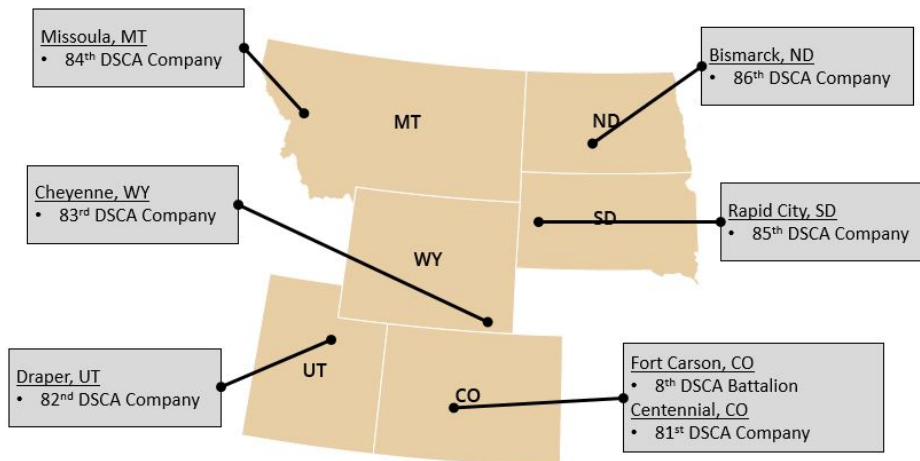

Figure 21.   FEMA Region 8 DSCA Company Alignment (Proposed)[153]
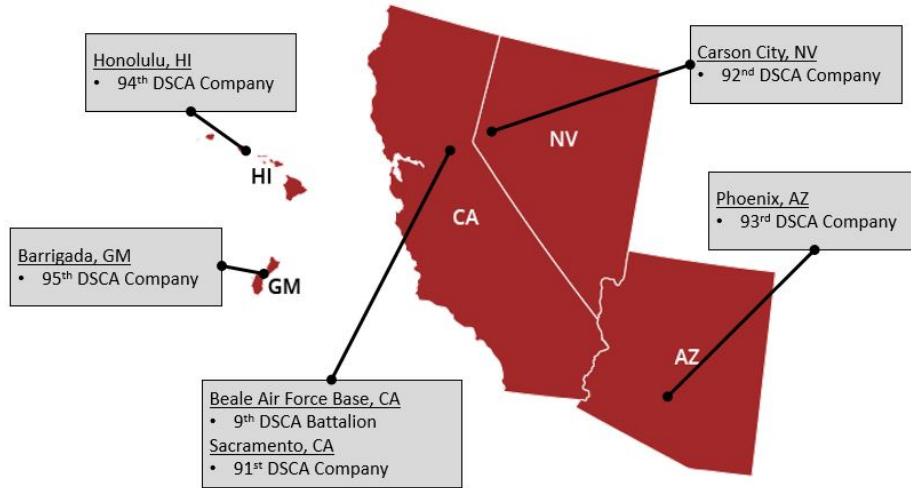
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[152] Adapted from FEMA data.

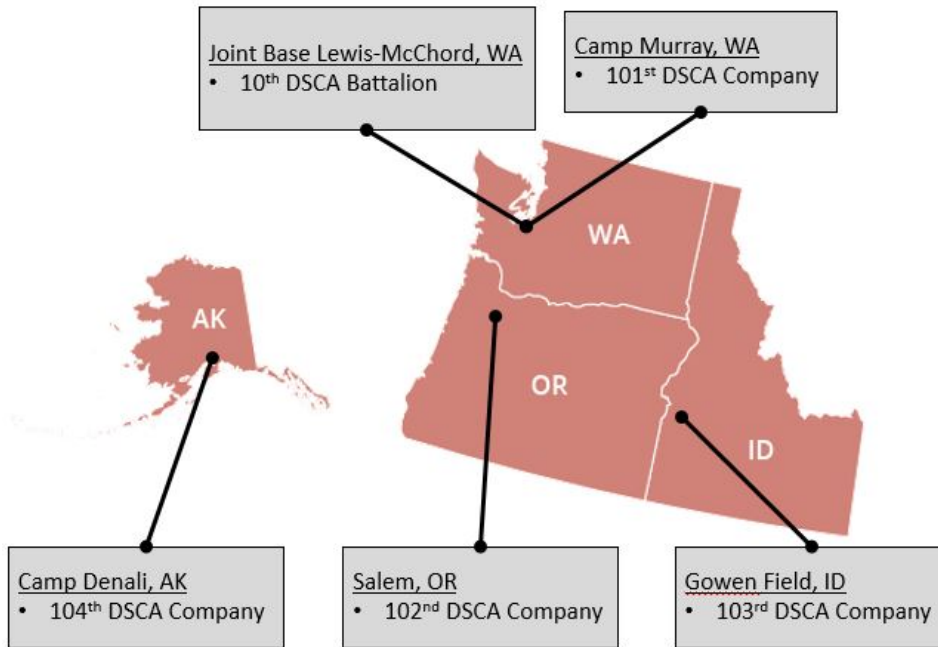Figure 22.   FEMA Region 9 DSCA Company Alignment (Proposed)[154]

Figure 23.   FEMA Region 10 DSCA Company Alignment (Proposed)[155]

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[153] Adapted from FEMA data.

[154] Adapted from FEMA data.

[155] Adapted from FEMA data.

2. Subject Matter Experts

By aligning DSCA Battalions from the Army Reserve and DSCA Companies from the Army National Guard with each FEMA Region and state, we can accomplish two things. First, there is now a specialized DSCA unit responsible for direct liaison and coordination with each state and region. This allows the Army and Joint forces to be integrated into the planning efforts of various civil authorities and establishes ongoing relationships between the Army and the civil authorities that may need assistance during a disaster. Second, the personnel assigned to these reserve component units live and work in the regions and states to which they are assigned. This creates within each unit not only a group of DSCA specialists but also a group of SMEs on the state and region with which they are responsible for coordinating and conducting liaison. These personnel also have a vested interest in ensuring planning and preparation for their assigned state or region are effective, because they and their families live and work within their AOR.

3. Relationship with FEMA Regions/States

The relationships between each type of DSCA unit and the various levels of civil authorities involved in emergency management is important. This relationship facilitates integrated planning at all levels. It expedites the request process for Army resources during a disaster. It allows a more rapid integration of military resources into the civilian ICS for disaster response operations. From the perspective of civilian agencies and government employees, especially at and below the state level, the military has a tendency to come in and take over operations. This perception is a result of the lack of relationship building and liaison on behalf of the military, especially at the federal level, and a gap in knowledge of the laws and regulations that govern military disaster response operations in the homeland. It is incumbent upon the military, and thus the Army, to educate its civilian partners on its capabilities, limitations, and responsibilities when it comes to DSCA.

This can be a major challenge for many reasons, not the least of which is the significant differences between military and civilian organizations. Current efforts by

USNORTHCOM to educate stakeholders on the fundamentals and practice of DSCA are targeted at DOD personnel and are centrally conducted only a few times per year at major military installations. Additional informational briefings are conducted for federal government officials on a regular basis. For this reason, the majority of emergency management officials at the state level and below throughout the country do not have access to this kind of training. In order to correct this problem, DSCA education must be projected down to the state and local level. The DSCA Corps is a vehicle through which this can be accomplished.[156]

F.   TEMPLATE FOR CREATING A NEW BRANCH

The DOD is taking steps to address the threat of cyber terrorism, implementing several significant changes within its organization and mission to address this threat. In 2010, the DOD created the U.S. Cyber Command (USCYBERCOM) as a sub-unified combatant command subordinate to U.S. Strategic Command (USSTRATCOM). USCYBERCOM's mission is to direct the operations and defense of DOD computer networks and conduct full spectrum military cyberspace operations.[157]   Within USCYBERCOM, each service component has its own service component command subordinate to USCYBERCOM. This research focuses attention specifically on Army Cyber Command (ARCYBER) for two reasons. First, of the four service component cyber commands, ARCYBER was created the most recently. Second, the creation of ARCYBER brought significant changes within the Army's force structure that the other service components did not experience when their cyber commands were created. Before ARCYBER came into existence, the Army had no centrally coordinated effort or agency designed to address the emerging cyber threat.

The origins of ARCYBER can be traced back to 2002, when the Army established the Army Network Enterprise Technology Command (NETCOM) in order to remedy technology compatibility issues between Army combatant commands. NETCOM created

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[156] Osterholzer, "Education in Action," 3-6.

[157] United States Strategic Command, "U.S. Cyber Command," United States Strategic Command, March 2015, accessed September 25, 2016, https://www.stratcom.mil/factsheets/2/Cyber_Command.

a single Army computer network, known as LandWarNet, which existed within the World Wide Web and was managed by the Army Global Network Operations and Security Center (AGNOSC). In 2004, the Army combined the AGNOSC with the Army Computer Emergency Response Team (ACERT), creating a Theater Operations Center at Fort Belvoir, Virginia. This new operations center was then capable of both defending the Army's computer network and protecting the integrity of the data stored therein. Network operations were divided in two. The AGNOSC focused on network defense, defending LandWarNet against attack or incursion from outside the network, while ACERT focused on internet network operations, responding to information system incidents within the network.[158]

To address the offensive side of computer network operations, the Army created the Army Intelligence and Security Command (INSCOM) at approximately the same time NETCOM was created. In 2008, in order to synchronize internal, defensive cyber operations with offensive cyber operations, the Army organized NETCOM and INSCOM under the Army Space and Missile Defense Command (USASMDC). Later that year, the first provisional network warfare battalion was activated and organized under INSCOM; this was the first unit organized specifically to conduct cyber warfare offensive operations as its primary mission.[159]   Up to this point, personnel responsible for operating the Army's cyberspace capabilities were 'borrowed' from other commands such as military intelligence, information operations, or the signal corps; most of these personnel were not trained for cyber warfare operations, though they may have had civilian educational backgrounds in this area or on-the-job training related to cyber warfare. The creation of a dedicated cyber workforce improved the Army's ability to conduct cyber warfare operations, rather than relying on a piecemeal force of personnel with other primary duties.

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[158] United States Army Cyber Command, "Establishment of U.S. Army Cyber Command," United States Army Cyber Command and Second Army, accessed September 25, 2016, http://www.arcyber.army.mil/Organization/ARCYBERHistory.

[159] Ibid.

In 2009, the Secretary of Defense directed each of the service components to identify elements to serve as service component commands under the new USCYBERCOM, scheduled for creation the following year. Initially, the Army selected USASMDC to serve as the interim Army Forces Cyber Command (ARFORCYBER). The initial concern was that the creation of USCYBERCOM and a new Army Cyber Command would reduce the existing capabilities of INSCOM and NETCOM to conduct operations by adding additional levels of bureaucracy to the mix. After a thorough analysis of the current Army force structure and the cyberspace operations mission set to date, the Army Chief of Staff directed that the interim ARFORCYBER become the new permanent ARCYBER no later than the end of June 2010. NETCOM and INSCOM were officially moved under ARCYBER, as well as many of their existing subordinate elements, and a new Army Cyber Brigade was created to replace the smaller provisional network warfare battalion created in 2008. The new Cyber Brigade, designated the 780th Military Intelligence Brigade (Cyber), was organized under INSCOM and became operational in late 2011, more than doubling the size of the operational cyber force.[160]

With the activation of ARCYBER in 2010, the first ARCYBER commander, Lieutenant General Rhett Hernandez, established three major lines of effort for the command to become fully operational and integrated into Army operations. "The lines of effort included operationalizing cyber, developing Army cyber capabilities and capacity, and recruiting and retaining Army cyber warriors."[161] The Army was years behind other service components in developing its cyber capability, so a major focus in the first years of ARCYBER's existence was on unifying effort across the service components in order to achieve an effective joint DOD cyber capability. This benefited the Army greatly because it could draw on the experiences of its sister services' efforts to combat the cyber threat.[162]

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[160] Sydney J. Freedberg, Jr., "The Army's Plan for Cyber, One Bright Spot in its Budget," Breaking Defense, last modified February 27, 2014, accessed December 21, 2016, http://breakingdefense.com/2014/02/the-armys-plan-for-cyber-one-bright-spot-in-its-budget/.

[161] ARCYBER, "Establishment of ARCYBER."

[162] Ibid.

From 2012 to 2015, ARCYBER supported dozens of joint and combined cyber operations exercises, focusing on the integration of cyber operations into conventional Army operations; this was not possible before the command's inception. General Hernandez oversaw the formulation of a series of cyber warfare military occupational specialties (MOSs) for enlisted soldiers and a cyber warfare area of concentration (AOC) for officers and warrant officers. He also oversaw the creation of the first Army cyber doctrine and Army cyber strategic plan, which charted ARCYBER's mission out to the year 2020. The focus for ARCYBER is to defend Army computer networks against accidental damage or intentional infiltration. This mission is essential to continued Army operations, and overall DOD operations in support of the National Security Strategy, because of the Army's strong reliance on computer systems and automation of many major weapon systems.[163]

In 2012, USCYBERCOM directed that the service component cyber commands form a Cyber Mission Force consisting of 133 Cyber Mission Teams, 41 of which would come from the Army. These teams are only now becoming fully active, with an initial operating capacity date of October 1, 2016. The Army chose to divide its share of the Cyber Mission Force so that half of the force would come from the active Army, one quarter would come from the Army Reserve, and one quarter would come from the Army National Guard. The purpose of the Cyber Mission Teams is threefold. First, they defend DOD networks against attacks from adversaries of every kind. Second, they conduct offensive cyber operations in support of conventional forces. Third, they manage the DOD information systems network.[164]

A great deal of effort is under way to integrate cyber operations with conventional operations to create a COP for battlefield commanders. Conventional land operations are already extremely complex, where dozens of different lines of effort from infantry on the ground to aviation support and supply chain logistics must be expertly coordinated in

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[163] Ibid.

[164] United States Army Cyber Command, "The Facts: Cyber Mission Force," United States Army Cyber Command and Second Army, last modified March 2, 2016, accessed November 28, 2016, http://www.arcyber.army.mil/Style%20Library/ARCYBER%20Custom%20Assets/factsheets/ARCYBER%20fact%20sheet%20-%20Cyber%20Mission%20Force%20(2March2016).pdf.

order to achieve desired effects on the battlefield. The added complexity of cyber operations, which can incorporate information operations, psychological operations, electronic warfare, and cyber network warfare exceeds the typical soldier's capabilities and expertise. The Army has developed multiple stand-alone systems to automate various kinetic systems, such as field artillery, mortars, and air defense systems, as well as non-kinetic systems such as human resource management and supply chain management. These systems do not generally exist on the internet, so they are fairly well protected from cyber-attack. On the other hand, the fact that these systems are not inherently integrated magnifies the challenges in maintaining a good COP between multiple different systems and functions on the battlefield. One of ARCYBER's missions involves determining a way to integrate these systems while still protecting them from cyber-attack.[165]

The plans to integrate cyber warfare operations into all aspects of conventional Army operations are reflected in the ARCYBER strategic plan. This plan outlines four primary lines of effort for ARCYBER to achieve its ultimate objective to "conduct effective cyberspace, signal, and electronic warfare operations in the cyber domain in support of Unified Land Operations."[166] The lines of effort all support this objective. First, ARCYBER will transform the existing signal center facilities on Fort Meade, Maryland, Fort Belvoir, Virginia, and Fort Gordon, Georgia into the new ARCYBER headquarters and Center of Excellence. Second, ARCYBER will work to develop new cyber-qualified soldiers and leaders to operate the Army's cyber force structure. Third, ARCYBER will develop and refine cyber doctrine and concepts for the Army. Fourth, and finally, ARCYBER will work to integrate cyber operations into the full spectrum of Army operations, known as Unified Land Operations.[167]

ARCYBER was formed primarily using existing force structures consisting of INSCOM and NETCOM, both of which are headquarters or command type elements,

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[165] Gregory Conti, John Nelson, and David Raymond, "Towards a Cyber Common Operating Picture," United States Military Academy Cyber Research Center, 2013, 5-6.

[166] Stephen G. Fogarty, "United States, Department of Defense, Cyber Center of Excellence, Strategic Plan." Department of the Army, Washington D.C., 2015, 5.

[167] Fogarty, "Cyber COE Strategic Plan," 6.

indicating they are not deployable troop units. Subordinate to INSCOM in the command hierarchy is the 780th Military Intelligence Brigade, consisting of a headquarters and two battalions, the 781st Military Intelligence Battalion and the 782nd Military Intelligence Battalion. The mission of the 780th is to conduct signals intelligence, conduct computer network operations and network defense, assist conventional forces in network defense, and deny adversaries freedom of action in cyberspace.

Subordinate to NETCOM in the command hierarchy is the 1st Information Operations Command, which consists of a headquarters and two battalions, the 1st Information Operations Battalion and the 2nd Information Operations Battalion. The mission of the 1st is to provide information operations field support teams, conduct vulnerability assessments, conduct operational security (OPSEC) assessments, and conduct cyber warfare operations.[168]

In addition to these elements, ARCYBER has as a direct reporting unit known as the Army Cyber Protection Brigade (CPB), which consists of two battalions comprised of multiple Cyber Protection Teams (CPTs). These teams are able to "rapidly evaluate, and act in response to unexpected and dynamic cyber situations, defending the nation in response to hostile action and imminent cyber threats."[169] While the CPB is designed to respond quickly to cyber incidents within Army systems anywhere in the world, and is primarily focused on defensive cyber operations, it also has the capability to disrupt adversary networks in support of conventional operations.[170]

The final arms of ARCYBER's force structure exist within the Army Reserve and Army National Guard. These components have military intelligence and information operations elements that support the missions of the 1st Information Operations

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[168] United States Army Cyber Command, "Fact Sheets," United States Army Cyber Command and Second Army, accessed November 28, 2016, http://www.arcyber.army.mil/Pages/FactSheets.aspx. 780th Military Intelligence Brigade, "Welcome," Army Intelligence and Security Command, accessed November 28, 2016, https://www.inscom.army.mil/msc/780mib/index.html. First Information Operations Command, "Overview of Subordinate Units," Army Network Enterprise Technology Command, accessed November 28, 2016, https://www.1stiocmd.army.mil/Home/subordinateunits.

[169] LandWarNet, "What is CPT," Cyber Protection Brigade, accessed November 28, 2016, https://cpb.army.mil/what-is-cpt.

[170] LandWarNet, "Welcome to the U.S. Army Cyber Protection Brigade," Cyber Protection Brigade, accessed November 28, 2016, https://cpb.army.mil/home.

Command and 780th Military Intelligence Brigade. Also, portions of the CPTs are made up of reserve component soldiers in the Army Reserve and Army National Guard. They are activated to augment active Army CPTs during deployments during high operational tempo (OPTEMPO) periods when the inventory of active Army CPTs has been exhausted or are not ready to deploy on consecutive tours. The bulk of ARCYBER's force structure is stationed at Fort Meade, Fort Belvoir, and Fort Gordon, with the headquarters located at Fort Meade.[171]

ARCYBER faced a significant challenge in gathering enough soldiers to fill positions in the new force structures created in 2010. Prior to the creation of ARCYBER, cyber-related military education was limited to a few specialized positions within the Army Signal School at Fort Gordon. Cyberspace-related education was sparse for officers and enlisted personnel entering the Army, and a system did not exist to train and certify personnel in the myriad of different skill sets required of a cyber operator. Supporters of cyber education in the years leading up to ARCYBER's creation argued for a multi-discipline approach to cyber education, meaning a combination of civilian education through colleges and technical schools, military education (both initial entry and advanced schooling), and information technology certifications through Microsoft, Cisco, and a number of other companies. All agreed that the amount of training required to bring a new soldier from initial entry into the Army to a fully-qualified cyber operator was cost and time prohibitive at best.[172]

This disconnect required the development of an entirely new career path within the Army, which had not been done since the creation of the Special Forces, Psychological Operations, and Civil Affairs branches in the 1970s. This process required an analysis of all of the different existing branches within the Army that had 'pieces' of the cyber mission in order to find a way to consolidate these functions into a new, all-encompassing branch. ARCYBER worked with the Army Human Resources Command (HRC) to develop career tracks and benchmarks for promotion and assignments for

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[171] ARCYBER, "Fact Sheets."

[172] Edward Sobiesk et al., "Cyber Education: A Multi-Level, Multi-Discipline Approach," Report, United States Military Academy Cyber Research Center, 2015, 43.

personnel in the new branch, commencing with lateral transfers of personnel in higher ranks and establishing a method for them to requalify as cyber operators so the new force structure would have qualified senior-grade leaders. This involves a long process, because it requires years for new soldiers entering the Army as cyber operators to grow and move up through the ranks to take on these leadership roles in the future.[173]

The Army is leaning forward with educating officers in cyber operations. An example of this involves the annual Cyber Defense Exercise (CDX) held at the U.S. Military Academy at West Point, which pits cadets from all of the service academies against one another to test their ability to defend computer networks against cyber-attacks. This exercise has been held annually since 2001, but has seen a surge in attention and participation since 2008. Participants in this exercise are preparing to become leaders in the Army's new cyber branch, and cadets will leave West Point to become leaders within ARCYBER. This type of event is an indication of how early in the education of Army soldiers cyber education needs to start in order to have qualified and certified cyber operators in the force when they are needed.[174]

G.   CONCLUSION

This chapter has outlined a possible solution to the shortfalls in Army DSCA capabilities identified in the previous chapters. The DSCA Corps (FA20) can provide the Army with a dedicated group of DSCA professionals, trained and proficient in DSCA operations, and closely tied in with civil authorities at every level of government. While not the only possible solution to the identified shortfalls, this solution may be the most effective way to systematically address these issues effectively over the long term. The next chapter will address implementation of the DSCA Corps.

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[173] Todd Arnold, Rob Harrison, and Gregory Conti, "Towards a Career Path in Cyberspace Operations for Army Officers," Small Wars Journal, last modified August 18, 2014, accessed November 28, 2016, http://smallwarsjournal.com/jrnl/art/towards-a-career-path-in-cyberspace-operations-for-army-officers.

[174] Gregory Conti, and David Raymond, "Preventing a Digital Pearl Harbor," *West Point Magazine*, 2012, 40.

VI. IMPLEMENTATION AND CONCLUSION

A. INTRODUCTION

This chapter will address the challenges with creating a DSCA branch within the Army, including trade-offs with force structure requirements and budgetary limitations. It is predictable that the most significant resistance to this change will be due to funding, which can be in short supply, and that it will require reductions in other force structure to facilitate it effectively. This chapter will show a timeline for implementation, starting with approval and ending will fully functional DSCA Corps units. It will conclude with opportunities for future research, and a summary and conclusions section for the thesis.

B. CHALLENGES AND LIMITATIONS

There are a number of challenges and limitations to the successful implementation of the DSCA Corps (FA20) within the Army. There is an important distinction between a challenge and a limitation. Challenge is defined as, "something needing great mental or physical effort in order to be done successfully, or the situation of facing this kind of effort."[175] Challenges can be overcome through leadership, policies, and regulations. Limitation is defined as, "the act of controlling, or something that controls."[176] Limitations require more significant changes to appropriations or law, such as acts of Congress or Executive Orders. The recommendations in Chapter V represent significant changes to Army DSCA doctrine and regulations as well as changes in federal appropriations; thus it is important to address these challenges and limitations.

1. Challenges

There are three major challenges to the implementation of the DSCA Corps (FA20). First, in order to achieve support from command elements throughout the Army, this change needs to be appropriately publicized and justified across the Army. Second,

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[175] Cambridge Dictionary, "Challenge," Cambridge University Press, accessed July 16, 2017, http://dictionary.cambridge.org/us/dictionary/english/challenge.

[176] Cambridge Dictionary, "Limitation," Cambridge University Press, accessed July 16, 2017, http://dictionary.cambridge.org/us/dictionary/english/limitation.

this change requires a culture shift within the Army that recognizes the importance of the DSCA mission. Third, the unique force structure of the DSCA Corps requires a great deal of coordination between the Active Army, Army Reserve, and Army National Guard that is not normally required.

The most significant challenge facing the implementation of FA20 is to gain the support of the Army's senior leadership and high-ranking commanders, including Title 10 and Title 32. This can be difficult, as was seen when the Goldwater-Nichols Act of 1986 was signed into law. Goldwater-Nichols established the Chairman of the Joint Chiefs of Staff (CJCS) as the military advisor to the President and leader of the JCS, as well as establishing a Vice Chairman position. It also formalized the chain of command from the President, through the SecDef and CJCS, then to the chiefs of each of the services. At that time, assignment to a joint duty position was seen by most military personnel as detrimental to their career. As a result, services provided sub-standard personnel to fill joint billets, which reduced the effectiveness of the joint enterprise as a whole. It was not until after 9/11 that senior leaders in the services began pushing the importance of joint duty assignments within their formations. The DSCA Corps could face the same challenges within the Army without support from senior leaders and commanders.[177]

In addition, a culture shift must occur within the Army towards recognizing the importance of DSCA because of the increasing potential homeland challenges due to weather changes as well as globalizing nature of war. Traditionally, DSCA has been viewed as a secondary mission for Army forces. While it is true that the primary mission of the Army is to conduct combat operations overseas and support the Homeland Defense missions of the DOD, DSCA must be more than an afterthought if the Army is to be successful in this critical function. Some steps have been taken in this regard. The creation of the Weapons of Mass Destruction Civil Support Teams (WMD-CST), CBRNE Enhanced Response Force Packages (CERFP), and Homeland Response Forces (HRF) within the National Guard, all part of the CBRNE Response Enterprise (CRE),

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[177] Nancarrow, "Preparing Military Officers," 24-30.

since 9/11 shows that the Army and the DOD recognize the unique role they play in supporting Homeland Security and providing DSCA. With the exception of the WMD-CSTs, all of the CRE formations are mission assignments to traditional units with different combat missions; new units with dedicated missions were not formed to conduct these missions. Also, the CRE is focused solely on CBRNE Consequence Management, rather than all-hazards emergency response, which limits their support capabilities for the majority of disasters that require DSCA.

Finally, the implementation of the DSCA Corps requires a high level of coordination and integration between Title 10 and Title 32 formations. This type of coordination is common within the Army, but the Active Army, Army Reserve, and Army National Guard remain distinctly separate in every way below the Department of the Army (DA) level. The formations proposed for the DSCA Corps require an integrated chain of command that includes personnel and units from each component of the Army spread across all 54 states and territories. In order for the DSCA Corps to effectively execute the DSCA mission before, during, and after disasters, a high degree of coordination and integration is needed to ensure plans and operations are consistent at every echelon and across the country.

2. Limitations

There are also two significant limitations to the DSCA Corps implementation. First, and most significant, is that the current budget for the Department of the Army would need to be altered and potentially increased to facilitate this change. Second, the Army's force structure needs to be modified to accommodate this change, which requires either a net increase in the size of the force or reductions in other branches and functional areas in order to accommodate.

At this time, the DOD is experiencing consistent annual reductions in its overall budget, which affects each of the services. Implementation of the DSCA Corps will require funding to train personnel and provide new formations with facilities, equipment, and an operating budget. While the budgetary requirements will be less significant than those required to create the Cyber branch in 2010, due to the technological nature of the

Cyber branch, they still represent a net increase in the Army's budget. This would necessitate budgetary reductions for other programs, which may be prohibitive to achieving support from senior leaders in the Army.

Secondly, creation of new DSCA formations will require either an increase in the number of units the Army has been authorized to field by Congress or a reduction in formations from other branches and functional areas. This would put the Army in a position that they would need to reduce their combat power and capabilities in other areas to a small degree in order to facilitate the new DSCA units. This problem would be faced by the Active Army, Army Reserve, and Army National Guard, each of which will have different priorities and requirements competing with this initiative. The personnel requirement is not equally distributed between each component, as illustrated in Table 5. The largest impact is to the National Guard, which would need to collectively provide over 6,000 soldiers to support the new DSCA Corps units. Overall, the Army's personnel requirement is 7,640 soldiers, which is roughly the size of two infantry brigade combat teams.

Table 5.   DSCA Corps Personnel Requirements

Component	Unit	Number of Units	Personnel Per Unit	Total Personnel
Active Army	DSCA Group	2	180	360
Army Reserve	DSCA Battalion	10	80	800
National Guard	DSCA Company	54	120	6,480
Total Army	**DSCA Corps**	**66**	**-**	**7,640**

C.   TRANSITION

Based on the example set by the creation of the Cyber Branch, which began in 2010 and culminated in 2016, we can predict the steps that must be taken and the time that will be needed to bring the DSCA Corps from ideation to fruition within the Army force structure. There are differences between the Cyber Branch and the DSCA Functional Area. The fact that Cyber is a branch requires a more robust proponent and overhead than a functional area requires. This required more time and money than are

needed for the DSCA Corps implementation. The Cyber Branch force structure was created by realigning existing units, where the DSCA Corps will require standing up new units. This will require more time and potentially more money for the DSCA Corps than was required for the Cyber Branch. This transition to a fully functional DSCA Corps can best be accomplished in three phases: creation, fielding, and integration.

1. Creation

This first phase involved the creation of FA20 and the DSCA Corps units. For FA20, the POI for qualifying personnel in this new career field needs to be created and tested for functionality. FA20 information needs to be incorporated into existing career management regulations and the Army's personnel management automation systems. Personnel already meeting the requirements for qualification can be 'grandfathered' into FA20. The new DSCA Corps units will be created within the Army's force management models and placed at various installations as outlined in Chapter V. The Army will create Tables of Distribution and Allowances (TDA) to begin assigning personnel to the new units. Army DSCA regulations and manuals will be updated to incorporate the DSCA Corps models into existing Army DSCA doctrine. At the end of this phase, all administrative processes to facilitate the creation of the FA20 functional area and the DSCA Corps units will be complete.

2. Fielding

In this phase, personnel will be assigned to the new DSCA Corps units. Once personnel are assigned, they can attend FA20 qualification courses to become qualified to perform their new duties. Units will become operational at their assigned facilities and begin interacting with their new command structures under the guidance and direction of ARNORTH. Required facility improvements or modifications will be done as needed and each unit will be fielded equipment as dictated by the unit TDAs. Equipment such as computers, radios, and vehicles will take time to be fully fielded. At the end of this phase, all DSCA Corps units will be fully manned and equipped and all personnel will be fully trained as FA20 soldiers.

3.   Integration

In this phase, the DSCA Corps units will begin operations according to their mission and priorities assigned to them by ARNORTH. They will begin integrating with federal, regional, state, and local civil authorities to conduct liaison and build relationships with key agencies and individuals. This phase is ongoing as the DSCA Corps becomes the lead Army element for all DSCA missions.

D.   SUMMARY AND CONCLUSION

1.   Summary of Findings

This thesis illustrated that there are several significant shortfalls in the way the Army and the DOD provides DSCA in response to major or catastrophic disasters.   In Chapter III, the description of DOD's response during Hurricane Sandy and its involvement in the Cascadia Rising 2016 earthquake response exercise highlighted the issues that need to be resolved. The main shortfalls identified in Chapter IV are as follows:

1.   Civil-Military Liaison
2.   Pre-Disaster Relationship Building
3.   Soldier Education and Training
4.   Knowledge and Expertise
5.   Planning
6.   Anticipation of Needs

The Army and DOD have made efforts since Hurricane Katrina to correct these shortfalls. Various entities throughout the Army, especially in the National Guard, have made efforts to improve integration and coordination between military and civilian agencies. Most of these efforts have been at the federal level between USNORTHCOM, ARNORTH, NGB, and partnering civilian agencies such as FEMA and the FBI. These efforts have had limited success in correcting the functional shortfalls experienced during real-world disaster response situations. A major change is needed to correct these problems once and for all.

2.   Recent Developments

During the process of research and preparation of this thesis, a series of major hurricanes struck the southeast United States. Hurricanes Harvey, Irma, and Maria made landfall at various points from Texas to Florida beginning in August 2017 and continuing through late September 2017. At the time of this writing, there is little publicly-available information regarding successes or shortfalls with the military responses to these three hurricanes. There are dozens of news articles that discuss the work the military is doing to support hurricane relief efforts, such as search and rescue, delivery of food and water, and assistance with flood mitigation. These are all great stories that show how effective DSCA can be, but they do not speak to the topics addressed in this thesis.

There is evidence that the DOD has taken the hard lessons from the Hurricane Sandy response to heart, though. Chapter III of this thesis discusses the Hurricane Sandy response, identifying several shortfalls. One of these shortfalls was a presidential directive from President Obama, given in a speech at the time, in which he stated, "We're not going to tolerate any red tape. We're not going to tolerate any bureaucracy."[178] While well-intentioned, this directive resulted in commands from the DOD to USNORTHCOM and ultimately to field commanders to, "Get missions; Do not wait for mission assignment paperwork… When you get a mission: execute. Clean up paperwork later."[179]   The confusion that resulted in the hurricane response was clear, especially when a Marine Expeditionary Unit landed on Manhattan Island without prior request or authorization. The story is different with the recent responses to Harvey, Irma, and Maria. On September 1, 2017, in heat of the response to Hurricane Harvey, USNORTHCOM Commander General Lori Robinson relayed a directive from SecDef James Mattis regarding the military response. Robinson stated, "He made the comment to me: 'Lori, Texas gets everything they need, and we'll get it there as fast as we can.'"[180]   This is a

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[178] Burke and McNeil, "Toward a Unified Military Response," 33.

[179] Ibid., 35.

[180] Cheryl Pellerin, "Northcom Chief Relays Mattis Message: 'Texas Gets Everything They Need,'" Defense Media Activity, last modified September 2, 2017, accessed September 22, 2017, https://www.army.mil/article/193324/ northcom_chief_relays_mattis_message_texas_gets_everything_they_need.

departure from the high-level directives seen in the Hurricane Sandy response five years earlier, when the President and senior DOD officials encouraged field commanders to ignore established processes in the interest of speed of response, and at the expense of a coordinated response. Mattis states that the state of Texas will receive any support they need from the DOD, implying that Texas must tell the DOD what it needs before the resources will come at the greatest speed possible.

In the coming months, more information will come to light that will show whether or not the DOD and the Army made any improvements to their DSCA processes based on lessons learned from the Hurricane Sandy response. The responses to both Hurricane Harvey and Hurricane Irma are on scale with Hurricanes Katrina and Sandy. Hurricane Harvey saw the activation and employment of over 19,000 National Guardsmen and over 6,300 Title 10 personnel.[181] Hurricane Irma saw the activation and employment of over 13,000 National Guardsmen and over 4,500 Title 10 personnel.[182] At the time of this writing, the DOD is shifting resources from the Hurricane Irma response to respond to Hurricane Maria in Puerto Rico and the Virgin Islands; the total numbers of military personnel involved is unknown.[183] In comparison, the total military response to Hurricane Katrina in 2005 was over 50,000 National Guardsmen and over 20,000 Title 10 personnel. While these recent hurricane responses have not yet reached this level, they

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[181] Federal Emergency Management Agency, "Coordinated Response to Hurricane Harvey Continues: Federal Efforts Continue to Support Survivors with Recovery and Rebuilding," Department of Homeland Security, last modified September 5, 2017, accessed September 22, 2017, https://www.fema.gov/news-release/2017/09/05/coordinated-response-hurricane-harvey-continues-federal-efforts-continue.

[182] Federal Emergency Management Agency, "FEMA Officials and Federal Family Supporting Local Response to Hurricane Irma," Department of Homeland Security, last modified September 12, 2017, accessed September 22, 2017, https://www.fema.gov/news-release/2017/09/12/fema-officials-and-federal-family-supporting-local-response-hurricane-irma.

[183] Federal Emergency Management Agency, "Hurricane Maria Response and Relief Operations Underway," Department of Homeland Security, last modified September 21, 2017, accessed September 22, 2017, https://www.fema.gov/news-release/2017/09/21/hurricane-maria-response-and-relief-operations-underway.

very easily could due to the expected long duration of recovery efforts that may require military support.[184]

3.   Conclusion and Recommendations

This chapter outlines the importance and a plan for creating a DSCA Corps (FA20) within the Army aimed at correcting the identified shortfalls. The DSCA Corps would create a set of units filled with DSCA specialists who can be the lead element in the Army for all DSCA missions. These units would be responsible for conducting liaison and relationship building with civilian agencies at every level of government, from federal to local. They would integrate into the planning processed for civilian agencies with the goal of anticipating their needs and facilitating the rapid deployment of Title 32 and Title 10 forces during a disaster. These soldiers would also serve as key facilitators of communication between civilian agencies and traditional Army formations, ensuring cohesive and integrated operations during any disaster response.

A dedicated DSCA Corps is not the only potential solution to the shortfalls identified in this thesis. Other scholarly works from the Naval Postgraduate School, Army War College, and Army Command and General Staff College have suggested that these shortfalls can be corrected by improving or increasing the available DSCA training for Army personnel. Still others have address problems and gaps in DSCA laws, doctrine, policies, and regulations that, if changed, could address the identified shortfalls. While beneficial in advancing the study and practice of DSCA, these solutions do not go far enough to address the core of the problems identified in this the previous chapters. The constant turnover of personnel within the Army and within the civilian agencies with which the Army works for DSCA missions results in a constant need to train new people. By creating a core of DSCA SMEs, such as the DSCA Corps, the Army can solve this problem and the other problems identified in this thesis.

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[184] Scott Maucione, "Military Response to Hurricane Harvey Could Reach Katrina Proportions," Federal News Radio, last modified August 29, 2017, accessed September 22, 2017, https://federalnewsradio.com/defense/2017/08/military-response-to-hurricane-harvey-could-reach-katrina-proportions.

The DSCA Corps concept needs to be implemented immediately within the Army. In spite of the budgetary restrictions the Army currently faces and the challenges presented by this change, our responsibility as soldiers and Americans is to do all we can to provide life-saving assistance to civilians during their time of greatest need. Failing to do everything in our power to ensure we can be readily and rapidly deployed where we are needed is counter to the Army values and our mission to defend the United States against all enemies, both foreign *and domestic*.

4.   Future Research

There are two main areas of research that will further the discussion of improvements to the Army's DSCA capabilities. First is research into the DSCA capabilities of the Army's sister services, the Navy, Air Force, and Marine Corps. Each of the services has been given leeway by the DOD to address their DSCA requirements as they deem most appropriate. A comparison of the DSCA capabilities of the Army and its sister services may show where the Army is ahead of or behind the other services in the realm of DSCA. Second is research into the DSCA capabilities of allied foreign militaries such as the United Kingdom, Australia, Israel, and Japan. Every nation has different laws that govern the use of armed forces for disaster response activities within its borders. While many of the practices that these nations engage in may not be transferrable to the U.S. due to differences in federal and state laws, there are likely to be practices that can be imported to the U.S. to make the Army more effective during DSCA missions.

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