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NATIONAL DEFENSE UNIVERSITY

JOINT FORCES STAFF COLLEGE

JOINT ADVANCED WARFIGHTING SCHOOL



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SIXTY YEARS OF DISASTER RESEARCH IN ORDER TO REALISTICALLY
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A paper submitted to the Faculty of the Joint Advanced Warfighting School in partial satisfaction of the requirements of a Master of Science Degree in Joint Campaign Planning and Strategy. The contents of this paper reflect my own personal views and are not necessarily endorsed by the Joint Forces Staff College or the Department of Defense.

This paper is entirely my own work except as documented in footnotes.

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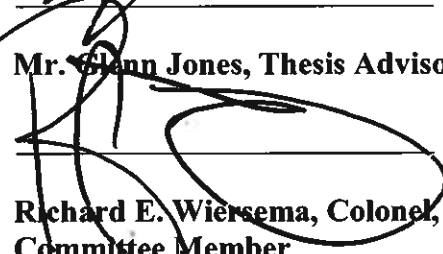
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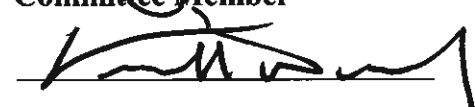
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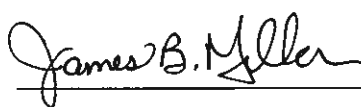
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ABSTRACT

The U.S. Military, chief among them the U.S. Army and National Guard, has gained an enormous amount of civil support experience since the birth of the United States; however, in supporting Joint and Service publications there is little reference to the relevant disaster research studies to either support or shape this experience. This study investigates present U.S. Defense Support of Civil Authorities doctrine and related disaster research, supported by 60 years of social science and other related ethical studies, in order to offer recommendations for feasible ways to coalesce the two methodologies. This study focuses on the loosely defined U.S. Government lexicon of vague and overlapping terms that contrast with social science definitions. It then discusses disaster relevant philosophy and ethics followed by a discussion of the disaster response process and the information gaps between myth and reality.

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DEDICATION

To my wife and two daughters who have had to endure without “Daddy” for numerous deployments and long hours. I love you.

To my mother, whose spirit will always be with me.

To my friends who have not come home...you are greatly missed.

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CHAPTER 1: THE INTRODUCTION

Conflicting terminology, lack of philosophical and ethical grounding, and prevalence of myths regarding human behavior during disasters compromise Defense Support of Civil Activities (DSCA): Department of Defense doctrine should incorporate 60 years of disaster research in order to realistically plan and effectively execute disaster response. The exclusion of sixty years of credible disaster research and philosophical based decision-making approaches from DSCA doctrine impedes efficient disaster planning and effective execution of disaster response. The U.S. Department of Defense should include the results of these decades of disaster research and philosophical ideas to more realistically prepare Service members and leaders for actual disaster conditions.

DSCA is the current method that the United States Military uses to support civil authorities during disaster relief operations. It has many codes, regulations, and directives governing its use; each with an emphasis on prioritizing civilian leadership and a minimization of military influence.¹ Joint and Service doctrinal manuals discuss DSCA through a civil-military integration perspective that focuses on process, aspects of command and control, legal ramifications, and rules of force. These manuals build upon decades of practical experience but they do not properly address the fundamental aspect of a crisis or disaster that is the human experience. There is a vast body of empirical research, developed since the 1950s, that describes this aspect of the human experience through the probability of human behavior. The purpose of this thesis is to link the decades of disaster research to the doctrinal processes that guide DSCA. This thesis

¹ Some of the policies, directives, and laws that govern DSCA are DODD 3025.18, the Insurrection Act, Homeland Security Act, Economy Act, Stafford Act, and Homeland Security Presidential Directive – 5.

approaches the subject matter in the following manner: it clarifies terminology; it discusses philosophy and its influence upon disaster preparation and response; it separates common disaster related myths from reality; it binds the gaps and exclusions of social science with doctrine; and it makes recommendations for rewriting particular portions of U.S. doctrinal publications.

Background

The premise of civil vice military leadership during crises began in the formative years of the new United States when, during November 1794, President George Washington ordered a military detachment to western Pennsylvania in order to curtail the violence raging against a government excise tax on whiskey. Known as the Whiskey Rebellion, this was one of the nation's first threats to federal authority. The President, concerned about setting a precedent, ordered the military to support the local civil authorities and not usurp civil control. Washington's orders to Henry Lee, the militia commander, was to give "scrupulous regard to the rights of persons and property," and "the duties of the army are confined to the attacking and subduing of armed opponents of the laws, and to the supporting and aiding of the civil officers in the execution of their function."²

All of the appropriate government and military manuals dealing with DSCA follow the premise set by President Washington; the military supports civil leadership during crises.³ It is a mindset spanning the chapters of Joint Publication 3-28 (JP 3-28) and U.S. Army Field Manual 3-28 (FM 3-28) where failure to follow the Posse Comitatus

² Wythe Holt, "The Whiskey Rebellion of 1794: A Democratic Working-Class Insurrection," (2004), 64, <http://www.uga.edu/colonialseminar/pastevents.htm>, (accessed February 15, 2013).

³ Ibid. Holt argues that the intent of the Federal Government was to suppress the rebellion through intimidation as well as awe them with a strong governmental resolve.

Act, Insurrection Act, Economy Act, or Stafford Act can lead to legal ramifications for a Service member. Aside from these legal ramifications, great attention is devoted to the difference between federal and state forces as well as the difference between state and federal governance during crises. These manuals articulate the legal and executive concerns very well and do an excellent job preparing a Service member for much of what they might experience with regard to civil-military organizational integration. Unfortunately, the manuals do not prepare the Service member for the reality of human behavior that they are most likely to experience as they execute disaster support. In some ways, the manuals actually refute decades of disaster research.

This thesis merges the concepts of disaster research over the past 60 years with the fundamentals of DSCA. In Chapter 2, it compares the lexicon of the U.S. Government⁴ to disaster research. It is no surprise that the differences between the two approaches are significant. The terminology metrics employed by social scientists rely on the enormous body of knowledge associated with disaster research and as a result, they have developed discrete ways to differentiate emergencies, crises, disasters, and catastrophes. The U.S. Government, on the other hand, uses a different criterion to form their definitions; it must, due to the scope and complexity that these definitions must meet. The thesis compares the two methods and recommends a way to merge them that makes sense.

⁴ There is almost no common U.S. Government approach to any term or topic, with a few exceptions. DOD joint publications and U.S. Army Field Manuals only apply to DOD and the U.S. Army, respectively. The U.S. Government is composed of dozens of Federal Departments and agencies (D/As). Each has its own authorities, capabilities, and associated lexicon. The U.S. Government does not do anything as one unified organization but individual D/As can. Therefore, for the sake of this thesis, the term U.S. Government describes a perspective from the relevant departments and agencies concerned with DSCA and related terminology.

Chapter 3 discusses disaster philosophy. It delves into some of the situations that Service members may contend with while they are executing disaster support operations and offers some philosophical principles to guide them to make the best decisions. One of the dilemmas associated with DSCA is when Service members execute the best-laid plans of local, state, and federal governments. When these plans are inadequate, a familiarity with philosophical principles can guide Service members to the best possible solution. This thesis also posits that a better understanding of philosophy can guide Service members in the absence of orders or communication from senior leadership.

Chapter 4 compares the myths and realities of human behavior during disaster. It describes six typical myths such as panic, looting, and role abandonment. Realities of human behavior follow, illustrating that human behavior tends toward action vice shock, chaos, and social paralysis. The chapter relies upon the decades of work led by Dr. Enrico L. Quarantelli and the University of Delaware's Disaster Research Center.

Chapter 5 describes the myriads of legal challenges that Service members face during DSCA operations. The myriad of these constraints pose challenges to the interaction of civil and military members; therefore, Service members must understand when and where they can legally initiate action. It details those legal issues surrounding military support to civil agencies and provides context for what a Service member may face. The chapter also describes the fundamentals of DSCA and the processes with which Service members contend. It describes in detail the military support of civilian agencies and the National Response Framework. The focus of this chapter is to inform the reader of the process that local, state, and federal agencies must be prepared to execute in the case of crises.

The gap between disaster research and DSCA is the subject of Chapter 6. Overall, JP 3-28 and FM 3-28, arguably the two most important manuals regarding DSCA, are sound and logically organized but they do not cover any of the realities of human behavior during disaster or the philosophy that guides decision-making. This chapter illustrates the discrepancies of present U.S. DSCA doctrine in relation to disaster research studies. For example, FM 3-28 actually conflicts with disaster research findings in its description of community response immediately after a disaster.

Recommendations are the purpose of Chapter 7. The intent is to merge as closely as possible the lessons learned from leading disaster research theory and philosophy with U.S. military DSCA doctrine. The focus is on writing U.S. government definitions that more closely match the social science definitions, incorporating disaster philosophy guidelines, and describing disaster myths versus reality.

Problem

When writing this thesis it became apparent that there is a gap in knowledge of DSCA doctrine regarding the actual results of disaster research. Some of the present doctrine is naïve when compared to studies written by the DRC and prominent scholars in the field such as Dr. Enrico L. Quarantelli. This thesis merges the relevant topics of disaster research with those aspects of DSCA doctrine to promulgate a more comprehensive doctrinal approach to the instruction and preparation of U.S. Service members.

Purpose and Significance

Empirical research can have a profound effect on doctrine; so profound that the research validates new concepts or invalidates those that have been entrenched for years.

It is a rare occasion where empirical science can influence doctrine; therefore, the purpose of this thesis merges the immense body of knowledge gained from 60 years of disaster research with the relevant aspects of U.S. doctrine. The merger will result in better training, better preparation, and a greater understanding of the issues that a Service member may face when executing disaster support operations.

CHAPTER 2: THE DEFINITIONS

During the 1992 Los Angeles riots "...two Compton police officers responded to a domestic dispute, accompanied by Marines. They had just gone up to the door when two shotgun birdshot rounds were fired through the door, hitting the officers. One yelled "cover me!" to the Marines, who then laid down a heavy base of fire...The police officer had not meant "shoot" when he yelled "cover me" to the Marines. The term "cover me" meant...point your weapons and be prepared to respond if necessary. However, the Marines responded instantly in the precise way they had been trained, where "cover me" means "provide me with cover using firepower."¹

Is it an emergency or a crisis?

Emergency, crisis, disaster, and catastrophe are discernible terms; however, their definitions can create ambiguity. As a result, their use can convey different meanings across a wide spectrum of organizations and people. These differences are largely based on perspective and scale. Where perspective is concerned, take the following example. A husband may regard the lack of groceries in the pantry as a crisis. The fact that he has to go to the grocery store has become an emergency. The poor behavior of his children in the store, while he shops, is a disaster. He summarizes the whole event to be a catastrophe. When he tells his wife of the day's events, she regards it as a typical experience in the life of a parent and disregards the subjective views that her husband attributed to the sequence of events. The differences in personal involvement and context in the terminology offers a different perspective between husband and wife. With regard to scale, the terms imply differences in magnitude. One could conclude that a catastrophe is larger than a disaster; however, a catastrophe for a city might be a disaster for the state. The combination of the perspective and scale has an impact on the use of these terms.

¹ James D. Delk, *Fires and Furies: The L.A. Riots* (Palm Springs, CA: ETC Publications, 1995), 221. Over 200 rounds were fired by the Marines during this event. Fortunately, no one in the house was injured.

Our uses of the terms in the public arena provide an example of this ambiguity. Governors request assistance from the federal government in the form of disaster declarations. In response, the United States Government sends the Federal Emergency Management Agency (FEMA) to provide support. FEMA representatives then work with local emergency planners in an incident response command center. Meanwhile, the governor activates the National Guard in order to provide disaster response. Throughout, local and national media claim the results to be catastrophic and disastrous.

Aside from public use and variations across different organizations, even terminology within the same organization can be convoluted and ambiguous. FEMA's website describes how to plan, prepare, and mitigate disasters, yet its mission statement deals with hazards.

FEMA's mission is to support our citizens and first responders to ensure that as a nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards.²

Social science definitions vs. United States Government definitions

Each term requires a distinction in methods of response, amount of resources, and types of resources. As previously described, the term emergency carries a much different meaning to a first responder, city council, or a government than does a disaster; therefore, it is critical to ensure that the terms are discernible. Sixty years of social research, largely led by Dr. Enrico L. Quarantelli and the Disaster Research Council (DRC), in

² Federal Emergency Management Activity, "About FEMA," , <http://www.fema.gov/about-fema> (accessed October 1, 2012).

cooperation with better efforts by the U.S. Government, have provided increased standardization but there exist significant discrepancies.³

Social Science Definitions

The prevailing thought among social scientists is that everyday accidents and “disasters” differ; they exhibit qualitative and quantitative differences.⁴ Dr. Quarantelli quantifies these differences into four elements of organization behavior that describe the nature of support; level of independence; standards of performance; interface of private and public sectors.⁵ This thesis posits that these elements of organization behavior are useful methods to discern emergencies, crises, disasters, and catastrophes.

Emergencies have the least effect in comparison to crises, disasters, and catastrophes. They may happen randomly or unexpectedly but their frequency and impact when measured on a grander scale is routine; therefore, their effects are relatively predictable and manageable. Because of their nature, emergencies do not exceed the response parameters of community organizations. An emergency can be explained in the following manner, using the four elements of organization behavior.⁶

- 1) **Nature of support:** Emergencies are largely supported by individual organizations where rehearsals and standing operating procedures (SOPs) suffice for preparation and readiness.⁷

³ Enrico L. Quarantelli, *A Half Century of Social Science Disaster Research: Selected Major Findings and their Applicability* (Newark, DE: Disaster Research Center, University of Delaware, 2003), 2.

⁴ Enrico L. Quarantelli, *Emergencies, Disaster and Catastrophes are Different Phenomena* (Newark, DE: Disaster Research Center, University of Delaware, 2000), 1.

⁵ Ibid. Quarantelli’s research only differentiates emergencies from disasters, and disasters from catastrophes. This thesis summarizes his position into four generic elements that can explain emergencies and crises in a similar fashion.

⁶ Ibid.

⁷ Ibid.

- 2) **Level of independence:** Emergencies do not require a loss of organizational independence due to their size, scope, and effect on a community or organization.⁸
- 3) **Standards of performance:** Emergencies do not cause changes in an organization's standard of performance. SOPs and other similar methods are sufficient for the scope and complexity inherent in an emergency.⁹
- 4) **Interface of private and public sectors:** Emergencies do not require the convergence of private and public organizations. Public organizations such as first responders can deal with their effects through routine methods and mobilization of resources.¹⁰

In contrast, a crisis has certain features that set it apart from an emergency.

- 1) **Crises present a threat:** Crises possess dangers and hazards beyond the scope and scale of an emergency. As a result, there is some type of perceived threat against life and/or property beyond routine considerations.¹¹
- 2) **Crises arise unexpectedly:** Crises are unforeseen and abrupt. Their very nature implies a sense of unpredictability.¹²
- 3) **Crises require action:** During a crisis, there is a sense of urgency or a belief that if left alone there will be far greater, negative consequences and a departure from the current norm. Based on this assumption, recovery from a

⁸ Ibid.

⁹ Ibid.

¹⁰ Ibid.

¹¹ Enrico L. Quarantelli, "Disasters are Different, therefore Planning for and Managing them Requires Innovative as Well as Traditional Behaviors," [paper presented as one of the keynote addresses at Emergency '95 at the University of Lancaster, Great Britain, July 3, 1995], 3.

¹² Ibid.

crisis constitutes a return to state of normalcy (if not a new normalcy) or a return to routine behavior.¹³

- 4) **Crises require different behaviors:** Crises require different training, planning, operations, and organizational activities. In a crisis, there are not only differences from emergencies in the degree of behaviors but also in the kind of behaviors.¹⁴

Abnormal circumstances differentiate crises from emergencies. Arguably, the largest difference between crises and emergencies is the requirement for different behaviors. This difference defines the inherent nature of crises; they are not part of the norm and behavioral changes must result to effectively deal with them. Disasters and catastrophes also include these same aspects of crises; therefore, consider them as individual subsets.

The lowest category of a crisis is a disaster. Routine methods and practices are sufficient for an emergency but a disaster requires different responses within the four elements of organization behavior that elevate it into a crisis category.¹⁵

- 1) **Nature of support:** Disasters require resources beyond the capability of one organization. The inherent nature of disasters also requires cooperation between organizations that are largely unfamiliar with each other.¹⁶ As an example, during the response to the September 11th, 2001 attack on the Pentagon there was an enormous amount of responders. They included 30

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Quarantelli, Emergencies, Disaster and Catastrophes are Different Phenomena, 1-2.

¹⁶ Ibid., 1.

local, state, and federal law enforcement agencies, four FEMA urban search and rescue teams, and 20 health safety and environmental groups.¹⁷

- 2) **Level of independence:** Disasters require that organizations lose a part of their autonomy and freedom of action. In the case of a disaster, an organization may have to cooperate with other organizations or entities in such manners that did not exist in normal routines. The conditions of a disaster may require that an organization submit to some form of monitoring or levels of accountability that did not previously exist¹⁸
- 3) **Standards of performance:** Disasters will require a change in organizational norms. The increase in complexity of a disaster over an emergency will force organizations to respond differently. As a result, the organization will set a new norm for performance.¹⁹
- 4) **Interface of private and public sectors:** Disasters demand different mobilization of resources for the common good. Resources will not follow ordinary procurement methods. Goods may be granted voluntarily or they may be commandeered.²⁰ There will be a level of cooperation between public and private organizations that surpass periods of normalcy.

Similar criteria differentiate catastrophes from disasters. As the second category of a crisis, catastrophes involve more destruction and deviation from the original norm. Their effects are listed as follows:

¹⁷ Pamela Varney, *The 9/11 Pentagon Emergency*, ed. Arnold Howitt and Herman Leonard (Washington DC: CQ Press, 2009), 236.

¹⁸ Quarantelli, *Emergencies, Disaster and Catastrophes are Different Phenomena*, 1.

¹⁹ Ibid.

²⁰ Ibid.

- 1) **Nature of support:** Catastrophes heavily affect the majority of the community. Damage is a relative assessment compared against all structures within the defined community. During Hurricane Hugo more than 90% of all homes in St. Croix in the Virgin Islands were destroyed. The situation in St. Croix prevented displaced victims from relocating with family or friends since such a high number of them also lost their homes. Catastrophes also affect the homes of and organizational structures of first responders making it harder if not impossible for fire, police, and medical services to provide support. The scale of a catastrophe places a disproportionately large population in a situation where it cannot adequately relocate or respond thereby overwhelming regional capabilities.²¹
- 2) **Level of independence:** Catastrophes prevent local officials from taking their usual work roles. The effects of a catastrophe are severe enough that local officials cannot assume their normal responsibilities; this inability often lasts into the recovery period. The catastrophe may also have caused fatalities among the local officials. In such cases, those outside of the affected community may fill leadership roles.²² Because of the greater damage created by catastrophes communities have to seek support beyond even what a disaster would require.
- 3) **Standards of performance:** Catastrophes interrupt the majority of community functions. Community facilities for work, recreation, worship, and education are completely closed. The sharp and simultaneous nature of a

²¹ Ibid., 2.

²² Ibid.

catastrophe prevents water, electricity, transportation, and many forms of communication services from operating across the community. In contrast, disasters only affect a community on a smaller scale and still allow other aspects of daily life to occur.²³ Different performance levels and standards are required to deal with the vast interruption of community functions.

4) Interface of private and public sectors: Catastrophes prohibit help from neighboring communities. Catastrophes affect multiple communities across a region. A disaster is the focal point of converging response services that can come from other parts of the community or from a neighboring community. In a catastrophe, the large scale of the event prevents this method of support; therefore, a community will have to prioritize the response effort within its jurisdiction as well as compete with other communities for aid.²⁴ The interface of public and private organizations will most likely happen at a national level.

The overall difference between crises and emergencies is the interruption and disruption of routines in social life. To deal with this disruption, crises require different methods of response and behaviors. Crises can cause major disruptive effects of normal behavior along social, psychological, economic, religious, symbolic, and political lines. They do not have to cause the loss of life or destruction of property; a case in point is the series of events surrounding the Three Mile Island nuclear power plant. No one died or suffered injuries during the incident and the plant only suffered relatively minimal

²³ Ibid, 3.

²⁴ Ibid, 4.

damage but the event caused a crisis response. Years later, many in the public still regard it as a disaster.²⁵

United States Government Definitions

Quarantelli's paper describes discernible organization behavior to differentiate emergencies, crises, disasters, and catastrophes from each other; however, the U.S. Government uses a completely different metric. In contrast, the U.S. Government uses standardized definitions to explain these terms across a wide spectrum of requirements. It must do so to explain particular cases based upon their application in a particular, national context. For the U.S. Government to state that it has an emergency may be too vague and does not codify the vast nature of situations with which it must contend; therefore, the definition must take one of the many forms that a national perspective requires. As a result, the U.S. Government does not use the same definition standards for an emergency as explained by Quarantelli. Instead, Joint Publication 1-02: Department of Defense Dictionary of Military and Associated Terms (JP 1-02) divides an emergency into four different types of emergency categories: national emergency; civil emergency; defense emergency; domestic emergency.²⁶

Because of the vast differences in scope between U.S. Government agencies and disaster research science it is difficult to find congruence or even some commonality in the use of emergency, crisis, disaster, or catastrophe. The best place to start that shares the closest terminology to the social science definition of emergency is in the Robert T.

²⁵ Quarantelli, "Disasters are Different", 11-12.

²⁶ U.S. Joint Chiefs of Staff, *Department of Defense Dictionary of Military and Associated Terms* Joint Publication 1-02 (Washington DC: Joint Chiefs of Staff, November 8 2010 As Amended Through April 15 2013), 87-169.

Stafford Disaster Relief and Emergency Assistance Act, as amended, and Related

Authorities. The Stafford Act defines an emergency as:

any occasion or instance for which, in the determination of the President, Federal assistance is needed to supplement State and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United States.²⁷

In this definition, the Stafford Act describes an emergency using completely different methodology than social science. This piece of legislation frames the definition to facilitate the delivery of Federal assistance to State and local governments due to a perceived threat. The magnitude of that threat, as the definition implies, is severe enough to invoke the term catastrophe; therefore, action is required to mitigate or avert a subsequent catastrophe and its effects. The Stafford Act offers a perspective of an emergency that is larger in scope and context than the one offered by Quarantelli. The definition refers to three of the organization behaviors (nature of support, level of independence, and interface of private and public sectors) but there are no references for a change to the standards of performance.

The fact that the Stafford Act definition uses a catastrophe as a component of the definition for an emergency creates ambiguity. Because of these differences, Federal, State, and local agencies may use the same terms in a different way causing confusion in the interaction between public and private organizations.

JP 1-02 complicates matters even further by using the exact same wording to define a civil emergency.²⁸ Public and private organizations require accurate and precise

²⁷ *Robert T. Stafford Disaster Relief and Emergency Assistance Act*, Public Law 93-288, as amended, 42 U.S.Code 5121-52072 and Related Authorities.

²⁸ U.S. Joint Chiefs of Staff, *Department of Defense Dictionary of Military and Associated Terms*, 87.

definitions; therefore, redundant definitions and other ambiguities can cause problems. They may be insignificant creating only minor setbacks during routine, administrative tasks but the implications may be far worse during major events where clarity is imperative.

The U.S. Government almost makes use of emergency, catastrophe, and disaster synonymously. The interchangeable nature of the terms means that they intersect many other definitions and publications. If the definition associated with one term is neither accurate nor precise, then the likelihood that it will create more ambiguity increases as it spans other definitions. The JP 1-02 definition of domestic emergencies serves the following example:

emergencies affecting the public welfare and occurring within the 50 states, District of Columbia, Commonwealth of Puerto Rico, U.S. possessions and territories, or any political subdivision thereof, as a result of enemy attack, insurrection, civil disturbance, earthquake, fire, flood, or other public disasters or equivalent emergencies that endanger life and property or disrupt the usual process of government. Domestic emergencies include civil defense emergencies, civil disturbances, major disasters, and natural disasters.²⁹

First, the JP 1-02 definition for domestic emergencies departs at the outset from Quarantelli's definition of an emergency. Instead, it follows three of the four organization behaviors of a crisis. It defines a threat, implies that the event was unexpected, and that a different set of behaviors are required due to the disruption of the usual process of government. Second, it confuses the reader by using the plural form of emergency. This definition begins with a term that is neither accurately nor precisely

²⁹ Ibid., 169.

defined anywhere else.³⁰ Third, the inclusion of civil defense emergencies and civil disturbances, as well as major disasters and natural disasters, implies a relationship to each other but unfortunately, that relationship is not described. If one were to look-up major disaster or civil defense emergency one would find that both terms would refer to the original definition for domestic emergencies. Thus, this wording serves three different terms and closely relates to two others thus creating greater ambiguity and confusion.³¹

Definitions and terms are not only interchanged across government publications, such as the case with emergency and civil emergency, they are also interchanged within the same publications. As stated previously, this interchangeability leads to greater confusion; therefore, U.S. Government definition methodology of an emergency lacks the clarity and discernible manner in the social science methodology that Quarantelli describes.

U.S. Government use of the term disaster fare no better. As with emergency, there is no overall definition for disaster but there are numerous definitions for different disaster categories. Aside from the previously mentioned example of major disasters, JP 1-02 has definitions for natural disaster, foreign disaster, and foreign disaster relief. JP 1-02 also refers to but never defines the terms public disaster, manmade disaster, and human-made disaster.³²

³⁰ No definition for emergency or emergencies was found in any other government document during the writing of this thesis.

³¹ Ibid., 87, 321.

³² Ibid. Because of the nature of their use in JP 1-02 the terms are superfluous and may not require a definition or acknowledgement.

JP 1-02 defines a natural disaster as “an emergency situation posing significant danger to life and property that result from a natural cause.”³³ The definition is succinct but its use of the term emergency once again mixes different categorical references. In this context, a natural disaster is a type of emergency not a type of disaster that the term, itself, implies.

For further comparison of disaster terminology, JP 1-02 defines a foreign disaster using a different metric. It is:

An act of nature (such as a flood, drought, fire, hurricane, earthquake, volcanic eruption, or epidemic), or an act of man (such as a riot, violence, civil strife, explosion, fire, or epidemic), which is or threatens to be of sufficient severity and magnitude to warrant United States foreign disaster relief to a foreign country, foreign persons, or to an intergovernmental organization.³⁴

The definition does not mix the terms disaster and emergency; therefore, in this case it does a reliably good job describing a foreign disaster as an act, either natural or manmade, that may require U.S. support in the form of disaster relief. It could do better by including the four organization behaviors described by Quarantelli but the fact that it does not confuse terms is significant.

The foreign disaster definition is also one of the only places where JP 1-02 describes natural and manmade acts. The U.S. Government could do better to clarify terminology by organizing terms in conjunction with their root definitions; hence, natural disaster would be the best place to nest descriptions of a flood, drought, or hurricane.³⁵

Thus far, this thesis demonstrates that the U.S. government uses emergency and disaster terms synonymously, uses one definition for multiple terms, and in some cases

³³ Ibid., 368.

³⁴ Ibid., 213.

³⁵ Ibid.

neither does it adequately define nor makes any attempt to define other derivations. In any regard, this does nothing but creates ambiguity within the U.S. Government lexicon and potentially causes further problems.

Comparatively, JP 1-02 does use better logic to define crisis:

An incident or situation involving a threat to the United States, its citizens, military forces, or vital interests that develops rapidly and creates a condition of such diplomatic, economic, or military importance that commitment of military forces and resources is contemplated to achieve national objectives.³⁶

The crisis definition actually follows three of the four features of Quarantelli's social science methodology. The definition clearly presents a threat, it states that the situation rose rapidly, and that action is required ("contemplated" is the actual term used). The definition also implies, but is not explicit, that a new set of behaviors are required to deal with the situation. It also offers a scale of perspective that is useful for a national context. This is one of the few terms that comes close to the demands of both the U.S. Government perspective and the rigors of Quarantelli's social science method.

Unfortunately, the definition does have some weaknesses. The primary weakness lies in the exclusion of one word: "or". The definition would do better with "and/or" vice "and" as a conjunction between military forces and resources. Using "and" means that the only way to resolve a crisis is to use the military combined with other resources; therefore, every crisis must have a military response. If the term applies only to a military context then "and" works but it needs a threshold making it worthy of a military response. Then again, having both a military and civil definition of crisis only creates greater ambiguity. Inserting "and/or" allows other response methods. Otherwise, the definition is relatively congruent with the social science method.

³⁶ Ibid., 133.

Complex Catastrophes

To understand the process that the U.S. Government uses to define a term and why it chooses a specific definition over another is important. Fortunately, during the writing of this thesis, the U.S. Department of Defense (DoD) was in the midst of adding a new term to the government's lexicon: complex catastrophe. In a memorandum dated 20 July 2012, the Secretary of Defense, Leon Panetta, stated that the DoD "must be prepared to help civilian authorities save and protect lives during a complex catastrophe."³⁷ During a large-scale exercise in 2011, aptly titled National Level Exercise 2011, the U.S. Government learned some valuable lessons as they tried to "break the [response] system."³⁸ In after action reports, the U.S. Government found that one event could create a set of cascading conditions that, when combined, create a deteriorating situation that far surpasses the effect of the lone, original event.³⁹ The effects of such an event, newly coined a complex catastrophe, could qualitatively and quantitatively exceed those experienced to date; thereby, placing an unprecedented demand for Defense Support of Civil Authorities.

Secretary Panetta mandated that the definition for a catastrophic event be used until one could be created for a complex catastrophe.⁴⁰ This example helps serve two functions. First, it allows another opportunity to compare the U.S. Government's

³⁷ U.S. Secretary of Defense, Actions to Improve Defense Support of Complex Catastrophes, July 20, 2012 (Washington DC).

³⁸ U.S. Department of Homeland Security. Federal Emergency Management Agency, *National Level Exercise 2011 Federal Partner Participation*, Department of Homeland Security Office of the Inspector General (Washington DC, 2011).

³⁹ U.S. Department of Homeland Security. Federal Emergency Management Agency, *National Level Exercise 2011 Functional Exercise Final After Action Report*, Department of Homeland Security (Washington DC, 2011), 7-8.

⁴⁰ U.S. Secretary of Defense, Actions to Improve Defense Support of Complex Catastrophes, 1. Once again, there is no definition for a catastrophe by the U.S. government so only the closest approximation to Quarantelli's definition will work.

methodology for definitions with those of social science. Second, it demonstrates one process that the U.S. Government uses to create an entirely new definition. In this particular case the catastrophic event definition, as shown below, filled the void.

any natural or man-made incident, including terrorism, which results in extraordinary levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, national morale, and/or government functions.⁴¹

Once again, the U.S. Government's conceptualization of terms and use of terminology does not follow the four discernible organization behaviors. For example, the use of the terms "extraordinary" and "severely" in the definition qualitatively raises the level of a catastrophic event over the effects of "endanger life or disrupt" in the previously discussed domestic emergency. This does imply a difference but the definition still lacks the quantifiable nature that separates emergencies, crises, disasters, and catastrophes in Quarantelli's social science lexicon.

Secretary Panetta tasked the Under Secretary of Defense for Policy, in coordination with the Chairman of the Joint Chiefs of Staff, to define complex catastrophe. In a document entitled Actions to Improve Defense Support of Complex Catastrophes (DSCC), Secretary Panetta created three criteria that the definition must include.⁴²

- 1) It shall represent an event that is of strategic consequence to the Nation, with potentially wide-spread effects that will inhibit the response itself, such as (but not limited to), the consequences of a cyber attack on the electric power grid and the cascading effects on other critical infrastructure sectors.⁴³

⁴¹ U.S. Joint Chiefs of Staff, Department of Defense Dictionary of Military and Associated Terms, 77.

⁴² U.S. Secretary of Defense, Actions to Improve Defense Support of Complex Catastrophes, 1.

⁴³ Ibid.

- 2) It shall reflect the strategic assumption, consistent with existing guidance that the magnitude of prevention, consequence management, and mitigation requirements in a catastrophic incident may temporarily exceed civil authorities' capabilities to respond – potentially from the outset.⁴⁴
- 3) It shall outline decision criteria and triggering thresholds to determine when a complex catastrophe has occurred.⁴⁵

During the process, the Directorate for Joint Force Development, Joint Staff (J-7) created two definitions for review. Both of the definitions shared similar characteristics. They covered aspects of a natural or man-made incident that results in cascading failures with extraordinary losses in lives and damage on a national scale. The difference between the two definitions is limited. One includes references to the causes such as a cyberspace attack or terrorism; the other does not. On February 3, 2013, after six months of effort, Todd M. Rosenblum, Acting Assistant Secretary of Defense for Homeland Defense & Americas' Security Affairs, signed a memo to the Deputy Secretary of Defense recommending the longer definition.

Any natural or man-made incident which results in cascading failures to multiple interdependent critical life-sustaining infrastructure sectors and causes extraordinary levels of mass casualties, damage, or disruption severely affecting the population, environment, economy, national morale, response efforts, and/or government functions.⁴⁶

Any natural or man-made incident, including cyberspace attack, power grid failure, and terrorism, which results in cascading failures of multiple, interdependent, critical, life-sustaining infrastructure sectors and causes extraordinary levels of mass casualties, damage or disruption severely affecting the population, environment, economy, public health, national morale, response efforts, and/or government functions.⁴⁷

⁴⁴ Ibid.

⁴⁵ Ibid.

⁴⁶ Gene Edwards, e-mail message to author, January 10, 2013.

⁴⁷ Gene Edwards, e-mail message to author, January 10, 2013.

As stated earlier, the U.S. Government uses a different standard for its definitions than Quarantelli's organization behaviors; however, both the catastrophic event and complex catastrophe definitions are different from other disaster related definitions because they include "extraordinary results". None of the other government definitions does this and at least in this sense the U.S. Government implies that there will have to be changes in the nature of support, standards of performance, and levels of independence. So, in these particular cases, the definitions do bear some resemblance to the social science organization behaviors.

Use of terms

As discussed, there is a significant difference between social science definitions of emergency, crisis, disaster, and catastrophe compared to those in use by the U.S. Government. Due to these differences, there needs to be a standardized approach that ensures clarity in the remainder of this thesis. Because the social sciences have a succinct way to differentiate emergencies, disasters, catastrophes, and crises this thesis will conform to their use. If both social science and the U.S. government (as in the case of crisis) define a term then this thesis will use the social science definition unless explicitly stated to the contrary.

Aside from the previously mentioned definitions, this thesis will use some generic terms to maintain context. When referring to the science and study of crises, disasters, and catastrophes, this thesis will use the term "disaster science" or "disaster research" where appropriate. The term emergency response will conform to first responders such as police, fire, and rescue. If a term has not been previously explained then a definition will be made prior to further description. With the discussion of relevant lexicon

complete, this thesis will examine the essential premises of our thinking and philosophy that guide disaster planning, preparation, and response.

CHAPTER 3: THE PREMISE

Disaster Ethics and Philosophy

The Role of Philosophy in Disaster Planning and Preparation

Why study disaster philosophy?

Disaster research and studies in the field of homeland security are practical endeavors; they are oriented on solving a distinct set of problems or achieving a set of particular tasks. As a result, the information acquired from such research can be used to the benefit of a great many other fields such as law enforcement, sociology, and psychology. Disasters are also a part of the human experience. They serve as subjects for art and literature; therefore, it is not a stretch of the imagination to include academic philosophy as a contributor to the study of disaster.¹

Professionals write the vast majority of disaster literature about civilians who, as Dr. Norma Zack states, are regarded as “the passive object of actions taken by authorities to protect and assist them.”² Philosophers are specialists in critical thinking but offer a separate perspective from government officials and public policy planners. They approach the subject of disasters from the vantage point of the population in which they live: the ordinary person. Because philosophers are a member of the ordinary population they bring the common foibles and concerns, such as fear and a lack of planning, that are

¹ Naomi Zack, "Philosophy and Disaster," *Homeland Security Affairs* 2, no. 1 (2006), <https://www.hsdl.org/?view&did=461870> (accessed October 15, 2012).

² Ibid.

absent from professional discourse on disaster. Philosophy can delve into the abstract but it can offer a new argument or provide a context previously not discussed.³

Why study disaster ethics?

Disasters and people are inextricably intertwined. This is a condition of the human experience. Everything that is part of the human experience requires a set of ethical standards. Just as philosophy guides the practical approach to disaster, ethics guide the actions of the individuals and even the organizations that lead them in disaster response.

It is critical to understand the behavior of people and their response before, during, and after a disaster. Every aspect of humanity that exists before a disaster will continue to exist during the disaster and after. Adherence to ethical behaviors during a disaster may require a greater amount of discipline because the absence of ethics in critical situations can create such deleterious effects. Disasters affect people in extreme ways, requiring them to seek support outside of their typical environment.⁴ In these cases, people who seek support and those who offer support may face ethical issues; battling the question of individual needs over the needs of others.

For example, disasters require planning on all scales. Planning may be oriented toward seemingly insignificant small-scale activities such as personal or family responses. Planning may also orient toward large-scale activities such as a whole host of city, state, and national responses. Plans guide the method of response; therefore, if that

³ Ibid.

⁴ Naomi Zack, *Ethics for Disaster* (Lanham, MD: Rowman & Littlefield Publishers, 2009), 13. Dr. Zack's posit that people require support outside of their typical environment is congruent with Dr. Quarantelli's assertion that crises affect levels of independence.

plan does not adequately address all aspects of an adequate response then the populace will be the victim of not only the disaster but also a victim of inadequate preparation by the planner and the authorities. Based on this assumption, the planner and authorities who develop the response may actually be the stewards of disaster ethics. It is extremely critical to understand the relationship between disaster response planning, disaster plans, and the role of ethics.⁵

Social Contract Theory

One can trace the origins of social contract theory back to the Age of Enlightenment. The premise of the theory addresses the concepts that surround the origin of society and the legitimacy and seniority of the state's authority over an individual.⁶ Social contract theory argues that individuals consent, either explicitly or implicitly, to surrender some of their freedoms and/or rights in order to submit to the state, in exchange for protection. Because of this exchange, social contract theory debates the question of natural and legal rights and their relationship with each other.⁷

Most social contract theories are heuristic and examine the human condition free of any political order or structure. Social contract theory postulates that individual rights existed before the formation of government and are more important than the formation of society under government.⁸ The theory also purports that government should only exist if it makes life better for those governed.⁹ The creation of government is “not inevitable”

⁵ Zack, *Ethics for Disaster*, 13-14.

⁶ J. W. Gough, *The Social Contract, a Critical Study of its Development*. (Oxford: Clarendon Press, 1957), 3.

⁷ Zack, *Ethics for Disaster*, 72.

⁸ The United States Declaration of Independence and the United States Constitution Bill of Rights refer to these individual rights.

⁹ *Ibid.*

and exists only at the behest and consent of the governed; therefore, it is always subject to the populace.¹⁰

Thomas Hobbes, John Locke, and the State of Nature

Thomas Hobbes was an English philosopher who created the first detailed ideas of social contract theory. Hobbes posited that before society individuals lived in a “state of nature” where their existence was anarchical; organized around acts of self-interest and were absent of rights and contracts. As a result, their lives were “solitary, poor, nasty, brutish, and short”.¹¹

What followed Hobbes’ state of nature was the creation of a social contract. Individuals came together ceding some of their individual rights to form a political state. Sovereignty was no longer an individual measure. The state organized sovereign powers by creating laws to regulate interactions between individuals. Hobbes believed that the state needed to have a strong, central authority to maintain order because these individuals were originally aggressive and competitive. Without government, the individual would have no other option for peace and order.¹²

As the political state evolved from the social contract, it eventually came into conflict with other sovereign states. This concept of state competition paralleled the way individuals competed with one another in the original state of nature. Conflict between states was then further advancement of Hobbes’ inherent belief of a brutish mankind.

John Locke shared Hobbes’ conceptual state of nature but he differed in other fundamental ways. Chief among them was the belief in the inherent qualities of

¹⁰ Zack, "Philosophy and Disaster," 2.

¹¹ Zack, Ethics for Disaster, 72.

¹² Zack, "Philosophy and Disaster," 2.

government. Where Hobbes believed government must have a strong, central authority Locke countered that government derives its power from the people and thus should be limited. The functions that a limited government should provide are to protect private property, to settle disputes without bias, to punish criminals domestically, and to protect its citizens from foreign enemies.¹³ Locke largely believed that society could exist without government because the powers invested in the government would revert to the people; however, if society collapsed then government would no longer exist.

Locke had a less harsh view of humankind than did Hobbes. He believed that the state of nature was largely tolerable and that individuals obeyed the first principle of Natural Law, not to harm one another. This allowed him to posit that a legislative form of government should represent all citizens where a majority decision is binding. Locke, and his interpretation of the social contract, largely influenced the Founding Fathers and the republican form of the U.S. government.¹⁴

A second state of nature

Hobbes' and Locke's state of nature is extremely relevant to disaster studies because it explains the multi-faceted relationship of people, government, and the environment. From their perspective, the state of nature was similar to their way of life in the 1600s, which was much harder than contemporary times. During the period, modern government was in its infancy, technology was relatively limited, and the natural environment held much more relative power that could easily extinguish the effects of

¹³ Ibid.

¹⁴ Ibid.

government.¹⁵ To Hobbes and Locke, the state of nature served as a conceivable historical condition and the basis for a comparison of life without a social contract.

In the contemporary world, modern conveniences, technology, and infrastructure have reshaped life. Any lapse in government would have significantly different effects on modern life and a return to the Hobbesian or Lockean state of nature is at least inconceivable, if not impossible. For example, in the aftermath of Hurricane Sandy in 2012 many residents of Breezy Point in Queens, New York lost their houses due to fires from natural gas leaks.¹⁶ According to the Hobbes and Lockean definition of a state of nature, Breezy Point residents should be able to live off the environment and sustain themselves. In reality, these individuals cannot rebuild or survive in an urban setting without manmade, intermediary links. They cannot “live off the land” in an urban metropolis because the environmental changes and interruption of modern amenities render this impossible.

The original context of Hobbes’ and Locke’s state of nature has thus lost much of its meaning in modern society. To define this change, Dr. Norma Zack created the term “second state of nature” which is the belief that individuals cannot sustain themselves in nature without government.¹⁷ As previously stated, in a state of nature, life can exist without government but it is not necessarily better; hence, the reason for the creation of a social contract. Dr. Zack’s second state of nature states that life is hardly sustainable

¹⁵ Zack, *Ethics for Disaster*, 78.

¹⁶ CBS News, “*Breezy Point, Queens Looks Forward After Devastating Fire Following Superstorm Sandy*,” CBS News, http://www.cbsnews.com/8301-505263_162-57542785/breezy-point-queens-looks-forward-after-devastating-fire-following-superstorm-sandy/ (accessed December 12, 2012).

¹⁷ Zack, *Ethics for Disaster*, 78.

without government because humankind changed the world to such an extent that in only remote locations can one find a place that resembles the original state of nature.¹⁸

It is very hard to conceive any situation where there is a complete absence of all government; however, in severe enough disaster cases there may be localized areas that are temporarily without one. In these most severe of cases, the idea of a human state of nature becomes relevant because without government, individuals tend to rely on their own devices. In this second state of nature, the question then becomes “what does government owe citizens in situations in which government is dysfunctional?”¹⁹ Dr.

Zack posits that:

Government has a continual obligation to benefit those governed by rendering them better off than they would have been in the first state of nature. The temporary dysfunction of government in disasters results in a second state of nature for those governed. Therefore, government has an extended obligation to render citizens better off than they may be in a second state of nature. That is, government is obligated to ensure adequate disaster preparation and planning, for all probable disasters, in precisely those ways in which the public has demonstrated its inabilities. The scholarly foundations for such an obligation would consist of new work in political science, political philosophy, and law.²⁰

Moral Theory

The greatest test of any political idea or philosophy, including those that define social contract theory, is the question of morality. Is the action of an individual or government morally right? If that action is not moral, then other methods need to be

¹⁸ Zack, "Philosophy and Disaster", 4.

¹⁹ Ibid.

²⁰ Ibid., 5.

emplaced to preserve it such as force, rhetoric, and coercion; therefore, any principle or action that does harm or does not value human life requires substantial justification.²¹

Moral theory has three classifications: virtue; deontology; utilitarianism. Each provides a unique perspective with regard to disaster ethics and philosophy but require and explanation first.

Virtue or character ethics

Aristotle's ideas on virtue have been largely untouched since he wrote *Nichomachean Ethics* over two thousand years ago. He believed that virtue is a trait that can be developed and taught to children but must be maintained and practiced by adults. Furthermore, virtue is the inclination to conduct one-self in the right way, for the right reasons, as a result of strong character. For a society to maintain its virtue, it must reinforce virtue in its citizens as well as allow and maintain virtuous individuals who participate in government.²²

Deontology or duty ethics

Arguably, the deontology philosopher with the most impact is Immanuel Kant. He held two cardinal rules of ethics. First, duty is the reason for morally correct action. The highest form of goodness is one that is "good in itself" and one "without

²¹ Ibid., 5. The three classifications of morality, virtue, deontology, and utilitarianism can be traced back thousands of years to a conversation between two ancient Greeks. Socrates was on his way to trial for "corrupting the youth of Athens" when he met Euthyphro who was to prosecute his own father for the death of a servant. Socrates engaged him in a dialogue about goodness and Euthyphro, who believed that his actions were just, stated that goodness is what pleases God. Socrates response to this was twofold and he asked Euthyphro if something is good because God approves of it or if God approves of something because it is inherently good. The questions created a dilemma. If something is good because God approves it then why is God the source of moral goodness? On the other hand, if goodness is exclusive of God then what makes it good? Socrates, as well as Western philosophy, favored the second question and sought to explain what makes something good.

²² Ibid., 6.

qualification". By his construct "Nothing in the world—indeed nothing even beyond the world—can possibly be conceived which could be called good without qualification except a *good will*." Second, the motive of an act defines the goodness and not the consequence of the action. A person only has a good will if acts are carried out in "respect of moral law" and people can only act out of respect for the moral law when they have a duty to do so.²³

Utilitarianism or consequentialism

Utilitarianism is an ethics theory that advances the utility of an action; in other words, it maximizes happiness and minimizes suffering.²⁴ Jeremy Bentham states in his book *A Fragment of Government* that utilitarianism "is the greatest happiness of the greatest number that is the measure of right and wrong."²⁵ This premise contrasts with deontology because it is not an absolute as Kant describes but relative and does not require good will. Consequentialism is the contemporary version of utilitarianism that seeks to maximize the consequences of an action. If the outcome is good, it will be better if one maximizes the act.²⁶

Disaster Planning, Preparation, and Response

As stated previously, disasters are a part of the human experience; therefore, every part of disaster, regardless of action or inaction, is an ethical matter and should be interpreted through a moral code. Authorities conduct disaster planning in periods of normalcy but authorities execute disaster plans in the imminent threat of or immediately

²³ Immanuel Kant , Allen W. Wood, and J. B. Schneewind, *Groundwork for the Metaphysics of Morals* (New Haven: Yale University Press, 2002).

²⁴ Ibid., 38.

²⁵ Jeremy Bentham , J. H. Burns, and H. L. A. Hart, *A Fragment on Government* (Cambridge [England]; New York: Cambridge University Press, 1988).

²⁶ Zack, "Philosophy and Disaster", 7.

after a disaster. Because of this differentiation, disaster planning, preparation, and response require separate methods but is this differentiation distinct enough to require separate ethics?²⁷

Disaster Planning

The reason for the distinction between planning, preparation, and response is that the unpredictable effects of a disaster may require amended actions and rules of action. Take for example a flood that blocks the planned exit routes forcing responders to devise new methods and routes of evacuation. Amending the response and changing the routes do not contradict any ethical principles if both the plan and reaction safely evacuate all people. Because of the unpredictable nature of disasters, plans must be general enough to avoid any contradiction between planning and response. Planners must make adequate preparations to ensure a flexible response and equality for all to participate.²⁸

What if resources are extremely limited and the plan cannot adequately account for everyone? Is there justification for evacuating only a part of the population while leaving the others? Would a plan such as this be ethical? These are important questions and require an answer. One way to address the answers is to look for examples in the development of ethical issues related to a subset of disaster response: emergency medical care.

Medical triage

Medical triage is an excellent source of practical examples to broaden any philosophical debate. Largely relevant in a context of wars, medical triage is also

²⁷ Zack, Ethics for Disaster, 13.

²⁸ Ibid.

germane in the context of mass casualties during disaster response. The fact that it also has a history spanning over 200 years, medical triage provides numerous case studies that can fully articulate different philosophies.

Gerald Winslow combines military and disaster medical care in the following definition:

the medical screening of patients to determine their priority for treatment, the separation of a large number of casualties, in military or civilian disaster medical care, into three groups: those who cannot be expected to survive even with treatment, those who will recover without treatment, and the priority group of those who need treatment in order to survive.²⁹

Differentiating between the wounded can follow two models: egalitarian (based on equality) or utilitarian (based on efficiency). The egalitarian model follows the rule that those who need the appropriate care will receive it regardless of rank or distinction. It is not efficient but it does treat the most severely wounded with the greatest care. The egalitarian model is prioritized for the patient. In contrast, the utilitarian model maximizes the results of medical triage by returning as many individuals as quickly as possible to complete a particular task. The utilitarian model prioritizes patients for an objective.³⁰

During war, demands for maintaining the most combatants in effective fighting shape may require the efficiencies of the utilitarian model of triage. Medical staffs allocate resources to combatants so that they can quickly return to pressing military objectives. Those who suffer serious wounds will wait regardless of their type of injury. Nevertheless, there are two particular points that distinguish triage methods during war

²⁹ Gerald R. Winslow, *Triage and Justice* (Berkeley: University of California Press, 1982), 1.

³⁰ Baker R and Strosberg M, "Triage and Equality: An Historical Reassessment of Utilitarian Analyses of Triage." *Kennedy Institute of Ethics Journal* 2, no. 2 (1992), 103-123.

from disaster. First, the demands upon resources and the inevitability of wounds during war require different methods of preparation and response from disaster response. Authorities can adequately plan for and administer policies that deter casualties from the outset. Second, liberal democratic societies over time will prefer egalitarian models even during periods of war.³¹

This preference for equality vice efficiency should serve as a lesson about moral principles during disasters. To understand the potential lessons one must understand that disasters interrupt periods of normalcy and, with time, normalcy as well as routine will return. In this regard, disaster planning and preparation fall under normal ethical perspectives and do not have a justification for efficiency because after the return to normalcy there will be legal accountability for one's actions.³²

Ethical considerations for disaster planning

During periods of normalcy, work typically follows the plan but during disaster, the best-laid plans may not be adequate. The unpredictable nature of disaster also implies that any or all parts of a plan may fail; therefore, planning for disaster requires a comprehensive approach. It is exactly this different standard of performance, as described in chapter one, that differentiates disaster planning from routine planning.

Dr. Norma Zack states that disaster planning should follow four rules. First, the planning must occur before a disaster strikes. This assumes that there should be enough time to formulate an unbiased plan without compromise. If planning commences too late, expediency instead of effectiveness may result thereby creating too many

³¹ Zack, *Ethics for Disaster*, 15.

³² *Ibid.*, 16.

opportunities to corrupt moral judgment. Second, disaster planning should be general enough to allow flexible response but not too vague to be misinterpreted. Third, the best moral principles should be evident enough in the plan to be executable. Finally, the plan should be realistically optimistic.³³

Planning for disaster is an ethical matter and cannot be ignored. Aside from the previously listed rules, a disaster plan must be transparent and viewed by the public that will be required to execute it. The debate and scrutiny that a plan faces from such exposure will only make it better and help the public understand the unavoidable realities.³⁴

Herein lays one of the greatest disaster planning conflicts. Do authorities use an egalitarian model for planning but execute a utilitarian model when resources run low?

Disaster Preparation

Planning for a disaster and planning for disaster preparedness are two different endeavors. To prepare is to put in proper condition or readiness.³⁵ Implicit in the definition is that preparation must occur before response. To respond without adequate preparation means that the response is inadequate. Disaster preparation requires ways (methods or response capabilities) and means (materials or resources) to ensure a successful outcome. Planning to prepare ensures that the materials are in place and that the individuals who will utilize them are trained. Preparation plans should also differentiate the potential effects of a disaster based on historical trends. For example,

³³ Ibid., 18-19.

³⁴ Ibid., 19.

³⁵ Dictionary.com, "Definition of Prepare," , <http://dictionary.reference.com/browse/prepare> (accessed December, 14, 2012).

there is a categorical difference between the effects of an EF2 (Enhance Fujita Scale) tornado versus an EF5 tornado and proper preparation has to consider these differences.

Preparation should occur during the periods of normalcy prior to a disaster. Preparedness should not only include the aforementioned ways and means but also a credible strategy to reach the optimistic conclusion or end state. Moral principles can help navigate the complexities of proper preparation. It is the obligation of disaster planners to arrange these moral principles to achieve a successful response; the moral principles not only define what a response will entail but what further work needs to be done. The largest difference between disaster response planning and disaster preparation planning is in regard to the moral principles of Save the Greatest Number (SGN) and Save All Who Can Be Saved (SALL).³⁶

Save the greatest number

SGN uses a utilitarian perspective for disaster response. Many disaster plans in the U.S. are based upon SGN concepts.³⁷ It is morally limited because SGN implies that the context of the situation can change the amount of those who can be saved; it is relative to the severity of the situation and adequacy of response. In order to illustrate SGN, a train derailment provides an adequate example. If the train jumps the tracks due to an obstruction, such as a fallen tree, then the responders would be able to apply the principle of SGN. A tree falling on the tracks, especially due to natural causes, is not something that planners can always assume; therefore, it is beyond the scope of reason. The number of lives saved is contingent upon the proficiency and preparedness of the

³⁶ Zack, Ethics for Disaster, 22.

³⁷ Ibid.

first responders. If all of the first responders are adequately trained and perform their best then those lives lost are not subject to questioning; there are no moral implications.

If the train derailed because the authorities did not properly maintain the tracks or that the first responders did not train properly then there is a difference in causality. SGN principles cannot account for the number of lives lost due to these variables. No matter how authorities employ SGN principles the lives lost are attributable to inadequate preparation. No form of response will ever recover the lives lost. In this context, there are moral implications.

Save all who can be saved

SALL is also a utilitarian perspective but it focuses upon disaster planning, and preparation vice response. To build upon the derailed train example, a SALL approach has to start before the incident. It would provide for the proper track maintenance to prevent a derailment and it would provide adequate training of the responders in the event a derailment did take place. Of course, SALL principles cannot prevent every conceivable event, such as the unpredicted fallen tree, but it can account for the human variables subject to planning and preparation.³⁸

Save the greatest number who ____

Rescue professionals tend to follow the principles of SGN but because SGN orients only on response the cases involving its use are unpredictable. Typical SGN response is synonymous with triage but when an event such as a mass casualty scenario unfolds, limited resources could modify SGN principles into SGN Who ____ (SGNW).

³⁸ Ibid.

Under SGNW, the blank accounts for a patient's predetermined characteristics. As the situation continues to unfold SGNW traits could require further amendments.³⁹

Imagine a triage scenario where the medical facility does not have adequate resources to account for everyone's needs. The medical staff imposes a SGN Who are first responders. As the resources continue to dwindle, the medical staff modifies the conditions further to SGN Who are first responders that are also emergency medical technicians. This more specific condition allows those that can help others receive more care but it is also contextual and may change even more as resources decline further.

SGNW has several, distinct, moral predicaments. The arbitrary nature of the predetermined characteristics is not transparent to the public and may never be. The power that rests in the hands of the authorities who develop the characteristics may not be morally qualified to make such decisions. SGNW is, by default, a resource constrained principle; it presumes that there will be limitations despite the fact that there still may be enough time to procure them.⁴⁰

Rules to live by

Dr. Naomi Zack describes four values that are the result of thousands of years of religious and humanistic study and practice in her book, *Ethics and Disaster*. They are as follows:

- 1) Human life has intrinsic worth.
- 2) Everyone's life is equally valuable.
- 3) Everyone has the same right to freedom from harm by others.
- 4) Everyone is entitled to protection from harm by nonhuman forces.⁴¹

³⁹ Ibid., 27.

⁴⁰ Ibid.

⁴¹ Ibid., 23.

She posits that democratic governments are obligated to support the preceding social principles. These principles, in turn, become rules for individuals to follow.

- A. We are obligated to care for our dependents and ourselves.
- B. We are obligated not to harm one another.
- C. We are obligated to care for strangers when it does not harm us to do so.⁴²

Furthermore, Dr. Zack argues that the lists are incomplete and could be explained differently but they do codify a peaceful existence in a democratic society. They should serve as ethical guideposts for disaster preparation and the subsequent response when disaster alters the norms of life.⁴³

⁴² Ibid.

⁴³ Ibid.

CHAPTER 4: THE MYTHS

Public Belief in Disaster Myths

There are widely held beliefs about human behavior during disasters, which judging by the results of over 60 years of social science research, are incorrect. While there remain a great many things to be studied and discovered regarding the human response to disasters, the amount and fidelity of the existing research establishes at least that the science to date has moved us far beyond speculation and hyperbole.¹

Common beliefs, more aptly termed myths, were included in the pioneer research conducted in the early 1950s, when the social sciences first undertook disaster studies. Much of the initial research delved into technological and natural events. In the 1960s, social scientists began to learn more about what actually constituted a crisis, disaster, or catastrophe and what differentiated them from each other as well as conflict crises. They studied riots that largely occurred in urban areas and universities, which arose out of the social issues of the era, and as a result began to more fully understand the human response as the research perspective began to widen.²

Fears versus Reality

Based upon these decades of research, social scientists found that there are differences between the types and/or causes of emergencies, disasters, and catastrophes and that the human response is arguably different from conflict-type crises. Dr. Enrico Quarantelli analyzes six common fears regarding human behavior in his paper titled *Conventional Beliefs and Counterintuitive Realities*. The common fears are: panic; anti-

¹ Enrico L. Quarantelli, "Conventional Beliefs and Counterintuitive Realities," *Social Research* 75, no. 3 (2008), 873.

² Ibid., 874.

social looting behavior; supposed passivity during emergencies; role conflict and abandonment; severe mental health circumstances; and the locus of problems.³

Panic

The term panic suffers from two distinct problems especially with its relationship to disaster. First, panic is considered the “norm” during a disaster because of decades of errant human behavior portrayed in popular culture films or as the result of media hype; it has become a meme.⁴ Second, panic has not sustained a definition that is congruent across numerous disaster studies; therefore, any human behavior that is considered disorganized could be attributable to panic. Dr. Quarantelli stated “almost every kind of socially disorganized or personally disruptive type of activity has been characterized as panic. The range includes psychiatric phenomena to economic phenomena (e.g., the ‘panics’ involved in bank runs, stock market crashes, depressions, etc.).”⁵

Despite a common belief that people will most likely panic during or after a disaster, research shows otherwise.⁶ Actually, panic flight was analyzed in the infancy of disaster research and there are now hundreds of studies (295 studies in the Disaster Research Center (DRC) Resource Collection alone) that provide empirical evidence of the rarity of panic.⁷ Less than 100 actual cases of disaster related panic have been recorded in over five decades of research.⁸ Independent of disaster research, fire researchers have conducted panic studies and they also found it to be so rare that it is

³ Ibid., 873.

⁴ Ibid., 876.

⁵ Ibid.

⁶ Thomas E. Drabek, *Human System Responses to Disaster : An Inventory of Sociological Findings* (New York: Springer-Verlag, 1986),136.

⁷ Quarantelli, "Conventional Beliefs and Counterintuitive Realities", 876.

⁸ Ibid., 879.

thought to be useless for further analysis.⁹ This thesis posits that Service members and other disaster responders should understand how unlikely panic is during disaster, despite the assumption that it would be common.

If panic is indeed so rare then what would cause it to happen? Before one can address the cause, panic requires a suitable definition that is better than the wide variations previously discussed. The most common use of panic implies that it is inappropriate flight behavior away from a threat or danger.¹⁰ Based upon this definition Dr. Quarantelli creates three conditions that would potentially induce panic:

- 1) Perception of an immediate great threat to self and/or significant others. It is extreme fear rather than anxiety that predominates since the risk to physical survival seems clear. Fear, no matter the magnitude, in itself is not enough to generate panic despite what some users of the term mistakenly assert.¹¹
- 2) Belief that escape from the threat is possible (a perception that one is trapped does not lead to panic flight; this can be seen in entombed coal miners or sailors in sunken submarines). It is hope, not hopelessness, that drives panic flight.¹²
- 3) A feeling of helplessness in otherwise dealing with the threat and particular others are not seen as being able to help. If there is a perception that movement away from the risk is possible, an orderly or organized movement or evacuation from the location usually occurs. Such flight behavior is not panic behavior-as was overwhelmingly the case among the survivors who left the towers in the 9/11 disaster.¹³

Two other factors, group members and physical space, can further amplify these conditions. Panic is more likely to occur in groups where the members are strangers and have no prior existing social ties. In addition, the likelihood for panic is greater in locations that have a prior cultural norm for it such as enclosed spaces (night clubs or theaters).¹⁴

⁹ Ibid., 877.

¹⁰ Ibid., 878.

¹¹ Ibid., 879.

¹² Ibid.

¹³ Ibid.

¹⁴ Ibid.

Antisocial behavior

Another prevalent belief is that immediately following a disaster there will be a significant amount of antisocial behavior.¹⁵ There are references to looting and rapes following the Galveston Hurricane and Johnstown Flood in the popular media of the day. These behaviors were usually attributed to racial components or lower socio-economic status components of the community.¹⁶ In contrast, there are only two references to antisocial behavior during recent or present disaster studies that have occurred within the United States; Hurricane Katrina in New Orleans and Hurricane Hugo in St. Croix.¹⁷

In order to isolate the range of antisocial behaviors, this thesis will only focus on looting. Meaning, “to rob”, looting was derived from the Hindu word *lut*, via the Sanskrit term *lunt*. The term later entered the western lexicon in order to refer to the action by an invading army as it plundered recently conquered areas. It was only until 1907 when the Hague Convention prohibited looting and condemned it in a military context. Despite its relatively recent barring in international law the same action under different terms has been condemned for thousands of years.¹⁸

Looting has been largely studied in context with civil disturbances but research does exist in relation to disaster, with the DRC conducting the majority of empirical studies over the past five decades. Because of this difference in research perspectives one examine looting from a number of angles. For example, a United States Strategic Bombing Survey of German and Japanese cities during World War II (WWII) found that there was not a significant problem with looting in the aftermath of aerial bombings.

¹⁵ Drabek, Human System Responses to Disaster, 28-29.

¹⁶ Ibid.

¹⁷ Quarantelli, "Conventional Beliefs and Counterintuitive Realities", 880-881.

¹⁸ Ibid., 881.

This information is reinforced by a similar study that the British Government undertook of its population during WWII.¹⁹

The overall conclusion based on empirical evidence is that looting is relatively rare among contemporary western societies, to include Japan, that have recently suffered a disaster. It does tend to exist more frequently in developing social systems but in the rare instances of looting in western society, it tends to follow a pattern. The four conditions that set the pattern are: overt and social condemnation by those experiencing the disaster; looting is conducted covertly; undertaken by isolated individuals or pairs; the loot is discovered by chance or opportunity.²⁰

When compared to looting in civil disturbances the differences are largely oriented on a social norm construct. In these cases looting is accepted rather than discouraged. Looters conduct their actions in the open and in small groups to include family units as opposed to the covert individual or pairs. Finally, the civil disturbance looting focuses on particular targets as opposed to targets of opportunity.²¹

In the case of the Hurricane Hugo and the catastrophe that resulted in St Croix, there are particular points to be made about the endemic looting that occurred. Looting took place in three phases. Pre-existing juvenile gangs who targeted retail stores stocked predominantly with consumer items such as televisions started the initial phase of looting. These gangs did not loot any grocery stores. The second phase began when another group of citizens, who were typically law abiding, began to take items to include items from hardware stores. The final phase erupted when a large number of people began to take necessities from grocery stores and other remaining items previously left

¹⁹ Ibid., 881.

²⁰ Ibid., 883.

²¹ Ibid.

behind by the first two phases. Eventually, looters took every conceivable item in sight include carpets and electrical fixtures. Only 10% of the shops in the looted areas stated that they were not completely robbed of all goods. Otherwise, there were no reported cases of any looting associated with private residences, schools, resort hotels, banks, or the industrial complex.²²

Based on the outcome of events in New Orleans and St Croix, the DRC identified three factors that contribute to looting:

- 1) A concentration of disadvantaged persons subject to continuous perceptions of vast differences in lifestyle.²³
- 2) A subculture that is tolerant of minor theft and the presence of organized youth gangs involved in serious crime (e.g. drug dealing, grand theft, etc.).²⁴
- 3) A local police force that is both inefficient and corrupt (only a limited number of police officers in New Orleans and St Croix openly and actively participated in the looting; a trait that sets it apart from civil disturbances).²⁵

Just as is the case with panic, looting is relatively rare. In contemporary western societies, there are four indicators of how looters behave and three factors that contribute to those rare cases. A thorough planning process should be able to ascertain the likelihood of any looting. In reality, disaster research has shown that altruistic actions and support heavily outweigh any case associated with looting.²⁶

The aftermath of the 1906 San Francisco earthquake serves as an excellent example. The city mayor and his advisors made law enforcement their chief priority.

²² Ibid., 882-884.

²³ Ibid., 883.

²⁴ Ibid.

²⁵ Ibid.

²⁶ Ibid., 885.

After time, the wave of lawlessness that they feared never did not occur. Instead, there were only a limited number of incidents and some of the purported looters were shot.²⁷

Unfortunately, what transpired was a gross over-response of law enforcement and the loss of most likely innocent lives.

All later accounts by both officials and private citizens emphasized that looting was minor or non-existent...In any case, how was looting to be defined? Citizens pillaging drugstores for medical supplies for the injured? Others seeking food for hungry families from stores that were about to be burned? Well-dressed residents sifting through the ruins of the mansions and China-town? Or army troops pawing through the boxes of shoes in the middle of the street? The determination was subjective and made in a moment. No one publicly questioned the order that substantially infringed upon the few civil liberties that existed at the time and cost the lives of an undetermined number of innocent civilians.²⁸

Passivity

The concept of passivity following a disaster contrasts sharply with the previously described concepts of panic and looting. Passivity implies that victims are in a state of shock or inaction; behavior unlike the active measures of panic and/or looting. The general belief in passivity states that immediately following a disaster a person is unable to cope with the situation and therefore cannot react. This description of the disengaged victim can be traced to a theoretical essay written by Anthony Wallace in 1954. In this essay, Wallace coined the term “disaster syndrome” to describe the impact upon an individual immediately after a disaster.²⁹ Despite the fact that numerous studies since have debunked Wallace’s assertions, passivity still lingers in popular belief.³⁰

²⁷ Claire B. Rubin, ed. *Emergency Management: The American Experience 1900-2005* (Fairfax, VA: Public Entity Risk Institute, 2007), 28.

²⁸ Philip L. Fradkin, *The Great Earthquake and Firestorms of 1906: How San Francisco nearly Destroyed Itself* (Berkeley, CA: University of California Press, 2005), 67-68.

²⁹ Anthony F. C. Wallace, *Tornado in Worcester: An Exploratory Study of Individual and Community Behavior in an Extreme Situation* (2. Printing). (Washington, D. C., 1956).

³⁰ Quarantelli, “Conventional Beliefs and Counterintuitive Realities”, 886.

Instead, studies have shown that, in fact, the population is much more engaged immediately following a disaster. Those that can quickly respond, work in a decentralized fashion to accomplish anything that can be done. Within the first half hour, about a third of survivors are searching for missing persons and about 10% are taking an active role in rescue operations. These findings on emergent behavior sharply contrast with any assertion of a collective shock or inaction.³¹

As time progresses from the disaster, emergent behavior evolves. Groups start to organize and fill in the gaps left by governmental agencies that are unable to operate. These emergent groups are typically informal, have networks with other groups or individuals, and sometimes are anchored to pre-existing organizations. They have to rely on innovative techniques and improvisation to meet demands because traditional routines are ineffective post disaster.³² The work that the emergent groups accomplish is a part of the disaster recovery effort. They work in the gaps that government agencies are trying to fill and allow a recovery to take place in a decentralized and relatively effective manner.³³

Role abandonment

Another predominant belief is that disaster responders will not report to work during or immediately following a disaster because of familial responsibilities. Some disaster researchers argue that popular culture and mass media are the basis for these beliefs.³⁴ There are several dozen empirical studies of role conflict and role

³¹ Ibid., 887.

³² Ibid., 888.

³³ Ibid., 888-889.

³⁴ Ibid., 889.

abandonment that best describe the actual pressures that workers and disaster responders face.³⁵

The best way to understand this phenomenon starts with the definition of “roles”. It is “a term social scientists use to describe all of the expectations placed on a person because of their position in a group or organization.”³⁶ In this section, the three problems that a worker can have (strain, conflict, and abandonment) meeting these expectations will be discussed.³⁷

The basic premise of the role abandonment myth begins with a disaster responder who feels a reluctance to arrive at work or to continue working because of the strains of the role or the strains made by a competing familial role. Role strain describes the former situation, which is the difficulty of meeting the multiple demands of a single role or the more serious expectations of that role. The latter situation is known as role conflict which is when a person must meet the demands of multiple roles; in other words, dual hats. When the pressures of role strain or role conflict reach a breaking point, what follows is role abandonment; the responder dismisses the responsibilities associated with the role and, as a result, is no longer a part of the disaster response equation.³⁸

Sociologists understand the impact of role strain on disaster responders. They have also highly documented it and consider role strain common in disasters. Four basic conditions largely influence role strain. First, the responder is concerned about personal health and safety. Second, they are also concerned about accurate and timely

³⁵ Joseph E. Trainor and Lauren E. Barsky, “Reporting for Duty? A Synthesis of Research on Role Conflict, Strain and Abandonment among Emergency Responders during Disasters and Catastrophes” (Wilmington, DE: Disaster Research Center, University of Delaware, 2011), 9.

³⁶ Ibid., 9.

³⁷ Ibid.

³⁸ Ibid.

information. Third, there is a belief that there will be a reduction in organizational continuity. Fourth, and finally, there is a perception that the role expectations during a disaster are too demanding or unclear.³⁹

Researchers have also highly documented and recorded role conflict. It falls under two basic scenarios of work vs. family and the dual hat syndrome. People experience tensions while trying to balance the different stressors of multiple roles. In the context of disaster, the uncertainty surrounding a responder's loved ones and that the responder should be doing something about them describes the work vs. family conflict. The dual hat syndrome refers to public officials or responders that occupy core positions in multiple roles such as a police officer who also is a volunteer emergency medical technician. Just as is the case with role strain, role conflict is common during disaster.⁴⁰

Researchers analyze role abandonment using two different methods: behavioral research and perception research. Behavioral research is based upon actual studies of respondent behavior during and after disaster; therefore, the results of the study are based upon fact. Behavioral research has limitations because the findings only include information based upon situations that have already occurred. Perception research provides an opportunity to explore alternative scenarios and can be administered to large numbers of individuals. The findings of perception research are largely hypothetical and cannot be based upon fact until the event actually happens.⁴¹

Comparing the two methods to each other tends to produce different results. Behavioral research concludes that role abandonment, because of role strain or role conflict, is relatively rare during disaster. Perception research shows a wide variation,

³⁹ Ibid., 10.

⁴⁰ Ibid., 11.

⁴¹ Ibid., 12-14.

about 20% to 68%, of individuals would be unwilling or unable to work in a range of disaster scenarios. The reasons for such a potentially high rate of abandonment centers on individual safety, amount of training, and familial concerns. Scientists prefer behavioral conclusions in order to reconcile the difference between the two research methods. Based on this conclusion, during most disaster scenarios role abandonment is highly unlikely.⁴²

If role abandonment is so rare, how is it that, in the aftermath of Hurricane Katrina, 240 of the 1,450 New Orleans Police Department (NOLA) officers failed to report to duty? Why were 51 of the 240 fired for abandoning their post? The scenario surrounding NOLA's role abandonment has not been found in any other research in any disaster in the U.S.⁴³ Other factors predicated these reasons; namely that the department was dysfunctional before Hurricane Katrina and that the reason for role abandonment had nothing to do with role conflict or role strain but rather with indecisiveness, unpreparedness, and a lack of situational awareness.⁴⁴

Sudden and widespread mental health breakdowns

The research that ties mental health breakdowns to disasters is controversial, complex, and contradictory; however, there are a few points germane to this thesis. The DRC contends that those that do deal with disasters and catastrophes can endure significant stressors but that the likelihood of an enduring, long term, mental illness is

⁴² Ibid., 15-17.

⁴³ Quarantelli, Conventional Beliefs and Counterintuitive Realities, 890-891.

⁴⁴ U.S. Senate, Special Report of the Committee on Homeland Security and Governmental Affairs Hurricane Katrina: A Nation Still Unprepared (Washington, D.C.: U.S. Government Printing Office, 2007)., 440.

still remote.⁴⁵ There is still a considerable amount of research to be done in this subject area.⁴⁶

Locus of problems

This myth binds the previous five together; it assumes that only a top down, highly centralized organization can meet the demands created by a crisis. One of the predominant ideas of this myth is that disaster survivors will be disorganized and not ready to meet the newly generated challenges. Russell Dynes stated that the assumption presumes that “they panic; they freeze; they become anti-social; they become traumatized; they become self-centered; and thus they cannot be counted upon for selfless action.”⁴⁷

Disaster research findings reliably conclude that the informal networks and organizations that emerge, because of a disaster, outperform and are more likely to meet the challenges of a post-disaster recovery than centralized, command and control agencies. The qualifier to this concept is that American citizens and organizations are uninterested about disaster preparation during normal times but that they focus on it predominately at the period of disaster impact.⁴⁸

The Realities of Community Disaster

The predominant myths about disaster have been discussed. The next topic of this thesis will cover the realities of individual, organizational, and community behaviors.

Also, the realities of mass communication systems (MCS) will be discussed since MCS

⁴⁵ Drabek, Human System Responses to Disaster : An Inventory of Sociological Findings, 146.

⁴⁶ Quarantelli, “Conventional Beliefs and Counterintuitive Realities”, 891-895.

⁴⁷ Russell Rowe Dynes, *Community Emergency Planning : False Assumptions and Inappropriate Analogies* (Newark, Del.: Disaster Research Center, University of Delaware], 1994).

⁴⁸ Quarantelli, “Conventional Beliefs and Counterintuitive Realities”, 895-898.

serves as a surrogate for societal behavior. These generalizations are oriented upon a developed western society; therefore, extrapolating these realities to a developing society may require adjustment.

Disasters can be differentiated from conflict situations

Disasters are different from conflict crises. Disasters can be considered consensus type occasions whereas conflict crises tend to make the situation worse. In the case of a hospital, during a conflict crisis it may come under direct attack and as a result will only have one shift available for work. The nature of casualties that arrive do so in random order. In contrast, during a disaster hospitals can organize multiple shifts for appropriate response. As casualties arrive they tend to climb to a peak and then drop off in accordance with the effects of a disaster.⁴⁹

Disaster behavior can be differentiated from emergency behavior

Disasters require different response methods due to their effects. Because of this difference those organizations that manage response efforts must deal with many previously unknown organizations. During a massive fire in Nanticoke, Canadian researchers identified 346 different organizations that converged on the area in order to provide support. This is one of the particular categorizations that defines a disaster in chapter one.⁵⁰

⁴⁹ Enrico L. Quarantelli, *Disaster Related Social Behavior : Summary of 50 Years of Research Findings* (Newark, DE: Disaster Research Center, University of Delaware, 1999), 3.

⁵⁰ Ibid., 2-3.

Disaster behavior is differentiated from catastrophe behavior

The scale and complexity of a catastrophe is larger than a disaster. Due to this difference, planning for a catastrophe requires significantly different methods. Response efforts that meet disaster standards do not suffice for a catastrophe.⁵¹

Disaster-related behavior is very complex

Disaster-related behavior is complex because of its place in the social cycle of a community. There are four phases of disaster phenomena:

- 1) **Mitigation:** the phase that includes measures taken to reduce the effects of a disaster.
- 2) **Preparedness:** the phase in which actions are planned and taken when a disaster is imminent.
- 3) **Response:** the phase where relevant actions are taken immediately during and after the impact of a disaster
- 4) **Recovery:** the phase where actions are taken after the response during the crisis period is complete.

These four phases of disaster phenomena can serve as tenets to help explain the behaviors of individuals, communities, organizations, and societies from similar perspectives. Each of the behaviors will be described by a mitigation, preparedness, response, and recovery perspective.⁵²

Realities of Individual Behavior

1) Lack of prior interest in or concern for disasters

⁵¹ Ibid., 3.

⁵² Ibid., 3-4.

The likelihood of being a disaster victim is relatively low. Because of this low probability, the American populace tends to focus on normal or routine concerns. Only in areas that are conducive to disaster preparation subcultures, such as communities in close proximity to nuclear power plants or earthquake prone areas, is there a higher concern or interest.⁵³

2) With forewarning, reaction tends to be rational and socially oriented

Those individuals that are clearly in the predicted area of an impending disaster tend to take warnings seriously. They will take meaningful action to cope with the perceived risks, especially if others do the same. These same individuals will refuse evacuation orders if the location and security of other family members is not known.⁵⁴

3) When disasters occur, individuals tend to act well and help one another

Individuals tend to take pro-social action and account for 90% of search and rescue efforts around affected sites. Actual panic, looting, and other disaster myths are extremely rare.⁵⁵

4) Disasters do have a personal impact but the long term behavioral effects are inconsequential

The effects of disaster on persons are controversial but the DRC believes that they are primarily subclinical, short lived, and self-remitting. There remains a

⁵³ Ibid., 4 One survey described by Quarantelli found that only 13.8% of Americans had been severely affected by fire or natural disasters.

⁵⁴ Ibid.

⁵⁵ Ibid.

considerable debate regarding the impact on first responders who work in disaster recovery.⁵⁶

Realities of Organizational Behavior

1) Disaster mitigation activities are rarely on the agenda of any organization

Only in private industries where safety is the norm (nuclear industry and chemical industry) do any organizations place a priority in disaster mitigation.⁵⁷

2) Non-emergency organizations plan incorrectly for disaster preparedness

Organizations tend to focus on written plans. Creating a plan is important but not as important as a robust planning process that takes into account public educational initiatives, executing disaster drills, and training.⁵⁸

3) Organizations face many coping problems during the crisis period of disasters but the difficulties are unexpected

The DRC reports that there are three sets of crisis management problems. First, there are problems with the relaying of information within organizations, between organizations, and between organizations and citizens. Second, there are decision-making problems due to a loss of upper echelon persons because of over work, conflict of authority because of new disaster related tasking, and confusion over jurisdictional responsibilities. Third, there are inter-organizational coordination problems due to the magnitude of the

⁵⁶ Ibid., 5.

⁵⁷ Ibid.

⁵⁸ Ibid.

disaster, strained relationships, and differing views on what constitutes “coordination”.⁵⁹

4) Only selective organizational changes are made as the result of disaster

After a disaster, any impetus for change usually fails unless there is proactive leadership that continues to push for structural and functional changes.⁶⁰

Realities of Community Behavior

1) With the exception of disaster prone areas most communities give a low priority to community wide disaster mitigation activities

More effort has been apportioned to these activities as a result of programs by the Federal Emergency Management Agency as well as MCS. Usually, if any effort is made within a community it is in relation to the news of a recent event elsewhere.⁶¹

2) Community preparedness planning is uneven and problematic

Tensions already exist in the normal environment between community organizations for numerous reasons. These tensions limit the ability to plan or prepare and in the event that cooperation does exist those plans and preparedness activities are subject to problems.⁶²

3) Changes to community structures and functions during the relevant time period are proportional to the magnitude of the disaster

The DRC breaks community organizations into four type categories.

⁵⁹ Ibid., 5-6.

⁶⁰ Ibid., 6.

⁶¹ Ibid.

⁶² Ibid.

- a) **Type I Organizations:** These do not markedly change their structure or function during crisis periods. Fire and police departments are typical of Type I organizations because they do not usually make any changes due to the advent of a crisis.
- b) **Type II Organizations:** These expanding organizations have old functions but new structures. An example would be a local Red Cross chapter that takes on new volunteers to enable preexisting functional activities.
- c) **Type III Organizations:** These expanding organizations have old structures but new functions. A city waste disposal department that expands to include debris removal from city streets would meet these criteria.
- d) **Type IV Organizations:** these organizations did not exist prior to the disaster. They can be informal search and rescue teams or community watch groups.

The increasing magnitude of a disaster will force organizations to go through many of these type changes. In addition, the increasing magnitude will force these community organizations to work together more.⁶³

4) Old and new problems make community disaster recovery difficult

The tensions and problems that existed in a community, before a disaster, typically return. To add to this, new problems arise to complicate things further.⁶⁴

⁶³ Ibid., 6-7.

⁶⁴ Ibid., 7.

Realities of Mass Communication Systems

1) MCS does not report disaster mitigation or preparedness activities

The absence of MCS reporting echoes the general perception of the public that the likelihood of a disaster is relatively low; therefore, they do not report any mitigation or preparation activities.⁶⁵

2) MCS has disaggregated roles: to “observe and report” vs. to “warn”

These dual roles can confuse the community audience. To observe and report implies that the perspective is objective and from outside the community. To warn is a perspective that is from within the community. Because of the first priority, it is complicated to integrate MCS into the disaster planning and preparedness activity.⁶⁶

3) New coverage provides the operative perspective or reality but the reporting is necessarily incomplete

With modern media sources, information can flow from many different sources. Because these sources are varied they may not actually come from the community involved and as a result the information provided is incomplete and at times inaccurate. Examples of this unbalanced reporting are the exposure that organized search and rescue efforts receive on broadcasts when 90% of search and rescue efforts are informal and decentralized.⁶⁷

4) MCS focus on atypical and conflicting aspects of recovery efforts

⁶⁵ Ibid.

⁶⁶ Ibid.

⁶⁷ Ibid.

News organizations want to cover tensions and conflict as opposed to routine and cooperation. Though this reflects that which is out of the ordinary it can also reflect a return to normalcy.⁶⁸

⁶⁸ Ibid., 7-8.

CHAPTER 5: THE PROCESS

National Policy for Domestic Emergencies

As of March 2011, the President of the United States, through Presidential Policy Directive 8 (PPD-8) mandated an “all-of-Nation, capabilities based approach to preparedness.”¹ The premise of PPD-8 demands cooperation not only among different government agencies but also at all levels of the private sector to include individuals. The development of National Preparedness Goals (NPGs) in PPD-8 “establish core capabilities necessary for preparedness and a national preparedness system to guide activities that will enable the Nation to achieve the goal.”² The National Preparedness System is an integrated set of guidance, programs, and processes that enable the Nation to meet the goal.³

The National Incident Management System (NIMS) primarily incorporates national policy for domestic emergencies. It constitutes local, state, and federal levels for incident management across the United States. Both the NIMS and NRF provide the foundation for response efforts that not only cover all levels of government, to include the military, but they also cover non-governmental organizations.⁴

The Department of Homeland Security (DHS) is responsible for promulgating and updating the NIMS, NPG, and supporting documents. Together, the NIMS and NPG

¹ U.S. President, *Presidential Policy Directive/PPD-8*. (Washington DC:Government Printing Office, March 2011), 1.

² *Ibid.*, 1.

³ *Ibid.*, 2.

⁴ U.S. Department of the Army, *Civil Support Operations*, Field Manual 3-28 (Washington, D.C.: Headquarters, Department of the Army, June 29, 2010), 2-1.

guide, as well as, drive policy for all federal agencies to include the Department of Defense (DOD).⁵

Incident response in the U.S. is federally planned but executed starting at the local level. Using this tiered response method, other levels of support can be called in as the effects of an incident overcome the resources of the first responders. Military units may be called in because of the tiered response framework and in this case, it is national policy that the military support civilian authorities but still remain under the operational and administrative control of their respective military chains of command.⁶

National Incident Management System

The NIMS is the template for incident management regardless of the cause, size, location, or complexity of the incident. It is applicable in all jurisdictions and across all functional disciplines. It is a comprehensive, systematic approach to incident management and it is employed nationwide. Because it is scalable and provides conceptual response sets as well as standardized resource management procedures it should not be thought of as a response plan or a communications plan. Instead, NIMS represents a core set of doctrines, concepts, principles, terminology, and organizational processes that enables effective, efficient, and collaborative incident management.⁷ It is comprised of five components: preparedness; communications and information management; resource management; command and management; and ongoing maintenance and management.

⁵ Ibid., 2-1.

⁶ Ibid., 2-2.

⁷ United States. Federal Emergency Management Administration, *National Incident Management System* (S.I: s.n., 2009)., 3.

Five Components of NIMS

Preparedness

This is based upon effective emergency management and incident response activities. Each has to begin with a whole host of preparedness activities conducted on a recurring basis, well ahead of any potential incident. Preparedness is an amalgam of assessment; planning; procedures and protocols; training and exercises; personnel qualifications, licensure, and certification; equipment certification; and evaluation and revision.⁸

Communications and Information Management

Any incident response effort must rely on communications and information systems to effectively coordinate all response activities. NIMS can provide a common operating picture to all command and coordination sites as well as describe the requirements necessary for a standardized communications framework. It also emphasizes the need for a common operating picture. This component of NIMS is based on the concepts of interoperability, reliability, scalability, and portability, as well as the resiliency and redundancy of communications and information systems.⁹

Resource Management

Resources (such as people, supplies, or equipment) are required to support critical incident response objectives. The resource stream must be flexible and adaptable to meet the demands of the particular aspects of the incident. NIMS creates standardized mechanisms and builds the resource management process to classify requirements, order

⁸ Ibid., 7.

⁹ Ibid.

and acquire, mobilize, track and report, recover and demobilize, reimburse, and inventory resources.¹⁰

Command and Management

The Command and Management component of NIMS is arguably the most important component of NIMS. It is constructed to allow effective and efficient incident management and coordination by providing a flexible, standardized incident management structure. This structure is arranged on three key organizational constructs: the Incident Command System, Multiagency Coordination Systems, and Public Information.¹¹

Ongoing Management and Maintenance

Within the context of Ongoing Management and Maintenance, there are two sub-components: the National Integration Center (NIC) and Supporting Technologies. Homeland Security Presidential Directive 5 tasks the Secretary of Homeland Security to establish a method to ensure that the ongoing management and maintenance of NIMS, including regular contact with other organizations to include federal, state, tribal, local, non-governmental organizations and the private sector. The NIC administers strategic direction, oversight, and coordination of NIMS and supports both routine maintenance and the continuous refinement of NIMS and its components. The NIC oversees the program and coordinates with federal, state, tribal, and local partners in the design of compliance criteria and implementation activities. It also gives guidance and backing to jurisdictions and emergency management/response individuals and their affiliated organizations as they accept or, consistent with their status, are encouraged to accept the system. The NIC also oversees and coordinates the publication of NIMS and its related

¹⁰ Ibid., 8.

¹¹ Ibid.

products. This oversight includes the review and certification of training courses and exercise information.¹²

With regard to supporting technologies, NIMS and its related emergency management and incident response systems change continuously; therefore, emergency management/response personnel will increasingly rely on technology and systems to implement and adapt NIMS. The NIC, working with the Department of Homeland Security Science and Technology Directorate, provides oversight and coordinates the continuous development of incident management-related technology, including strategic research and development.¹³

National Response Framework

In 2008, the NRF replaced the National Response Plan and became the all-hazards doctrine for the management of incident response. The NRF further describes the principles discussed in the NIMS but focuses on prevention, preparedness, response, and recovery. It also details the structure and methods for the coordination of federal support to local and state incident managers as well as executing federal responsibilities. Most importantly, the NRF emphasizes the tiered response structure that is the corner stone of U.S. domestic response doctrine.¹⁴

The NRF uses a methodical and coordinated approach to incident response at the field, regional, and federal headquarters levels. It establishes protocols for reporting incidents, issuing alerts and/or notification, coordinating response actions, and mobilizing resources. Though the NRF maintains the primary role of state and local bodies as first

¹² Ibid.

¹³ Ibid.

¹⁴ Department of Homeland Security, *National Response Framework* (Washington, D.C., January 2008).

responders, it admits that incidents beyond the control of local response efforts will require a federal government response that uses all necessary department and agency capabilities.¹⁵

Five Principles of the NRF

The overarching objectives of the NRF are to save lives, reduce suffering, protect property, and protect the environment.¹⁶ There are five key principles of operations that define response actions in support of the Nation's response mission. When the five principles are grouped together, they form the national response doctrine.¹⁷

The U.S. Constitution's division of federal and state governments and the federal system of government frames the national response doctrine. As a result, the doctrine changes due to political and strategic influences, from lessons learned, and the introduction of new technologies and ideas. The five principles of the national response doctrine are: engaged partnerships; tiered response; scalable, flexible, and adaptable operational capabilities; unity of effort through unity of command; and a readiness to act.¹⁸

Engaged Partnerships

Engaged partnerships are an essential part of preparedness; therefore, leaders at all levels must continuously communicate, develop shared goals, and align capabilities to prevent or mitigate the inability to respond during a crisis. As described in Chapter 3,

¹⁵ Ibid., 24.

¹⁶ Ibid., 1.

¹⁷ U.S. Department of Homeland Security, *National Response Framework*, U.S. Department of Homeland Security (Washington DC, 2013), 8.

¹⁸ Ibid., 9.

preparedness requires a plan; engaged partnerships ensure that individuals and agencies are working together, training, and organizing well in advance of an incident.¹⁹

Tiered Response

Incidents begin and end at the local level; to include the vast majority that remain only at the local level. Incidents must be led and managed at the lowest possible jurisdiction and be provided support by outside agencies when required. To maintain this decentralized control, every level of response must be ready at all times.²⁰

Even though tiered response is a principle of the NRF, response times can be compressed to such an extent that it can begin simultaneously at all levels. Despite the fact that the Stafford Act limits the federal government's ability to respond until requested by a state governor, the DOD, DHS, and President of the U.S. have the authority to prepare for support until such a request is made.²¹

Scalable, Flexible, and Adaptable Operational Capabilities

Every disaster or incident is unique and thus requires a unique response. Even during a response effort, circumstances can change; therefore, the NRF provides scalable and flexible organizational structures and capabilities.²²

Unity of Effort through Unified Command

A successful response effort must have unity of effort. One of the ways to achieve this is by a unified command structure. This command structure must have a thorough understanding of the roles and responsibilities of each participating organization

¹⁹ Ibid.

²⁰ Ibid., 10.

²¹ U.S. Department of the Army, Civil Support Operations, 2-12.

²² U.S. Department. of Homeland Security, National Response Framework, 10.

and respect their corresponding chains of command. The DOD is fully integrated into this concept and their response is covered by the NRF.²³

Readiness to Act

In order to provide an effective response there needs to be a balance between a readiness to act and an understanding of the risk. The NRF relies on a forward leaning response for immediate notice incidents that are agile in scope, size, and complexity. To capitalize on quick response efforts and mitigate risk there must be clear communication and adequate supporting processes.²⁴

The Military and Civil Support Operations

The U.S. Army defines the four elements of full spectrum, military operations as: offense; defense; stability operations; and civil support operations. Stability operations and civil support operations are similar in the fact that they both have civilians in large numbers within the operating area, both require military forces for essential services, and that military forces have to work closely with civil authorities (an implicit condition of a military subordinate to civilian control). Despite these commonalities, the greatest distinction lies in the operating environment of stability operations versus civil support operations; the former is conducted outside the U.S. while the latter is conducted within the U.S. Because of this difference, there is a substantial change in the laws, military chains of command, rules for the use of deadly force, and interagency processes.²⁵

²³ Ibid., 10-11.

²⁴ Ibid., 10-11.

²⁵ U.S. Department of the Army, Civil Support Operations, viii.

Defense Support of Civil Authorities

Civil support is defined as Department of Defense support to U.S. civil authorities for domestic emergencies, and for designated law enforcement and other activities.²⁶

Defense support of civil authorities (DSCA) replaces two older terms: military support to civil authorities and military assistance to civil authorities. DSCA is defined as:

support provided by U.S. Federal military forces, National Guard forces performing duty in accordance with Reference (m) [Title 32 United States Code], DOD civilians, DOD contract personnel, and DOD component assets, in response to requests for assistance from civil authorities for special events, domestic emergencies, designated law enforcement support, and other domestic activities. Support by National Guard forces performing duty in accordance with Reference (m) [Title 32 United States Code], is considered DSCA but is conducted as a State-directed action. Also known as civil support.²⁷

When state National Guard forces provide support in a purely state capacity, specifically when the state has control and pays for the support, it is referred to as National Guard civil support and not DSCA.²⁸

Homeland security and homeland defense are complementary aspects of the National Security Strategy. Homeland defense is:

the protection of U.S. sovereignty, territory, domestic population, and critical defense infrastructure against external threats and aggression, or other threats as directed by the President. Missions are defined as homeland defense if the nation is under concerted attack from a foreign enemy. Department of Defense leads homeland defense and is supported by the other federal agencies.²⁹

In turn, Department of Defense supports the Nation's homeland security effort, which is led by the Department of Homeland Security. Homeland security is:

²⁶ U.S. Joint Chiefs of Staff, *Civil Support Operations*, Joint Publication 3-28 (Washington, D.C.: Joint Chiefs of Staff, September 14, 2007).

²⁷ U.S. Department of Defense, *DoD Directive 5111.13p* (Washington, D.C.: Department of Defense, January 16, 2009), 12.

²⁸ U.S. Department of the Army, *Civil Support Operations*, 1-1, 1-2.

²⁹ *Ibid.*, x.

the concerted national effort to prevent terrorist attacks within the United States; reduce America's vulnerability to terrorism, major disasters, and other emergencies; and minimize the damage and recover from attacks, major disasters, and other emergencies that occur.³⁰

In both homeland defense and homeland security, the military conducts civil support operations.

³⁰ Ibid.

CHAPTER 6: THE GAP

Doctrine versus Science or Doctrine Supported by Science

Disaster preparation and response requires extensive knowledge and training. There are volumes of information devoted to educating leaders, agencies, and responders for these occasions. As expected, the Department of Defense (DOD), the nation's largest potential source of civil support, also maintains and promulgates publications designed for such responses. Not intended as a pejorative but the DOD has a penchant for developing manuals; it must because of the wide variety of topics and mission sets. In this vast array of military manuals, experience, logic, and science support doctrine, methodology, and procedure.¹ It is, arguably, the rare case when a manual contradicts, ignores or is naïve of contemporary science.

The Strengths

Joint Publication (JP) 3-28 and U.S. Army Field Manual (FM) 3-28 are DOD's guiding source of information related to DSCA. Both of these manuals display an extensive knowledge of the subject matter and easily explain the complicated nature of U.S. laws regarding the use of the military. JP 3-28 incorporates a generalized approach and serves as the doctrinal umbrella under which the U.S. Army's FM 3-28 frames its specific approach. Overall, the U.S. Army and Joint Staff produced very sound publications have taken into account the myriad of changes over the last 20 years since the 1993 production of FM 100-19 Domestic Support Operations.

¹ The U.S. Army categorizes its manuals by doctrine, reference, tactics and procedures, and techniques. Recently, the U.S. Army made extensive use of applications for interactive training on different media platforms.

Joint Publication 3-28

JP 3-28 encapsulates the framework of homeland defense, DOD's operational environment, types of operations, as well as the activities required for sustenance and support. It covers a broader perspective than FM 3-28 and uses this perspective to explain the different facets of DSCA at the uppermost levels of government. It is undergoing a rewrite process.

U.S. Army Field Manual 3-28

FM 3-28 is the principal manual for DSCA and covers much of the subject matter in greater detail than JP 3-28. It explains the role of a military subordinate to civilian leadership, describes the benefits of military capabilities during response efforts, and offers guidance in the face of ambiguous orders and tight legal constraints. As a whole, the manual does extremely well explaining the many facets of DSCA.

The Weaknesses

As previously stated, both JP 3-28 and FM 3-28 are sound, well-conceived documents but they could achieve much more if the manuals incorporated any germane aspect of the extensive amounts of disaster research produced during the last 60 years. As a result, the manuals commit three basic mistakes. First, and most importantly, neither manual includes any aspect of disaster research. Second, the manuals promote concepts that largely belie disaster research.² Third, the manuals, specifically FM 3-28, contradict disaster research.

² An example of this includes the Rules of Force procedures in FM 3-28 which will be explained in greater detail within this chapter.

Exclusion of Disaster Research

The wealth of information that both manuals provide could offer much more if they applied the relevant findings of disaster research. The application of the research will require different approaches based upon the manual's organization. In the case of JP 3-28, which serves as the doctrinal umbrella for Service manuals, inclusion will require a broad perspective. In contrast, FM 3-28 has a tighter perspective than JP 3-28 does; therefore, it should include more aspects of disaster research to account for the greater levels of fidelity. By acknowledging that the vast body of disaster research and knowledge exists and that the Disaster Research Center (DRC) provided input to the design of DSCA provides enormous credibility to the document and to U.S. doctrine.

Concepts Belie Disaster Research

Both JP 3-28 and FM 3-28 include discussions of the Standing Rules for the Use of Force (SRUF) in support of civil law enforcement. They explain SRUF using a continuum of force escalation model and they include the threat of potential domestic terrorism events during DSCA operations that might require the use of force. Each manual is explicit in its description of the potential legal and political pitfalls of the use of force; however, the whole approach regarding SRUF belies the realities of disaster research.

The likelihood of a Service member requiring the use of force within the borders of the United States during DSCA operations is highly unlikely. Though the manual's descriptions and narrative concerning the subject matter are correct and detailed, they do not approach the topic from the standpoint of such an improbability. Disaster research

shows that people tend towards order not anti-social behavior during disasters.³ There are implications with approaching the use of force from the present standpoint within the manuals and a better explanation of the use of force is required.

Contradictions of Disaster Research

FM 3-28 states, “after a disaster, the affected communities often experience a collective shock that inhibits the local response, compounded by the destruction.”⁴ This assumption contradicts what disaster research repeatedly finds otherwise. In a paper titled, *Conventional Beliefs and Counterintuitive Realities*, Dr. Enrico L. Quarantelli reports that

the myth... concerns the...notion that survivors of disasters are stunned into inaction or passivity. The initial shock of undergoing the impact of a disaster supposedly makes individuals dazed and unable to function or react to the situation.... Instead of passivity and inaction, they documented over and over again that survivors quickly moved to do what could be done in the situation.... Even the very earliest disaster studies found that in the first half hour after impact, about a third of survivors searched for missing persons, with about 10 percent taking an active role in rescue.⁵

Dr. Quarantelli later articulates the survivors’ situation after Hurricane Katrina in New Orleans, Louisiana that

Their pro-social and very functional behavior dwarfed on a very large scale the antisocial behavior that also emerged. Improvisation and innovation took place because the everyday traditional routines could not be used or were ineffective in dealing with the problems that had to be addressed. Of course, not all that was created was perfect; there was at times a degree of inefficiency in what was done. However, what came into being not only prevented the New Orleans area from a collapse into total social disorganization, but little by little provided at least semi-

³ Enrico L. Quarantelli, "Conventional Beliefs and Counterintuitive Realities," *Social Research* 75, no. 3 (2008), 880-886.

⁴ U.S. Department of the Army, *Civil Support Operations*, Field Manual 3-28 (Washington, D.C.: Headquarters, Department of the Army, June 29, 2010), 3-1.

⁵ Quarantelli, “Conventional Beliefs and Counterintuitive Realities”, 886-887.

solutions for many immediate and intermediate problems that required attention. A decentralized response....is almost a necessary response of a catastrophe.⁶

FM 3-28 also discusses the importance of readiness during pandemic disease outbreaks. Sick Service members can reduce readiness or even endanger others through exposure; therefore,

DOD policy and directives stress the importance of state-level planning and preparation before an outbreak requires military resources. The priority of effort goes to installation readiness and force health protection measures. The installation commander plays a pivotal role by coordinating installation response planning and preparation. The flu will not distinguish between Regular military, National Guard and Reserve Component forces, and DOD civilians. Most estimates predict that between 30% and 40% of Soldiers or civilians would not report for duty (either because they are sick, or family members are ill). A pandemic could degrade readiness so that units could not carry out their missions. This could occur due to lack of a pandemic influenza vaccine, lack of antiviral drugs, lack of personal protective equipment, and the lack of education on hygiene and social distancing.⁷

Presuming that 30% to 40% of Service members or civilians would not report to duty is risky to say the least. FM 3-28 does not refer to the study that produced the estimates; therefore, the whole concept of role abandonment in this case becomes questionable. Recent studies of role abandonment by Dr. Joseph E. Trainor and Dr. Lauren E. Barsky of the DRC have produced different results that would refute the assertions in FM 3-28. The description of role abandonment in Chapter 5 of this thesis already explains the research that Dr. Trainor and Dr. Barsky conducted; however, it is prudent to re-address this concept in the context of FM 3-28's statement. There are no documented cases of role abandonment in U.S. disasters save one, the abandonment of

⁶ Ibid., 888-889.

⁷ U.S. Department of the Army, Civil Support Operations, 4-15.

their posts by 240 New Orleans police officers during the effects of Hurricane Katrina.⁸

The dysfunction associated with the police department largely accounts for this rare example instead of factors associated with role strain or role conflict that would be contributors in this case. Also, the relatively high projected rate of 30% to 40%, as FM 3-28 suggests, aligns itself to conclusions usually predicted by perception studies that are not wholly accurate. In contrast, behavioral studies would be a better indicator.⁹

⁸ Joseph E. Trainor and Lauren E. Barsky, "Reporting for Duty? A Synthesis of Research on Role Conflict, Strain and Abandonment among Emergency Responders during Disasters and Catastrophes" (Wilmington, DE: Disaster Research Center, University of Delaware, 2011),13.

⁹ Ibid., 16-17.

CHAPTER 7: THE RECOMMENDATIONS

U.S. Defense Support of Civil Authorities (DSCA) doctrine provides an excellent description of the process and legal constraints that Service members face; however, it does not prepare those same Service members for the realities that they may face when confronted with actual crises and disasters. The amount of knowledge related to disaster research is enormous and well documented. Unfortunately, the Department of Defense (DOD) and Services do not rely upon disaster research studies in order to shape their doctrine. As a result, the myths, as described in Chapter 4, and a lack of ethical and philosophical considerations in disaster planning can mislead Service members from conducting realistic training. Military forces are the most likely source of large-scale support during disasters and have much to gain from over 60 years of disaster research. As such, inclusion of appropriate disaster research lexicon and studies in the appropriate manuals would greatly enhance the military's ability to respond when called and most importantly serve as enablers to positive response efforts.

This chapter makes a number of recommendations regarding the inclusion of disaster research into DOD doctrine. Some of the recommendations will refer to changes in terminology used by the United States Government (USG); however, the vast majority will deal with proposed changes to the United States Army Field Manual 3-28 (FM 3-28). The purpose of these recommendations is to take advantage of a rare opportunity where peer reviewed, empirical science can influence military doctrine.

United States Government Lexicon

“Not until terms and concepts have been clearly defined can one hope to make any progress in examining the question clearly and simply and expect the reader to share one’s views.”¹

The first, and perhaps most important, recommendation involves a change to USG terminology. As Chapter 2 alludes to, the array of definitions that the USG uses are confusing and even contradictory when compared to the definitions that Dr. Enrico L. Quarantelli refers to in his document titled “Emergencies, Disaster, and Catastrophes are Different Phenomena”. This chapter proposes changes to the existing definitions and the creation of definition for terms that do not yet exist in Joint Publication 1-02 DOD Dictionary of Military and Associated Terms (JP 1-02). In either of these cases, the proposed definitions will follow the logic and criteria established Dr. Quarantelli.

Definition of Emergency

In JP 1-02, as amended through 15 April 2013, there are numerous references to emergency as well as many terms that pair with the term emergency to create a particular definition. The relevant, multiple pairings range from civil, civil defense, defense, domestic, national, and transportation emergencies. It is proposed that the JP 1-02 version of civil emergency be modified to include a definition that fits both USG government needs and Dr. Quarantelli’s criteria. The changes should include references to the nature of support, level of independence, standards of performance changes, and the interface of private and public sectors.

¹ Carl von Clausewitz , Michael Howard , and Peter Paret, *On War* (Princeton, N.J.: Princeton University Press, 1976), 132.

Definition of Disaster

JP 1-02 also has variations of disaster definitions. The relevant, multiple pairings for disaster are fewer than for an emergency but they do range from foreign, major, and natural. References to human-made and man-made disaster exist, as subsets of other definitions but they, themselves, are not defined. It is proposed that the USG write a definition for disaster bearing the same criteria for a disaster as categorized by Dr. Quarantelli. The disaster definition must be able to distinguish itself from a lesser emergency and a greater catastrophe. It should include an increased levels of support, decreased independence, a change in standards of performance, and closer interfaces between private and public operations. A newly created term such as civil disaster could match the effort for a new civil emergency definition thereby creating common definition structures within the USG lexicon.

Definition of Catastrophe

The closest definition related to catastrophe in JP 1-02 is catastrophic event. It is identical to, save one word, the January 2008 National Response Framework definition of a catastrophic incident. They are as follows:

catastrophic event: Any natural or man-made incident, including terrorism, **which** results in extraordinary levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, national morale, and/or government functions.²

catastrophic incident: Any natural or manmade incident, including terrorism, **that** results in extraordinary levels of mass casualties, damage,

² U.S. Joint Chiefs of Staff, *Department of Defense Dictionary of Military and Associated Terms* Joint Publication 1-02 (Washington DC: Joint Chiefs of Staff, November 8 2010 As Amended Through January 31 2011), 39.

or disruption severely affecting the population, infrastructure, environment, economy, national morale, and/or government functions.³

Other than these examples, there is no criterion requiring the use of the term catastrophe as a noun vice an adjective in the USG lexicon; instead, the focus is on catastrophic as opposed to catastrophe. It is recommended that action be taken to develop a definition for a catastrophe that is greater than a disaster and falls short of the definition of a complex catastrophe. The definition should include the impact to the majority of the population, interruption in work roles, interruption of community functions, and the lack of available help from neighboring regions.

Inclusion of Complex Catastrophe

The creation of the term complex catastrophe denotes a concern for situations that can involve large regions if not the whole of the United States. This implies that the response effort could be the largest that the U.S. has ever faced. An event on this scale requires a different mode of thinking and organization that should be discussed in FM 3-28 and other government publications. The complexities of such a response effort would be enormous and would require organizational skills beyond the level of current publications.

Joint Publication 3-28

During the creation of this thesis, JP 3-28 experienced a rewrite. The myriad changes include a reorganization of the chapters that include more references to legal considerations such as the Posse Comitatus Act and a greater emphasis on interagency coordination. The basic recommendations regard inclusion of disaster research findings

³ U.S. Department. of Homeland Security., "*National Response Framework*," U.S. Department. of Homeland Security (Washington DC, 2008), 42.

related to use of force as well as inclusion of disaster philosophy with regard to disaster response.

Recommendations for Standing Rules of Engagement and for the Use of Force

Of particular importance is the appendix that deals with the Standing Rules of Engagement and Standing Rules for the Use of Force (SROE/SRUF). The proposed appendix rewrite keeps much of the legal concerns associated with these measures, within the boundaries of the U.S., but it fails to consider the low probability as supported by disaster research. It is recommended that JP 3-28 carry reference to the volumes of research that adequately address the unlikely event for a Service member to use force within the confines of the U.S. A better appreciation of the reality that surrounds SROE/SRUF would anchor the legal concerns with the manual. This recommendation in no way is to assume that the low probability of such an event should reduce awareness of or training to applicable standards for disaster support.

Inclusion of Disaster Philosophy and Ethical Considerations

Philosophical or ethical considerations are not included as a topic in any of the manuals written by the U.S. Government agencies on Defense Support of Civil Activities (DSCA). JP 3-28 and FM 3-28 indirectly approach these topics with reference to the Posse Comitatus Act or SRUF. In both of the cases, the only concerns addressed are those that could legally affect the Service member. There is no attention paid to the myriad of other situations or outcomes that a Service member may face. Because disaster is a human endeavor, it is recommended that the U.S. Government take action to include some aspects of disaster philosophy and ethics in disaster preparation and training.

The JP 3-28 rewrite effort includes a section for planning considerations during disaster support. It is highly recommended that at least part of this section include disaster philosophical concepts and ethical considerations. Arguably, the greatest reason for inclusion of these concepts and considerations is that Service members are among those most likely to execute disaster plans when other agencies are unable to do so.

Under circumstances when Service members are a part of the response plan they will most likely be executing plans developed at the local, state, or National level. If the plan is flawed, or in the event that communications are lost, Service members will have to execute to the best of their ability someone else's plan. Absent any other support, these are the situations where functional knowledge of disaster ethics such as Save the Greatest Number versus Save All Who Can Be Saved serves best. A responsible humanitarian effort that follows the steps listed in Chapter Three is an example of one way where a Service member can assure that their actions are well conceived and executed. In those events where a Service member fails to adequately care for or address the safety of U.S. citizens during a disaster they could suffer far worse legal ramifications than failure to obey Posse Comitatus or SRUF.

Field Manual 3-28

FM 3-28 is a well-written Service publication that covers in detail, issues that will affect Service members. Its limitations are similar to JP 3-28's in that it lacks any reference to the empirical realities of disasters. Based on this limitation it is recommended that FM 3-28 include appropriate social science research, new terms, and philosophical concepts. Corrections should be made in those cases where FM 3-28 could better consider a topic or in cases where the discussion is incorrect.

Social Science Research

There are numerous aspects to social science studies of disaster. The aspects of the research covered in Chapter 4 deal with disaster myths. It is therefore prudent and wise for FM 3-28 to include discussions of these myths and their true likelihood to better prepare Service members who have to respond in these situations.

Begin a Partnership with the Disaster Research Center, University of Delaware

The Disaster Research Center is widely recognized as a pioneering institution in the subject area of disaster research. In particular, the DRC is a leader of human behavioral and social scientific issues; new research methodology development; for a commitment to research training; and for a portfolio that spans over 600 field studies in the aftermath of disasters, catastrophes, and community crises. Because of the vast amount of experience and knowledge that the DRC has to offer, it is recommended that Joint and Service doctrine subject matter experts in the DSCA field establish a partnership. The benefit of such a partnership would greatly increase the reliability of doctrinal assumptions as well as provide better insight into Service doctrine.⁴

Realistically Depict Human Behavior in Appropriate Service Doctrine

FM 3-28 states that after a disaster “affected communities often experience a collective shock that inhibits the local response, compounded by the destruction.”⁵ As previously addressed in Chapter 4, FM 3-28’s assertion is contrary to disaster research and serves as an example of U.S. Service doctrine’s misunderstanding of human behavior

⁴ "University of Delaware, Disaster Research Center," University of Delaware, <http://www.udel.edu/DRC/> (accessed January 13, 2013).

⁵ U.S. Department of the Army, *Civil Support Operations*, Field Manual 3-28 (Washington DC: U.S. Department of the Army, June 29, 2010), 3-1.

during or after disasters. Disaster research studies have consistently shown that human behavior tends toward action rather than passivity.⁶ In order to correct this trend, U.S. DSCA doctrine should account for the likelihood of human behavior in the appropriate Joint and Service publications. It is recommended that either a portion of an existing publication be allocated to this topic or a new publication that discusses the realities of human behavior be created into Service doctrine. An accurate understanding of human behavior allows Service members to act in ways that enable others to provide response in ways that achieve common goals.

Describe Role Conflict, Role Strain, and Role Abandonment

Chapter 4 discusses the belief in role abandonment during disasters. To quote FM 3-28 with regard to pandemic response, “most estimates predict that between 30% and 40% of Soldiers or civilians would not report for duty (either because they are sick, or family members are ill). A pandemic could degrade readiness so that units could not carry out their missions.”⁷ Recent studies by researchers at the DRC call into question the validity of such a statement.⁸ Regardless, situations may arise where individuals may not be able to respond during a crisis; therefore, this thesis posits that certain organizational characteristics, as stated by research, would minimize any reasons for role strain, role conflict or role abandonment. They are:

- 1) Instill a clear sense of purpose and value.
- 2) Establish a cohesive culture and sense of obligation towards the group.

⁶ Enrico L. Quarantelli, "Conventional Beliefs and Counterintuitive Realities," *Social Research* 75, no. 3 (2008), 873-904.

⁷ U.S. Department of the Army, Field Manual 3-28: *Civil Support Operations*, 4-15.

⁸ Trainor and Barsky, Reporting for Duty? A Synthesis of Research on Role Conflict, Strain and Abandonment among Emergency Responders during Disasters and Catastrophes.

- 3) Train and clearly establish employee expectations before and during an event.
- 4) Establish honest communications with employees to help them understand why they are or not taking risks.
- 5) Provide meaningful support and protection for employees and their families.⁹

Another factor, when discussing the likelihood of role abandonment, is the inclusion of potentially sick Service members in the work place. If personnel are more likely to report to duty than believed they may actually spread the pandemic if they are infected. Service members, who are action oriented may, in this case, create more problems. Leaders must be prepared to think through this topic and others like it.

To a U.S. military organization, especially one that has experience over a decade of continued conflict, these characteristics are indubitable; however, in the context of a disaster where a military unit will be working with other civilian agencies, they require a broader understanding. Service members will most likely be executing another agency's plan during disaster recovery efforts and may have to coordinate and operate with civilians during this period. The organizational support that exists in the U.S. military may not exist in a civilian organization, especially one that has recently withstood a disaster. It is imperative that Service members be aware of the likely differences in leadership and organizational abilities of other agencies and, when required, at least identify the listed characteristic gaps of their own units and of others that prevent role strain, conflict, and abandonment. This thesis recommends that methods be identified and described in the appropriate Joint and Service publications that can alleviate the potential for role strain, role conflict, and role abandonment.

⁹ Ibid., 19-20.

CONCLUSION

This thesis described numerous implications for Defense Support of Civil Authorities (DSCA) doctrine. First, U.S. Service members are responsible for the execution of disaster response. It is imperative that they are adequately prepared and trained for their role in disaster response efforts. Thus far, DSCA doctrine primarily accounts for process and legal concerns and excludes any of the aspects of realistic human behavior based on over 60 years of disaster research. Without merging the vast body of disaster research knowledge with DSCA doctrine and training Service members will not be prepared to deal with all of the complexities of disaster response.

Second, the use of vague, potentially confusing, and conflicting terminology will limit comprehensive Federal policy. Appropriate U.S. departments and agencies must assess current definitions and make such changes to the government lexicon that validates discernible terminology. This will lead to credible changes in policy and differentiate critical resource requirements for emergency, disaster, and catastrophe response. It will also clarify any confusion across numerous federal and state agencies that currently exist.

In conclusion, this thesis identified a gap in the knowledge regarding the realities of human behavior during disaster as a part of DSCA as well as the difference in terminology of emergencies, crises, disasters, and catastrophes. It also explored some of the legal and ethical constraints that Service members face when executing DSCA operations. The recommendations that it makes are relatively simple and extremely important; that the U.S. Department of Defense rethink and rewrite some of the terminology involving emergencies, crises, disasters, and catastrophes, include philosophical and ethical decision-making discussions in training, and account for the

realities of human behavior that Service members are likely to find when they execute disaster response efforts. As a result, U.S. Service members will be better able to lead, cooperate with other responders, and serve as enablers of positive action during chaotic events.

APPENDIX

Primary Civil Support Tasks

Army Field Manual 3-28 specifies four primary support tasks of civil operations. They are: provide support for domestic disasters; provide support for domestic chemical, biological, radiological, nuclear, or high-yield explosives (CBRNE) incidents; provide support for domestic civilian law enforcement agencies; and provide other designated support. FM 3-28 expanded the number of primary civil support tasks from three to four in 2010 by placing an increased emphasis on CBRNE incidents. Any incidents involving CBRNE threats may cause an event to be extremely more complicated and it will require specialized response capabilities. Similar planning and response considerations may apply to pandemic incidents as well.¹

Provide Support for Domestic Disasters

There are four levels of response that can be provided by the military in the case of a domestic disaster. They are: at the direction of the governor for state National Guard forces; a declaration by the President requested by the governor of the affected state; at the direction of Service Secretaries for capabilities not assigned to the combatant commanders (for example, bases and installations); and through immediate response authority.²

¹ U.S. Department of the Army, *Civil Support Operations*, Field Manual 3-28 (Washington DC: U.S. Department of the Army, June 29, 2010), 1-12.

² Ibid. The U.S. Army Field Manual is the primary source for civil support and is referred to by other Services. Joint Publication 3-28 does not list these same primary tasks.

Provide Support for Domestic CBRNE Incidents

The majority of scenarios in the NRF deal with accidental or deliberate threats caused by CBRNE. During the response period of a CBRNE incident, federal military and state National Guard forces can provide specialized capabilities and general-purpose forces in support of civil authorities.

Not every CBRNE threat is necessarily manmade. Pandemic disease outbreaks (known as pandemics) also fall under this civil support task. In this capacity, military support to pandemic response has internal and external components. Internally, military installations must respond appropriately to maintain the combat readiness of the forces. Externally, military forces can respond to those federal and state agencies that request for support in dealing with the pandemic disease.

Other outbreaks of infectious disease aside from human oriented pandemics may require military support. These situations can include animal diseases such as hoof and mouth disease and crop infestations caused by fungus, bacteria, or viruses. During these incidents, military support can be requested by state or federal agencies, such as the Departments of Agriculture.³

Provide Support for Domestic Civilian Law Enforcement Agencies

This task is arguably one of the most contentious primary civil support tasks due to the numerous laws and legal implications that could be enforced if military support is not provided wisely. It applies to the restricted use of military assets to support civil law enforcement personnel conducting civil law enforcement operations within the United

³ Ibid., 1-13.

States and its territories. Military forces support civilian law enforcement under U.S. Constitutional and statutory restrictions as well as corresponding directives and regulations. All Service members must understand the rules and regulations that govern the use of military assets for civil law enforcement.⁴

Provide Other Designated Support

This task relates to pre-planned, routine, and periodic support unrelated to emergencies, disasters, or catastrophes. Usually, other designated support is provided to major public events for such things as specialized transportation or to meet additional security requirements. Events that would qualify for this support are national, special, security events such as an Inauguration, a state funeral, or Olympic sporting event. It can also extend to augmentation of critical government services by Service members, as authorized by the President and directed by the Secretary of Defense. A particular example includes President Reagan's replacement of striking air controllers in the Federal Aviation Administration with qualified military personnel. The Service members were replaced once newly hired civilians completed training. Another mission that either federal military or state National Guard forces can receive on a regular basis is assisting firefighters on state and national lands.⁵

Fundamentals of Civil Support

Every civil support mission is unique; therefore, responders face an inherent inability to be completely prepared for every set of circumstances. This is why FM 3-28

⁴ Ibid.

⁵ Ibid.

creates a broad set of fundamentals that military responders can apply to each and every civil support task.⁶

The primary purposes of civil support are to save lives, alleviate suffering, and protect property

Service members can fulfill countless tasks during civil support but the enduring mission is to save lives, alleviate suffering, and protect property. In the absence of orders, communications, or in complex and chaotic situations, each Service member will do well to base their actions on this three-part prime directive.⁷ This task also ties to disaster ethics and is the cornerstone of disaster planning, preparation, and response.

The law defines every aspect of civil support operations

The law defines who has jurisdiction, who is allowed to respond, and the constraints and restraints imposed upon Service members. It also prohibits many Service members from executing particular tasks such as those closely related to law enforcement. The law also requires that certain skill sets such as medical treatment meet particular requirements. Military leaders must consult with a staff judge advocate before authorizing any Service member to carry out any task outside of the mission received through the appropriate chain of command. Violation, whether intentionally or not, of the laws regarding civil support can create legal barriers to a military unit's mission accomplishment.⁸

⁶ Ibid., 1-14.

⁷ Ibid., 1-12.

⁸ Ibid., 1-14.

Civilian officials set the priorities and direct civil support operations

During civil support operations, the military works for civil authorities; but this statement needs some clarification. Civil authorities have the responsibility to establish the priorities for incident response to which military units may contribute. Once the priorities are established, the defense coordinating officer (a military liaison typically co-located at a federal joint field office) will create missions for military units to complete. The military units will complete assigned missions and then allow civilian agencies to assume all response efforts as soon as possible.⁹

All costs associated with civil support missions must be documented

DOD personnel must accurately document the cost of civil support operations. This requirement is stated in law and delineates the cost associated with military personnel completing missions. The reason behind this accounting allows private businesses to compete for recovery efforts and is designed to revitalize the economies of the affected areas.¹⁰

The military end state is reached when civilian authorities can fulfill their responsibilities without military assistance

The quickest way to a new normal after an incident is a fully functioning, civil authority without assistance from the military. Once this has been achieved the military shall cease any response or recovery effort and return to its installations and posts.¹¹

⁹ Ibid., 1-15, 1-16.

¹⁰ Ibid., 1-16.

¹¹ Ibid.

Federal Military Forces Disaster Response

When federal military forces provide incident response it is provided in two categories: immediate response authority and response to a Presidential declaration of an emergency or disaster. Under an immediate response authority, an installation commander may assist a local community in an emergency but the support is limited in both time and scope. Support under the pretense of a Presidential declaration may range from installation support up to commitment of major portions of active duty forces.¹²

Immediate Response Authority

Federal military forces are typically not the first responders; however, the context of the immediate response authority does give installation commanders the ability to provide support to local civil authorities when requested. The intent behind this authority can best be summed up in the following statement¹³

Presidential Declaration

In most cases, federal military forces, committed to civil support operations come after a presidential disaster declaration in accordance with the Stafford Act. After the disaster declaration has been issued, a primary federal agency (usually FEMA) communicates and coordinates with the defense coordinating officer (DCO) to make a DSCA request and submit it to the DOD executive secretary. A federal coordinating officer may also initiate the DSCA request, or another federal agency could request

¹² Ibid., 3-9.

¹³ Ibid., 1-16.

Federal military support. The President may circumnavigate the normal request process and directly order the military to provide support.¹⁴

The United States Constitution and Division of Powers

Under a political system defined in the U.S. Constitution, the central national government shares power with the states. This form of federalism is the framework for the division of powers between state and federal government. The U.S. Constitution carefully distributes power to the executive, legislative, and judicial branches of the federal government and the individual states. This same separation of power principle also applies to the U.S. armed forces, about which the Constitution states,¹⁵

Congress shall have power . . . To raise and support Armies . . . To provide and maintain a Navy; To make Rules for the Government and Regulation of the land and naval Forces; To provide for calling forth the Militia to execute the Laws of the Union, suppress Insurrections and repel Invasions; To provide for organizing, arming, and disciplining, the Militia, and for governing such Part of them as may be employed in the Service of the United States, reserving to the States respectively, the Appointment of the Officers, and the Authority of training the Militia according to the discipline prescribed by Congress;

The President shall be Commander in Chief of the Army and Navy of the United States, and of the Militia of the several States, when called into the actual Service of the United States; Article II, Section 3 states the President, —..shall take care that the Laws be faithfully executed.
[The Constitution of United States, Article II Section 2]

Separation of Powers

From these paragraphs became the genesis of today's National Guard and the constitutional basis for the separation between the National Guard and the Regular components of the U.S. military. This Article also grants the authority to the state

¹⁴ Ibid., 3-10.

¹⁵ Ibid., 1-3.

governors to maintain command (unless federalized) of the National Guard units within their jurisdiction. Because of this construct, there is not a chain of command that subordinates a state governor to the U.S. President. Rather, both the state and federal government have respective powers granted them in accordance with the U.S. Constitution. This delineation between a state's authority and the federal government's authority creates a legal division that affects operations within the borders of the United States. Service members who operate within the domestic operational environment must fully understand this distinction and the potential impacts that the separation of powers can create.¹⁶

Fears of a standing army

The shaping of the U.S. Constitution and its separation of powers demonstrates the founding fathers antipathy towards a large military such as those used by European powers. A large standing army that answered to a head of state was considered a threat to civil liberties. Despite the founder's fear of a large standing army, they also understood the necessity for a nation to have a regular force for the common defense. The founders maintained a balance between the state and federal government by ensuring that the states would have military capabilities. There were numerous historical reasons for this balance between the states and nation.¹⁷

¹⁶ Ibid., 1-4.

¹⁷ Ibid.

Whiskey Rebellion

The original, political design for the United States under the Articles of Confederation (1784 to 1787) was inadequate. The National government did not have the authority or means to act in the National interest. This absence of a cohesive national system led to the Constitutional Convention where the Founders created a new, stronger form of national government. After the ratification of the U.S. Constitution in 1787, the federal and state governments had the ability to enforce laws. Shortly thereafter in 1794, the new nation had an opportunity to test the construct during the Whiskey Rebellion. President Washington had to use armed forces to restore order and his guidance to the military was to support local civil authorities, not pre-empt them. From that moment, President Washington's military in support of civil authority response established the paradigm and remains in law today.¹⁸

Components of the Military

Title 10 Status

Title 10, U.S. Code, governs all federal military forces including Regular and activated reserve components of the Army, Navy, Air Force, and Marines. When Federalized, the National Guard is also in a Title 10 status. As the Commander-in-Chief, the President commands all federal military forces. The President can also direct federal military forces to support federal agencies; however, these forces shall always remain under a federal chain of command. In instances such as a disaster or catastrophe, there is

¹⁸ Ibid.

a requirement for two chains of command, one for federal forces and one for state forces.¹⁹

Title 32 Status

A state governor commands all Title 32 status forces. This includes any National Guard unit, regardless of active status, that is not federalized under Title 10. When a governor mobilizes a National Guard unit, it is in a state active duty status, under the command and control of that governor. In this arrangement, state governments fund all expenses (including pay), mandate all mission sets, and enforce all state military codes. Title 32 National Guard units can execute civil law enforcement missions subject to the states rules and regulations. State governors can make reimbursement requests to the federal government for any costs associated with a state's emergency response activation of the National Guard.²⁰

Defense Support of Civil Authorities Concepts and Frameworks

Strengths and Weakness of DSCA

The primary purpose of the U.S. military is to organize, train, and equip in order to defeat threats to the national interest; however, civil support operations are also a critical element of service to the nation. When domestic incident response capabilities are overwhelmed, the same skills that allow Service members to meet their objectives in operational or combat situations can be of great assistance to local, state, and federal organizations. In conjunction with the training, that a professional military force provides, is the equipment that the military provides. Developed for combat conditions,

¹⁹ Ibid., 1-6.

²⁰ Ibid., 1-7.

military equipment assists with communication, construction, bridging, etc... Coupled, a Service member's skills and equipment offers an incredible amount of support that cannot be duplicated anywhere else in the United States. The U.S. military has a long history of civil support operations dating back to the earliest days of the Republic. Each year, thousands of Service members give support to civilian organizations.²¹

Regular Components

The U.S. military numbers approximately 1.4 million active duty Service members organized into five different Services. The regular components of the Army, Navy, Air Force, and Marines offer important advantages in size, training, equipment, flexibility, and endurance. The fact that a regular component such as the Army or Marines can generate large forces rapidly to support local, state, and federal organizations during response efforts and then sustain them is arguably the Services' primary attribute.²²

Active military units also suffer some disadvantages such as proximity, legal limitations, and operational limitations. Military bases may not be close to the area requiring support thereby delaying response times. Deployments and exercises may also limit the ability of a regular component's response. Once regular components become a part of a response effort, they may also face legal limitations regarding their use.²³

²¹ Ibid., 1-1.

²² Ibid., 1-4.

²³ Ibid., 1-4.

Reserve Components

The reserve components of the U.S. military number approximately 850,000 personnel. The law currently restricts the use of reserve forces for civil support operations. Generically speaking, reserve forces conduct civil support operations under two criteria. First, the President in response to a CBRNE incident may mobilize reserve forces. Second, reserve forces on active duty for training may provide immediate response or other associated civil support only when authorized by DOD; however, the time spent conducting civil support operations counts against the total training time for that year, and may not exceed the total active duty for training time allotted for that year.²⁴

National Guard

The Army National Guard and Air National Guard total approximately 460,000 personnel. The National Guard has significant advantages such as proximity, responsiveness, knowledge of local conditions, tactical flexibility in civil support missions, and closer associations with local and state officials. The state governor can activate the National Guard and because of their geographic proximity to the incident respond quickly. Because National Guardsmen are from the local region, they have a better understanding of the local areas. When under a Title 32 status, the National Guard can aid law enforcement and other civil enforcement activities prohibited by Title 10 forces.²⁵

²⁴ Ibid., 1-5.

²⁵ Ibid., 1-5.

Disadvantages of the National Guard are unit organization, limited endurance, and inadequate state funding. Many National Guard units have larger echelon structures that span multiple states. An incident in one state may be best suited for a unit in an adjacent state; therefore, the supporting National Guard units from affected state may not be optimized for that incident. When National Guard units mobilize, they draw Service members from the local work force and economy. If an incident requires long-term National Guard support then tension within local and state government can result. A state's funding sources are limited when compared to the federal government; therefore, fiscal constraints can force the state to demobilize the National Guard prematurely.²⁶

Limitations to DSCA

The Posse Comitatus Act

The Posse Comitatus Act limits federal military forces support of civilian law enforcement. It and other DOD directives prohibit the use of the Army and Air Force Service members to execute state law, federal law, or direct law enforcement functions; however, the Posse Comitatus Act does not prohibit National Guard forces mobilized in a State Active Duty status or in a Title 32 status.²⁷ The National Guard's statutory law enforcement functions are still allowed. The Posse Comitatus Act also allows the United States Coast Guard (USCG) to execute inherent Title 14 U.S. Code law enforcement

²⁶ Ibid., 1-6.

²⁷ Ibid., 5-2. DOD Directive 5525.5 prohibits the U.S. Navy and Marine Corps from executing the same functions. It also provides guidance on the type of assistance the DOD provides to civil authorities when the assistance is primarily for a military purpose and does not violate the Posse Comitatus Act. This guidance is known as the Military Purpose Doctrine. Such support cannot degrade combat readiness or the capacity of DOD to fulfill its primary mission. In general, the less directly related the situation is to civilian law enforcement and the more it supports a military purpose, the less applicable is the Posse Comitatus Act.

powers; these are not restricted even as the USCG falls under the U.S. Navy's operational control. Service members who violate the Posse Comitatus Act can receive severe criminal penalties.

Congress passed the Posse Comitatus Act in 1878 "in response to the military presence in the Southern States during the Reconstruction Era" and due to perceived abuses of military involvement in civilian affairs.²⁸ Since the inception of Posse Comitatus, Congress has allowed the U.S. military to support civil law enforcement in limited cases such as the sharing of information, loaning equipment, and providing expert training and advice.²⁹

Unless specifically authorized by law, no military personnel in a Title 10, United States Code (USC), status (Federal military forces) will become involved in direct civilian law enforcement activities, including, but not limited to, search, seizure, arrest, apprehension, stop and frisk, surveillance, pursuit, interrogation, investigation, evidence collection, security functions, traffic or crowd control, or similar activities, except in cases and under circumstances expressly authorized by the President, Constitution, or Act of Congress.³⁰

In cases where a disaster overwhelms local law enforcement, National Guard forces can support civil law enforcement agencies upon the governor's authorization. Specific legal authorities outlining National Guard execution of law enforcement missions vary from state to state. In contrast, Federal military forces must have special authorization from the Secretary of Defense in order to conduct civil law enforcement beyond federal military installations. In exceptional cases, states attorneys general, in

²⁸ Matthew C. Hammond, "The Posse Comitatus Act: A Principle in Need of Renewal," *Washington University Law Quarterly* 75, no. 2 (1997), 953.

²⁹ Kirk L. Davies, "The Imposition of Martial Law in the United States" [master's thesis, Wright Patterson Air Force Base, Ohio: JA General Staff College, January 2000], 18.

³⁰ Chairman, U.S. Joint Chiefs of Staff, *Defense Support of Civil Authorities Execute Order* (Washington DC: U.S. Joint Chiefs of Staff, 14 August 2009).

coordination with the SECDEF, may recommend to the President authorization of the Insurrection Act.³¹

The Insurrection Act

The President, as delegated by Congress, may mobilize federal military forces during an insurrection or civil disturbance. The Insurrection Act authorizes the President to wield federal military forces within the U.S. to enforce federal law or restore peace and order after a major public emergency. The state governor must request use of federal military forces or the President must determine that state authorities are ineffective while maintaining public order. The President first issues a proclamation ordering the dispersal of those preventing law enforcement. The Insurrection Act allows the President to take unilateral action in order to suppress an insurrection or domestic civil disturbance against the authority of the U.S. without the request or authority by a state governor.³²

Presidents invoked the Insurrection Act a number of times in U.S. history. The 1992 Los Angeles riots provoked the most recent use of the Insurrection Act to quell civil disturbances. President G.H.W. Bush used the Insurrection Act during widespread looting after Hurricane Hugo devastated Saint Croix, Virgin Islands in 1989. In the civil rights era, some southern state governors defied federal law and court orders forcing federal action by the President under the umbrella of the Insurrection Act.³³

³¹ U.S. Department of the Army, Civil Support Operations, 5-2.

³² Ibid., 7-6.

³³ Ibid.

Emergency Authority

Federal military commanders can commit their forces to uphold the law and protect federal property under two particular circumstances allowed by DOD Directive (DODD) 5525.5. The first circumstance is when an event requires rapid federal action, including mobilization of military forces, in order to prevent the loss of life, to prevent the malicious destruction of property, to restore governmental functions, and to restore public order. The requirements for federal military forces might be due to the immediate effect of a disaster or civil disturbance where local government authorities are unable to deal with the situation. The Posse Comitatus Act still applies unless other exemptions exist.³⁴

The second circumstance is when federal property and federal government functions require protection. The need could arise in the face of an immediate and discernible threat when local authorities were unable, or declined, to provide adequate protection. In this case, federal military commanders may also mobilize federal military forces.³⁵

Under both circumstances, federal military commanders who are responsible for authorizing such actions under the emergency authority must determine that obtaining prior approval from the President, through the chain of command, to mobilize is unfeasible or unresponsive. Despite delays while using their emergency authority, commanders must continuously attempt contact to obtain specific authorization through their respective chains of command from the President.³⁶

³⁴ Ibid., 5-3.

³⁵ Ibid.

³⁶ Ibid.

Martial Law

Martial law involves use of the military to exercise police powers; restore and maintain order; ensure essential mechanics of distribution, transportation and communication; and conduct necessary relief measures.³⁷ In these circumstances, a military commander temporarily supersedes civil law, as adjudicated by civil courts under ordinary measures. The President, and only the President, can establish martial law under federal military forces. DODD 3025.12 states that “federal military commanders shall not take charge of any function of civil government unless absolutely necessary under conditions of extreme emergency. Any commander who is directed, or undertakes, to control such functions shall strictly limit military actions to the emergency needs, and shall facilitate the reestablishment of civil responsibility at the earliest time possible.”³⁸

Other officials authorized to do so under that state’s law may employ martial law on the state level. Even in these situations, the restraints at the state level are similar to the restraints at the federal level. Martial law, at either level, is subject to legal review by the appropriate supreme court.³⁹

³⁷ Ibid.

³⁸ U.S. Department of Defense, *DoD Directive 3025.12 Military Assistance for Civil Disturbances* (Washington DC: Department of Defense, 4 February, 1994), 5.

³⁹ U.S. Department of the Army, *Civil Support Operations*, 5-4.

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VITA

Lt Col Carlton Wade Hasle, USMC, holds a Bachelor of Science Degree in Sociology and a Bachelor of Arts Degree in History from Virginia Polytechnic Institute and State University, Blacksburg, VA as well as a Masters of Science in Management from the University of Maryland University College, Adelphi, MD. He enlisted in the United States Marine Corps Reserve in 1987 where he served for six years. During this period he was activated and served in Saudi Arabia and Kuwait during Operation DESERT SHIELD/DESERT STORM. In May 1993 he was commissioned as a second lieutenant when he subsequently completed The Basic School and flight school before he was winged as an AH-1W pilot in May 1996. His first Fleet tour was primarily spent with Marine Light Attack Helicopter Squadron (HMLA) 167 and included two deployments with Marine Medium Helicopter Squadron 266 (Reinforced) as a part of the 24th Marine Expeditionary Unit. During this time he served as a Weapons and Tactics Instructor and was promoted to captain. He then served as an Operational Test Director for the H-1 Upgrades Program from 2002 to 2004 where he was also promoted to major. From 2005 to 2008 he served on the Marine Aircraft Group 39 staff and deployed twice to Iraq with HMLA-169 as the Operations Officer and Detachment Officer in Charge. In 2008 he was promoted to lieutenant colonel and served as the Executive Officer of Officer Candidates School in Quantico, VA. From December 2010 to June 2012 LtCol Hasle commanded HMLA-367. LtCol Hasle was a student at the Joint Advanced Warfighting School from 2012-2013. His awards include the Meritorious Achievement Medal, Air Medal with "V", Commendation Medal with gold star, Achievement Medal, and the Combat Action Ribbon. LtCol Hasle is a recipient of the 2007 MCAA Aviator of the Year.