

THE FEDERAL EMERGENCY MANAGEMENT AGENCY;
AN ORGANIZATION PREPARED

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Homeland Defense

by

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ABSTRACT

THE FEDERAL EMERGENCY MANAGEMENT AGENCY; AN ORGANIZATION
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The citizens of the United States face disaster every year. Whether manmade, natural, large or small the individual states provide a first line of defense and response with their resources and by agreement, through the Emergency Management Assistance Compact (EMAC), the resources of neighboring states. When the incident is too large or the state's resources compromised to the point where the state cannot adequately respond to the event, the Federal Emergency Management Agency (FEMA) facilitates access to national assets. The FEMA provides coordination for the federal response with an all hazards approach to disasters experienced by the U.S. In order to accomplish this mission FEMA routinely engages Department of Defense assets, specifically Title 10, which provides a robust and rapid response capability unavailable from any other source. This thesis examines FEMA's preparedness and ability to integrate these resources into the response plan. To accomplish this, the thesis explores the changes to FEMA between 1992 and 2007. This research also analyzes "FEMA Strategic Plan, Fiscal Years 2008-2013" FEMA's 5-year plan projecting changes within the organization. FEMA is the nation's preeminent emergency management and preparedness agency but are they ready?

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ACRONYMS

2SR	Second Stage Review
AAR	After Action Review
AOR	Area of Responsibility
C2	Command and Control
CBRNE	Chemical, Biological, Radiological, Nuclear, hi yield Explosives
CDT	Central Date Time
COE	Contemporary Operating Environment
CONUS	Continental United States
DCE	Defense Coordinating Element
DCO	Defense Coordinating Officer
DHS	Department of Homeland Security
DHUD	Department of Housing and Urban Development
DoD	Department of Defense
DOE	Department of Energy
DOL	Department of Labor
DOT	Department of Transportation
DSCA	Defense Support to Civil Authorities
EMAC	Emergency Management Assistance Compact
FCO	Federal Coordinating Officer
FEMA	Federal Emergency Management Agency
FORSCOM	Forces Command
GAO	Government Accounting Office

GWOT	Global War on Terror
HHS	Health and Human Services
HSC	Homeland Security Council
HSPD	Homeland Security Presidential Directive
ICS	Incident Command System
JTF	Joint Task Force
MA	Mission Assignment
MCS	Multiagency Coordinating System
MPH	Miles Per Hour
NAPA	National Academy of Public Administration
NGO	Non-Government Organization
NICC	National Infrastructure Coordinating Center
NIMS	National Incident Management System
NORTHCOM	Northern Command
NRF	National Response Framework
NRP	National Response Plan
ONP	Office of National Preparedness
PDA	Preliminary Damage Assessment
PDD	Presidential Decision Directive
PFO	Principal Federal Officer
SCO	State Coordinating Officer
SME	Subject Matter Expert
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture

USNORTHCOM United States Northern Command

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CHAPTER ONE

INTRODUCTION

Background

The United States of America faces and successfully manages natural disasters every year - mostly at the local and state government level. Occasionally the resources of the affected state fail to meet the needs of the disaster. Agreements with neighboring states and localities can help support these needs, though this is not always the case. When major natural disasters overwhelm local, state and regional resources, the Department of Homeland Security (DHS) may, by order of the president of the United States, engage their resources in order to manage and meet the needs of our citizens. Staffed to handle multiple emergencies simultaneously, the Federal Emergency Management Agency (FEMA) provides the managerial function for DHS. It is important to understand that FEMA does not provide the resources employed but rather operates as the coordinating element for federal assets. As the lead federal agency, they choose from available support options to sustain the affected state's emergency response efforts. FEMA does not supplant the state emergency managers but rather acts as a kind of intermediary between them and the federal government. This synchronization ensures maximum utilization of the available resources including local and state first responders, organized state militias, National Guard assets, state emergency response assets, support from other states, non-government organizations (NGO)'s and commercial sources. Quickly accessible federal entities, such as the Coast Guard, Health and Human Services (HHS), Department of Labor (DOL), Department of Transportation (DOT), Department of Energy (DOE) and the Department of Agriculture (USDA) then fill the gaps. As these

resources peak in capability, or unique missions arise, FEMA reaches the decision point of whether or not to engage Department of Defense (DoD) assets.

The Department of Defense is the largest, most robust and most capable federal organization able to provide full spectrum emergency and disaster support. Along with this great capability comes the highest cost of employment making DoD the organization used when no other means will do to accomplish the mission. Because of this enormous cost, FEMA must be sure that the decision to call in the military is the right one. This decision normally comes if the response requires a quick reaction or large scale response. DoD, through its military service arms, provides this unique ability and is able to tailor its forces to the requirements of FEMA and react quickly to any situation anywhere in the United States. The one certainty in any national emergency is that DHS through FEMA will be involved and when FEMA has a critical need DoD provides the necessary men and equipment. In order to ensure the timely and effective employment of these resources, DHS assigns responsibility to the Federal Coordinating Officer (FCO) who, along with the Defense Coordinating Officer (DCO), helps to manage the integration of Title 10 and other DoD entities with the available state and Title 32 resources.

Disaster response begins with a declaration by the governor of the affected state to the president; however, the assignment of resources begins with the president's representative, the FCO. According to the DHS, "The FCO is a senior FEMA official trained, certified, and well experienced in emergency management, and specifically appointed to coordinate federal support in the response to and recovery from emergencies and major disasters. The FCO executes Stafford Act authorities, including commitment of FEMA resources and the mission assignment (MA) of other Federal departments or

agencies.” (Department of Homeland Security 2008) This individual represents FEMA in execution of Stafford Act responsibilities and is the primary point of contact for the State Coordinating Officer (SCO) and other state, tribal, and local responders. It is through the FCO that federal support begins to integrate with and compliment the state effort. It is likewise through the FCO that states gain access to DoD resources, managed by the DCO.

Just as the assignment of federal resources begins with the FCO, the DCO is the channel through whom DoD allocates assets. Ten DCOs, appointed by the DoD, oversee the Defense Coordinating Elements (DCE) in 10 regions aligned with 10 FEMA regions. These individuals, along with the staff of their DCE, serve as a single DoD point of contact for processing and coordinating the military with FEMA when requests for Defense Support to Civil Authorities (DSCA) arise. By managing the requests for DoD support, analyzing the requirements and forwarding the MA, the DCO ensures that the DoD response is necessary, adequate, and appropriately resourced. The DCO is a subject matter expert (SME) on state and federal emergency response plans and must build relationships with federal agencies, National Guard officials, and state emergency response personnel. Through these actions, the DCO enables support to various homeland defense and civil support exercises, coordinates with military installations within their region, and works with other DCOs in order to support or assume operations in other regions. The ultimate objective is to integrate Title 10 resources into the overall federal response to declared emergencies not of a military nature. (FEMA 2008)

The use of military forces during these natural disasters raise certain legal issues pertaining to the use of active duty military personnel in a civil support role on American

soil. The armed forces have been deliberately designed as the military element of national power and not as a national police force. The intentional limitation derives from the colonial period in pre-revolutionary war times when the British Army acted as a policing force in the American colonies. This extension of the government's will upon its people through the military so abused the civilian population that the American government took steps to limit the military authority within the national borders. Ultimately, this led to the Insurrection Act (1807) and the Posse Comitatus Act (1878). These Acts enable the president to utilize the military under certain conditions and ensure that severe penalties prohibit the abuse of military power. Many times since the inception of these two acts, the active military have been called on to support the nation in times of disasters and emergencies. There has been no recorded instance of abuse by military leadership in the performance of his duties and, generally, the citizens of the United States look without fear to the military for support during their times of need. It is a credit to the Armed Forces that the American people trust them with their lives, their families and their property. Many individuals argue in favor of Posse Comitatus while others argue that it is outdated. Regardless of one's point of view, neither Posse Comitatus nor the Insurrection Act has limited the military role in aiding Americans in their time of greatest strife.

The United States Military plays a critical role in the national response framework (NRF) and is the most robust and responsive of the assets available to FEMA. These forces come in three different forms, Title 10 and Title 32 and Title 14. Title 10 outlines the roles of the US Armed Forces and is comprised of subtitles A-E. Of these, subtitle B pertains to the Army, subtitle C pertains to the Navy and Marine Corps, subtitle D

pertains to the Air Force, and subtitle E pertains to the Reserve Component. (U.S. Code; Title 10 2004) These subtitles provide the guidance for training, manning and equipping U.S. forces. Title 32 provides the same training, manning, and equipping guidance specifically for the National Guard. Title 14 governs the U.S. Coast Guard which, as an organization falls under the purview of the DHS and not DoD. This extremely capable and responsive organization plays a critical role in disaster response and law enforcement but falls outside the scope of this study. For the purpose of this research there are two relevant differences between Title 10 and Title 32. First, Title 32 forces operate with a chain of command extending through the Governor of the State in which they are formed and second, that Title 32 are specifically authorized to perform law enforcement duties when not under Title 10 authority. This key difference allows the state to access some of the capabilities found within the DoD without the limitations of Title 10 law. (U.S. Government 2004) It is imperative that FEMA recognize the difference in roles and responsibilities and does not inadvertently employ these two organizations in an inappropriate manner thereby placing Soldiers and leaders at increased risk of violating the Insurrection Act or the Posse Comitatus Act in an effort to meet the needs of the U.S. populace. (Leahy 2008)

The Insurrection Act authorizes the president of the United States to employ federal and National Guard troops, for law enforcement, in subduing insurrection or rebellion directed against a state or the nation. The intent of the Act is to provide enough power to the president to regain and retain order without infringing on the sovereignty of the individual states. The Act has been used only sparingly since its inception and, when invoked, suspends posse comitatus. Title 10 sections 331-335 govern the use of the

Insurrection Act. Sections 331 and 332 specifically authorize the president's use of federal forces and the National Guard to enforce state requests and federal law. Section 333 provides guidance on the conditions that should exist prior to the use of this Act. Section 334 ensures that president first issue a proclamation to disperse. This section is important because it maintains a level of protection for American citizens by allowing for a peaceful resolution. The final section, 335, extends the president Authority to Guam and the Virgin Islands as "state" entities. (Cornell University Law School 2008).

Posse Comitatus: "Use of Army and Air Force as posse comitatus": Whoever, except in cases and under circumstances expressly authorized by the Constitution or act of Congress, willfully uses any part of the Army or the Air Force as a posse comitatus or otherwise to execute the laws shall be fined under this title or imprisoned not more than two years, or both." (U.S. House of Representatives 2006) Title 10 armed forces, specifically the Army and Air force, are prohibited by law to act as law enforcement officers. Suspension of Posse Comitatus allows these forces to perform law enforcement functions. (U.S. House of Representatives 2006)

The Stafford Act of 1988 empowered state governors to request DoD support, through the president, to perform emergency work. Emergency work is defined in the amended Act (June 2007) as the essential action necessary to preserve life and property. This emergency work can be carried out for up to ten days and include debris removal (subject to section 5173 (b)). The federal government and affected state will cost share the financial burden with the federal government percentage not to exceed seventy-five percent. (United States Government 2007)

The Insurrection Act, suspension of Posse Comitatus and the Stafford Act, then, form the foundation for the federal government response to natural disasters. Knowing that the U.S. government can support the individual states during times of disaster should facilitate the use of Title 10 resources in support of our citizens. Crisis after crisis, though, proves that understanding the guidelines is far easier than implementing them. Hurricane Katrina stands as a poignant reminder of just how catastrophic a natural disaster can be and how quickly state and federal resources can be taxed in response. This overtaxing of resources is exactly what occurred in 1992 with Hurricane Andrew, the 1993 Mississippi Floods, the 1993 East Coast Blizzards, the 2004 Hurricane Season and Hurricane Katrina.

Hurricane Andrew

Hurricane Andrew made landfall on August 24, 1992 in southern Dade County, Florida and is the first modern natural disaster to challenge the nation's emergency response capabilities. Its closest competitor, Hurricane Hugo, struck South Carolina in 1989. According to the Department of Commerce records, "Hurricane Andrew caused an estimated \$26 billion (some estimates as high as 33 billion) damage in the United States making it the most expensive natural disaster (at that time) in United States history. By comparison, Hurricane Hugo came in around twenty percent of this cost. At landfall in southern Dade County, Florida, the central pressure was 922 millibars, the third lowest this century, (after the 1935 Florida Keys Labor Day storm and Hurricane Camille in 1969) for a landfalling hurricane in the U.S. " (Department of Commerce 2004)

Hurricane Andrew was a monster storm for which the people of Florida and FEMA were unprepared.

The east coast of the U.S. has weathered many hurricanes. Andrew was similar in some respects to these but different in size and ferocity. Andrew, like many Atlantic hurricanes, formed off the coast of Africa because of a tropical wave. It became a tropical storm on August 17, 1992. “As with many of the worst Atlantic hurricanes, Andrew was born as a result of a tropical wave which moved off the west coast of Africa. It had an uneventful track west northwestward across the Atlantic. August 21, 1992 brought significant change to the conditions because of a deep high pressure center over the southeast U.S. that extended eastward. This high pressure, positioned north of the storm, created a more favorable environment and enabled tropical storm Andrew to rapidly strengthen. (Department of Commerce 2004) On August 22, 1992, Andrew became a hurricane further strengthening to a category 4 the next day. During its westward movement it weakened for a short time but as it approached Florida it moved over the Gulfstream causing a rapid re-intensification to category 5 and imminent landfall. The storm devastated Dade County causing \$25 billion in damage (most of the storm's economic damage happened in southern Florida). Andrew then moved northwest across the Gulf of Mexico and made its second landfall on August 26, 1992 as a category 3 storm in south-central Louisiana. Andrew directly caused 23 U.S. deaths and indirectly caused 38 more. It destroyed 25,524 homes and damaged 101,241 creating a large population of displaced persons. (Department of Commerce 2004) FEMA, despite their best intentions and efforts, could not anticipate this level of destruction nor could they effectively respond adequately and rapidly. They simply had no way to predict the huge impact of this storm or the needs of the communities afterward. Hurricane Andrew was the Hurricane Katrina of its time.

1993 Mississippi Floods

This massive event caught and held the attention of the nation for months during 1993. Heavy rains in May through the end of June caused flooding in tributaries of the Mississippi River. By July 5, major evacuations were underway along the Mississippi River turning this regional mid-western event into headline national news. In the weeks that followed, levees continued to fail, displaced families, and losses in property and agriculture continued to increase. On July 17, President Clinton met with the Governors of the nine affected states to discuss escalating environmental concerns including fresh water pollution from flooded sewerage, oil and chemical facilities. The floodwaters did not ebb until August 9th at which time the concerns of relief and aid for rebuilding rose. Periodic rainstorms in the region resulted in flash floods though the overall water level continued to recede until August 29-31 when additional rain caused flooding in Des Moines. After this, the United States Army Corps of Engineers (USACE) began repairing the federal levees. During this time, FEMA continued its efforts and the Department of Housing and Urban Development (DHUD) made funds available for “buyouts” to encourage residents not to rebuild within the floodplain. In some instances displaced residents voted to move their entire town. As the floodwaters receded, (St. Louis dropped below flood stage September 13) the fear of crop damage/shortfalls in production and winter and spring flooding increased. (S. A. Changnon 1996) By the end of the floods, the region realized a widespread impact. Eighteen billion dollars of damages extended over 9 states, leaving behind more than 1,000 broken levees 18,402 square miles flooded; 171,815 square miles effected, 31,000 people dislocated, and 48

people killed made the 1993 Mississippi floods the worst on record (although not the biggest), for the United States of America (Observatory 2003).

East Coast Blizzards

The 1993 East Coast Blizzard caught the entire nation by surprise as it swept over 13 states, effected 26 states, killed 270 people and, for the first time in history, closed every major airport on the east coast at one time or another. The snow, as much as 56 inches, was just a part of this “winter hurricane”. Tornados, a storm surge and wind speeds as high as 144 miles per hour (MPH) caused widespread interruption of essential services and effectively isolated thousands of people from help. This storm raged from March 12 through March 15 and, over these three days, deposited an amount of water equivalent to 40 days of water flowing out of the mouth of the Mississippi River at New Orleans.

Recovery cost estimates were as high a \$6 billion. (Lott 1993)

2004 Major Hurricane Season

The 2004 Hurricane Season rates among the worst for the number of named storms (15 as compared to an average of 10) and Hurricanes (9 as compared to an average of 6). Six of these Hurricanes received the classification as major hurricanes. Throughout the season, these storms delivered a staggering \$49 billion in damages, the most costly season to this point, and 168 deaths. These storms heavily damaged 13 states. (Department of Commerce 2008) Florida, affected by 4 hurricanes in 2004, had 1 in 5 homes damaged and 117 fatalities, South Carolina faced two landfalling hurricanes for the first time in 45 years. In addition, widespread rainfall from hurricane Frances

caused flooding as it tracked northward through the Appalachian Mountains.

(NOAA/National Climatic Data Center 2004)

Hurricane Katrina

No natural disaster in recorded history reached the level of destruction and resulting fiscal loss of Hurricane Katrina. Tropical Storm Katrina became a Hurricane on August 25, 2005 less than two hours before its first landfall in southeastern Florida. This mighty storm blew over the tip of Florida for about six hours until finally entering the Gulf of Mexico on August 26 again as a tropical storm. As the system tracked out into the warm waters of the Gulf, it reorganized in one hour and, for the second time attained hurricane strength. Katrina continued to gain power and achieved category 3 status with winds of 115 MPH by August 27th. Throughout the day, Katrina nearly doubled in size and emitted wind bands 140 nautical miles from its center. On August 28, the wind field expanded to 200 nautical miles from center and a sustained wind speed of 172 MPH. Katrina's landfall, at 0610 local Central Date Time(CDT), wind speed weakened to about 121 MPH followed by a third landfall a few hours later. By 30 August, 1800 CDT the storm was a tropical depression passing through the Tennessee Valley. Landfall was over and the storm had passed but the worst still lay ahead. (Knabb, Rhome and Brown 2005)

Hurricane Katrina affected states from Florida, the site of first landfall, to Louisiana, Mississippi and Alabama sustaining hurricane force winds all the way to the US Canada border and was still a major storm system as it passed into Quebec. This storm dwarfed every other natural disaster up to this point by orders of magnitude doubling the damages realized for the entire 2004 hurricane season and tripling that of

Hurricane Andrew. At \$96 billion over multiple states (three catastrophically affected) Katrina delivered the financial impact to the nation previously only forecast as the result of a nuclear attack, pandemic outbreak or a major earthquake. While a compromised and ineffective levee system allowed 80 percent of the city to flood, utterly failing to protect the city of New Orleans, the significant damage was not limited to this one city. The three hardest hit states, Alabama, Louisiana and Mississippi, still have not recovered economically or physically. Overall, the storm impacted over 90,000 square miles, killed 1,330 people, dislocated 800,000 people and damaged or destroyed 300,000 homes. The sheer magnitude of this natural disaster will exist in our memories perhaps for generations. Considering the massive scale of this disaster, Katrina served as a tool to highlight the deficiencies in our response system and affected an analysis and rethinking of our emergency procedures and handling of future disasters. In hindsight, no reasonable person would expect that any state or even the U.S. Government could possibly address all of the needs of citizens in the disaster zone. Many things could have been handled better, more quickly and more efficiently though. (Government, US 2006) (U.S. Department of Homeland Security 2008)

Many of these lessons learned in Katrina, 2005, began after Hurricane Andrew, 1992. FEMA, a comparatively young organization, has the mission of responding to the disasters experienced by the United States. These disasters often hit with little or no warning and with no accurate way to predict where they will strike or how extreme their affects might be. In its three decades of organization, (since 1979) FEMA has learned many hard lessons and, perhaps responded as well as possible to the onset of natural disaster, acts of God and ravings of terrorist. FEMA wants to get it right every time

though arguably an impossible task. Hurricane Andrew, in 1992, offered the first significant challenge to FEMA and, because of failings and lessons learned FEMA began to change in its approach to disaster response. This research explores this change in FEMA's and their preparedness to request and manage Title 10 DoD resources in response to our nation's natural disasters.

Primary Research Question

Is FEMA prepared to effectively incorporate Title 10 resources into the natural disaster response effort?

Secondary Research Question

What has FEMA done to improve their response to natural disasters since 1993 (specifically the planning for and incorporation of Title 10 military assets)?

Is Northern Command (NORTHCOM) prepared to provide these resources?

How does FEMA envision the FEMA-DoD relationship in the future?

What triggers should initiate DoD involvement?

Who should manage DoD assets (i.e. military or agency commander/senior member, FEMA representative...who is in charge?

What should trigger disengagement of DoD assets?

Assumptions

FEMA is staffed to manage steady state operations and is not big enough to handle catastrophic emergencies.

DoD involvement is a critical element to successfully meet FEMA's response to disasters of national significance.

FEMA and the DoD desire to work together in support of FEMA's mission.

Limitations

This Thesis will only address the FEMA-DoD relationship.

Analysis is from the point of view of FEMA and the conduct of their mission. Expanding beyond this limitation will result in a product that is unfocused and far too broad in scope.

This Thesis will discuss, generally, Title 10 and Title 32 authorizations/responsibilities. Title 10 governs the use of active duty forces in the conduct of emergency response. It further limits the use of active duty forces for law enforcement operations except as required under the Insurrection Act. Title 32 governs the use of National Guard forces in support of emergency relief and allows these forces to operate as law enforcement under certain conditions.

Delimitations

This research will not seek to provide a model for FEMA-DoD organization or relationships.

This paper will not discuss the merits/demerits of Title 10 and Title 32 in regards to national emergency response nor will it address Title 32 response to emergencies. An effective case can be presented demonstrating the benefits of a full spectrum response from active duty forces and the National Guard. It is the combination of all available

assets that maximizes the response and not necessarily the strengths and weaknesses of any given organization.

This research acknowledges the critical role provided by the U.S. Coast Guard under Title 14. The contributions and capabilities are such that discussion of or inclusion of them is outside the scope and capability of this paper.

This paper will not argue either for or against the relevance of the Posse Comitatus Act.

Significance

This study seeks to provide information that will benefit the U.S. Military and DHS (FEMA) in understanding how FEMA has changed in disaster response since Hurricane Andrew. Furthermore, this paper will explore USNORTHCOM's preparedness to provide necessary resources and the FEMA-DoD relationship. By gaining this understanding, FEMA will more effectively plan for DoD asset integration and support states in the process of requesting DoD resources through established procedures. Through this support, individual states will better plan the use of their internal resources in combination with DoD capability. Every organization operates with limited resources. While there is value in redundancy, thereby ensuring capability, there is no value in having too much to operate effectively or, conversely, not enough to get the job done. Ideally, FEMA will orchestrate their mission with exactly what they need, where they need it, at just the moment it is required. With this level of efficiency, FEMA will realize its goal of a nation prepared.

CHAPTER TWO

LITERATURE REVIEW

The purpose of this research is to determine if FEMA is prepared to effectively incorporate Title 10 resources into the natural disaster response effort. FEMA focuses the preponderance of their and NORTHCOM's resources and training on responding to homeland defense in response to terrorist attacks. This focus does not imply an indifferent approach on the part of FEMA and USNORTHCOM but rather demonstrates the realities of the contemporary operating environment (COE). The 9/11 attacks clearly show that the global war on terror (GWOT) is a primary focal point for the security and defense of the U.S. homeland. Because of this and limited assets, a federal response to natural disasters within the United States is reduced thereby stressing local and state resources often beyond their ability to respond. The frequency of these major disaster declarations varies from year to year. However, over the past 13 years (not including 2008) this has occurred an average of 52 times or 4.33 new declarations per month. In addition to these major declarations, FEMA manages an average of 55 non-major disasters per year each requiring varying equipment, effort and expertise. This volume prolongs the suffering of the effected population while federal resources mobilize. In order to mitigate this condition FEMA and NORTHCOM continuously assess their capabilities and procedures with the desired endstate being an acceptable (though presumably never perfect) plan that adapts to the changes in the COE and specific need. (FEMA 2008)

Existing literature offers numerous opinions regarding FEMA's ability to integrate DoD assets into their response effort. The most widely expressed public opinions are:

FEMA is too small to handle emergency response.

FEMA is underfunded to handle emergency response.

FEMA is incapable of handling emergency response.

FEMA adequately handles emergency response but fails in the critical area of communication and coordination between state and federal agencies.

DoD should be the lead role in disaster response.

DoD is not capable of handling all emergencies effectively (Liberato identifies this point in his work “ A New Department of Defense Framework for Efficient Defense Support of Civil Authorities” and as indicated in the ESF matrix assigning primary agency responsibility) ESF 3 is the only one where DoD is the lead agency.

DoD should not be the lead agency in disaster response due to its primary mission of defending the country against attack.

Posse comitatus limits the military response and should be updated or revised to support the COE.

Current legislation is adequate to allow for DSCA.

Some, like Lombardo, argue that current legislation is too limiting and actually delays the federal response, specifically DoD, to natural disaster. He notes, “By adding a catastrophic disaster category to The Stafford Act, it will signal or “trigger” to all responsible agencies that if declared substantial response will be needed, to include immediate response by DoD in support of the governor. For the governor, it would be an acknowledgement that he/she expects and accepts DoD response under the preestablished plans and procedures developed under the provisions of the catastrophic disaster category of the Stafford Act. For the DoD, it will provide reassurance that state civil authorities

understand and accept how they will respond because they will be doing so according to the same plans and procedures state civil authorities agreed upon.” (Lombardo 2007, 76) He makes recommendations that suggest reviving DoD responsibility in responding to catastrophic disasters, maintaining solid relationships with state officials and reexamining DoD review and approval of critical support to FEMA. Lombardo identifies the three laws that limit DoD's involvement, Posse Comitatus, the Insurrection Act and the Stafford Act, and seems to advocate their revision in order to allow the military to take automatic action under certain conditions not relating to national defense. (Lombardo 2007)

Organizations like the Government Accounting Office (GAO) and the National Academy of Public Administration (NAPA), FORSCOM and FEMA IG all have submitted analysis and recommendations on disaster response and the federal government role. Karl Schneider addresses this in Disaster Relief is Spelled F-E-M-A by observing that, while states have the primary responsibility of disaster response, they can be overwhelmed. During these times, he observes that the federal government fails to move quickly enough possibly due to the limits imposed by Federal law. He raises the prospect posed by some unnamed commentators that DoD should be lead agency for disaster response. In his work he replies to this suggestion by identifying the military's primary mission, national defense, and stating that with this mission, DoD cannot guarantee the availability of necessary resources especially during times of war. Schneider's views seem clear; DoD should not be the lead agency however, they must be involved through civilian channels as authorized by federal law. (Schneider 1993)

Next, there are two points of view, seemingly contradictory, but interestingly linked as a success story for FEMA's recent performance during Hurricane Katrina. The first is that FEMA is incapable of handling emergency response, especially large scale. The second is that FEMA adequately handles emergency response though with noticeable failings in the areas of communication and coordination between states and federal agencies. Katrina continues to provide a platform for measuring state and federal response because of its wide scale impact and the stress on every system in place to counteract disasters. FEMA, at least since Hurricane Andrew, has sometimes been seen by the public and some (often elected) government officials as an inefficient organization lacking the capability to manage disasters. Hurricane Katrina, to the uninformed, proved this without question; however, when one examines FEMA's actions a different picture emerges. The House of Representatives in their report "*Select Bipartisan Committee to Investigate the Preparation to Hurricane Katrina, 2006*" is critical of FEMA. This report summarizes it best by stating: "It is clear the federal government in general and the DHS in particular were not prepared to respond to the catastrophic effects of Hurricane Katrina. There is also evidence, however, that in some respects, FEMA's response was greater than it has ever been, suggesting the truly catastrophic nature of Hurricane Katrina overwhelmed a federal response capability that under less catastrophic circumstances would have succeeded." (Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina 2006, 151) These two points of view, given emergency conditions, may prove to be accurate. As the committee noted, an event can be so large that even the very best effort is not enough. The question this poses is, had FEMA responded at the same level during Hurricane Andrew would the perception

of their effectiveness be different? This research does not address this hypothetical question but will focus on FEMA's efforts to improve.

The Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina identifies an additional limitation of FEMA. FEMA cannot adequately manage disasters of extreme magnitude like Hurricane Katrina because of their limited staffing. (Government, US 2006) This, again, supports the popular view of FEMA as being inept in the area of emergency management. However, again, events of such magnitude as Katrina overwhelm personnel resources just as it overwhelmed the levees designed to protect New Orleans. This position, then, must be tempered with what is "normal" rather than what is the exception. There does not seem to be an opposing point of view that FEMA's staffing levels are adequate for disaster response. This may be a product of their integration with DHS and the effort to exercise an economy of force in regards to manning and resources allocated to FEMA with the intention of augmenting the staff from DHS agencies when required. (Government, US 2006, 152)

Jeffery Toomer asks "If not Posse Comitatus then what?" (Toomer 2002), to highlight one cry for the military and DoD to assume a larger role in disaster response. He maintains that the Act, designed to protect the American people from an overzealous army, is in fact creating an environment of danger. His argument continues to posit, because of past circumvention of the Act, that it is already ineffective and thus void. (Toomer 2002) The alternative suggests that, because of the ability of the government to operate around (though not in violation of), the law to benefit the greater public good is effective and adequate and that it needs no changes, amendments or modification. Maximo Moore submits that education of military leaders in their roles and

responsibilities, as governed by existing law, will improve the military response and public confidence during time of emergency. Moore suggests that the military framework is not the right one for disaster response as it requires authority over subordinates in order to function vice the concept of shared decision making. (Maximo A. Moore 2006)

Unique disasters, like Hurricane Katrina, test the emergency response system and capabilities. These do not necessarily indicate an inadequacy with the lead agencies or supporting agencies. These catastrophic events simply tax resources in such an extreme way that no amount of pre-planning or preparation adequately enables a response. In short, we can plan for the worst but it is fiscally and physically impossible to completely prepare for it. Regardless of the severity, impact or extent of a disaster, DHS and FEMA seek to respond in an acceptable and coordinated manner. (Maximo A. Moore 2006)

The DHS through its subordinate agency, FEMA, responds to emergencies that meet specific criteria. This criterion primarily allows for a federal response only in the event that state government submits a request or the president acts unilaterally with the authority granted through the Insurrection Act, the Stafford Act and the NRF. Scholars argue for and against the modification, elimination or revision of these authorities. These arguments revolve around a single theme; the federal government must respond to disasters in support of civil authorities without violating the sovereignty of the state governments or the rights of American citizens. Scholars agree that there is no black and white approach to this fine balance of support as evidenced by the relative fluidity of rationale in approving the use of federal assets, especially the military, in disaster response. The fluid environment exists because the federal decision makers want to

respond to emergencies as quickly and as effectively as possible and so apply the broadest possible definitions to the policies. This effective practice enabled rapid response during past disasters. The consensus is that the federal government must respond quickly and with significant resources to meet the immediate shortfall of state government. Anything short of this is failure in the eyes of the American citizenry.

FEMA has an established procedure for requesting federal assistance. This process begins at the state level before, during, or after the disaster or incident. The governor assesses his resources and determines if they are adequate to respond to the states need. These resources include local, state, neighboring states and in recent years non-neighboring states, where memoranda of understanding exist to provide mutual support. Once it is determined that the state is incapable of effectively responding to or managing the disaster, the state and FEMA conduct a Preliminary Damage Assessment (PDA). The purpose of this assessment is to determine the need for the governor to request a federal disaster declaration from the president of the United States. This responsibility resides with the governor and flows directly to the president through FEMA. Once approved FEMA is empowered to provide all necessary support and resources to respond to the disaster. FEMA assumes lead agency status and coordinates the overall federal effort. It is FEMA's responsibility to ensure the use of available state resources prior to the allocation of federal assets. (Federal Emergency Management Agency 2008) (California Integrated Waste Management Board 2007)

FEMA's job as lead agency is difficult and demanding. In response to this the Secretary for Homeland Security appoints a Principal Federal Officer (PFO) as the primary point of contact to ensure the efficiency of the federal effort, the maintenance of

media relations, the effectiveness of public communications and information flow to local leaders encouraging and supporting their involvement. The job of the PFO is critical in maintaining the input/support of local leadership and the information flow to the population. The PFO enables FEMA to perform their function through his high-level involvement in the process. Disaster resolution is a high priority for FEMA and, as scholarly sources point out, FEMA's role is to coordinate the effort. Popular opinion, though, is that FEMA is responsible for fixing the problems. (Federal Emergency Management Agency 2008)

United States Northern Command (USNORTHCOM), established in 2002, defends the American homeland on land, sea and in the air. As part of this mission NORTHCOM coordinates defense support of civil authorities throughout its area of responsibility (AOR) which includes the Continental United States (CONUS), Alaska, Canada, Mexico and the associated littoral area out to about 500 nautical miles. NORTHCOM is also responsible for the Gulf of Mexico and the Straits of Florida. While homeland defense is the organization's primary mission, they are not limited to military operations. A significant responsibility for this headquarters is civil support missions especially during times of emergency and natural disaster. "USNORTHCOM's civil support mission includes domestic disaster relief operations that occur during fires, hurricanes, floods and earthquakes. Support also includes counter-drug operations and managing the consequences of a terrorist event employing a weapon of mass destruction. The command assists the lead agency when tasked by DoD. Per the Posse Comitatus Act, military forces can provide civil support, but cannot become directly involved in law enforcement." (U.S. Northern Command n.d.) Even though NORTHCOM is not the lead

agency for natural disaster response--though some argue that they should be--they are empowered, and expected, to maintain a proactive posture. Until the state makes an official request through FEMA, the command cannot take significant action. The Posse Comitatus Act prevents Title 10 forces from performing law enforcement functions except under specific authorizations. Individuals like President George Bush, Joseph Biden, Tom Ridge, Sam Nunn, Jeffrey Toomer and others make the argument that the Posse Comitatus Act should be repealed or revised, and argue that this action is a necessary adaptation to the changing world environment and the perceived inadequacy of the current lead agency specifically the DHS and FEMA. Others, like Patrick Leahy, Maximo Moore, and Tony Lombardo argue that it is sufficient in its current form and that the Act itself does not limit the speed of DoD response but rather the bureaucratic system restricts DHS and FEMA's response time.

Posse Comitatus does not limit NORTHCOM's efforts to support disaster response in fact, the command is required to plan for these operations thereby improving their response. According to USNORTHCOM, "In providing civil support, USNORTHCOM generally operates through established Joint Task Forces (JTF) subordinate to the command. An emergency must exceed the capabilities of local, state and federal agencies before USNORTHCOM becomes involved. In most cases, support will be limited, localized and specific. When the scope of the disaster is reduced to the point that the lead agency can again assume full control and management without military assistance, USNORTHCOM will exit, leaving the on-scene experts to finish the job." (U.S. Northern Command n.d.) Through these task forces (Joint Forces HQs National Capital Region, JTF Alaska, JTF Civil Support, JTF North, Standing Joint Force

HQs North, ARMY North and Air Force North), the DoD and Title 10 forces conduct live and simulated disaster response exercises. Recently the command conducted a chemical, biological, radiological, nuclear and high yield explosives (CBRNE) exercise at Fort Stewart, Georgia which trained the members of the federal military consequence force. This training culminated in a multi tiered consequence management response system engaging DoD, Title 10, and Title 32 capabilities. NORTHCOM continued its proactive approach to disaster support and national defense by launching operation VIBRANT RESPONSE during the week of 22 September, 2008 to further solidify and integrate internal capabilities.(USNORTHCOM n.d.)

These exercises provided essential training to the personnel who respond to our nation's disasters. It is, though, the lessons learned from each individual catastrophe that enables NORTHCOM to do its job. Rear Adm. Christopher Colvin, director of operations at USNORTHCOM, observed, "The increased capability and coordination in past three years shows us that state, tribal, local and federal agencies and resources of the National Guard are much improved. We are still planning and coordinating to provide unique areas of additional capabilities to the right place as needed, such as search and rescue, and medical transportation." (Hurricane Response; U.S. Northern Command Prepares for Tropical Storm Gustav 2008) Part of this response is planning for and prepositioning DoD assets. For Hurricane Gustav alone, NORTHCOM took preemptive steps including: activation of four DCOs and 2 EPLOs, designated eight military installations as FEMA staging areas, provided aeromedical capability for up to 1,000 patients, provided airlift for up to 16,000 passengers, prepared rotary wing assets for use in disaster support, deployed Canadian CC-177 Globemaster and C-130 aircraft, forward

positioned a Title 10 command post, designated 2 military installations to serve as base support installations, and established search and rescue capability.(USNORTHCOM 2008) Clearly, NORTHCOM proactively responded to this event and prepared for additional national civil support needs through existing plans and by pre-staging men and materials to areas where they can best support the operation. The international relationship with Canada, in this case, further enhanced NORTHCOM's capabilities and paved the way for increased mutual support between neighboring countries. For all of their efforts in preparation NORTHCOM still found itself limited by Posse Comitatus. The law authorized active duty forces to meet certain needs while forbidding their action in other areas most notably law enforcement. The limitation posed by posse comitatus creates a potential misperception especially from those in need of assistance. To the average citizen the Regular Army, U.S. Army Reserve and Army National Guard is "the Army" so they do not understand when a Title 10 Soldier cannot provide the same service as a Title 32. The Department of the Navy uses a workaround for integrating Title 10 and Title 14 (U.S. Coast Guard) whereby Title 10 Sailors gain the status of Title 14 Coast Guardsmen. By placing a USCG member on a U.S. Navy ship and reflagging it as a USCG vessel, the Sailors on the ship assume law enforcement authority. This greatly enhances the capabilities of the Navy (and Coast Guard) in response to national support needs. Similar flexibility does not exist within the Army though the application certainly does. As the public and first responders become more familiar with legal authority this problem may diminish. However, for the near future and in the absence of a massive education campaign directed at the civilian population this perception will continue to define the Army's measure of effectiveness in the eyes of the people.

Every disaster, training exercise and change in policy improves the nation's level of preparedness. From FEMA's modern beginning under President Carter, they have, with limited resources, managed the nation's emergencies as a coordinating agency. Major changes since 1992 have reorganized and strengthened FEMA's capabilities. Hurricane Andrew, the 1993 Mississippi floods, the East Coast Blizzards, 2004 Major Hurricane season and Hurricane Katrina each contributed a venue for testing relationships and procedures and each, invariably, highlighted shortcomings in these relationships and procedures. In response to these deficiencies, some call for the dissolution of FEMA while others propose a major restructuring of the agency. Others suggest rewriting or repealing existing law or even altering lead agency responsibility. These events also highlight improvements as indicated by USNORTHCOM's and FEMA's proactive approach to Hurricane Gustav. Today FEMA is able to conduct mitigation, response and recovery activities based on the initiatives of the past 15 years. Prior to and including Hurricane Andrew, FEMA was able to manage the recovery effort but had few resources to focus on response much less so for mitigation. Yes, the agency makes mistakes but they make mistakes during their action rather than the much greater error of not acting at all. The result of these mistakes, and successes, is a number of key milestone events that individually have only limited impact but together have systematically altered the capability and effectiveness of FEMA.

CHAPTER THREE

RESEARCH METHODOLOGY

FEMA traces its heritage back to 1803 when the Congress passed legislations authorizing the federal government to provide assistance to a New Hampshire town after an extensive fire. From this beginning until 1979, the federal response to disasters of all kinds remained limited and mostly uncoordinated. The research conducted in the formulation of Chapter 2 uncovered a gap in the knowledge base that presented a question: how does FEMA intend to integrate DoD assets into the natural disaster response effort? Further, the research suggested that FEMA has not effectively integrated DoD assets into natural disaster response because of limitations in federal law and the diverse conditions that exist before, during and after a natural disaster.

FEMA has continued to transform its domestic role in the decades since its modern beginning in 1979 when President Carter, with executive order 12127, created FEMA as a single agency to manage the nation's disasters. It was not until 1993 with President Clinton's appointment of James Witt and subsequent reorganizations under his leadership, that FEMA became a true emergency management agency. Mr. Witt made FEMA a more responsive and capable organization, an organization capable of integrating all national resources, including Title 10 military assets, into the response. This new ability developed slowly over many years, beginning with the first significant reorganization of FEMA in 1993. Over the following fourteen years, federal legislation sought to keep pace with the needs of the country. These milestone events (legislation, training events and exercises and reorganizations) merged best practices with lessons learned in an effort to create a working system. Even though the federal response has

been lacking at times, FEMA, for the first time in January, 2008 has a published plan for the way ahead. Three significant pieces of FEMA's transformation, initial reorganization under James Lee Witt, thirteen years of change, and a plan for the next five years (2008-2013), have developed FEMA into a much more capable organization that is prepared to integrate all available assets into a coordinated response. For the purposes of this research, the process was limited to six principle types of sources. Non-fiction books, published research work, official government reports, after action reviews (AAR) (primarily military in nature), living/oral history interviews, and sources available through the internet (limited to .ORG, .EDU and .GOV sites) provided the necessary source information for this research. This diversity provides the right mix of information and personal insight in order to answer the questions posed.

Chapter 3 presents the methodology practiced in conducting research for this study. This chapter further discusses how this methodology was used in presenting the research and analysis in Chapter 4 of this document. The goal of this research was to provide a better understanding of FEMA's past and current procedures in responding to disasters especially regarding the utilization of DoD assets. This increased understanding benefits those engaged in emergency response by identifying capabilities and limitations as identified in past successes and failures. The research method used in gathering this information consisted of an examination of the existing body of knowledge and individual interviews with emergency management experts that filled the gaps in information. The result of this research enabled the development of Chapter four as an analysis of the milestones which illustrated the significant changes in leadership, professional development, development of 'doctrine', exercise and training programs and

key legislative advances from 1992 through 2007 and a way ahead plan indicating FEMA's plan from 2008 through 2013.

Benefit of different types of sources

Nonfiction books published on this subject show that FEMA fails to meet its responsibilities not because of inability but rather the often complex system of federal support and the limitations of the state and local capabilities upon which they rely. Mr. Philip Odeen and his panel, mirroring the common view, noted in their work *Coping with Catastrophe* "From the local perspective, emergency management organizations and officials generally are at the mercy of the state and federal government for much of their budgets, planning and reporting requirements and staffing determinations. The mixed signals given out in recent years by the federal government about dual use planning...have made it hard for both state and local organizations to plan and function effectively." (National Academy of Public Administration panel chaired by Philip A. Odeen 1993, 82) He notes, "In post disaster circumstances, state and local officials have to deal with FEMA in a time of extreme stress and hardship. The potential for conflicts and strain are enormous; and states and localities that are only marginally prepared tend to fare poorly in the post-disaster environment." (National Academy of Public Administration panel chaired by Philip A. Odeen 1993, 82) Rutherford Platt supports this in his work *Disaster and Democracy* where he highlights numerous events (focusing on late 1980s and into 1998) observing that "FEMA's basic role should be to serve as the federal government's coordinator of assistance for state and local governments overwhelmed by disaster." (Platt 1999, 22) He identifies a flaw "The system as a whole encourages state and local elected officials to ask for maximum federal disaster assistance

[regardless of actual need] and the requests have increased approximately 50 percent over the last 10 years [as of 1993]”. (Platt 1999, 58). In regard to the agency’s response to Hurricane Andrew, he maintains that, “Criticism of federal response to Andrew once again [referencing similar comments regarding Hurricane Hugo (1989) and the Loma Prieta Earthquake (1989)] prompted a series of policy and program reviews that would strongly influence the Clinton Administration.” (Platt 1999, 86) Finally, Mr. Platt concludes, “Some of these issues are beyond the power of FEMA to resolve...But FEMA as the lead federal disaster agency is the designated advocate of sound national policy.” (Platt 1999, 101) These secondary research works are based on the author’s personal observation, interviews with victims, and government officials along with review and study of official reports and so, while biased, carry with them the weight of many different opinions and sources of information. They provide a very broad point of view from many different public and private sources and present a scrutiny of the posturing and positioning of our elected and appointed officials. This highlighting of personal actions and statements can be a catalyst of political and policy changes reaching far beyond recovery of the disaster. The failing of the emergency management systems prompts some individuals and organizations to propose that DoD take a lead agency role in disaster response. Several research studies suggested that disaster response is linked in three areas, actual need, political need and public perception of government effectiveness. These conclusions illustrate the necessity that FEMA change and adapt to the emergency response needs of the nation in order to maintain political support and an acceptable level of performance. The specific changes often begin as recommendations found in scholarly works and official reports.

Because book length research works tend to be broader in scope, research for this thesis required sources that had increased focus and detail. Scholarly works and published reports fill this requirement by focusing on a single event, type of event or phenomena. Many of the significant changes in FEMA are a direct result of the recommendations stemming from these documents. The Homeland Security Report on Hurricane Katrina offered five core recommendations and eighty-eight overall recommendations (many of which have been implemented) in response to a single disaster. Here are a few of the changes/requirements for FEMA:

- lead the nation's CEM efforts (including protection) for all hazards, including catastrophic incidents
- partner with non-federal entities to build a national emergency management system
- develop federal response capabilities; integrating FEMA's CEM responsibilities;
- build robust regional offices to address regional priorities
- use DHS resources under the Secretary's leadership
- build non-federal emergency management capabilities, including those involving communications; and develop and coordinate the implementation of a risk-based all hazards preparedness strategy that addresses the unique needs of certain incidents (Congress Report Service 2006, 36, 37)

Tony Lombardo, in his research at the US Naval Post Graduate School, recommended, "By adding a catastrophic disaster category to The Stafford Act, it will signal or "trigger" to all responsible agencies that if declared substantial response will be needed, to include immediate response by DoD in support of the Governor." (Lombardo 2007, 75) The Stafford Act was amended in 2007 to define catastrophic incidents. Other recommendations, like this offered by Jeffrey Toomer

"Moreover, while the heated debate continues over whether *Posse Comitatus* statutes are still truly a "great bulwark in our democratic society," this monograph has argued that given the current focus of national security documents (such as the National Security Strategy

(NSS), National Military Strategy (NMS), and the 2001 Quadrennial Defense Review (QDR), a greater than twenty-year precedent of military employment in the War on Drugs, commensurate involvement in other domestic crises, and the current threat environment post- September 11, 2001, that the *Posse Comitatus* Act is at best a relic greatly in need of revision. The *Posse Comitatus* Act hinders the full employment of DOD assets in the domestic environment necessary to bring success in the homeland defense effort. *Posse Comitatus* statutes, as interpreted in today's environment, are confusing and present too many opportunities for misinterpretation, both for lawmakers and for military commanders on the ground." (Toomer 2002, 45)

has met with less than overwhelming support. Not to be undervalued, in 2006, Congress enacted a revision of the Insurrection Act (affecting *Posse Comitatus*) which was actively opposed by Senator Patrick Leahy. (Leahy 2008) These changes were later countered through language included in the 2008 National Defense Authorization Act. The limitation in these works is that they are often narrow in scope and offer recommendations and analysis only on a single event or aspect of the event. Further, these works often disregarded the other conditions present at the time. The work may recommend the use of a particular resource in a particular manner for future response assuming that the exact conditions and resources will be present in a future emergency and these resources will be available exclusively for the condition. This assumption is not valid due to ever differing disaster conditions nor is it necessary for planning purposes. The goal of emergency management is to use limited resources to the maximum extent possible so even though the recommendation may work, the resource required may not be available. This forces planners and first responders to execute a solution with available resource that may differ from that recommended. This does not in any way decrease the importance of scholarly products. The works researched for this

project reinforced the fact that FEMA is improving in their capability and in their ability to successfully utilize DoD assets and demonstrated the need for further progress.

After Action Reviews offer an excellent source of factual and relevant information. The typical AAR details the conditions and resources (assets including men, equipment and materials) and how they were utilized throughout the event. A good AAR analyzes the operation by phase, identifying what went well, what did not go well, and provides recommendations (typically possible at the organizational level i.e. not requiring national or legislative approval/mandates) for future planning/improvement. The AARs researched for this project (many surrounding Hurricane Katrina) almost universally presented a view that FEMA and DoD had many areas in which to improve.

One MARFOR AAR from Hurricane Katrina noted [in order to improve DoD/FEMA interaction]:

Some formal USMC processes hamper ability to respond quickly and work effectively in this type of environment [and so] USMC needs to develop SOP or playbook for HA/DR operations to facilitate effective planning and execution of such operations in the future

Other AAR's from Army units deployed in support of Hurricane Andrew noted the need for unity of command and control (C2), a more integrated logistics system, common communications systems, and highlighted the need for early deployment of key forces (C2, military police, and others). These AARs often repeat themselves (compare Hurricane Andrew with Hurricane Katrina and many of the same issues arise) indicating that maybe we do not learn well from our past action. It is more reasonable, though, to state that we learn slowly, change slowly and often experience a repeat of past failure while also realizing a greater degree of success. One may ask what the point of the AAR as a source of information is. The answer is simply this; these AARs provide the very

best source of assessment of what really went well and, at times to an extreme, what went wrong. The benefit to FEMA's ongoing process of change and integration with DoD is that these analyses offer a snapshot picture of a certain set of circumstances at a certain point in time and uniquely identify shortfalls and failures at the point where resources meet need.

The insight and views of a single, well informed individual carry weight similar to that of panels constructing reports, groups composing AARs and persons pursuing research in the topic area. This is because, as Malcolm Gladwell explains in his book *Blink*, that most humans "thin slice" information and reach rapid (within seconds) conclusions about a myriad of things. Experts, though, do this in their specific area of expertise without really understanding why they reach their conclusions...they just do...and they are right most of the time. For example, when the Getty Museum was in the process of buying an ancient Greek sculpture called a kouros, Gladwell reported:

When [Fredrico] Zeri was taken down to the museum's restoration studio to see the kouros in December of 1983, he found himself staring at the sculpture's fingernails. In a way he couldn't immediately articulate, they seemed wrong to him. Evelyn Harrison was next. She was one of the world's foremost experts on Greek Sculpture, and she was in Los Angeles visiting the Getty just before the museum finalized the deal [to purchase the kouros] with Becchina. 'Arthur Houghton, who was the curator, took us to see it,' Harrison remembers. 'he just swished a cloth off the top of it and said, 'well, it isn't ours yet but it will be in a couple of weeks.' And I said, 'I'm sorry to hear that.'" (Gladwell 2007, 5)

The experts were right, the kouros was a fake. Why is this important in this research? Experts see things and instinctively know that something is right or wrong (like the fingernails in the example) though they cannot qualify or quantify it at the moment. When asked why FEMA was better today than they were prior to Hurricane

Andrew, Mr. Scott Wells, an Emergency Management Consultant said “Response operations are receiving priority of effort by FEMA leadership. Before Andrew FEMA’s focus was on recovery.” (Wells 2008) In these few words, he summed up over a decade of change within FEMA. Of course, there is more to the equation than that but this illustration of an expert’s ability to cut to the core of an issue, problem or question illustrates their importance in this research.

The final source of information consulted for purposes of this research is web-based information. The Internet offers a way to fill the gaps in knowledge and to tie separate pieces of information together. The limitation with this source is that one must validate the information prior to including it in research results. For the purpose of this research web-based resources are limited to U.S. Government sites, education resources (.edu) and official organizations (.org). This limitation is necessary in order to retain a standard level of credibility, accuracy and validity throughout the research process. This does not imply that other sources are not viable, but simply that these offer the best source of responsible and accurate information. Due to the scope and nature of the internet, the volume of information is overwhelming. It is also a clear indicator that many individuals and organizations including local, state and federal government, private non-profit and institutions of higher learning are interested and committed to improving the execution of disaster response. They provide a broad range and depth of information that covers the entire spectrum of opinion from positive to negative.

Some other research methods considered included focusing only on case studies (specifically the 1993 Mississippi floods, Hurricane Andrew, Hurricane Katrina, various F5 tornadoes and the 2007-2008 California wild fires). This method was insufficient

because DoD's and FEMA's involvement varied from one event to the next. The unique nature of each disaster and the degree to which the federal government is involved makes this method valuable but not viable as a means to determine trends and triggers and they lacked the benefits of lessons learned due to the disparate nature of the events. Finally, the case studies lacked some of the personal insight offered by the people who were present. Oral history offered an additional method for research that provided the personal aspect that, when offset with case studies, reports and scholarly articles and documents provided a well-rounded representation of the events.

In summary, every source was necessary in order to answer the research questions because no single source could fulfill the necessary requirements. The research conducted answered every research question posed in chapter one of this work. Though the volume of information available on this subject is massive, the opinions, analyses and observations continuously point in a mostly unified direction. FEMA is prepared to incorporate Title 10 resources into their natural disaster response effort. FEMA has improved its posture since Hurricane Andrew in order to meet the needs of the nation by continuing to adapt its policies, procedures and plans. The onset of the GWOT, increasingly limited resources, a change in the organization of FEMA, and often intense public scrutiny of FEMA's emergency response forces FEMA to proactively approach disaster response and ensure the adequacy of their preparedness, personnel staffing and coordinating efforts. The publication of the NRF demonstrates that they not only recognize their shortcomings, but also actively seek to rectify them. Despite this fluid environment, FEMA and DHS have developed and implemented a methodical and logical improvement plan. Just as the recovery and rebuilding of affected communities takes

years the changes within FEMA takes long periods of time. By soliciting recommendations from state first responders, emergency managers, USACE, the US military, federal agencies and internal organizations, FEMA is an improved organization as compared to its pre-1993 nature.

CHAPTER FOUR

ANALYSIS

The Federal Emergency Management Agency has, since its inception in 1979, evolved from a fledgling organization without a clear purpose, into a capable agency with a clear vision and a defined path to attain its goals. Through success, failure, lessons learned and a wealth of experience from its staff, FEMA has developed a program that meets its goal of ensuring a nation prepared. FEMA's growth and improvement is measurable over time beginning with the very significant impact of Hurricane Andrew in 1992 and ending with the recent 2008 Hurricane season. As the public gains a better understanding of their responsibilities as citizens and the capabilities of local, state and federal government the true efforts and achievements of this agency become clear. In the face of overwhelming catastrophe and chaos, FEMA provides a path to recovery.

So, just what can FEMA do when a natural disaster strikes? To answer this, and the questions posed in this thesis we must first reiterate FEMA's responsibility. FEMA, the nation's emergency management organization, must support the citizens of the United States during times of emergency including manmade and natural disasters. FEMA's staff organization includes 2,600 full time employees who manage the federal response to declared emergencies enabling FEMA to simultaneously manage multiple emergencies based on normal operations (based upon experience and data captured from previous years). Normal, based upon declared major disasters from 1992 until September 2008, equals 50.35 per year. (FEMA 2008) This number does not represent the much higher number of declared emergencies (1,761 or 103.5 per year) over the same period. This means that FEMA is always at risk of overextension due to unforeseeable major

catastrophes like Hurricane Katrina or a pandemic outbreak. In order to mitigate the effect of catastrophic events, FEMA maintains a pool of about 4,000 people who, when activated, augment personnel resourcing needs. As with all reactive decisions, this mobilization takes time. Once FEMA is fully engaged though, they provide access to a myriad of federal resources including all elements of the nation's departmental structure, (DHS, DHUD, USDA, DoD and others). FEMA is in effect the conductor of a symphony. Imagine all of the musicians (first responders, National Guard, Coast Guard, State EMS, police chiefs, mayors, governors, Federal agencies and even foreign support) arriving and playing their instruments without regard to the musical score or even the other participants in the concert. FEMA, then, with the wave of a wand, captures the attention of these players. Perhaps just a few at first, but as the cacophony gains order, the others take notice until they all play the music in concert. FEMA, though imperfect, is the best tool available to bring order to the chaos of a federally declared disaster. (FEMA 2008)

Prior to its reorganization in 1993, FEMA was a much different and more bureaucratic organization. Established in 1979 by President Jimmy Carter, FEMA arose as a zero sum organization absorbing all or portions of the Federal Insurance Administration, the National Fire Prevention and Control Administration, The National Weather Service Community Preparedness Program, the Federal Preparedness Agency (General Services), and HUD Federal Disaster Assistance, thus gaining a role in overseeing the nation's civil defense. This dual role of civil defense and disaster response allowed for significant influence through political funding and caused tension between FEMA and federal law enforcement organizations. FEMA, in these early years,

struggled with providing for the civil defense, and though they had funding and equipment were never able to adequately do so simultaneously with disaster management. State and local emergency response agencies exacerbated FEMA's struggles because they presided over their own disaster response. The Department of Justice and the FBI compounded this issue because of their primary responsibility for national law enforcement and intelligence. FEMA effectively became an organization between other entities all of whom felt, rightfully, that disaster response and national defense was their sole venue. Instead of becoming a facilitator, FEMA became a competitor for funding and struggled internally with the decision as to which role (disaster response or civil defense) was most important. (Leland Stanford Junior University 2008)

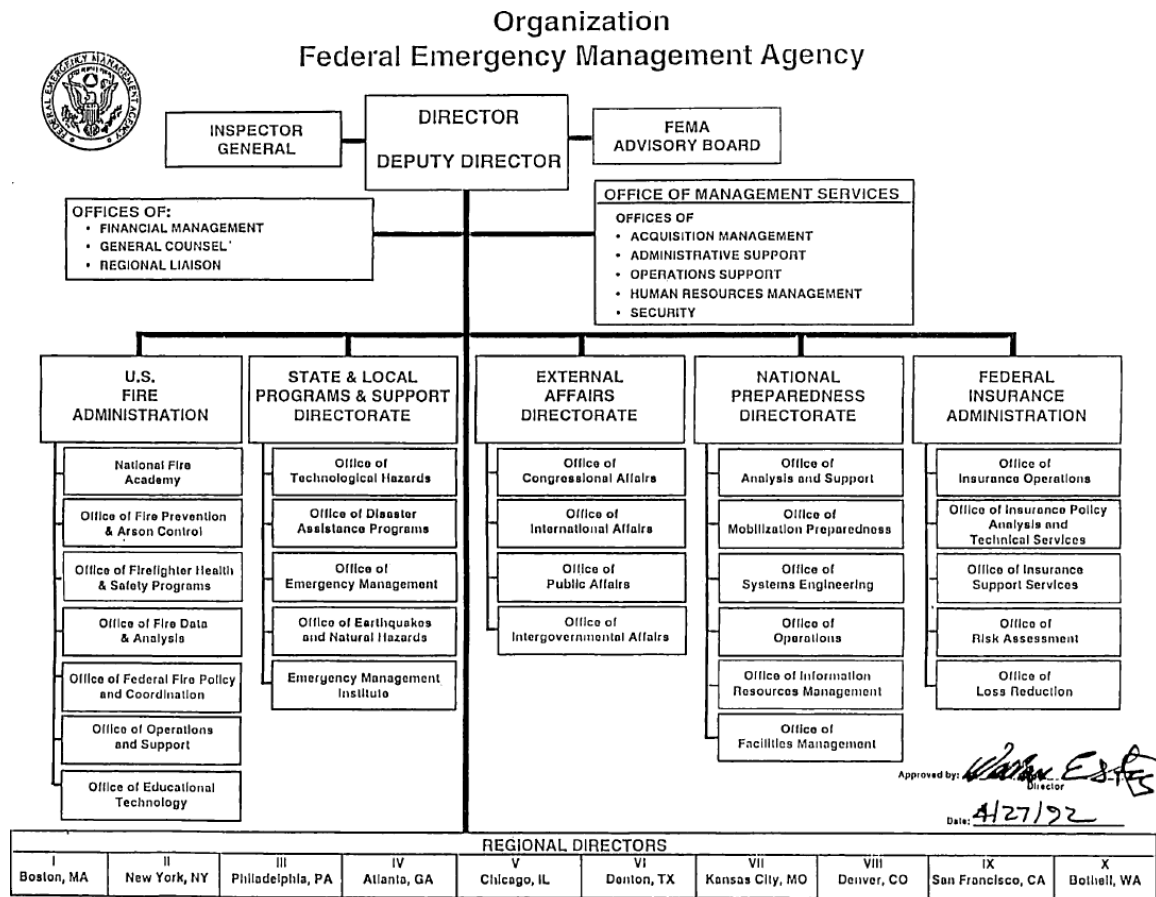


Figure 1. FEMA organizational structure 1992
(National Academy of Public Administration panel chaired by Philip A. Odeen 1993, 134)

In 1993, President Clinton appointed a new FEMA director, James Lee Witt, who convinced members of Congress that FEMA could be a value-added agency to their constituents. By adopting an “all hazards, all phases” approach to emergency management, Witt paved the way for a more streamlined and effective agency. Witt also approached emergency management in a proactive manner with a concept of pre-positioning resources before disasters struck and emphasized the mitigation approach to disaster management. (Roberts 2006)

The all hazards concept provided the centerpiece to FEMA's reorganization focused on utilizing resources (personnel, materials and money) on a year round as required basis. This approach enabled FEMA to use available funds to respond to natural disasters or civil defense as need arose. This created a funding issue due to the difficulty of moving monies earmarked for civil defense over to disaster response. This caused FEMA to reassess its manning structure and, ultimately, reduce its civil defense organizational structure by 100 positions (these individuals were reassigned new roles). This all hazards approach also realigned equipment previously reserved for civil defense and national security and made it available for use prior to rather than after the onset of disaster. This elimination of the bureaucracy allowed for a monetary savings to the federal government by eliminating the need to flood money into a region to buy equipment already in the inventory (though previously tied up in the approval process). This improvement aided FEMA in their ability to support the state with necessary materials. (Roberts 2006)

The new FEMA needed to prove that it could manage the nation's emergencies. The question was how to accomplish effective emergency management while remaining within the confines of the law. The inherent challenge is that states constitutionally have the primary responsibility to respond to their disasters. FEMA's engagement occurs only when a state's resources are inadequate and a federal disaster is declared. There is no possible way to anticipate what any given state will require during any particular disaster, which makes planning for pre-positioning difficult. Mr. Witt solved this by interpreting existing statutes to provide a means of minimizing the "government red tape" thereby

shortening the response time applying assets when and where needed. FEMA's reaction to natural disasters improved during Mr. Witt's tenure, though possibly at the expense of other non-natural emergencies. Mr. Witt had a difficult dilemma, should the agency do everything with mediocrity or reorganize and accept risk in some areas thereby enabling the agency to do other things well. The decision to focus on natural disaster, the most common event requiring federal aid, was likely the right one. (Roberts 2006)

FEMA adopted an all phase strategy with an emphasis on mitigation. To this end, Mr. Witt directed a major change for FEMA through the creation of the Mitigation Directorate. As its primary goal, the new directorate sought to minimize the loss of life and property damage before disaster struck. Mitigation is essentially proactive risk management. The concept is to eliminate likely causes of loss of life and property (like building elevated structures in flood prone areas or bridges designed to withstand earthquakes) and offset the remaining risk with insurance or other protection. FEMA supports mitigation to states and local governments through technical assistance, expertise and the national flood insurance program. This represents just one of the initiatives emplaced by Mr. Witt. (Roberts 2006)

It is clear that FEMA underwent a major transformation in 1993 both organizationally and conceptually. FEMA reinvented itself in order to repair its faltering public image and to prove itself capable of managing national crises. This first renovation was the one of many that has completely changed FEMA's approach to disaster management. Today, FEMA is a learning and growing organization. This evolution from a bureaucratic and mostly ineffective agency occurred through 15 years of

slow and painful lessons. Beginning in 1992, a number of events took place that reshaped FEMA's very nature. (Roberts 2006)

Milestone Events 1992 through 2007

1992

NAPA publishes report "Coping with Catastrophe"
GAO publishes "*Federal, State and Local Response Needs Improvement*"
Federal Response Plan signed

1993

Mitigation directorate formed
GAO publishes "Disaster Management; Improving the Nations Response to Catastrophic Disaster"

1994

National Flood Insurance Reform Act
Stafford Act amended

1995

Galloway report "Report of the Interagency Floodplain Management Review Committee" Published

1996

Executive Order 13010 "Critical Infrastructure Protection" issued

1997

Emergency Management Assistance Compact (EMAC)

1998

PDD 63 Critical Infrastructure Protection

1999

Federal Response Plan revised since its original inception.

2000

Disaster Mitigation Act of 2000
TOPOFF Exercise

2001

Office of National Preparedness (ONP) Established
Homeland Security office established in the White House
Homeland Security Council (HSC) formed (October 8, 2001)

2002

Homeland Security Act
TOPOFF II Exercise
FEMA Project impact ends

2003

Executive Order 13284; DHS created
Executive Order 13286
FEMA reorganized under DHS
Homeland Security Presidential Directive (HSPD) 5 Management of Domestic Incidents and HSPD 8 National Preparedness published
Initial NRP (NRP) created

2004

Final National Incident Management System (NIMS)
Hurricane PAM Exercise conducted
National Infrastructure Coordinating Center (NICC) Created

2005

Stafford Act reauthorized for Pre-event mitigation
2SR DHS reorganization announced
National Preparedness Guidance creating 15 planning scenarios
TOPOFF III

2006

Whitehouse Townsend Report published
NRP Modified

2007

Stafford Act reauthorized for Pre-event mitigation

TOPOFF IV
ICS Core Competencies released

Over the decade and a half outlined in the preceding timeline (1992-2007) FEMA experienced many fundamental organizational changes. These changes fall into five categories: key leadership, professionalization of the work force, NRF, NIMS and ICS, training and exercise programs, and key legislation. Taken individually these five offer limited improvement opportunity for the agency however, in combination these five areas of emphasis have evolved FEMA from its pre-1992 existence into its current identity. Because of this interdependence it is difficult to isolate one as more important or of greater significance however, the appointment of James Witt is an important decision and an excellent starting point for further developing this paper.

Effective key leadership in an organization like FEMA is essential to performance, growth and improvement. President Clinton's appointment of James Witt, former director of the Arkansas Office of Emergency Services, as FEMA's new director provided FEMA an experienced executive level emergency manager at its head that also had a close relationship with the president. For the first time in history, the nation had a professional emergency manager at the helm of FEMA. As his first major test since Hurricane Hugo, he managed FEMA's response to the 1993 Mississippi floods and the East Coast Blizzard. Successful leadership understands the situation, visualizes an action, describes the vision to his subordinates and directs its implementation. Mr. Witt quickly assessed the needs of FEMA and as his first significant organizational decision created the Mitigation Directorate which refocused FEMA's efforts to minimizing likely disaster effects on potentially affected population. FEMA could not prevent the disaster

but they could help reduce the loss of life and property resulting from it. The recommendations from “Coping with Catastrophe” seemed to be producing results.

The NAPA report “Coping with Catastrophe” provided some timely and much needed support for FEMA following Hurricane Andrew. It identified seven essential requirements necessary to build an effective FEMA and emphasized that disaster response is a local responsibility supported as necessary by the federal government.

- Reduction of political appointees to a director and deputy director, development of a competent, professional career staff and appointment of a career executive director.
- Access to, and support of, the President through the creation of a Domestic Crisis Monitoring Unit in the White House.
- Integration of FEMA’s subunits into a cohesive institution through the development of a common mission, vision and values; an integrated development program for career executives; and effective management systems.
- Development of structure, strategy and management systems to give agency leadership the means to direct the agency.
- A new statutory charter centered on integrated mitigation, preparation, response, and recovery from emergencies and disasters of all types.
- Joint assessment teams and a graduated response scale for more timely and effective responses to disasters, including catastrophic.
- Development of functional headquarters-field relationships. (National Academy of Public Administration panel chaired by Philip A. Odeen 1993, ix)

FEMA could not effectively operate as an agency nor could it attain these goals unless it forged relationships with the individuals in positions of power. As indicated in “Coping with Catastrophe” additional funds would be required in order to attain these seven goals but FEMA lacked a natural constituency (and therefore access to these new funds) until a disaster struck an area. This shortfall suggests that FEMA wielded little political influence until an elected official’s or high ranking political appointee’s home state experienced a disaster. To mitigate this situation, FEMA exercised internal economy of resources and maintained a close association to the White House. This

relationship brought with it access to money but also increased scrutiny of the agencies performance. The report encouraged the president to maintain the option of dissolving FEMA's organization back to the original component pieces if, over time, it became clear these goals were beyond the reach of FEMA.(National Academy of Public Administration panel chaired by Philip A. Odeen 1993) The president, instead of dissolving FEMA, began the process of increasing FEMA's role and improving their performance. In order to facilitate this growth FEMA had to professionalize.

Professionalization of emergency managers and an emphasis on integrated mitigation, preparation, response and recovery encouraged FEMA to reach out to other federal organizations including DoD, a possible competitor for the lead agency for emergency response. Professionalization also enabled the Mitigation Directorate to assess risk, offer expert technical assistance, insurance programs and remapping support to the states. FEMA's Mitigation Directorate still operates today and, from their website, conducts the following activities that support their efforts: (FEMA 2008)

- Complying with or exceeding NFIP floodplain management regulations [FEMA uses the NFIP to help states become more compliant].
- Enforcing stringent building codes, flood-proofing requirements, seismic design standards and wind-bracing requirements for new construction or repairing existing buildings [FEMA makes recommendations and encourages compliance through grants and other funding to the states].
- Adopting zoning ordinances that steer development away from areas subject to flooding, storm surge or coastal erosion.
- Retrofitting public buildings to withstand hurricane-strength winds or ground shaking [FEMA only has authority with federal structures, states retain the final decision on their level of improvement].
- Acquiring damaged homes or businesses in flood-prone areas, relocating the structures, and returning the property to open space, wetlands or recreational uses.
- Building community shelters and tornado safe rooms to help protect people in their homes, public buildings and schools in hurricane- and tornado-prone areas. (FEMA 2008)

As FEMA improved their skill level, the security of their lead agency status seems assured even though politicians and some emergency management experts continue to suggest that the military assume this role.

The report “*If not FEMA then who?*” addresses this in its recommendation against the military assuming the first responder role. This additional requirement on the armed forces would needlessly detract from their primary mission of war fighting. Further, while the military has the capabilities to respond quickly and robustly to disasters, the tasking authority should remain a civil responsibility. According to the committee, FEMA must improve its procedures for engaging the military so that speed and capability meet the need of the affected area. In order to accomplish this and meet the changing needs of the nation FEMA needed to update and formalize the way they conducted disaster response.

The GAO report “*Disaster Management; Improving the Nations Response to Catastrophic Disaster*” recognized the inadequacy of the Federal Response Plan to manage disasters on the scale of Hurricane Andrew (the largest natural disaster on record at the time of publication) and reinforced NAPA’s “*Coping with Catastrophe*” recommendations by highlighting five FEMA responsibilities:

1. To enhance the capability of state and local governments to respond to disaster
2. Coordinate with 26 other agencies in order to coordinate disaster response.
3. Provide assistance directly to affected U.S. citizens
4. Facilitate financial assistance to affected state and local government organizations
5. Provide leadership in mitigation activities

Though inadequate, the FRP would not be formally modified until 1999 and again in 2003 with the initial NRP. FEMA later implemented the NRF, the National Incident

Management System (NIMS) and the Incident Command System (ICS) to improve their overall response effort and coordination with interagency and state entities. (National Academy of Public Administration panel chaired by Philip A. Odeen 1993)

The publication of the final NIMS provided the necessary forcing function to integrate all of the nation's emergency management resources (federal, state and local) into an interoperable and compatible system that facilitated cooperation and coordination. This first 'doctrine' standardized approaches and best practices into workable plans that retained enough flexibility to react to the fluid environment of disaster management. This flexibility allowed state and local governments to remain autonomous while also instituting unity of command and effort by establishing a common understanding of the federal government's multiagency disaster response. NIMS' benefit to disaster response is its detailing of how the U.S. government, as a multiagency and unified organization, conducts its all hazards operations. Through NIMS, state and local governments and first responders at all levels gained an understanding of the federal process and provided them with a clear reference to the components that form the system. (U.S. Government Department of Homeland Defense 2007) (General Accounting Office; 1993)

Several components makeup the framework of NIMS, they are:

- Command and management
- Preparedness
- Resource management
- Communications and information management
- Supporting technologies
- Ongoing management and maintenance

And is based on three organizational systems:

- The **Incident Command System (ICS)** An interdisciplinary management structure which defines the operating characteristics, management

components, and structure of incident management organizations throughout the life cycle of an incident through flexibility and communication. The ICS accomplishes this by using common terminology, organizational resources, manageable span of control, organizational facilities, use of position titles, reliance on an Incident Action Plan, integrated communications and accountability.

- **Multiagency Coordination Systems(MCS)** A combination of resources that operate under a common coordinating framework that supports domestic response. Typical resources may include facilities, equipment, personnel, procedures and communications. Their primary function is to support incident management priorities, enable logistics support, aid in resource allocation decisions, coordinate incident and interagency information and issues. The on scene incident commander exercises operational control over the MCS.
- **Public Information Systems**, which include the processes, procedures, and systems for communicating timely and accurate information to the public during emergency situations (FEMA 2007) (Department of Homeland Security 2004)

FEMA's leadership, work force development and operational documents improved as did their ability to coordinate with other federal government agencies, the states, non-government organizations and international partner countries. Training and exercise programs provided the medium that encouraged this improvement and the perfect way to test these relationships and systems.

TOPOFF began in 2000 with TOPOFF I and progressed through TOPOFF II (2002), TOPOFF III (2005) and TOPOFF IV (2007) each representing improved FEMA interaction with first responders, federal agencies, non-government organization and our international partners like Canada, Great Britain and Australia. This series of exercises under the umbrella name of TOPOFF provided a venue for establishing capabilities and procedures for the federal response to terrorist attacks. The first exercise focused on improving the capability of government officials and agencies. Followed by TOPOFF II focused on a simulated attack, TOPOFF III emphasized international cooperation and

TOPOFF IV (the largest to date) capitalized on lessons learned and added new goals including increased coordination with DoD and the private sector, an increase in prevention planning, mass decontamination, and long term recovery and remediation. The improvement in communication and cooperation between private, local, national and international entities from TOPOFF I through TOPOFF IV demonstrates FEMA's commitment to continuous improvement. During TOPOFF I FEMA had a continued role in civil defense but by TOPOFF II, FEMA's responsibility in this area was clearly shifting away from them beginning with the creation of the Homeland Security Council (HSC). (Homeland Defense; TOPOFF: Exercising National Preparedness 2008)

The formation of the HSC furthered FEMA's continuing transformation by effectively relieving them from their once primary civil defense role and allowing them to concentrate on what they do best, disaster management. The council develops and implements homeland security policy by coordinating at the senior government level. The president, vice president, the attorney general, the secretaries of Homeland Security, Treasury, Defense, Health and Human Services, Transportation, the directors of National Intelligence, the FBI, and the assistant to the president for homeland security and counterterrorism make up the council membership. The process of transitioning FEMA's priority to emergency management culminates in 2003 with the creation of the Department of Homeland Security and FEMA's integration as a sub agency under it. (U.S. Government; The White House 2008)

FEMA took advantage of the minimizing of their civil defense role by conducting the Hurricane 'Pam' exercise and creating the NICC. The NICC provides a focal point for emergency by providing incident specific information, predictive services and

intelligence, logistics information and administrative support tools used for incident response and decision making. The NICC, operationally tested during Hurricane 'Pam', improved unity of command, unity of effort and communication. FEMA recognized the potential for a catastrophic storm impact on the U.S. and proactively planned the Hurricane 'Pam' exercise, selecting it from a list of 25 potential scenarios (Pam was at the top of the list of likely catastrophes). Hurricane 'Pam' was not an exact parallel of Hurricane Katrina and did not highlight every weakness experienced during Katrina but it did closely approximate many of the major issues faced during this massive storm. (Committee on Homeland Security and Governmental Affairs; Susan Collins, Chairman 2006) FEMA, through this training event, effectively replicated a worst-case scenario coincidentally in the same area experienced the landfall of Hurricane Katrina that just over a year later. Did FEMA know that the Gulf Coast was at risk? Yes, just as they knew that the east coast and west coast were at risk to various disasters. FEMA planners truly thought that 'Pam' was a worst case situation and did not think that the nation would experience the real thing...at least not so soon after conclusion of the exercise. An outstanding success, Hurricane 'Pam' did not open the flood gates of funding to correct the shortfalls noted throughout its conduct. Disaster response is a reactive effort at best. The fact that FEMA conducted this highly accurate exercise demonstrates their commitment to achieving their overarching goals of mitigation, preparedness, response, recovery, and transition. Similar to the military's pre-combat rehearsals, these readiness and planning exercises enable FEMA to succeed where they might otherwise fail. The National Planning Guidance contributes to FEMA's growth by identifying planning scenarios around which FEMA trains. (FEMA 2004)

National Preparedness Guidance created 15 planning scenarios to facilitate planning and coordination among federal agencies in response to catastrophic and widespread incidents. The designers realized that these scenarios failed to answer every possible question, address every possible action and would require adaptation in order to apply to any given real world event. The intent of the 15 studies is to provide a starting point for the federal response and to improve interagency coordination, communication and overall effectiveness by isolating the most critical potential events and enabling agencies to prepare individually or jointly as time and funding allows. (Howe 2004)

Scenario 1: Nuclear Detonation – 10-Kiloton Improvised Nuclear Device
Scenario 2: Biological Attack – Aerosol Anthrax
Scenario 3: Biological Disease Outbreak – Pandemic Influenza
Scenario 4: Biological Attack – Plague
Scenario 5: Chemical Attack – Blister Agent
Scenario 6: Chemical Attack – Toxic Industrial Chemicals
Scenario 7: Chemical Attack – Nerve Agent
Scenario 8: Chemical Attack – Chlorine Tank Explosion
Scenario 9: Natural Disaster – Major Earthquake
Scenario 10: Natural Disaster – Major Hurricane
Scenario 11: Radiological Attack – Radiological Dispersal Devices
Scenario 12: Explosives Attack – Bombing Using Improvised Explosive Device
Scenario 13: Biological Attack – Food Contamination
Scenario 14: Biological Attack – Foreign Animal Disease (Foot and Mouth Disease)
Scenario 15: Cyber Attack (Howe 2004)

With each agency's understanding of the event and their unique responsibility within it, the federal government maximized resources by practicing economy of force and improved the overall response by spreading the effort over a larger footprint of government agencies. The improved interaction among different organizations and in legislative changes enhanced the nation's response capabilities. (Howe 2004)

Without legislative change, the improvements in leadership, personnel, documentation and procedures, and training fall away as time passes. It takes a change in the law to ensure that these critical organizational and operational initiatives survive changes in leadership, personnel, presidential administrations, etc. There have been numerous authorities created to support the nation's emergency managers and FEMA's transition including: the Stafford Disaster Relief Act (1988); the National Flood Insurance Reform Act (1994); Executive Order 13010 (1996); EMAC (1997); Presidential Decision Directive (PDD) 63 (1998); the Disaster Mitigation Act of 2000 (2000); the Homeland Security Act (2002); Executive Order 13284 and 13286 (2003); and HSPD 5 and 8 (2003). These key pieces of legislation ensure the continuity and longevity of FEMA's maturing as an organization.

First, the National Flood Insurance Reform Act provided a tool through which FEMA could more effectively execute its relocation of structures out of the flood plains and other at risk areas. The legislation authorized and required the director of FEMA to conduct and report risks of loss in erosion prone areas, assessment of flood claims and economic impact and authorized the conduct of community mapping to support this assessment. This Act provided standardization and regulation of flood insurance and affirmed state sovereignty by stating: "this title may not be construed to preempt, annul, alter, amend, or exempt any person from compliance with any law, ordinance, or regulation of any State or local government with respect to land use, management, or control." (U.S. Government 1994, Sec 584)

The Stafford Disaster Relief Act provided the statutory authority for the federal response to emergencies. It has been amended (1993 and 1994) and reauthorized (2005

and 2007) numerous times since 1988. The 1993 changes broadened the scope of mitigation to allow the acquisition of property in flood plains allowing FEMA to, for example, buy a structure (and property) located in a flood plain, move the building and return the property to unoccupied flood plain. The 1994 amendment unofficially partnered FEMA and USACE in the management of the dam and levee systems. FEMA sought to conduct mitigation in the flood prone areas of the nation while USACE focused and prioritized their efforts based upon the greatest risk to life and property. (Moss n.d.)

Executive Order 13010 “Critical Infrastructure Protection” formed a task force to identify and facilitate coordination and communication with relevant private and commercial entities to ensure protection and continuity of service provided by these identified pieces of architecture. President Clinton issued this executive order in realization that special protection against physical and cyber (electronic) threats and attacks for key pieces of infrastructure (public and private) critical to the function of the nation is necessary. President Clinton also realized that subordinate federal organizations must have the authority to act during disasters. In this case, DoD was granted the authority to perform the functions of the president (except in testifying before Congress) as allowed by the Federal Advisory Committee Act. The key element in this is the authority to perform the functions of the president. Even though this EO granted the authority to DoD, the precedent implies greater authority for other agencies to act when necessary. (National Archives n.d.)

The Emergency Management Assistance Compact (EMAC) provided a pre-established agreement between states for mutual support and aid during times of disaster. The compact recognizes that during times of calamity state resources may quickly be

overwhelmed or compromised while also maintaining the local government's responsibility and authority to manage the event. EMAC allows for state to state sharing without affecting the disaster declaration approval process. This means that FEMA only considers the individual state assets when deciding the extent to which the impacted state can respond...in other words, the state gets the benefit of the additional resources available from other states without penalty from FEMA creating a win-win situation. In the event that FEMA and EMAC are mutually involved in disaster assistance, FEMA may request an EMAC National Response Team (NRT) to facilitate unity of effort. Financial responsibility for enacting this support falls to the receiving state. The rewards of this type of agreement are immeasurable as is the potential benefit to FEMA. Fully allowable under the Stafford Act, FEMA can both encourage and assist in the formation of this and similar agreements. The EMAC is significant to FEMA and Title 10 because it potentially minimizes the number and type of forces required by the state thereby increasing FEMA's ability to respond to other disasters and improving the military ability to perform its principle role of national defense.

Presidential Decision Directive (PDD) 63 Critical Infrastructure Protection granted FEMA new authority and launched new a new collaborative mitigation effort. The PDD tasked FEMA with emergency fire service and continuity of government responsibility. Its significant second order effect is that it recognized the need for and directed close coordination between federal and state first responders further solidifying emergency management interaction at all levels of government. This close coordination allowed FEMA to further its mitigation efforts, establish deeper relationships with state

officials and first responders and increased the value and validity of projects like Project Impact. (Clinton 1994)

The Disaster Mitigation Act of 2000 provided the legal authority for FEMA to develop and implement disaster mitigation plans for state, local and tribal governments. The Act outlined requirements, limitations and funding for administration of the programs developed. This increased role for FEMA moved them further from civil defense and more into the disaster management role. Under this plan, states were required to develop their own mitigation plan in order to remain eligible for continued disaster assistance funds. The more developed the state's plan (standard versus enhanced) the greater the funding opportunities.

The Department of Homeland Security, formed by EO 13284, organized in 2002 through the Homeland security Act and later amended by EO 13286 officially began operation in 2003. DHS absorbed FEMA as a subordinate agency limiting the executive authority of FEMA by reducing their level of responsibility to disaster management (mitigation, preparedness, response and recovery). Though reduced from a cabinet level position to a subordinate directorship, FEMA's importance has not diminished. Their role is so critical to the nation that, when ordered by the president, the FEMA director assumes the position and authority of a cabinet level secretary. FEMA continued to lead the nation in preparing for all hazards (HSPD 5 and 8 required an all hazards approach) and managed the federal response and recovery efforts following national incidents. FEMA also initiated proactive mitigation activities, trained first responders, and managed the National Flood Insurance Program and the U.S. Fire Administration. (FEMA 2008)

A byproduct of this reorganization was a decrease in trained, experienced FEMA

personnel as many people moved to positions within DHS while others retired from service. This number may be as high as one third of FEMA's force according to a lecture given by Daniel Best, October 6, 2008 at the Command and General Staff College. (Best 2008) In addition to the formation of DHS and its subsequent absorption of other federal agencies, the initial NRP coordinated the federal effort with a "federal families" approach. Approaching disaster response with an all agency concept enhanced the federal response and set the stage for the coming years and further development of the Department of Homeland Security. (U.S. Government; The White House 2008)

The way ahead 2008 through 2013 (FEMA's 5 Stated Goals)

Goal 1: Lead an integrated approach that strengthens the Nation's ability to address disasters, emergencies, and terrorist events (FEMA 2008)

Goal 2: Deliver easily accessible and coordinated assistance for all programs (FEMA 2008)

Goal 3: Provide reliable information at the right time for all users (FEMA 2008)

Goal 4: FEMA invests in people and people invest in FEMA to ensure mission success (FEMA 2008)

Goal 5: Build public trust and confidence through performance and stewardship (FEMA 2008)

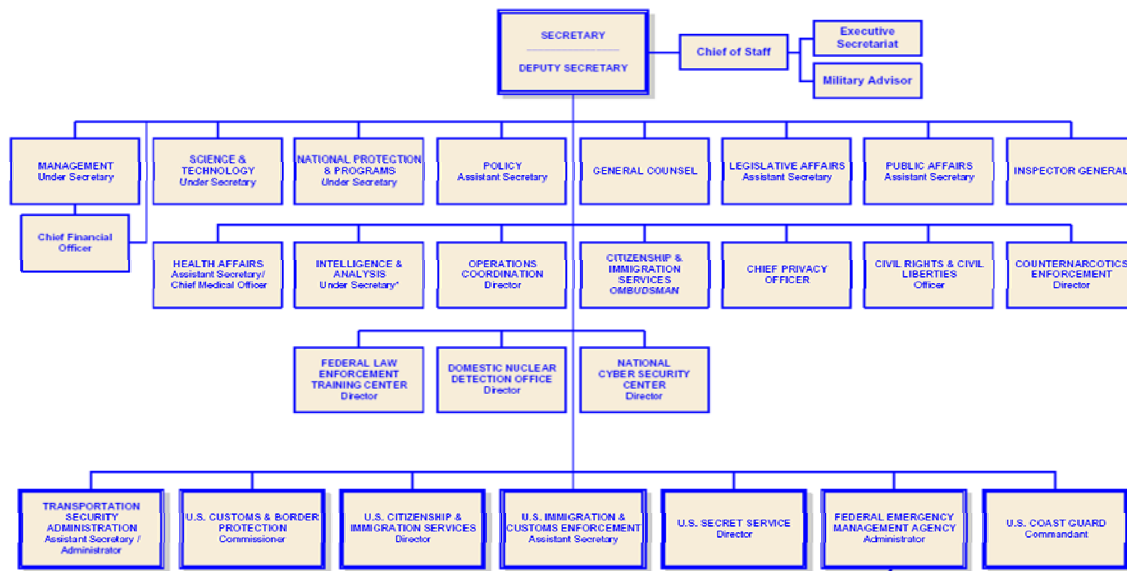
Goal 1 is the most attainable of the five. It addressed FEMA's core competencies in an aggressive and robust manner. When FEMA reaches a point of success here, the nation will have an outstanding emergency management organization. FEMA must execute a high level of response over the next five years in order to enable this goal's support of Goal 5. (FEMA 2008)

Goal 2 offers some excellent going forward guidance with emphasis on the simplification of disaster response by formulating, administering and improving delivery of disaster assistance. (FEMA 2008)

Goal 3 a shortfall consistently identified in disaster response is communication especially between response organizations. This is particularly important in relation to Goal 1 in regards to gaining and improving interoperable communication systems across all levels of government. (FEMA 2008)

Goal 4 is the second weakest part of the plan. There is not action plan associated with this goal only an idea of what FEMA intends to accomplish. The difficult part of this goal is to find and retain qualified personnel from a work force that tends to have only a few years of longevity with any particular company/job. FEMA competes against other government organization, including DHS, for this pool of people. (FEMA 2008)

U.S. DEPARTMENT OF HOMELAND SECURITY



* Under Secretary for Intelligence & Analysis title created by Public Law 110-53, Aug. 3rd, 2007

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FEDERAL EMERGENCY MANAGEMENT AGENCY

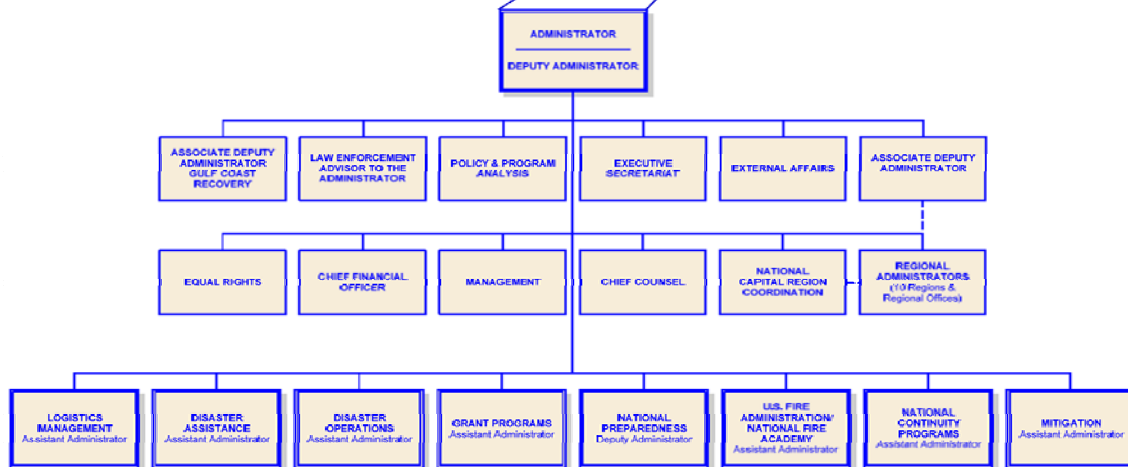


Figure 2. FEMA and DHS structure today.

Chart depicts DHS' and FEMA's organization structure today and the many areas that DHS and FEMA compete for personnel (U.S. Department of Homeland Security 2008)

Goal 5 is the weakest of all of the five with a good ideal but only a vague presentation of how to get there. The closest thing to an action item here is the development of a results oriented business approach and internal management controls and training plans. FEMA has a lot to accomplish as they move forward over the next five years. (FEMA 2008)

FEMA Core Competencies: (FEMA 2008)

- Service to Disaster Victims
- Operational Planning
- Incident Management
- Disaster Logistics
- Hazard Mitigation
- Emergency Communications
- Public Disaster Communications
- Integrated Preparedness
- Continuity Programs
- Shape the workforce
- Business Approach

The necessity of legal statutes to improve and protect organizations like FEMA is clear. What is not as clear is what prompts these initiatives. Catastrophic events like the terrorist attacks of 9-11-2001 and Hurricane Katrina heightens the public's awareness of the government's preparedness and, under this scrutiny, prompts investigative efforts and reports of performance. Some of the most notable and influential reports of the past fifteen years are the GAO report "Federal, State and Local Response Needs Improvement" (1992), The Galloway Report (1995), The DHS Second Stage Review (2SR), and the Townsend Report.

Though written as an analysis of the Loma Prieta earthquake and Hurricane Hugo, the GAO report "Federal, State and Local Response Needs Improvement" influenced the

changes in 1993 within FEMA by recognizing the difficulties they faced when responding to multiple, near simultaneous disasters and discussing the weaknesses in first responder programs. President Clinton, in response to this, appointed a new head of FEMA who brought with him experience and new ideas for maturing the agency. (National Academy of Public Administration panel chaired by Philip A. Odeen 1993) (GAO 1991)

The Galloway report “Report of the Interagency Floodplain Management Review Committee” focused on FEMA’s management of the flood plains. This report made a number of recommendations to increase FEMA’s authority to manage the flood plains and emphasized the need for continued and improved federal, state, local and tribal cooperation. It recognized that floods represent a continuously occurring event requiring a pro-active approach to mitigate loss of property to include agricultural products. FEMA’s renewed focus on mitigation makes this increased authority critical in order to avoid a repeat of the 1993 Mississippi floods during which most of the property loss resulted from ground water and sewer backups and not riverine flooding as one might have expected which is a direct impact of flood plain management. This report summarized four areas impacting FEMA:

1. FEMA should be the single agency to manage floods
2. FEMA should have increased authority to manage and mitigate floods
3. Feds should increase funding and cost control/stabilization for FEMA and
4. Recognized the need for pre-disaster training (interagency and federal/state).

According to a study by the Interagency Floodplain Management Review Committee, the federal government, and Congress has acted upon each of these recommendations

improving FEMA's ability to manage flood disaster and the floodplains. This report requires close cooperation between FEMA and USACE, a relationship already strengthened in 1994 through the National Flood Insurance Reform Act. (Interagency Floodplain Management Review Committee 1994)

The second stage review (2SR) provided DHS with the methods through which they would evolve. The 2SR outlined a six point agenda designed to reorganize and revamp DHS's structure and capability. (emforum.org; Secretary Chertoff Announces DHS Reorganization Including New Preparedness Directorate 2005)

1. Increase preparedness, with particular focus on catastrophic events.
2. Strengthen border security and interior enforcement and reform immigration processes.
3. Harden transportation security without sacrificing mobility.
4. Enhance information sharing with our partners, particularly with state, local and tribal governments and the private sector.
5. Improve DHS stewardship, particularly with stronger financial, human resource, procurement and information technology management.
6. Re-align the DHS organization to maximize mission performance.

The result of this reorganization was a changed reporting structure (though not necessarily better) and a formal focusing of FEMA on response and recovery. As Secretary Chertoff explained, FEMA, standing outside the new directorate, "will be a direct report to the Secretary — but it will now focus on its historic and vital mission of response and recovery." The new directorate "will support FEMA with training resources and will continue to rely on FEMA's subject matter expertise and the expertise of our other components in promoting preparedness." The mitigation directorate along with Secretary Chertoff's guidance established FEMA as the agency responsible for mitigation, response and recovery leaving preparedness as a more distant fourth mission. The HSC and DHS developed 15 planning scenarios in order to facilitate the overall

federal response to the events. FEMA used these to improve their focus on mitigation, response and recovery. (Relyea and Hogue 2005, CRS-9).

The “Townsend Report” formally named the *Federal Response to Hurricane Katrina; Lessons Learned*, written and published under the direction of the White House, is a detailed analysis of DHS’s and FEMA’s performance during Hurricane Katrina. This document provided a new starting point from which many recommendations for improvement have sprung. The report was relatively even-handed in its condemnation, praise, accounts and recommendations. Mrs. Townsend, in her letter to the president, stated,

Though there will be tragedies we cannot prevent, we can improve our preparedness and response to reduce future loss and preserve life. And while we will work diligently to implement immediate improvements, it is important to recognize that the true transformation envisioned in this Report will require a sustained commitment over time by the Federal government as well as by State and local governments that have essential duties in responding to disasters. The report and recommendations are submitted in the hope of ensuring that the harsh lessons of Hurricane Katrina need never be learned again.

Based on FEMA’s conduct of operations during the 2008 hurricane season, it seems that FEMA learned, applied and institutionalized the lessons. (Townsend 2006)

Fifteen years of change, progress, struggles, realignments, failures and success all meld together into the current FEMA organization. The chart below is a graphical representation of the impact the milestone on FEMA. This chart provides analysis of each of the major focus areas (mitigation, preparedness, response, recovery and transition, see glossary for detailed definitions) for FEMA and the data represented is a cumulative increase from 1992 through 2007. The horizontal scale is time expressed in

years. The vertical scale is the degree of change based upon the year's milestone events. Appendix B details the analysis of these events. In order to determine what focus area each event influenced each area received a subjective value of 1-3 (some = one, significant = two and major = three) which was then converted to the charts linear format. The significant improvement in recovery, response and preparedness, especially since 2002, demonstrates FEMA's efforts in these areas. Mitigation, while relatively flat, has improved over time and transition has only recently received attention.

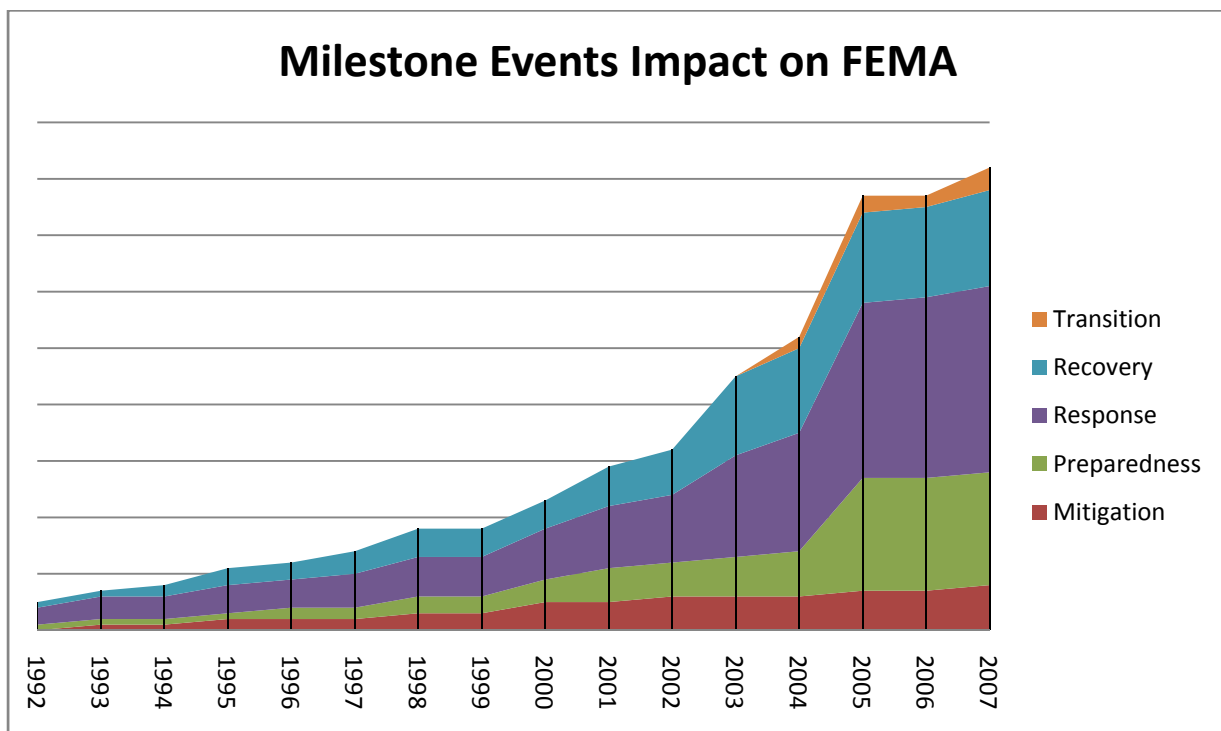


Figure 3. Milestone events impact on FEMA
 Chart depicting the impact of milestone events on FEMA (events covered in chapter 4 of this thesis). Chart created by Michael Goodwin (author) based on analysis of data contained within chapter 4 of this document and detailed in appendix B.

Based upon the improvement realized in FEMA's five areas of focus (Mitigation, Preparedness, Response, Recovery and Transition) two significant events have occurred impacting Title 10 resources. First, FEMA's ability to integrate Title 10 shows improvement. FEMA's efforts in response, recovery and transition provide the basis for this part of the analysis. Most of these improvement result from improved policy, joint training/interoperability events and publishing of response plans and scenarios. These efforts produced much more clearly defined roles and responsibilities at all levels of government and first responder organizations. Second, the requirement for Title 10 assets has decreased based upon FEMA's efforts in mitigation. Though only a modest improvement graphically, the decrease of risk to the population, communities and critical infrastructure by relocating them out of hazard prone areas and improving building codes means that risk to life and key infrastructure is minimized thereby reducing the employment of costly Title 10 resources.

Analysis of the milestone events (detailed in appendix C) provided the basis for constructing the chart below. The horizontal scale is time expressed in years and the vertical scale is a cumulative number of "points" for each milestone event. Each milestone event received a subjective value of 1-3 (some = one, significant = two and major = three) which was then converted to the charts linear format. This chart shows that FEMA has improved their ability to integrate Title 10 resources and simultaneously decreased the likely need for their large-scale employment through mitigation initiatives. Most of the improvements in these two areas have been since 2002.

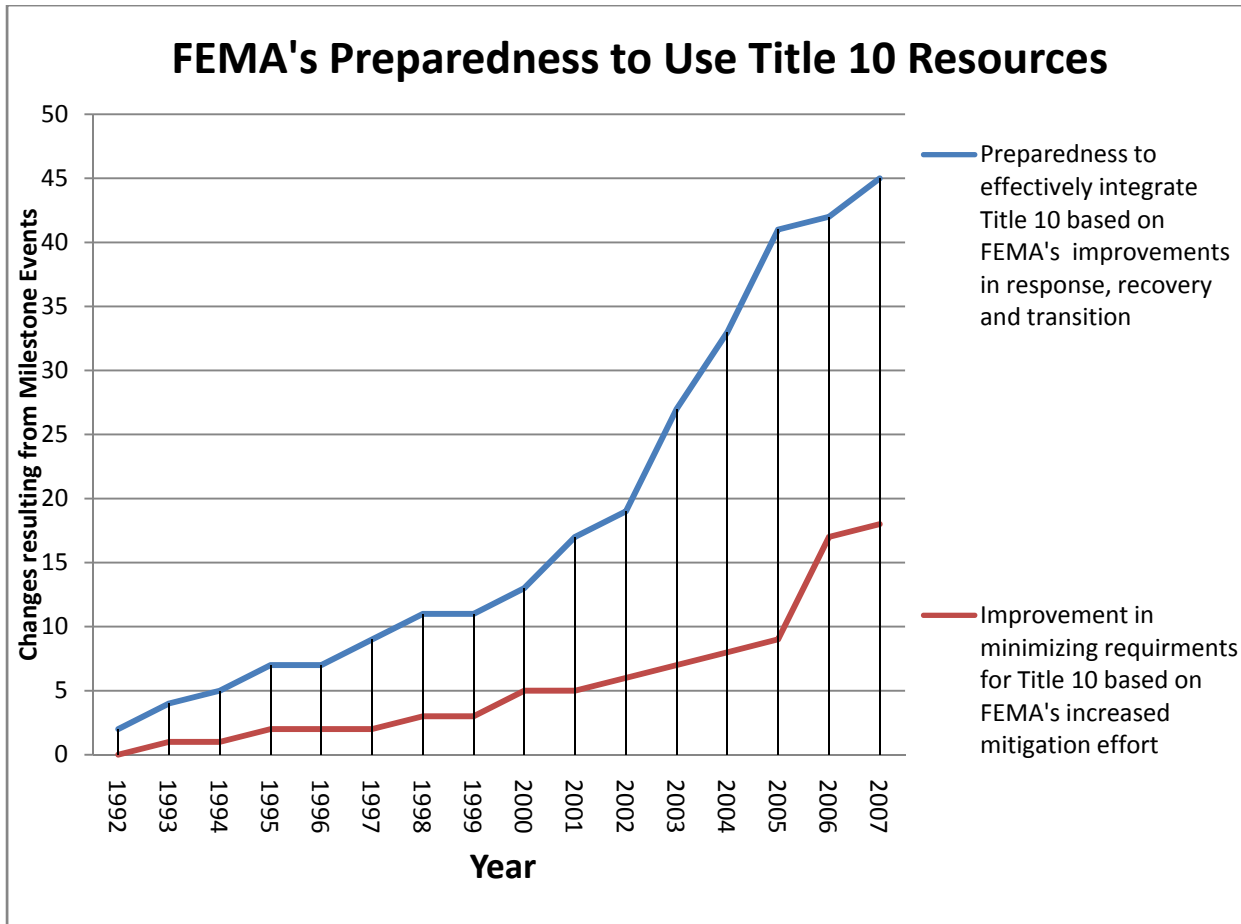


Figure 4. FEMA's preparedness to use Title 10 resources.

Chart depicting FEMA's increased ability to integrate Title 10 assets and their efforts to minimize the requirement to employ Title 10 forces. Chart created by Michael Goodwin (author) based on analysis of data contained within chapter 4 of this document and detailed in appendix C.

Can FEMA get it right every time? No, but what they can do is provide the coordination of effort, the unity of command and the guiding principles and doctrine that define emergency management. FEMA is a better organization today than ever in their history but this improvement on the national level has come at the price of less development of capability at the local and state level. Daniel Best articulates this, "The change in response has mostly been orientated to the development of Federal capability

and resources that have not been matched at a state or local level. The result is a loss of capability at the local and state level faster than a gain at the Federal level.” (Best, Director, Disaster Operations; FEMA 2008) As the nation experiences changes in the COE, the demands on FEMA and DHS increase. FEMA, then, must continuously implement actions to accomplish more with the limited resources at its disposal. FEMA has accomplished this by integrating all levels of the government (from the executive branch down to state and local), maintaining experience leadership, investing in the professionalization of its workforce, developing “doctrine” to guide the overall effort and strengthened relationships between supporting organizations including the DoD and NGOs conducting planning and training exercises. The Congress consistently supports this effort by passing new laws that solidify FEMA’s gains. Disaster management is an uncertain and unpredictable undertaking that FEMA meets head on in every circumstance without complaint and with an attitude of protecting the lives and property of the American public.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Since 1992, FEMA has greatly improved their response capability and are more prepared to integrate Title 10 assets because of its improvements in leadership, personnel, publication, revision and implementation of key documents, training and readiness exercises and legislative support. A critical relationship enhanced by these improvements is the one between the FCO and the DCO. FEMA and DoD conduct joint exercises that streamline and enhance the integration and application of assets. The principal interface between FEMA and DoD/Title 10 for assignment of these assets occurs with the FCO and DCO. Enhancing the ability of these two individuals to work together complements the capabilities of the overall response effort. During an exercise in Texas, June, 2007, Joshua Barnes (assistant to the FCO) noted, "Seeing more DOD operations and processes helps FEMA learn the types of resources that are available so we can tailor our requests for assistance appropriately," he said. "We are also able to identify possible needs of the state by looking at what they are doing, so we can plan to provide the additional capabilities the state may need." (Bielling 2007) During the same exercise, COL Laverne Young (DCO) observed, "Relationships among DOD, FEMA and the states have improved since 9/11," he said. "And FEMA's leaning forward now more than ever to provide that presence with the state before a disaster. We keep ourselves packed and ready to go, because we're DOD's first responders. That's why I love this job. We're here to help Americans, and it's our way of giving back." With the possible

exception of the truly catastrophic incidents (like those identified in the 15 planning scenarios) FEMA is prepared to utilize Title 10 assets for natural disaster response.

(Bielling 2007)

The massive disasters identified in the 15 planning scenario pose such wide reaching potential impact that, until it happens, FEMA cannot know what all of the actions necessary to respond and recover are. FEMA's planning efforts provide a good starting point from which all other actions evolve. When asked "Do you think FEMA is prepared to incorporate Title 10 resources into their natural disaster plan?" Scott Wells commented, "If you're talking about small, medium, and perhaps some large disasters such as hurricanes where we [emergency managers] have some experience, I would say yes. If you're talking about truly catastrophic disasters and disasters where we have little to no experience as in 14 of the 15 National Planning Scenarios, I would say no." (Wells 2008) So yes, FEMA is as prepared as they can be at this point. Their five-year (2008-2013) plan outlines goals that continue this effort and growth.

By the close of 1992, FEMA's continued existence as lead agency for disaster response seemed assured and a new era for FEMA appeared imminent. Even though the possibility of shifting lead agency status to the military was often considered, DoD would remain in a support role. FEMA's reorganization under the Department of Homeland Security in 2003 was the saving and insulating action that enabled FEMA's continued viability. Since 1993, FEMA's principle role has changed to an all hazards approach with a focus on incident response and recovery. As part of this response, the agency has gained authority to conduct pre-event mitigation, training with and for state and local emergency managers and first responders and to work in concert with non-government

organizations like EMAC. Mitigation rose to the forefront of FEMA's plan in 1993 with the creation of the Mitigation Directorate.

In conducting pre-event mitigation, FEMA had to overcome a few challenges. First, they had to establish the legal authority to conduct the activity. The Mitigation Directorate (1993), the Stafford Act revision of 1994 and the Disaster Mitigation Act of 2000 opened the door for FEMA's growth in this area. Second, they had to build stronger ties to the first responders. Federal funding and grants encouraged cooperation, compliance and coordination by the states and strengthen the federal to state relationship. Finally, FEMA recognized that emergency management is as much about effects as it is about association. To improve in this area, FEMA supported training exercises, training programs and the risk assessment process between them and the state emergency management organizations. Working closely together builds relationships that help overcome the bureaucracy present in the system and encourages a unified response across all departments of the federal government and the states.

FEMA's actions demonstrated their commitment to supporting this nation in disaster response by their coordination with state and local first responders. Through individual and organizational training, they build relationships that often supersede bureaucratic limitations while joint operation training with state agencies and DoD completes the requirements for disaster response. FEMA continues to improve in all aspects of emergency management including interpersonal and interagency cooperation, training, internal and external coordination and integration of technology.

FEMA makes better use of technology and has an improved method (under NIMS) of disaster management that is more organized and systematic. This process

resulted in much greater interagency coordination. The improvement in technology enhances communication, information management and the processing of funds for disaster claims. FEMA's disaster management efforts have resulted in a much greater number of response personnel available and NIMS, a more systematic and coordinated approach to event management. This improvement is critical for a small agency like FEMA. Finally, improvement in interagency coordination has shortened the time required for a disaster declaration. In table form the changes look like this: (Best, Director, Disaster Operations; FEMA 2008)

	Hurricane Andrew (1992)	Hurricane Katrina (2005)
Technology	\$500M in claims in about a year	\$1B in claims in less than 1 month \$9B in claims in about 1 year
Disaster Management	2,000 federal personnel peak	80,000 personnel among 26 agencies peak
Interagency Coordination	96 hours for disaster declaration	Less than 24 hours for disaster declaration

This improved situation relieves some of FEMA's reliance on DoD resources thereby improving NORTHCOM's ability to support disaster relief by reducing the number of potential military forces required.

NORTHCOM is prepared to provide the required resources through FORCES COMMAND (FORSCOM). (FORSCOM controls the assignment of forces by tasking units in the reset and ready pool as a primary source of manpower. Title 10 units all have civil support missions however, they have to prepare for all of the potential range of missions. Doing this in addition to their wartime task with the current operating tempo poses a significant challenge. To train and plan for C2 operations in large scale disaster

support in addition to this might push Title 10 into an untenable situation. Ultimately, DHS and DoD need to develop a large mission set (typically too large for anyone else to handle) for the military to focus on. Scott Wells summed this up when he said:

Yes, DOD's skill set is in doing big things in a big way. As currently configured, DOD is given bit parts and bring a lot of assets to do small things. Given the organization of DOD is put in place in recent years--NORTHCOM, ARNORTH—and the great capability DOD brings to the fight, I would suggest giving DOD large missions that we anticipate for catastrophic type disasters such as in the National Planning Scenarios. For example, DOD can be in charge of evacuations for any of several scenarios not only a hurricane or perhaps earthquake or radiological/nuclear event. For chemical or radiological event DOD could be put in charge of all decontamination operations. Giving big missions to DOD ahead of time allows the planners at ARNORTH and NORTHCOM to plan, train, and exercise for these big missions. (Wells 2008)

Unfortunately, NORTHCOM's preparedness to provide does not necessarily translate to FEMA's ability to incorporate.

This research was conducted with the assumption that one agency wants to be in control of the overall effort. This has proven false. While there may be an individual that has this as a personal goal, organizationally this is not the case. FEMA sees their role clearly as the coordinator of the federal response. Likewise, DoD, through the DCO, is comfortably confident in their role and responsibility as the most capable and robust support organization. DoD has a much more demanding role for the Title 10 assets under its authority, national defense. In this time of persistent conflict, DoD is willing and able to provide resources but wants them returned at the earliest possible time. In charge, hardly, DoD has enough to keep it busy. Therefore, it seems that FEMA and DoD see their relationship continuing much as it has in the past, mutually beneficial. The caveat to this is that FEMA and DoD get along better today because of the realignment of regions to mirror each other, greater interoperability efforts, increased training

opportunities and strong relationship building. This association between FEMA and DoD and other federal agencies still begs the answer to who makes the final decision when the involved parties cannot agree.

At the outset of this research it seemed certain that triggers existed for engaging Title 10 forces and that they just needed to be found and articulated. The truth is that, while there are some minor triggers, significant ones just do not exist at this point. The reason is that each disaster is different requiring a unique response. This means that, with few exceptions, there is no effective way to trigger the mobilization of an asset. In fact, even the most responsive military asset, the National Guard, does not routinely mobilize until just after an event. This is due to funding concerns as much as response requirements. One of the minor exceptions for military engagement is, for example, search and rescue after a hurricane. When a storm's landfall is imminent, it is safe to assume or "trigger" the alert and pre-position these critical assets. Successful use of DoD assets in disaster response requires effective execution of the request process not guess work or assumptions not based in fact. The utilization of an incident commander and a PFO has improved the efficiency of employing resources of all types including Title 10.

The incident commander is in charge of the local response and the PFO (the president's representative) has final authority over the federal response. The incident commander has authority to make decisions but does not assume command of and federal forces. The PFO likewise has final authority over the federal response but does not exercise authority at the local level. FEMA acts as a coordinating element between these two individuals and ensures that the minimum necessary resource is used to the maximum possible extent by thoroughly understanding the situational needs and

capabilities. In today's operational environment, it is normal for military commanders to parcel their forces into task forces and to integrate small, specialized units into their formation in order to accomplish specific task. These units and individuals each have their own preferences however, regardless of personal feelings or desires though, the unit exercises the will of the commander. Emergency management approaches the situational needs in much the same manner by applying just enough effort to accomplish the mission. In establishing who should be in charge, this research also identified who should not be in this senior role, the military. Title 10 forces should not be in the lead for any operation dealing with civil support they should fulfill the needs and requirements of the people and the civilian agencies managing the event. Therefore, military commanders control and manage military assets and civilian authorities control the commanders. Reversing this potentially presents an unnecessary and unacceptable violation of Posse Comitatus and detracts from the primary national defense mission of the U.S. armed forces. This support (forces/assets only) relationship seems to be positive for the U.S. military and appears to enable USNORTHCOM to more effectively engage in civil support missions because it allows the military to primarily focus on national defense while FEMA focuses on emergency management.

Once DoD and Title 10 assets engage in disaster support the costs associated with the effort rise quickly. It is important therefore that these resources disengage at the earliest possible time. What should trigger the disengagement of DoD assets? This is an easier answer than the trigger to engage. Past disasters show that when state resources are overwhelmed DoD becomes involved. As the national response intensifies the state and local capabilities recover and become able to assume greater and greater roles. It is

at this point that FEMA must determine to disengage DoD in order to minimize cost and to allow the military to refocus back on its primary mission of national defense.

FEMA, better prepared today and better postured for emergency management, accepts a difficult job with little allowance for mistakes. Even in the face of public criticism, they perform very well in most respects orchestrating the overall response beginning at the local level progressing through non-government and charitable organizations, on to state and culminating in an all out national effort supported by all federal agencies. DoD and Title 10 forces provide the greatest capability to FEMA and, with an improving request process, better communications, adoption of guiding documents and doctrine, FEMA does bring order to chaos,. Not all at once and certainly, with major events, not quickly but methodically and succinctly FEMA gets the job done. FEMA is the preeminent emergency response organization in the nation and they are ready.

Recommendations

FEMA needs to maintain high-level relationships and access to all levels of government including Title 10 through DoD. The robust nature of DoD, as discussed in the document, states that disaster response on the scale of Hurricane Andrew is smaller than many military operations and so would have little impact on DoD's ability to maintain military readiness. The assumption that DoD could respond to any given disaster with little effort or impact is a large one for the military whose primary focus is national defense and which was downsizing by 295,000 positions in the early 1990s. In today's operating environment this is even more inaccurate because of the smaller size of

the military and the state of persistent conflict in Iraq, Afghanistan and other regions. Perhaps in 1993 and the higher manning levels in the military (though declining) this view possessed greater merit than it does today. Major catastrophes continue to be the exception but also continue to be the defining events for FEMA.

FEMA must maintain the authority and empowerment from DHS to restructure as required and conduct additional training events and exercises like, TOPOFF and Project Impact, that improve the overall national response to disasters.

FEMA should focus exclusively on emergency management. Civil defense and emergency management is too much for a single small agency to handle. Recent changes effectively relieve FEMA of the civil defense roles they had in the 1980s and early 1990s. DHS should manage and facilitate civil defense.

Areas for further research

First Area:

FEMA needs to improve their perceived level of success and the public's understanding of their organization mission and capabilities. It is easy, as a victim, to criticize others even when they do most everything right. When FEMA responds successfully, there is still often a perception that they failed. FEMA needs to implement a public relations campaign in order to develop greater understanding of their role and responsibility thereby increasing the citizen's perception that FEMA is capable of attaining their mission goals. FEMA may be able to look at the military's ongoing

information operations concept for some support in this effort. FEMA needs to not only do a good job but also receive the recognition for their actions.

Second Area:

Given that FEMA's effort during Hurricane Katrina was massive, would the public opinion of FEMA be better if a similar response had been executed for Hurricane Andrew?

Third Area:

This research addressed FEMA's preparedness to use Title 10 assets in response to natural disasters. A recent addition to available personnel and their use during Hurricane Katrina suggests that FEMA will have to coordinate and integrate non-government security forces like Blackwater and Triple Canopy into the response effort. The legal ramifications in this area are complex at best as one explores the constitutionality of using 'mercenary forces' on American soil versus private citizen's right to hire private security. To further complicate the issue, local, state and federal laws regulate these organizations possession and use of weapons. Finally, can these forces be deputized to act in an official capacity? If so, the level (local, state or federal) impacts their authority and could raise issues of discriminating between these individuals based upon this level of authority much like the challenge faced in using Title 10 and Title 32 forces.

Fourth Area:

How can DoD's MAs be modified or created in order to take advantage of the large scale capabilities they possess? DoD does things in a big way and should be given missions that capitalize on this ability possibly by introducing more pre-scripted mission

assignments. These missions will often be too large for anyone else to handle and so may provide an effective triggering mechanism allowing DoD to become more proactive and improve the overall response to major catastrophes. (Best, Director, Disaster Operations; FEMA 2008)

ILLUSTRATIONS

Text Here

GLOSSARY

Mitigation: Provides a critical foundation in the effort to reduce the loss of life and property from natural and/or manmade disasters by avoiding or lessening the impact of a disaster and providing value to the public by creating safer communities. Mitigation seeks to fix the cycle of disaster damage, reconstruction, and repeated damage. These activities or actions, in most cases, will have a long-term sustained effect. (U.S. Government Department of Homeland Defense 2007)

Preparedness: A continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action in an effort to ensure effective coordination during incident response. Within NIMS preparedness focuses on the following elements: planning, procedures and protocols, training and exercises, personnel qualification and certification, and equipment certification. (U.S. Government Department of Homeland Defense 2007)

Recovery: The development, coordination, and execution of service- and site-restoration plans; the reconstitution of government operations and services; individual, private sector, nongovernmental, and public assistance programs to provide housing and to promote restoration; long-term care and treatment of affected persons; additional measures for social, political, environmental, and economic restoration; evaluation of the incident to identify lessons learned; postincident reporting; and development of initiatives to mitigate the effects of future incidents. (U.S. Government Department of Homeland Defense 2007)

Response: Activities that address the short-term, direct effects of an incident. Response includes immediate actions to save lives, protect property, and meet basic human needs. Response also includes the execution of emergency operations plans and of mitigation activities designed to limit the loss of life, personal injury, property damage, and other unfavorable outcomes. As indicated by the situation, response activities include applying intelligence and other information to lessen the effects or consequences of an incident; increased security operations; continuing investigations into nature and source of the threat; ongoing public health and agricultural surveillance and testing processes; immunizations, isolation, or quarantine; and specific law enforcement operations aimed at preempting, interdicting, or disrupting illegal activity, and apprehending actual perpetrators and bringing them to justice. (U.S. Government Department of Homeland Defense 2007)

Transition: Activities that lead to long term recovery and cleanup, a minimizing of the federal response, and a transfer of operations back to state responsibility.

APPENDIX A

EMERGENCY SUPPORT FUNCTION ROLES AND RESPONSIBILITIES

(ESF 1 through 15)

ESF	Scope	Responsible Federal Agency	DoD Role
ESF #1 Transportation	Aviation/airspace management and control Transportation safety Restoration/recovery of transportation infrastructure Movement restrictions Damage and impact assessment	DOT	S
ESF #2 Communications	Coordination with telecommunications and information technology industries Restoration and repair of telecommunications infrastructure Protection, restoration, and sustainment of national cyber and information technology resources Oversight of communications within the Federal incident management and response structures	DHS/NCS	S
ESF #3 Public Works and Engineering	Infrastructure protection and emergency repair Infrastructure restoration Engineering services and construction management Emergency contracting support for life-saving and life-sustaining services	DOD/USACE	C/P
ESF #4 Firefighting	Coordination of Federal firefighting activities Support to wildland, rural, and urban firefighting operations	USDA/FS	S
ESF #5 Emergency Management	Coordination of incident management and response efforts Issuance of mission assignments Resource and human capital Incident action planning Financial management	DHS/FEMA	S
ESF #6	Mass care	DHS/FEMA	S

Mass Care, Emergency Assistance, Housing, and Human Services	Emergency assistance Disaster housing Human services		
ESF #7 Logistics Management and Resource Support	Comprehensive, national incident logistics planning, management, and sustainment capability Resource support (facility space, office equipment and supplies, contracting services, etc.)	DHS/FEMA	S
ESF #8 Public Health and Medical Services	Public health Medical Mental health services Mass fatality management	HHS	S
ESF #9 Search and Rescue	Life-saving assistance Search and rescue operations	DHS/FEMA	P
ESF #10 Oil and Hazardous Materials Response	Oil and hazardous materials (chemical, biological, radiological, etc.) response Environmental short- and long-term cleanup	EPA	S
ESF #11 Agriculture and Natural Resources	Nutrition assistance Animal and plant disease and pest response Food safety and security Natural and cultural resources and historic properties protection and restoration Safety and well-being of household pets	USDA	S
ESF #12 Energy	Energy infrastructure assessment, repair, and restoration Energy industry utilities coordination Energy forecast	DOE	S
ESF #13 Public Safety and Security	Facility and resource security Security planning and technical resource assistance Public safety and security support Support to access, traffic, and crowd control	DOJ	S
ESF #14 Long-Term Community Recovery	Social and economic community impact assessment Long-term community recovery assistance to States, local governments, and the private sector Analysis and review of mitigation program implementation	DHS/FEMA	S
ESF #15	Emergency public information and	DHS	S

External Affairs	protective action guidance Media and community relations Congressional and international affairs Tribal and insular affairs		
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(U.S. Government 2008)

APPENDIX B

ANALYSIS SUPPORTING FIGURE 2

Change	Change	Mitigation	Preparedness	Response	Recovery	Transition
		Did the milestone event positively impact FEMA?				
GAO Report "Federal, State and Local Response Needs Improvement"	1992			1		
Federal Response Plan (FRP) Signed				1		
Mitigation Directorate Formed	1993	1				
GAO Publishes Disaster Management Improving the Nations Response to Catastrophic Disaster				1		
National Flood Insurance Reform Act	1994				1	
Stafford Act Amended	1995	1		1	1	
EO 13010 "Critical Infrastructure Protection"	1996		1			
Emergency Management Assistance Compact	1997			1	1	
PDD 63 Critical Infrastructure Protection	1998			1	1	
FEMA Project Impact begins		1	1			
FRP Revised	1999					
Disaster Mitigation Act of 2000	2000	1	1	1		
TOPOFF Exercise		1		1		
Office of National Preparedness created	2001		1	1	1	
Homeland Security Office Established in Whitehouse			1	1	1	
Homeland Security Advisory Council						
Homeland Security Act	2002	1		1	1	
TOPOFF Exercise II		1		1	1	
FEMA Project Impact ends						
EO 13266 Amended regarding DHS	2003			1	1	
HSPD 5 Management of Domestic incidents				1		
Initial NRP created				1	1	
HSPD 7 Critical Infrastructure Identification Prioritization and Protection			1		1	
HSPD 8 National Preparedness						
DHS Created				3	3	

Change	Change	Mitigation	Preparedness	Response	Recovery	Transition
		Did the milestone event positively impact FEMA?				
Final NIMS	2004		1	1	1	1
Hurricane "PAM" exercise				1		
NICC Created				1		1
Stafford Act Reauthorized for Pre-event Mitigation	2005	1				
Begin National Preparedness System Revision						
DHS Preparedness Directorate Created			2	1	1	
2SR DHS Reorganization Announced			1	1		
Changes to National Preparedness Goal			1	1		
TOPOFF III			1			1
National Preparedness Guidance (15 planning scenarios developed)			2	2		
FEMA Reorganized under DHS			2	2		
White House Townsend Report			3	3		
NRP Modified	2006			1		
Stafford Act reauthorized for pre-event mitigation	2007	1				
TOPOFF IV				1	1	1

Table created by Michael Goodwin (author)

APPENDIX C

ANALYSIS SUPPORTING FIGURE 3

Change	Year	FEMA preparedness to use Title 10	Potential Requirement for Title 10
		based on FEMA's improvement in response, recovery and transition	based on FEMA's improvement in mitigation
GAO Report "Federal, State and Local Response Needs Improvement"	1992	1	
Federal Response Plan (FRP) Signed		1	
Mitigation Directorate Formed	1993	1	1
GAO Publishes Disaster Management Improving the Nations Response to Catastrophic Disaster		1	
National Flood Insurance Reform Act	1994	1	
Stafford Act Amended	1995	2	1
EO 13010 "Critical Infrastructure Protection"	1996		
Emergency Management Assistance Compact	1997	2	
PDD 63 Critical Infrastructure Protection	1998	2	
FEMA Project Impact begins			1
FRP Revised	1999		
Disaster Mitigation Act of 2000	2000	1	1
TOPOFF Exercise		1	1
Office of National Preparedness created	2001	2	
Homeland Security Office Established in Whitehouse		2	
Homeland Security Advisory Council			
Homeland Security Act	2002		
TOPOFF Exercise II		2	1
FEMA Project Impact ends			

Change	Year	FEMA preparedness to use Title 10	Potential Requirement for Title 10
		based on FEMA's improvement in response, recovery and transition	based on FEMA's improvement in mitigation
EO 13266 Amended regarding DHS	2003	2	
HSPD 5 Management of Domestic incidents		1	
Initial NRP created		2	
HSPD 7 Critical Infrastructure Identification Prioritization and Protection		1	1
HSPD 8 National Preparedness			
DHS Created		2	
Final NIMS	2004	3	1
Hurricane "PAM" exercise		1	
NICC Created		2	
Stafford Act Reauthorized for Pre-event Mitigation	2005		1
Begin National Preparedness System Revision			
DHS Preparedness Directorate Created		2	1
2SR DHS Reorganization Announced		1	1
Changes to National Preparedness Goal		1	1
TOPOFF III		1	1
National Preparedness Guidance (15 planning scenarios developed)		1	1
FEMA Reorganized under DHS		1	1
White House Townsend Report		1	1
NRP Modified	2006	1	
Stafford Act reauthorized for pre-event mitigation	2007		1
TOPOFF IV		3	

Table created by Michael Goodwin (author)

APPENDIX D

LIVING HISTORY INTERVIEWS

Interview Approval Authorization

Living History Interviews approved by CGSC, Maria Clark.

Control Number CGSC/QAO 09-009.

Questions:

1. In your opinion, how has FEMA changed in their response to natural disasters since Hurricane Andrew?
2. Do you think that FEMA has improved since Hurricane Andrew (1992/93)? If so, how? If not, why do you think FEMA is not getting better?
3. What do you think is the most significant change within FEMA since Hurricane Andrew (1992/93)?
4. What do you think still needs to be done to make FEMA a better, more responsive or more effective organization especially in regards to natural disaster response?
5. Is there anything about FEMA that you think needs to be changed immediately? If so, what?
6. In your experience, how were Title 10 assets managed when mobilized for disaster response?
7. How do you think these assets could have been better managed?
8. How were these Title 10 assets released from their support role to FEMA? Can you describe a better way to trigger the release of these assets?
9. In your experience/opinion, what percentage of effort should/does each of the following (State government, regional government, federal government, non-government organizations) provide during these distinct phases (preparedness, response, recovery, mitigation and transition) during response to natural disasters? Do you think this is adequate for present and future needs (excluding the truly catastrophic)?
10. Do you think DoD's role should be changed to allow for greater latitude in disaster/emergency response? Specifically, do you think that Posse Comitatus and the Insurrection acts should be revised or repealed? If so, why do you think this and what modifications would you propose in any revision?
11. How do you think FEMA is handling the 2008 Hurricane Season?
12. Is there anything more that you want to add?

APPENDIX E

FEMA REGIONS



(FEMA 2007)

FEMA Regions and Defense Coordinating Officer Regions currently mirror each other.

APPENDIX F

FEMA 10 YEAR TIMELINE

	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000
Prominent Disaster Events*	Oklahoma City bombing; Hurricane Marilyn	Hurricanes Fran, Opal		Hurricanes Bonnie, Georges	Hurricanes Bret, Floyd	Cerro Grande fire; Hurricanes Irene, Lenny
Total Event Designations	35	149	57	148	106	104
Major Disasters	29	72	49	61	53	41
Emergencies	2	2	5	3	16	5
Fire Assistance	4	75	3	54	37	58
Laws, Plans, and Policies	The Stafford Act was most recently amended in 1993. The FRP was in effect since 1992.				Second version of FRP published.	<i>Disaster Mitigation Act of 2000</i> amends Stafford Act.
Leadership	President: William Clinton					
	FEMA Director: James Lee Witt					
FEMA Reorganizations		Planning and Operations rejoined after 1993 split.	Three Territorial Logistics Centers established to stock commodities for initial response.			
Annual Appropriation	\$847 million	\$805 million	\$1,816 million	\$842 million	\$1,064 million	\$873 million
Supplementary Appropriation(s) for the Disaster Relief Fund	\$2,273 million	\$3,171 million	\$3,300 million	\$1,600 million	\$1,806 million	\$2,176 million
Authorized FTEs	3,864	3,860	4,945	4,625	4,539	4,789
FEMA Programmatic Changes Discussed In This Report	FEMA conducts its first large-scale natural event exercise (Response '95). Hurricane Liaison Team created.	FEMA consolidates preparedness grants and links them to state strategic agreements.	FEMA begins voluntary self-assessments of state readiness.	FEMA conducts its last large-scale natural event exercise (Response '98).		EMPGs combine six preparedness grants.

*Includes all Category 3, 4, and 5 hurricanes.

(Office of the Inspector General 2006)

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Prominent Disaster Events *	September 11 th attacks on World Trade Center and Pentagon		Loss of Space Shuttle <i>Columbia</i> ; Hurricane Isabel	Hurricanes Ivan, Charley, Jeanne, Frances	Hurricanes Dennis, Katrina, Rita
Total Event Designations	104	126	115	129	139
Major Disasters	50	42	62	65	45
Emergencies	15	1	19	7	67
Fire Assistance	39	83	34	57	27
Laws, Plans, and Policies			The <i>Homeland Security Act of 2002</i> creates DHS. DHS publishes the Initial NRP; FRP remains in effect. President Bush releases HSPD-5.	DHS publishes NIMS. President Bush releases HSPD-8.	NRP supersedes FRP in April.
Leadership	President: George Bush				
	FEMA Director: Joseph Allbaugh		DHS Secretary: Thomas Ridge		DHS Secretary: Michael Chertoff
	EP&R Under Secretary and FEMA Director: Michael Brown				
FEMA Reorganizations	Preparedness, Training and Exercises merges with Response & Recovery into Readiness, Response, & Recovery Directorate. FEMA creates External Affairs and Administration & Resource Planning Directorates.	Readiness, Response, & Recovery Directorate splits into National Preparedness Division and Response & Recovery Division.	FEMA incorporated into DHS' EP&R Directorate. NDMS moves from HHS to FEMA. Some FEMA staff moved to DHS headquarters.		DHS Second Stage Review creates DHS Preparedness Directorate, absorbing some FEMA staff. EP&R layer to be eliminated.
Annual Appropriation	\$1,221 million	\$2,610 million	\$2,465 million	\$3,256 million	\$3,089 million
Supplementary Appropriation(s) for the Disaster Relief Fund	\$4,383 million	\$8,008 million	\$1,925 million	\$2,245 million	\$66,385 million
Authorized FTEs	4,859	4,952	4,574	4,859	4,905
FEMA Programmatic Changes Discussed In This Report	Initial FEMA proposal to develop a Southeast Louisiana Catastrophic Hurricane Plan.	Evacuation Liaison Team created.	NEMB-CAP preparedness baseline study and RAMP begin. Response Division develops a 5-year catastrophic planning strategy.	Four-part Hurricane Pam planning event begins in Louisiana.	Management of the EMPG transfers to ODP.

*Includes all Category 3, 4, and 5 hurricanes.

(Office of the Inspector General 2006)

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