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Disaster Response in the United States of America: An Analysis of the Bureaucratic and Political History of a Failing System

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DISASTER RESPONSE IN THE UNITED STATES OF AMERICA:

An Analysis of the Bureaucratic and Political History of a Failing System

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"Benjamin Franklin is supposed to have defined insanity as expecting a different result after doing the same thing over and over again. ...this definition more or less describes our approach to reforming the disaster relief program."

(Miskel xi)

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Chapter 1: Introduction

As an Emergency Medical Technician (EMT) and future medical doctor I often wonder how prepared our nation is to effectively respond to disasters. I have volunteered on ambulances in New York and in Pennsylvania but my curiosity turned to disappointment after I volunteered overseas on ambulances in the State of Israel. I noticed a fundamental difference between American and Israeli preparedness. In Israel, every volunteer and employee understood his role during a disaster and knew exactly what to expect from other agencies. Everyone understood how Magen David Adom, the Israeli ambulance service, would coordinate with the military's Homefront Command and was prepared to quickly transition from normal to disaster operations. Furthermore, even local resources such as the ambulance dispatch centers were designed to withstand largescale disasters and, if needed, could even be quickly relocated to underground bunkers.

In contrast, if you surveyed my American colleagues, you would find little to no understanding of the disaster response system. Virtually nobody has read the 426 page all-hazards plan titled the National Response Plan, and with the exception of some major cities, few emergency response agencies have reinforced or protected emergency infrastructure. In attempt to correct this problem, as of October 2005, the federal government began requiring that all local and state emergency response organizations adopt the federal incident command recommendations. Each agency was required to demonstrate that all employees completed a series of federal incident command classes to remain eligible for federal emergency preparedness dollars. However, even this requirement has been loosely enforced since it can be fulfilled through short online

courses for which the test answer keys are widely circulated. From my experience, the plan has not become a part of the institutional culture, is rarely reviewed during inservice training, and is criticized by most people for being so complex as to be impractical.

While the disaster response system may be adequate in small-scale disasters when a handful of agencies must coordinate, as I embarked on this research project I became astonished by our nation's striking lack of preparedness. Disasters often strike with limited or no warning, and by definition they result in large-scale death, destruction, and mass hysteria. They often have long-lasting and large-scale economic, political, and psychological effects. While individual disasters may not be predictable, we can be assured that another disaster will occur in the not too distant future. It may come in the form of a hurricane, earthquake, tsunami, or other natural disaster; or, it may be the result of an intentional human act such as war, terrorism, bioterrorism, or some yet unforeseen destructive act. The American public and political officials have a choice. They can continue, however illogical, to live in denial that another destructive event is forthcoming, or they can learn from the past and finally create a political and bureaucratic system capable of curtailing destructive effects.

Despite having responded to thousands of natural disasters and numerous terrorist attacks, at present the United States government at the federal, state, and local levels is exceedingly unprepared to handle the immediate aftereffects of disasters. The federal government has created numerous large bureaucracies and congressional panels as well as generated hundreds of official reports each of which purports to detail appropriate

disaster response guidelines. Nonetheless, the improvements since the first disaster response plan was implemented during World War I are not palpable.

During the most recent major Hurricanes – Katrina and Rita – despite having significant advanced notice of the impending natural disaster as well as years of investigative reports warning about the fragility of the New Orleans levy system, the disaster response system failed the citizens of Louisiana and the Gulf Coast. That the system requires repair is not debatable. The questions which remain are how the current system came to be, what our expectations of the system should be, and how we ought to shock the political bureaucracy into action to repair the obviously ailing system.

Changes to this point have consistently stemmed from the conviction that failure was a result of poor leadership, poor individual decisions, and inexperience. These "improvements" stemmed from the obvious fact that the system would work better if each participating organization were better equipped, better trained, and more highly funded. However, while these shortcomings contribute to the inefficiencies, the consistent failure of the system under different personal leaderships, points to a systemic cause for the failure. Criticism must look at the overall system and the environment in which it functions to develop a practical, appropriate, and affordable strategic plan. The government must replace its tendency to fund "random acts of preparedness!" with a carefully outlined strategic plan that is sensitive to American political traditions, yet still effective.

People often characterize disasters and the communal response they require as a new phenomenon grown out of the increasingly high-tech and internationally intertwined

¹ Phrase borrowed from Irwin Redlener, M.D., Director of the National Center for Disaster Preparedness at Columbia University's Mailman School of Public Health.

world. This suggestion is a myth. The earliest recorded disasters took place before the Declaration of Independence. In 1635 the Great Colonial Hurricane swept across much of Southern New England. Bays were flooded killing Native Americans, trees were uprooted, and areas were left uninhabitable. Governor William Bradford said of the storm at the time:

...such a mighty storm of wind and rain as none living in these parts, either English or Indian ever saw. ...It blew down sundry houses and uncovered others. ...It blew down many hundred thousands of trees turning up the stronger by the roots and breaking the higher pine trees off in the middle.²

In other words, the scenes all too familiar from televised reports of national disasters are not new; they are simply more widely broadcasted. In 1881, the Missouri River flooded. In 1886 Charleston, South Carolina was hit by a deadly earthquake. In 1889, Seattle experienced a devastating city-wide fire.³ In 1893, six hurricanes hit the United States causing a total of 4,000 deaths. In 1900, a hurricane hit Galveston, Texas leaving between 6,000 and 8,000 of Galveston's 38,000 residents dead with an additional 10,000 residents left homeless.⁴ This remains the most deadly weather disaster ever to hit the United States.

While economic and technological considerations encouraged people to settle along the Mississippi River and in other vulnerable locations increasing the scope, variety, and frequency of disasters, the havoc imposed by Mother Nature is not altogether

² Public Broadcasting Service, American Experience: The Hurricane of '38, available from http://www.pbs.org/wgbh/amex/hurricane38/timeline/index.html; internet; accessed 30 January 2007.

³ James F. Miskel, *Disaster Response and Homeland Security: What Works, What* Doesn't (Connecticut: Praeger Security International, 2006), 3.

⁴ Public Broadcasting Service, American Experience: America 1900, available from http://www.pbs.org/wgbh/amex/1900/peopleevents/pande27.html; internet; accessed 30 January 2007.

new. While modern disaster planning must include preparations for terrorist threats which pose new and previously unimaginable concerns, the overall response system needed to handle all disasters is similar.

Chapter 2: Disaster Response Pre-1979

Throughout the 19th century and the early 20th century, disaster response was handled by the federal government on a case-by-case basis without any clearly defined system. The vast majority of incidents were handled by state and local authorities independent of federal involvement. When federal disaster management was necessary, the military was the primary coordinator and source of manpower⁵. In 1917, during World War I, the federal government took its first step towards formalizing federal disaster relief. The War Department issued Special Regulation Number 67 formally titled "Regulations Governing Flood Relief Work in the War Department" which despite its title impacted relief for all types of disasters. However, despite the military order, federal disaster relief remained informal and sporadic until the 1950s. Citizens did not expect the federal government to contribute to relief efforts, and most people thought of disaster relief as a responsibility for neighbors, faith-based organizations, and other charitable organizations.

In 1950, the onset of the Cold War prompted federal officials to absorb disaster response into federal civil defense. This was accomplished by passing the Federal Disaster Relief Act of 1950, which was designed specifically to lessen the economic impact of disasters. The legislative history of the bill read:

The purpose of the bill is to provide for an orderly and continuing method of rendering assistance to the state and local governments in alleviating suffering and damage resulting from a major peacetime disaster and in restoring

⁵ Miskel, Disaster Response and Homeland Security, 41.

⁶ Ihid

public facilities and in supplementing whatever aid the state or local governments can render themselves.⁷

In many ways, the bill was a logical expansion of the New Deal social policies. It was intended to provide federal money to relieve the economic stresses of a disaster but it was not intended to supplant current disaster relief services offered by state, local, and nongovernmental organizations. Nonetheless, the 1950 law was the first in a series of bills and natural disasters that transitioned the federal government from its negligible pre-1950 disaster relief involvement to the current system.

The original 1950 law was to be limited in scope, activated only upon a presidential disaster declaration, and designed only to supplement state and local efforts.⁸ However, once the federal government committed itself to an official capacity within the disaster relief system, the federal government became the subject of intense criticism every time disaster relief was less than ideal. While initially disaster relief was the responsibility of the Housing and Home Finance Agency (HHFA) as a result of the Cold War, in 1953 it was transitioned into the Department of Defense where it was juggled between agencies for over 25 years.⁹

The Department of Defense was considered the appropriate department for the disaster response system because of the fear that an attack from the Soviet Union could create the next major disaster. However, due to limited resources, money and effort was expended on deterrence rather than disaster readiness. The ongoing assumption was that a successful attack from the Soviet Union would be so catastrophic that even the most

⁷ U.S. Code Cong. And Admin. Legis. Hist. for PL 81-875 (1950), 4024 as in Rutherfod H. Platt, Disasters and Democracy: The Politics of Extreme Natural Disasters (Washington, DC: Island Press), 17.

⁸ Platt, *Disasters and Democracy*, 15 ⁹ Ibid.

prepared civil defense system would be grossly inadequate. ¹⁰ Thus, the system was never carefully developed and was left unprepared to handle any disasters of unusually large magnitude – catastrophic disasters. Routine disasters were easily handled by the states with financial support, and limited logistical support, from the federal government.

By the late 1970s several sectors of the federal government were involved in disaster relief. However, since disaster relief was not the primary responsibility of any one agency it is unclear from the available literature exactly who had authority over the program. According to former Professor of National Security Affairs at the Naval War College James F. Miskel, the General Services Administration (which builds/leases federal buildings), the Department of Housing and Urban Development, and the Department of Defense all were involved in the program to various extents. 11 However, according to Rutherford H. Platt, control of the program shifted from the Housing and Home Finance Agency (1951-1952), to the Federal Civil Defense Administration (1943-1958), to the Office of Civil Defense and Mobilization (1958-1962), to the Office of Emergency Planning (1962-1974), and then eventually to the Federal Disaster Assistance Administration of the U.S. Department of Housing and Urban Development (1974-1979).¹²

Whichever agency maintained ultimate responsibility for emergency management, the fact remains that federal emergency management was not a high priority. Tasks were shuffled between various federal agencies, responsibilities were shared, and no entity had disaster response as its primary responsibility. The deficiencies of this system were not immediately apparent or at least not immediately addressed since

¹⁰ Miskel, *Disaster Response and Homeland Security*, 44. ¹¹ Ibid., 8.

¹² Platt, *Disasters and Democracy*, 15.

the system worked relatively well for small to moderate disasters. In the 1970s, however, one catastrophic disaster and one near-catastrophic disaster forced a significant reevaluation of the federal disaster response system.

Hurricane Agnes

In June 1972 Hurricane Agnes struck the east coast of the United States killing 122 people and causing more than \$10 billion in damage in 2005 dollars. ¹³ It caused more damage in Pennsylvania than any disaster before or since. ¹⁴ *Time m*agazine even referred to the storm as "the most ravaging storm in U.S. history." ¹⁵ In response, the federal government declared seven states – Florida, Maryland, New York, Ohio, Pennsylvania, Virginia, and West Virginia – disaster zones. While Ohio and West Virginia simply requested and received federal reimbursements, the remaining five states requested federal assistance in distributing food and water to tens of thousands of people. Approximately, 20,000 Pennsylvania residents, 17,000 New York residents, and 10,000 Maryland and Virginia residents had to flee their homes due to the flooding. The relief efforts were characterized by mass confusion. State and local governments were not well prepared to handle the disasters, and there was an overall lack of coordination between federal, state, local, and non-governmental organizations.

On June 26, the third day of the storm, the governors of New Jersey, Delaware, New York, Maryland, and Pennsylvania met in Harrisburg to discuss the inadequacies of the federal relief.¹⁶ The meeting took place a day after President Nixon conducted the

¹³ National Hurricane Center, Hurricane Preparedness Site, available from http://www.nhc.noaa.gov/HAW2/english/history.shtml#agnes; Internet; accessed 8 February 2007 and Miskel, *Disaster Response and Homeland Security*, 59.

¹⁴ Miskel, Disaster Response and Homeland Security, 57.

¹⁵ "Disasters: The Violent Deadly Swath of Agnes," *Time*, 3 July 1972, 9.

¹⁶ Paul L. Montgomery, "Flood Areas Rally as Waters Recede," *The New York Times*, 26 June 1972, p. 1A.

traditional flyover of a disaster site. As a result of this highly public summit and the political pressures it applied, on June 26, President Nixon directed all federal agencies to "provide all Federal assistance needed, and do it immediately by cutting through red tape." On June 27, he further directed Vice President Spiro T. Agnew to conduct a tour of the disaster stricken regions to "make sure Federal officials are cooperating fully."

The vice president discovered that federal disaster relief to people who had lost their homes in the storm was not adequate. On July 4, ten days after the storm made landfall, disaster victims were still waiting in line at the Red Cross for temporary housing. The flow of information was inadequate and local governments were given conflicting information about which expenses would be reimbursed by the federal government. While media coverage in the 1970s was generally more passive and less provocative than today's round-the-clock anxiety provoking reports, the storm, nonetheless, received extensive coverage given the other concurrent world events such as the Vietnam War and its anti-war protests. Despite media attention, however, thousands of disaster victims were still living in federal trailers one year later. The disaster response system simply failed on all accounts.

Due to the concerns raised by the response to Hurricane Agnes, the National Governors Association, a bipartisan organization of state governors, set up a commission to analyze the state and federal response system. The commission issued a policy statement recommending a consolidation of federal emergency preparedness responsibilities into one agency. One year later, the commission published an academic

17 "Washington: For the Record," *The Washington Post*, 26 June 1972, 16.

¹⁸ Press Secretary Ronald Ziegler, interview by Michal Knight, "Nixon Asks \$100 Million in Flood Relief," *The New York Times*, 28 June 1972, 28.

¹⁹ Miskel, Disaster Response and Homeland Security, 60.

²⁰ Ibid., 61.

study with the same recommendations. This study also concluded, although in somewhat kinder terms, that states were not prepared to adequately handle their disaster response responsibilities.²¹

Three Mile Island

Although the federal government had begun to evaluate its disaster preparedness no major changes were made before the next major activation of the ailing disaster response system seven years later. In March of 1979, a nuclear accident titled "the most serious²², accident since the inception of the American commercial nuclear power industry took place at the Three Mile Island nuclear facility in the Commonwealth of Pennsylvania. One of the two nuclear reactors in the electrical plant underwent a partial core meltdown. Although there were no serious injuries or deaths directly linked to the Three Mile Island accident, the magnitude of the incident has had a long lasting effect on nuclear regulations in the United States. The near disaster sparked public apprehensions about the safety of nuclear technology that persist to this day. While the Three Mile Island incident was caused by a nuclear accident rather than a natural disaster, the event nonetheless, caused widespread destruction that displaced thousands of people from their damaged homes and reeked havoc on public infrastructure. Thus, it required the activation of the same disaster response system that was proven inadequate during Hurricane Agnes.

The response to the Three Mile Island incident raised so many serious questions that President Richard Nixon immediately established a high level commission to

²¹ Ibid., 67.

²² Title given by the United States Nuclear Regulatory Commission

examine the causes of, preparedness for, and response to the incident. Six months later in October 1979 the commission issued its official report which stated:

The response to the emergency was dominated by an atmosphere of almost total confusion. There was a lack of communication at all levels. Many key recommendations were made by individuals who were not in possession of accurate information and those who managed the accident were slow to realize the significance and implications of the events that had taken place.²³

It is no mystery why the response to the disaster was inadequate. In a report issued by the Pennsylvania Emergency Management Agency (PEMA) following the accident, it was noted that Pennsylvania's Bureau of Radiation Protection which was responsible for developing emergency plans for nuclear facilities and the surrounding areas failed to prepare adequate plans. The bureau submitted a draft plan to the federal Nuclear Regulatory Commission in 1975 but the plan was rejected and returned to the bureau for modification. Although the plan was revised, four years later when the nuclear accident occurred, it was still never resubmitted for final approval by the federal government.²⁴ Although nobody will ever know if the revised plan would have received federal approval, in retrospect the plan was obviously still inadequate.

It is important to realize that the blame for inadequate preparedness is shared between the state, local, and federal government. While the state Bureau of Radiation Protection failed to maintain an adequate and approved plan, the federal Nuclear Regulatory Commission is the agency responsible for overall emergency disaster

²³ President's Commission, *Report of the President's Commission on the Accident at Three Mile Island*, 39; quoted in Miskel, *Disaster Response and Homeland Security*, 63-64.

²⁴ Oran K. Henderson, *Commonwealth of Pennsylvania Emergency Preparedness and Response: The Three Mile Island Incident*. ed. Thomas H. Moss and David L. Sills, *Three Mile Island Nuclear Accident: Lessons and Implication* (New York: New York Academy of Science, 1981), 317-318; referenced in Miskel, *Disaster Response and Homeland Security*, 64.

planning for nuclear power facilities. Despite this oversight responsibility, the Nuclear Regulatory Commission licensed the Three Mile Island power plant without certifying a state evacuation plan. Furthermore, the Nuclear Regulatory Commission failed to maintain any federal response plan and failed to notice that county and local governments did not maintain adequate evacuation plans. Evacuation plans only existed for the citizens in the immediate five-mile radius of the nuclear facility. However, in the hours following the disaster, officials contemplated evacuating people as far as 20 miles from the facility. Furthermore, there was no system in place to communicate emergency information to people in the surrounding communities or to the media.²⁵

News reports reflected this communications gap and were marked by utter confusion and misinformation. Most significantly, there was tremendous confusion about the actual severity of the situation in the nuclear facility, and this confusion was not confined to the press. On March 30 two conflicting evacuation recommendations were issued to the governor of Pennsylvania. The state Bureau of Radiation Protection claimed that radiation levels in the immediate vicinity of the nuclear facility were so low that an evacuation of surrounding neighborhoods was not needed. However, on the very same day the federal Nuclear Regulatory Commission issued an evacuation advisory recommending that pregnant women and children be evacuated.

The media coverage of the Three Mile Island event was much more anxiety provoking than that of previous natural disasters. In the past, media reports were confined to publicizing facts about current and past events such as the number of people displaced, the number of homes destroyed, and the wind strength, as example. In this case, media reports raised fear of the unknown and often made sensationalist conjectures

²⁵ Miskel, Disaster Response and Homeland Security, 64.

about the worst possible scenario. Walter Cronkite, the *CBS Evening News* anchor said on March 30, 1979:

The world has never known a day quite like today. It faced the considerable uncertainties and dangers of the worst nuclear power plant accident of the atomic age. And the horror tonight is that it could get much worse. It is not an atomic explosion that is feared; experts say that is impossible. But the spector was raised [of] perhaps the next most serious kind of nuclear catastrophe, a massive release of radioactivity ... the potential is there for the ultimate risk of a meltdown at the Three Mile Island Atomic Power Plant.²⁶

The unknown factor in Cronkite's broadcast and other similar reports sparked a widespread public outcry for better emergency preparedness. Although the Three Mile Island accident passed without any deaths, the scare led President Jimmy Carter to establish another President's Commission, similar to the Nixon commission that followed Hurricane Agnes, to evaluate the response and make recommendations. Before the commission even completed its report, however, the federal government hastened the establishment of the Federal Emergency Management Agency which was recommended following Hurricane Agnes.²⁷

²⁶ David M. Rubin, "What the President's Commission Learned About the Media," ed. Thomas H. Moss and David L. Sills, *Three Mile Island Nuclear Accident: Lessons and Implication* (New York: New York Academy of Science, 1981), 98-99; quoted in Miskel, *Disaster Response and Homeland Security*, 66.
²⁷ Miskel, *Disaster Response and Homeland Security*, 67.

Chapter 3: The Establishment of FEMA

In 1979, in the wake of Hurricane Agnes and the Three Mile High nuclear accident, Congress and President Carter through a combination of legislation and an executive order established the Federal Emergency Management Agency (FEMA) and the Emergency Management Council. In theory, the creation of FEMA consolidated the disaster preparedness responsibilities performed by various federal agencies into one agency, thereby alleviating the fragmentation and communications difficulties identified in the 1970s.

The executive order required that all federal agencies with disaster response capabilities and responsibilities cooperate with FEMA and tasked FEMA with coordinating preparedness as well as relief operations. While the reorganization requested cooperation from all federal agencies with emergency response capabilities, the system did not subordinate them to FEMA. The hope was that the newly created Emergency Management Council, which was chaired by the FEMA Director and included all federal agencies with disaster preparedness responsibilities, would enhance FEMA's stature within the federal bureaucracy and give the new agency the clout necessary to effectively coordinate disaster preparedness and response.²⁸

Upon close examination, however, it is obvious that the creation of FEMA really only promised to affect disaster preparedness and held little hope of improving disaster response. Most major elements of disaster response were left untouched during the reorganization. Small programs involved in the actual response to disasters such as the Federal Insurance Administration and the National Fire Prevention and Control

²⁸ Miskel, *Disaster Response and Homeland Security*, 68-69.

Administration, previously located with the Department of Commerce and the Department of Housing and Urban Development, respectively, were consolidated into FEMA. Beyond these minor consolidations, however, most changes were confined to preparedness and had little effect on actual response capabilities. Executive Order 12148, which was responsible for the consolidation of federal resources, only brought together three agencies - The Federal Preparedness Agency, The Defense Civil Preparedness Agency, and The Federal Disaster Assistance Administration, all of which were largely responsible for providing grants and policy guidance to states.

Executive Order 12148 actually included specific provisions that preserved the federal government's dispersion of federal response capabilities amongst many organizations. Sections 2-201 and 2-202 of Executive Order 12148 stated:

2-201. In executing the functions under this Order, the Director shall develop policies which provide that all civil defense and civil emergency functions, resources, and systems of Executive agencies are:

a)founded on the use of existing organizations, resources, and systems to the maximum extent practicable...

2-202. Assignments of civil emergency functions shall, whenever possible, be based on extensions (under emergency conditions) of the regular missions of the Executive agencies.²⁹

In other words, upon close examination it appears that the establishment of FEMA was little more than an attempt to raise the profile of emergency preparedness and response within the federal bureaucracy by giving it its own agency. While preparedness functions may have been consolidated, actual emergency response functions were to remain virtually untouched. The only true change was the establishment of a single agency

²⁹ Ibid., 70

charged with the coordination of response efforts and the establishment of the Emergency Management Council to assist in these coordination efforts. ³⁰

Despite what was publicized as a major reorganization of disaster response in the United States, the establishment of FEMA as the lead federal disaster preparedness and relief agency in 1979 did not overhaul the way disasters are handled in the United States. Although the establishment of FEMA involved some agency consolidation to facilitate the overall coordination of federal disaster relief and preparedness efforts, the truth is that federal resources remain dispersed amongst many agencies and the overall role of the federal government as a secondary resource remained unchanged. In fact, activation of federal resources both before and after the creation of FEMA has required states to request federal aid and has required federal certification that state and local governments are in fact overwhelmed.

Most years over 100 serious weather related incidents strike the United States, and states request federal assistance only in about half of those cases. The federal government typically certifies between 45 and 50 disasters annually, and in most of these cases federal assistance is confined to post-facto reimbursements to state and local authorities for expenses.³¹ This system of distribution which puts the primary burden of emergency response on the state and local governments has been in existence ever since the War Department oversaw disaster response during World War I, and it is consistent with the American federalist system of government. The creation of FEMA was not intended to change this dynamic. Federal resources, monetary as well as logistical, then

³⁰ Ibid., 68-70. ³¹ Ibid., 2.

and now are supposed to supplement but not substitute local resources.³² The truth is that for the vast majority of disasters, this system of local responsibility which partners private sector organizations, state and local governments, and the federal government works quite well.

Large private sector organizations such as the Red Cross, the Salvation Army, and private corporations, as well as small organizations such as local faith-based institutions and individuals, typically handle a large portion of emergency response during disasters. The Red Cross and Salvation Army, for example, consistently provide food and temporary housing amongst other resources. At the same time, state and local governments remain the primary source of manpower and coordination during disaster operations. They oversee police departments, fire departments, and ambulance services. Additionally, states have the ability to call up the National Guard if more manpower is needed. As a last resort and designed only to be used when state and local resources are overwhelmed, the states can request assistance from the federal government. The vast majority of the time the federal government's role is confined to post-facto reimbursements to state and local governments. However, on rare occasions the federal government has taken on coordination responsibilities and deployed federal troops to disaster regions.³³

In evaluating the effectiveness of the disaster system, it is critical to understand the secondary or even tertiary role of federal government in the response plan. When a disaster strikes a particular area, local authorities are the primary responders. While federal and state agencies are involved in training local responders and assuring adequate

 ³² Ibid., 8.
 ³³ Saundra K. Schneider, *Flirting with Disaster: Public Management in Crisis Situations* (New York: M.E. Sharpe, 1995), 28.

preparation, the system does not immediately involve them in the actual response efforts. The system assumes that most disasters can be handled entirely by local authorities.³⁴

When local authorities are overwhelmed, municipalities can turn to neighboring districts and request assistance through mutual aid agreements. States help coordinate these efforts and, in the event that these resources are overwhelmed, states may offer their own resources such as monetary assistance, supplies, state police, or even the National Guard. The details of each state's emergency response plan vary from state to state. Some people claim this is necessary since each state's plan must be designed to confront the unique needs and logistics of that state. For example, some states are prone to tornados while others commonly experience earthquakes, floods, or forest fires.³⁵ Other people, including the federal government, argue that one all-hazards approach to emergency response is ideal since all rescue operations require the same basic skills and equipment. To provide some consistency, while the details of each state's emergency preparedness and response plans vary, the overall structure is regulated by the federal government.³⁶ Each state must designate one agency as the lead emergency preparedness agency. It must serve as the central coordinating authority for all state-level actions as well as the point of contact for local and federal authorities.

When state and local resources are completely overwhelmed, a state governor can request federal assistance but must do so by explicitly claiming that local and state resources are overwhelmed. The request must be reviewed by FEMA and certified by the president. According to federal law, the president must agree that the disaster has

³⁴ Ibid., 29. ³⁵ Ibid., 30.

³⁶ Note: States may chose to ignore the federal structure but in doing so they lose their eligibility for federal financial assistance.

exceeded state and local capabilities before the federal government can become directly involved in relief efforts. If and when the president certifies the disaster, FEMA becomes involved and appoints a Federal Coordinating Officer to oversee the federal response.³⁷

FEMA maintains a very small staff, however, and only acts as a direct resource for a few types of relief. For example, FEMA is able to allocate temporary housing such as tents and mobile homes. The agency can distribute cash grants to disaster victims and has some limited abilities to actually get federal aid supplies to disaster regions.

However, FEMA does not maintain its own fleet of trucks, planes, or railroad cars.

Rather, the agency must rely on cooperation from 29 different federal agencies and departments. The Federal Coordinating Officer is designated as a representative of the president to provide him with enough clout within the federal bureaucracy to encourage interagency cooperation. The Federal Coordinating Officer is tasked with securing these federal resources, coordinating cooperation between the various federal agencies, and then coordinating the overall federal response with the state and local governments.

While this structure may seem excessively bureaucratic and the responsibility may seem widely distributed, the system was designed to avoid excessive replication of resources. When the system fails, people often criticize the current presidential administration for creating an unnecessarily large bureaucratic system. It is important to realize that the system is carefully legislated in The Disaster Relief Act of 1974 (PL 93-288) and the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (PL 100-707), and the system is implemented through the National Response Plan; it is not a bureaucratic system created by the president. In fact, even if the president wants to

³⁷ Schneider, *Flirting with Disaster*, 31.

³⁸ Miskel, *Disaster Response and Homeland Security*, 9, 11.

provide federal disaster relief to the states without receiving a formal request, federal law protects the states jurisdiction.³⁹

³⁹ Schneider, *Flirting with Disaster*, 31.

Chapter 4: FEMA - An Imperfect System

Although the federal relief system was reorganized under the auspices of FEMA, the program failures identified by Hurricane Agnes and the Three Mile High nuclear accident were not corrected. Both prior to and subsequent to the creation of FEMA, the American disaster relief program adequately handled the most common disasters. During the nine years following the establishment of FEMA the federal government certified about 20 disasters annually. Of those, Hurricanes Alicia, Gloria, Elena, and Juan all required substantial federal involvement, caused about a billion dollars in damage each, and were marked by adequate recovery efforts. However, when the system was stressed by disasters of unusually large proportions (catastrophic disasters), FEMA neither noticeably reduced fragmentation nor sufficiently improved communication between various emergency response organizations. In fact, over time FEMA proved to be a minimal improvement to the previous system.

Hurricane Hugo

In 1989 the continued inadequacy of the federal disaster response system was proven when Hurricane Hugo made landfall. It was the first Category 4 hurricane to hit the United States since ten years before the establishment of FEMA, and it was the strongest hurricane to strike the Carolinas in over 30 years. With winds reaching 135 miles per hour it whipped through the U.S. Virgin Islands across to Charleston and up into North Carolina. According to the National Oceanographic and Atmospheric Administration the storm caused approximately \$14 billion in damages in 2002 dollars.⁴⁰

⁴⁰ Miskel, Disaster Response and Homeland Security, 78.

Since the storm was predicted by the National Weather Service, FEMA officials pre-deployed to the Carolinas in anticipation of a disaster declaration request by the governors. On September 29, a day and a half before the storm struck Charleston, the governor of South Carolina issued an evacuation order for coastal and low-lying communities. As soon as the South Carolina governor issued the formal request for federal assistance, the president certified the disaster, and FEMA officials began to deploy federal resources. Two days later the governor of North Carolina issued a similar request for federal assistance, and that request was also immediately certified by the president.⁴¹

The declaration and certification process proceeded smoothly. However, the distribution of relief supplies in South Carolina was problematic and demonstrated an overall lack of coordination between state and federal officials. For example, FEMA did not ship enough generators to the region. The state government blamed FEMA for this error while FEMA claimed that the state only requested a small number of generators. The perception of an inadequately sluggish federal response was exasperated by President George H. W. Bush's decision to put off a presidential tour of the region until eight days after the storm. In reality, it is not entirely relevant whether the disaster response was inadequate because the states failed to make timely requests or because the federal government failed to deliver on those requests. Ultimately, all that really matters is that four days after the storm Charleston, South Carolina was still without electricity, a third of Florence, South Carolina was without power, and half of Charlotte, North

⁴¹ Ibid., 78-79.

Carolina was in the dark. Furthermore, a substantial percentage of the population did not have food, water, or temporary housing.⁴²

The reason for the delay in the delivery of essential aid was likely twofold. First, there were significant communications problems on the state and local levels since many of the emergency communication systems were compromised by the storm. These technical difficulties likely affected the delivery of federal aid as well as the restoration of electrical services by private contractors since coordination with state and local officials was complicated. Second, the particular structure of the South Carolina emergency management agency was less than ideal. The director was independently elected rather than appointed by the governor, and there was inadequate communication between the governor's and the director's offices. In fact, some reports indicate that the governor and the head of the emergency management agency maintained two separate operations centers during the storm and that there was limited or no communication between their offices resulting in unanswered requests for assistance and coordination from local and federal authorities.⁴³

Some government reports, including a 1991 oral testimony report released by the federal government's General Accounting Office blamed the 'near simultaneity' of Hurricane Hugo and the Loma Prieta earthquake, a major earthquake that affected the San Francisco region. However, Hurricane Hugo made landfall in South Carolina on September 22, 1989, and the earthquake did not strike until October 17, 1989. Even if the earthquake had an adverse effect on relief efforts in South Carolina, this does not

⁴² Ibid., 80.

⁴³ Ibid., 80-81

⁴⁴ Oral Testimony by John M. Ols, Jr. - "Disaster Assistance: Federal, State, and Local Responses to Natural Disasters Need Improvement," 15 May 1991 (GAO/T-RCED-91-39)

explain the inadequacy of federal relief in the almost four weeks prior to the earthquake. Furthermore, the American disaster relief system must be capable of handling multiple simultaneous and large-scale disasters. In the interest of appropriately distributing criticism, it is worth noting that the earthquake resulted in considerably less criticism of the federal government. That was likely due to lower public expectations since the hurricane was predicted and the earthquake was not. It was also largely due to a much better organized, more experienced, and better funded state emergency management agency in California rather than to a better federal response.

The same 1991 report released by the General Accounting Office that blamed the near simultaneity of the disasters for the lacking federal response also noted the need to improve the three major areas of disaster management – preparedness, immediate response, and recovery. In the area of preparedness the report notes that states and local governments have the primary responsibility; FEMA only has the ability to "guide, not direct" state and local governments regarding their preparedness. Furthermore, the report notes that if states or local governments choose to ignore federal advice, not remedy problems identified during joint training exercises, or not participate in training exercises, "FEMA has no practical means of requiring that they do so…"⁴⁵

The report essentially blames the state governments for the inadequate disaster relief. It highlights the contrast between the success of the relief efforts in California, which maintained a well-funded and well-trained emergency response system, and the Virgin Islands which did not develop adequate state emergency plans and did not appropriately seek federal advice or use federal training resources. While the report claimed that FEMA fulfilled its primary responsibilities, it also agreed that significant

⁴⁵ Ibid. 2

staffing and coordination problems compromised efficiency. The main conclusions and recommendations in the report highlighted the need to educate government officials to better understand FEMA's role as a secondary resource and to ask Congress to provide FEMA with the resources to secure permanent housing for disaster victims when necessary. Lastly, in responding to the criticism that the federal government did not adequately provide immediate response to the hurricane, the report notes, "FEMA is not authorized to assume the state's role as immediate responder." For this reason the report suggests to Congress, "Legislative action may be needed to give FEMA such authority if it is to act as an immediate responder in the future, when warranted and requested by the state."

Hurricane Andrew

In the years following Hurricane Hugo, the federal government developed the National Response Plan. This plan was designed to supplement state and local disaster response efforts through a 1992 signed agreement between 27 federal departments and agencies. This agreement represented an unprecedented effort to unify all domestic prevention, preparedness, response, and recovery activities into a unified emergency plan to assure optimal preparedness and careful coordination.⁴⁷ The plan was tested for the first time three years later when Hurricane Andrew struck Florida. Hurricane Andrew, a Category 4 storm, was the third largest storm to ever hit the United States. It caused between \$35 and \$40 billion in damages, almost two and half times as much damage as Hurricane Hugo. Hurricane Andrew completely destroyed 28,000 homes, seriously

⁴⁶ Ibid. 2

⁴⁷ U.S. General Services Administration, available from http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentType=GSA_BASIC&contentId=17463&noc=T; Internet; accessed 21 February 2007.

damaged 100,000 homes, left between 180,000 and 250,000 people homeless, damaged 80,000 local businesses, killed 61 people, knocked out electricity to 1.5 million people, and disrupted phone service to 150,000 people.⁴⁸

Just as FEMA had done before Hurricane Hugo, FEMA deployed a small taskforce to the region before the storm in anticipation of a disaster assistance request from the Florida governor. Within eight hours of the storm making landfall, the governor made his request and the president quickly certified it. The system failures began shortly thereafter. The major failure was that nobody at the local, state, or federal level understood the severity of the damage. According to Larry Zensinger, FEMA's Program Coordinator, Florida officials incorrectly believed they could manage the disaster.⁴⁹ While local officials obviously saw the damage in their communities, it took time for them to quantify the damage, and the lack of phone service made it difficult for them to communicate their needs to state and federal officials since wireless communication technology was still rudimentary and not available in many locations. This made the compilation of a comprehensive damage assessment extremely difficult. 50

FEMA was widely blamed for the failure to rapidly assess the extent of the damage and for failing to deploy essential relief. Two days after the storm made landfall people were still stranded without food, water, shelter, and other basic necessities. Kate Hale, the Emergency Management Director for Dade County, Florida made a series of scathing remarks at a press conference criticizing the inadequacy of the federal response. Several days later Congresswoman Barbara Mikulski (D-MD) in a letter to the Comptroller General of the United States wrote:

 ⁴⁸ Miskel, Disaster Response and Homeland Security, 81.
 49 Schneider, Flirting with Disaster, 93.

⁵⁰ Miskel, Disaster Response and Homeland Security, 82-83.

I am outraged by the federal government's pathetically sluggish and ill-planned response to the devastating disaster wrought by Hurricane Andrew...Time and again the federal government has failed to respond quickly and effectively to major disasters.⁵¹

While Director Hale's and Congresswoman Mikulsi's criticisms of the overall pace and quality of the disaster relief may be correct, it is not clear that FEMA was solely to blame. The tasks of assessing damages, coordinating the delivery of local aid, and requesting aid from the federal government is the responsibility of the state government and not the federal government. To blame only FEMA for inadequacies in this area is simply not appropriate although FEMA does deserve some blame for not circumventing standard operating procedures to save lives and relieve human suffering. Nonetheless, since most citizens do not understand the distribution of responsibility and incorrectly assume that the federal government oversees state government operations, the political ramifications of the federal government blaming the state government were too high.

With no choice but to escalate the federal response to defray criticism of the federal government, President H. W. Bush sent Andrew Card, the Secretary of Transportation, to take control of the federal response. While in theory the Federal Coordinating Officer, who had already been on scene for three days, is a representative of the president, a higher level official with more interdepartmental and interagency clout was needed to quickly overcome the bureaucratic and administrative obstacles to making federal aid flow expeditiously. The 26 federal departments and 13 functional groups which made up the Federal Response Plan were not prepared to work together and were not primed for their tasks. Thus, Andrew Card delegated many disaster response tasks to

⁵¹ National Academy of Public Administration, *Coping with Catastrophe: Building and Emergency Management System in Natural and Manmade Disasters* (Washington, DC: National Academy of Public Administration, February 1993), 1-2; quoted in Miskel, *Disaster Response and Homeland Security*, 85.

the Department of Defense, which is the only government agency with the manpower and equipment to rapidly escalate federal involvement and coordination efforts.

The General Accounting Office's (GAO) July 1993 Report to Congressional Requesters highlights the inadequacies the overall response to catastrophic disasters such as Hurricane Andrew. While the report strongly criticizes the federal government for an inadequate relief effort, the report also highlights the need to completely redesign the disaster response plan and its distribution of responsibilities during catastrophic disasters. The report states, "Unlike the bulk of the disasters requiring FEMA to respond, however, catastrophic disasters overwhelm the ability of state, local and voluntary agencies to adequately provide victims with essential services, such as food and water, within 12 to 24 hours." The report goes on to say:

The federal strategy for responding to catastrophic disasters is deficient because it lacks provisions for the federal government to immediately (1) assess in a comprehensive manner the damage and the corresponding needs of disaster victims and (2) provide food, shelter, and other essential services when the needs of disaster victims outstrip the resources of the state, local, and private voluntary community."⁵²

The GAO highlights that the plan itself, which relies on state and local resources for most needs assessment and relief delivery, and not the implementation of the plan by the federal government overall, or FEMA in specific, is the primary source of the inadequacy. The report, furthermore, criticizes federal law for not authorizing federal preparatory activities when the threat of a disaster is imminent and for not authorizing

⁵² "Disaster Management: Improving the Nation's Response to Catastrophic Disasters," July 23, 1993 (GAO/T-RCED-93-186).

FEMA to reimburse other agencies for expenditures prior to the official federal disaster declaration 53

While this approach may seemingly exonerate FEMA and the executive branch from direct responsibility for the failures since Congress is the architect of the plan and the law, the report also includes scathing criticism of FEMA for its management of its limited responsibilities. The GAO report states, "FEMA has neither established performance standards nor developed a training exercise program specifically geared toward enhancing state and local preparedness for catastrophic disaster response."54 Without such standards and without appropriate training for state and local responders, the federal disaster response plan is essentially relying on blind faith that state, local, and voluntary resources will be adequately prepared to orchestrate rescue efforts, deliver the food and supplies being paid for with federal dollars, and coordinate efficiently with the federal government. These assumptions were proven to be incorrect during Hurricane Andrew, Three Mile Island, Hurricane Hugo, and Hurricane Andrew.

After criticizing the response to Hurricane Andrew, the GAO made several specific recommendations. The GAO recommended that the president appoint a senior administration official with oversight authority over FEMA and other federal agencies to oversee disaster response planning and administration. The office recommended that FEMA create a disaster response unit charged with assessing the amount, type and projected cost of federal disaster assistance needed and make that recommendation to the state governor. The office also recommended improving FEMA's coordination efforts during catastrophic disasters and enhancing state and local preparedness to respond to

⁵³ Ibid., 3. ⁵⁴ Ibid.

disasters. Lastly, and perhaps most importantly, the GAO recommended that Congress give FEMA the explicit authority to preposition and prepare for catastrophic disasters when there is a warning. The office also recommended that Congress lift the restrictions on the Department of Defense's ability to use Reserve units for catastrophic disaster relief efforts.⁵⁵

The strength of the criticisms outlined by the General Accounting Office and the frightening consequences of inaction should have created a forum for lively discussion and swift governmental action to improve disaster readiness. While the inadequacy of disaster response became a prominent issue in the 1992 presidential election and may have even contributed to President Bush's electoral defeat, no effective action was taken to improve the system. Instead of reforming the disaster response system, President Clinton chose to rely on increased direct presidential involvement and a new FEMA staff to assure improved disaster preparedness. Rather than pushing for legislative reforms, the Executive Branch consulted with Congress and reinterpreted the Disaster Relief Act to allow some pre-disaster preparedness expenditures. However, these changes did nothing to offset the federal reliance on state, local, and private resources, nothing to assure rapid insurance claim processing, and nothing to improve the distribution of food and shelter to disaster victims.⁵⁶ In short, the federal leadership changed but the system remained virtually the same. The pattern of making minor administrative and structural changes rather than revamping the entire disaster response system repeated itself once again. Although the federal government deserves credit for adequately handling the Loma Prieta and North Ridge Earthquakes in the 1990s as well as the Midwest floods,

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⁵⁵ Ibid., 11-13.

⁵⁶ Miskel, Disaster Response and Homeland Security, 86-88.

none of these disasters were truly catastrophic in size or strength. The next catastrophic disaster was more than 10 years away and politicians, bureaucrats, and citizens had plenty of time to become complacent about the need for disaster response reforms.

Chapter 5: 9/11 and the Establishment of the Department of Homeland Security

September 11, 2001 is commonly thought of as the next major disaster in the United States. Readers should be cautioned, however, that while thousands of people died in the terrorist attacks they did not resemble the catastrophic disasters previously discussed. Unlike all of the natural disasters previously detailed, the attacks in New York City and Washington, DC did not completely overwhelm the emergency response capabilities of entire regions. The attacks caused brief mass confusion and overwhelmed individual emergency response agencies but did not paralyze the entire emergency response network. The primary first responders were the Fire Department of New York (FDNY), the New York Police Department (NYPD), the Port Authority Police Department (PAPD), and the Mayor's Office of Emergency Management (OEM).⁵⁷
While federal officials participated in rescue operations and helped provide security after the attacks, the immediate rescue efforts were orchestrated by local responders.

The local response networks were overwhelmed and resources were strained, but there was no system-wide breakdown in organization or authority. Nonetheless, emergency responders encountered many of the same problems that responders experience during catastrophic disasters. Communication systems failed, 911 call centers were overwhelmed, trained personnel were in short supply, interagency communication

⁵⁷ The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States, Authorized Edition, W.W. Nortan & Company, 281.

was lacking or absent altogether, response plans were often ignored and widely thought to be inadequate, and interagency chains of command were often ambiguous.⁵⁸

Despite these similarities, one cannot overlook the many important differences. The attacks were more localized than most catastrophic disasters, did not overwhelm emergency shelters or food distribution centers, and did not destroy the city infrastructure in either New York or Washington. For this reason, 9/11 cannot be considered a truly catastrophic disaster and, thus, a detailed analysis of the 9/11 attacks is beyond the scope of this paper. However, the 9/11 experience highlights one critical concept. One cannot ignore the importance of maintaining highly trained local emergency responders as well as properly staffed and equipped local emergency response agencies; local first responders are on scene first, handle the vast majority of rescue operations, and cannot be practically replaced by federal responders, especially when disasters strike without warning.

Unfortunately, the differences between the 9/11 terrorist attacks and most disasters were not adequately recognized by the federal government in the months following the attacks. Rather than carefully analyzing government failures, Congress and the President succumbed to the "do something" calls from the general public and created the Department of Homeland Security in November 2002 without taking the time to carefully contemplate how the new department would achieve its objectives. Just before signing H.R. 5005, the Homeland Security Act of 2002, President Bush said:

The new department will analyze threats, will guard our borders and airports, protect our critical infrastructure, and coordinate the response of our nation for future emergencies. The Department of Homeland Security will

⁵⁸ Ibid., Chapter 9.

focus the full resources of the American government on the safety of the American people. 59

This bill lumped 170,000 employees from 22 different federal agencies, including FEMA, into one agency with a cabinet level Secretary of Homeland Security. The theory was that unifying these agencies under one high-level supervisor would facilitate interagency cooperation and improve overall national security. However, this major administrative change, often dubbed the largest federal government restructuring since the creation of the Department of Defense in 1947, was highly flawed.

Although it is beyond the scope of this paper to analyze the overall successes and failures of the Department of Homeland Security, a brief analysis of the reorganization is necessary to understand the effect this change had on disaster response. The widespread restructuring took place without co-locating the 22 departments; this made it difficult to overcome the individual agency cultures that were widely blamed for the lack of coordination amongst and communication between the various agencies. Furthermore, the reorganization took place without restructuring government oversight of the individual agencies. Therefore, according to Norman J. Orstein, a scholar at the American Enterprise Institute, 13 House and Senate Committees and approximately 60 subcommittees exercise some authority over the department.⁶¹

Simply handling this oversight coordination, managing threat analysis, coordinating with foreign agencies, and managing intelligence information is an overwhelming task for senior administrators. According to Donald F. Kettl, Director of

⁶¹ Ibid., 21.

⁵⁹ White House Office of the Press Secretary, "President Bush Signs Homeland Security Act," 25 November 2002; available from http://www.whitehouse.gov/news/releases/2002/11/20021125-6.html; Internet; accessed 4 March 2007.

⁶⁰ Donald F. Kettl, *The Department of Homeland Security's First Year: A Report Card* (New York: The Century Foundation Press, 2004), 20.

the Fel's School of Government at the University of Pennsylvania, "Most of the department's senior officials are so buried under the pressing day-to-day operational issues that they have little energy and less time to devote to resolving the department's considerable management issues, which means that the issues are not resolved."62 Senior administrators are forced to focus on what is perceived as the immediate crises, thereby neglecting many responsibilities that have been incorporated into the department and ignoring the overall purpose of the restructuring which was to improve cooperation between agencies.

As a policy, the federal government promotes "all-hazard" preparation on the theory that all disasters, whether terror-related or natural, require similar disaster preparedness and response. While this is often true, terrorist attacks and natural disasters also pose unique challenges. Since the Department of Homeland Security was created, the federal government has focused on responding to and preventing terrorist attacks. Law enforcement personnel, for example, have been more involved in federal preparations than fire personnel. Alan Caldwell of the International Fire Chiefs Association said, "We're the last to be consulted. Yet, in an incident, we'll be the first to respond."63 Former FEMA Director James Lee Witt opposed including FEMA in the new Department of Homeland Security because of his concern that the federal all-hazards approach would be marginalized so as to emphasize responding to and preventing terrorism.⁶⁴

While the Department of Homeland Security refers to its National Response Plan as a "single all-discipline, all hazards plan," many government grant processes for

⁶² Ibid., 20-21. ⁶³ Ibid., 108.

⁶⁴ Ibid.

terrorist response and prevention are maintained separately – some by FEMA, some by the new Directorate for Emergency Preparedness, and others by the Office of Domestic Preparedness. The disjointed nature of the grant process is symbolic of the overall lack of coordination that pervades the new Department of Homeland Security despite its creation to improve coordination. Whereas FEMA had a cabinet-level post in the 1990s, the new department subordinated FEMA to the Undersecretary for Emergency Preparedness and Response who reports to the Secretary of the Department, a member of the president's cabinet. The creation of the Department of Homeland Security in 2002, just like the creation of FEMA in 1979, can be seen as a futile effort to improve interagency communication and coordination. The tragedy of this new highly bureaucratic system was seen firsthand when Hurricane Katrina struck the coast of the United States in 2005.

Chapter 6: New Orleans - A Recent Case Study

On August 25, 2005 Hurricane Katrina struck the Florida coast but caused minimal damage. Every major weather reporting agency, however, predicted that the storm would gain strength in the Gulf of Mexico and strike the New Orleans region with incredible power. Authorities differed over exactly how strong the storm would be when it made landfall and whether the storm would be a direct or indirect hit. In either case the destruction would be severe. However, the worst case scenario, a direct hit by a Category 5 storm would be catastrophic and devastating. New Orleans is not just any densely populated city. The city is built below sea level and relies on a complex network of levies and pumps to prevent the city from becoming totally submerged. New Orleans is surrounded by Lake Borgne to the east, Lake Pontchartrain to the north, and the Mississippi River to the south.

The threat faced by New Orleans in August 2005, however, was not unanticipated. New Orleans had a long history of devastating hurricanes. Its past history includes the 1909 Grand Isle Hurricane, the 1915 New Orleans Hurricane, the 1947 Fort Lauderdale Hurricane, the 1956 Hurricane Flossy, and the 1965 Hurricane Betsy, just to name a few. Hurricane Betsy was the most devastating. One of the city levees was compromised by the storm leading to severe flooding of the Lower 9th Ward. This storm served as a wakeup call that New Orleans was at incredible risk from natural disasters. By the end of the hurricane, approximately 75 people were killed in Louisiana. Congress authorized the Army Corps of Engineers to build a levee system capable of withstanding the most severe weather disasters. However, 40 years later, when Hurricane Katrina

struck New Orleans, the project had not been completed. Most authorities estimated that the pre-Katrina levee system would struggle to withstand even a Category 3 hurricane.

The threat to New Orleans was not forgotten over the years. In 1985, Hurricane Juan led to a large evacuation of the city although major damage was avoided. Although Hurricane Andrew did not strike New Orleans, for a short time authorities feared a direct hit. In 1998, Hurricane Georges prompted a widespread evacuation of the city although once again widespread devastation was avoided. Similarly, Hurricane Ivan prompted a widespread evacuation of the city but significant damage was avoided. By 2005, approximately 40 years had passed since the last hurricane caused major destruction in New Orleans. Marc Levitan, the director of Louisiana State University's hurricane center commented to the Houston Chronicle, "To some extent, I think we've been lulled to sleep." The potential threat was clear but people had become irrationally complacent, relying heavily on the hope that their luck would continue.

Despite the complacency, however, FEMA consistently ranked hurricane damage to New Orleans amongst the three most likely catastrophic disasters to affect the United States. For that reason, in July 2004 FEMA staged Hurricane Pam, a five-day mock storm scenario with winds of 120 MPH and 20 inches of rain. The exercises involved officials from federal, state, local, and voluntary organizations and took place at the State Emergency Operations Center in Baton Rouge, Louisiana. According to the scenario, more than one million residents were evacuated from New Orleans and between 500,000 and 600,000 buildings were destroyed as water flowed over the levees. 66 In the

⁶⁵ Eric Brune, "Keeping Its Head Above Water," *Houston Chronicle*, 1 December 2001, available from http://hurricane.lsu.edu/ in the news/houston.htm; Internet; accessed 5 February 2007.

⁶⁶ FEMA Press Release: "Hurricane Pam Exercise Concludes," July 23, 2004 (Release Number: R6-04-093)

debriefings following this mock hurricane, officials told The Times-Picayune that they expect evacuation attempts in New Orleans to only be half successful, especially since approximately 100,000 people live in households that do not own cars. The exercise identified the need for 1,000 shelters for evacuees, found locations for 784 shelters, and developed a plan to find locations for the remaining shelters. The state concluded that state resources would be sufficient to operate the shelters for 3-5 days, and it made arrangements for federal and other resources to replenish state resources. The exercise included a mass immunization plan for tetanus, influenza, and other diseases that could become prevalent following a catastrophic hurricane. The plan identified agencies to lead search and rescue teams equipped with up to 800 searchers. The plan even included provisions to repair damaged public schools, erect temporary schools, increase the capacity of undamaged schools, and hire additional teachers.

Hurricane Katrina Makes Landfall

Just one year later, the nightmare storm arrived. As Hurricane Katrina gained strength in the Gulf of Mexico, Louisiana, Mississippi, and Alabama braced for a devastating storm. While some people remained hopeful that the storm would weaken or, at the very least, avoid a direct strike at New Orleans, it became more likely that a devastatingly strong storm, perhaps even a Category 5 hurricane, might pass directly through New Orleans. While the storm gained strength over the warm waters of the Gulf of Mexico, Louisiana, Mississippi, and Alabama began to take serious precautions. The states suggested voluntary evacuations, opened emergency shelters, positioned

⁶⁷ Louisiana Homeland Security and Emergency Preparedness, "In Case of Emergency," 20 July 2004, available from http://www.ohsep.louisiana.gov/newsrelated/incaseofemrgencyexercise.htm; Internet; accessed 5 January 2007.

⁶⁸ FEMA Press Release: "Hurricane Pam Exercise Concludes," July 23, 2004 (Release Number: R6-04-093)

emergency supplies in the shelters, alerted National Guard forces, and activated emergency operations centers. An incredible attempt was made to evacuate New Orleans. Contraflow was initiated on all major highways (i.e. both lanes were directed outbound) and approximately 1.2 million people actually evacuated New Orleans and the surrounding areas. FEMA, the military, and nongovernmental organizations positioned 30 medical teams, 11 million liters of water, 9 million pounds of ice, and 5.9 million "meals ready to eat" in neighboring states before the storm made landfall. In short, tremendous efforts were exerted to prepare the New Orleans area for an extreme weather disaster. The mere fact that these efforts were insufficient is not a reason to dismiss them as inconsequential.

However, it is important to understand why more people did not evacuate New Orleans. Some people were not capable of leaving because of disabilities or because they had no mode of transportation. Many residents of New Orleans live in poverty and the cost of evacuating, especially when many past evacuations turned out to be unnecessary, was considered prohibitive. A significant number of people were also reluctant to evacuate because of fear that their property would be looted. Other people simply doubted the accuracy of the weather predictions, perhaps because New Orleans Mayor Ray Nagin delayed issuing a mandatory evacuation order until one day before the storm hit. Despite addressing the issue during mock Hurricane Pam, New Orleans did not have an adequate evacuation plan. The city had promised that buses would pick people up at 12 predetermined locations, but the locations were not marked, and the buses only ran for

⁶⁹ Miskel, Disaster Response and Homeland Security, 93-94.

a few hours. This left thousands of residents who did not own cars with no way out of the city.⁷⁰

When the storm made landfall in New Orleans, it had weakened considerably from its Category 5 status and made landfall as a borderline Category 3 or Category 4 hurricane. Nonetheless, the city's levee system failed; since the electrical grid also failed, the city's storm pumps were useless. Contrary to initial fears, New Orleans was not destroyed by the force of the hurricane winds but by the rising waters. For those residents stranded in the city, many made their way over to the Superdome, the designated shelters for people unable to evacuate. The Superdome was inundated with 30,000 people who were stranded in blistering heat with limited food and water for three days. An additional 20,000 people gathered in the Convention Center and lived in similar conditions. CNN reported:

Rumors of violence and chaos at the Superdome abound – one man is reported to have calmly leaped from the second-level bleachers to his death-but reports vary and some say the atmosphere is "not too horrific." Toilets have been overflowing for two days. The heat is intolerable. Many are ill and in need of medical attention. There is no drinking water.⁷¹

Although city official and the media later admitted that some of the initial reports of violence were exaggerated, nobody doubts that the conditions in the Convention Center and the Superdome were intolerable. After three days, officials began evacuating people from the city shelters to other shelters throughout the United States.

⁷⁰ Ibid., 94

⁷¹ CNN Reports: Katrina-State of Emergency (Kansas City: Andrew McNeel Publishing, 2005) [A compilation of CNN reportage], 33.

Nongovernmental Organizations

For the residents who were able to escape the city, nongovernmental organizations provided many essential resources. The American Red Cross opened 239 shelters the day the storm hit New Orleans and nearly 300 additional shelters the following week. These shelters accommodated 140,000 evacuees, distributed 31 million meals before closing on February 15, 2006, and spent approximately three billion dollars in donated money. The Salvation Army administered an additional 225 shelters accommodating 30,000 evacuees. The Salvation Army operated 11 mobile kitchens which served more than 20,000 meals per day. Of special importance is that these nongovernmental resources alone provided shelter for 70% to 95% of the total number of people rendered homeless by Hurricane Andrew, the worst natural disaster to ever hit the United States prior to Hurricane Katrina. The contribution that these organizations made to the overall disaster response, despite being inadequate, was incredible, and these organizations deserve our nation's respect and gratitude.⁷²

While nongovernmental organizations were providing shelter to evacuees, governmental organizations were providing other emergency services to hurricane victims. Initial concerns that looting would occur following the evacuation orders in New Orleans were true. The New Orleans Police Department literally crumbled in the wake of the storm. Equipment was compromised or destroyed, and many officers did not show up for their shifts. Even at full capacity, the police department would not have been able to both maintain order and orchestrate rescue operations. With reduced capacity, looting became a major problem and rescue operations suffered. Order was not restored

⁷² Miskel, Disaster Response and Homeland Security, 97-98

to the streets of New Orleans until the National Guard supplemented the police force beginning on the fourth or fifth day after the storm.

The National Guard

The National Guard was activated to help maintain law and order in the city as well as to assist with rescue efforts. National Guard troops from states other than those affected were dispatched to the region under the Emergency Management Assistance Compact which is a mutual aid agreement between states. By August 30, the day after the levees were breached 5,804 Louisiana Guardsmen and 178 troops from other states were deployed. By September 8, just one week later, 6,779 Louisiana Guardsmen and 23,476 troops from other states were deployed to Louisiana. By the end of the relief efforts, 40,000 National Guard troops were deployed under state control and an additional 30,000 military personnel were deployed under federal control.⁷³

The federal government was widely criticized, however, for not federalizing the National Guard under the president's control. According to the Posse Comitatus Act of 1878, once the National Guard is federalized it cannot act as a police force and cannot enforce regular laws. While nationalizing the force would have improved the overall efficiency of federal rescue efforts and enhanced the federal government's ability to deliver supplies in a timely fashion, it also would have reduced the ability to control crime in the city. With the knowledge that excessive crime would also impede rescue efforts, the National Guard remained under the governor's control. Unfortunately, due to the lack of leadership and overall condition of the Louisiana state government, this may have been the wrong decision.⁷⁴

⁷³ Ibid., 96-97. ⁷⁴ Ibid., 48-49.

FEMA and the Department of Homeland Security

Most Americans, when asked who is to blame for the failed emergency response to Hurricane Katrina, will probably point to the federal government, in general, and to FEMA, in specific. FEMA is to blame for many of the failures; however, the problems are much more systemic and far more widespread than most people realize or care to admit. Most agencies provided many extraordinary services during Hurricane Katrina but failed to deliver others.

During the first day of the storm, there was extreme confusion over the situation in New Orleans. Even though the levees were considered vulnerable in a storm of this magnitude, there was limited information about whether or not the levees had actually failed. Local first responders were responsible for surveying the damage and relaying that information to state and federal officials. However, due to equipment damage, personnel shortages, and communication system malfunctions, state and federal officials were unable to ascertain the severity of the situation. All parties knew the situation was bad but there was very little information to suggest just how bad. The White House and the Select Bipartisan Committee reports both comment that the condition of the levees was uncertain during the first day. According to the White House report, at 9:12 a.m. on August 29 there was a report of a break in the levee system. However, the White House later received information indicating that the flooding was caused by water flowing over the top of the levee system and that there was no break. At 6 p.m. the White House was informed that the levee system was not breached, and at 9 p.m. FEMA Director Michael Brown said on national television that the levee system had not been breached. It was not

until the next morning that it became clear to federal officials that there were hundreds of breaches in the levee system and that most of New Orleans was under water.⁷⁵

Only when the severity of the damage was clear, did Homeland Security Secretary Michael Chertoff declare Hurricane Katrina to be an Incident of National Significance. According to the National Response Plan's Glossary of Terms, an Incident of National Significance is:

> An actual or potential high-impact event that requires a coordinated and effective response by an appropriate State. combination of Federal. nongovernmental, and/or private-sector entities in order to save lives and minimize damage, and provide the basis for long-term community recovery and mitigation of activities.⁷⁶

Since there was little doubt, even before the severity of the damage was clear, that Hurricane Katrina would meet this definition, the delay in making this declaration has been widely criticized. In reality, however, even if Secretary Chertoff had made the declaration and a federal coordinating officer had been appointed earlier, it is unlikely that the federal response would have been altered substantially. Even with a federal coordinating officer in place, the federal official still would not have known what assistance the state needed since local first responders were unable to obtain and relay that information.⁷⁷ Nevertheless, it is possible that the mere declaration of an Incident of National Significance would have increased FEMA's ability to coordinate with other agencies by raising the profile of the event.

⁷⁷ Ibid., 104.

⁷⁵ Ibid., 103-104. ⁷⁶ Ibid., 100.

In addition to declaring an Incident of National Significance, however, Secretary Chertoff could have declared a Catastrophic Event. A Catastrophic Event is defined in the National Response Plan's Catastrophic Event Annex as:

Any natural or manmade incident, including terrorism, that results in extraordinary levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, national moral, and/or government functions. A catastrophic event could result in sustained national impacts over a prolonged period of time; almost immediately exceeds resources normally available to State, local, tribal, and private-sector authorities in the impacted area; and significantly interrupts governmental operations and emergency services to such an extent that national security could be threatened...⁷⁸

Of particular importance in a Catastrophic Event is the realization that state and local resources will be completely overwhelmed almost instantly. Such a declaration would have permitted the federal government to preposition supplies in the disaster region. In theory, this would have been extraordinarily important since the federal government is technically not permitted to preposition supplies before an official disaster declaration is requested by the state governor and certified by the president. In reality, however, FEMA ignored this regulation and prepositioned supplies without the required authorizations. Thus, although this extraordinary declaration would have raised the profile of the event and may have led to additional prepositioning of supplies and personnel, it is not clear if it would have significantly altered the federal response.⁷⁹

⁷⁸ Catastrophic Disasters: Enhanced Leadership, Capabilities, and Accountability Controls will Improve the Effectiveness of the Nation's Preparedness, Response, and Recovery System. General Accounting Officer Report to Congressional Committees - GAO-06-618

⁷⁹ Miskel, *Disaster Response and Homeland Security*, 102.

Following the storm, when officials were finally able to survey the damage, it was concluded that approximately 300,000 homes were destroyed or uninhabitable. FEMA, in an attempt to assist these families and others, distributed direct financial assistance to between 1.4 and 1.7 million households. This was an extraordinary effort. However, the system for distributing this money was seriously flawed. In an attempt to make the money available as quickly as possible, FEMA distributed 2.5 million debit cards worth \$2,000 each to evacuees. However, 900,000 of these cards went to people with fake addresses and \$24 million worth of cards were given out without any reasonable accountability. In its review of the federal government's response to Hurricane Katrina, the General Accounting Office noted the need to more carefully balance quick action with appropriate protections against fraud. The GAO cited examples of unduly slow action due to administrative procedures and unjustifiably fast action that resulted in excessive fraud.

Despite fulfilling its overall obligation to distribute emergency assistance dollars to victims, albeit imperfectly, FEMA did not carry out all of its assigned tasks during Hurricane Katrina. In particular, according to the National Response Plan, FEMA's primary role was to distribute relief supplies in and near the disaster zone. FEMA failed to discharge this duty and asked the military to do so in its place just as it had done during Hurricane Andrew. However, in all fairness, it is not clear that any one agency is capable of handling all the tasks assigned to FEMA during a catastrophic disaster. Aside from distributing supplies, FEMA was charged with coordinating the activities of all

⁸⁰ The White House, *The Federal Response to Hurricane Katrina: Lessons Learned*, 23 February 2006, 7; quoted in Miskel, *Disaster Response and Homeland Security*, 96.

⁸¹ Miskel, Disaster Response and Homeland Security, 96.

⁸² Irwin Redlener, American At Risk (New York: Alfred A. Knopf, 2006), 5.

⁸³ Catastrophic Disasters: GAO-06-618, 8.

federal agencies, working with the states who were themselves disorganized or operating under extreme stress, administering FEMA's own relief programs, and organizing nongovernmental and private sector relief efforts.⁸⁴ With its limited staff it is not surprising that FEMA chose to delegate some of its responsibilities to the military.

The decision to delegate some of its responsibilities at the height of the storm, however, does not dismiss FEMA's long-term failure to properly allocate 25,000 trailers that were purchased for short-term emergency housing using over \$850 million dollars of taxpayer money. By February 2006, only 2,700 of these trailers were installed while many of the remaining trailers were stuck in the mud in the flood planes of Hope, Arkansas. 85 Furthermore, instead of using the closed England Air Force Base in Alexandria, Louisiana for medium-term housing, FEMA contracted four cruise ships to provide 8,000 cabins at a cost of \$5,100 per cabin per month for a total of \$249 million dollars.86

When one tries to allocate blame for the failed levees in New Orleans, one is stunned by the number of people and government agencies who share the responsibility. While one could start 37 years ago when the levee project was first begun, it is easier to look at recent history. The Bush administration included \$297 million dollars for civil works projects in the United States Army Corps of Engineers' New Orleans district budget. Congress approved \$40 million dollars of which \$3 million was allocated to repair the levees. After much debate, \$5.5 million dollars was allocated to the project but since, according to the project manager, \$11 million dollars was needed, the levee project was suspended completely. So blame can be shared among the president, congress, and,

Miskel, Disaster Response and Homeland Security, 97
 Redlener, American At Risk, 6-7.

⁸⁶ Ibid., 7.

perhaps, the project manager for not doing his best with a limited budget; or perhaps the blame should be with the previous presidents, congresses, and project managers from the past 37 years, not to mention the local and state officials who were involved in the project.⁸⁷

Need for Improvement: Summary

During the period following the immediate catastrophe, government agencies and independent analysts had the opportunity to carefully evaluate the overall disaster response plan. Interestingly, the reports by the House Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina, the Senate Homeland Security and Governmental Affairs Committee, the White House Homeland Security Council, the Department of Homeland Security Inspector General, the Department of Homeland Security, and FEMA all agreed about the overall weaknesses in the response. In short, many of the same weaknesses that were highlighted following Hurricane Andrew reemerged.

In particular, FEMA did not have the administrative capacity nor the authority within the federal bureaucracy to effectively coordinate the implementation of the National Response Plan. Just as it had been in the past, strong presidential leadership was necessary to promote the needed interagency cooperation. Additionally, although FEMA did preposition supplies and personnel for Hurricane Katrina, this was not explicitly authorized by the Stafford Act before an official disaster declaration. Furthermore, although FEMA prepositioned supplies, other federal, state, and local agencies may not have prepositioned supplies since federal reimbursements are not

⁸⁷ Redlener, American At Risk, 7.

⁸⁸ Catastrophic Disasters: GAO-06-618, 1-2.

guaranteed until an official disaster declaration is issued. For that reason, it is widely held that this law ought to be revised to ensure that appropriate resources are prepositioned when a disaster is predicted. Lastly, and perhaps most importantly, there was no adequate system in place during Hurricane Katrina to provide rapid and accurate damage assessment. For that reason, key decision makers were forced to proceed without critical information. In the National Response Plan, state and local authorities are charged with providing these assessments. However, there is no adequate provision to obtain this information when state and local resources are completely overwhelmed as was the case during Hurricane Katrina.⁸⁹

⁸⁹ Catastrophic Disasters: GAO-06-618, 38

Chapter 7: Foreign Models

As criticism mounts in the wake of Hurricane Katrina over the inadequateness of the American disaster response system, it is important to look at other systems being used around the globe. This comparison process is complicated, however. The wealth of the United States inflates expectations of response capabilities, the size of the nation increases the scale and frequency of potential disasters, and the federalist system of government complicates the distribution of responsibility for disaster response. While one can look to Great Britain, Spain, Thailand, Israel, and other democratic nations which have experienced disasters in recent history, these nations do not share any of these characteristics. For that reason, the only two nations worthy of comparison are Australia and Canada, both of which are large and wealthy democratic nations which value the independence of their provinces.

Australia and Canada

In Australia and Canada, just as in the United States, emergency management agencies at the state, territory, province and local levels are primarily responsible for disaster relief. During most disasters, just as in the United States, the territory, province, state and local governments manage the disasters without federal intervention. However, when federal assistance is needed, unlike in the United States, there is no need for a formal disaster declaration. When Australian and Canadian disaster relief expenditures exceed a predetermined level, federal reimbursements begin; the process is automatic and thus depoliticized. In Australia, depending on the individual fiscal strength of the state or territory, either 75%, 90%, or 100% of the response and relief costs are reimbursed. In Canada, federal reimbursement depends on the per capita expenditures and start when the

province has spent \$1 per capita; the reimbursement level increases on a sliding scale up to a maximum of 90% reimbursement when the province has spent more than \$5 per capita. During large-scale disasters, the Canadian equivalent of FEMA, the Emergency Management and National Security Branch of Public Safety and Emergency Preparedness Canada (PSEPC) and the Australian equivalent of FEMA, Emergency Management Australia become involved. In general, any resources provided by Emergency Management Australia or PSEPC operate under the operational direction of the state and local governments. In Australia, even direct federal monetary assistance to citizens provided by Emergency Management Australia are administered through state or territory collection centers. In Canada, on rare occasions the federal government provides operational assistance through Health Canada or the military. Since there is no Canadian equivalent of the Posse Comitatus Law, the Canadian military is able to assist province law enforcement agencies when needed.

The Australian and Canadian systems of disaster response have been spared major criticism. The automatic and nonpolitical criterion for activating federal assistance moderates political tensions and staves off criticism. Although both governments place more confidence in the ability for states and territories to independently handle the operational aspects of disaster response, the overall system is not altogether different than that which exists in the United States. The state, territory, and province governments in Australia and Canada, however, are significantly more powerful within the overall governmental system and have proportionately more resources than do American state governments. This enhances their abilities to handle disasters but does not demonstrate the overall effectiveness of the system during truly catastrophic disasters. Furthermore,

in recent history Australia and Canada have been spared major disasters. Due to the low prevalence of major disaster and the increased reliance on local governments, Australia has only spent an average of \$3 billion per year and Canada has spent less than \$2 billion total over the course of the last 35 years on disaster response. This minimal involvement in disaster response activities makes it difficult to ascertain the overall effectiveness of the Australian and Canadian systems in comparison to the American system. ⁹⁰

Summary

The underlying structure of the American, Canadian, and Australian disaster response system is the same. State and local governments are given the primary responsibility for disaster response although in the United States the federal government maintains a larger operational role. The Australian and Canadian systems, however, are completely depoliticized. Regulations predetermine the exact extent and type of federal involvement. While one could argue that most significant disasters are declared without political debate and thus the politicization of the American system does not delay disaster relief, the American system may lead to irrationally lenient disaster declarations. Since most presidents do not want to be in the position of denying federal aid to states, the federal government frequently becomes entangled in disaster relief operations and reimbursements that could have been handled by the states. This involvement overwhelms the federal system and takes the focus off of preparing for truly catastrophic disasters.

⁹⁰ Miskel, Disaster Response and Homeland Security 111-117.

Chapter 8: Conclusion and Recommendations

The American disaster response system functions admirably during the vast majority of disasters. The system quickly arranges for emergency shelter, food distribution, medical care, and monetary distributions to disaster victims. The system even helps effected areas rebuild homes soon after a disaster. The system functioned admirably on 9/11, during the Oklahoma City bombing, and during most earthquakes, floods, and hurricanes. The mutual aid network advocated by FEMA encourages neighboring local police, fire, EMS, utility companies, and even the National Guard to supplement each others resources, and it works quite well in most cases. The system requires cooperation from state, local, federal, non-profit, for-profit, and other private sector organizations. Each of these organizations offers remarkable services during most disasters. However, the disaster response system is imperfect since the coordination of these fragmented resources is extremely cumbersome; nonetheless, there is no clear alternative since each proposed system has its clear drawbacks.

The Military Model

One clear alternative to the current system, for example, is to charge the United States military with coordinating and implementing all disaster relief preparations and operations. At first glance, this seems logical. The military is the single resource at the government's disposal that is capable of performing all the operational duties and obligations currently assigned by the National Response Plan. The military, even with the restrictions of the Stafford Act and Posse Comitatus Act, can be activated on short notice and is capable of simultaneously surveying damage, performing dangerous rescue

⁹¹ Miskel, Disaster Response and Homeland Security, 123-124.

operations, providing emergency medical care, erecting temporary housing, establishing emergency communication systems, and maintaining overall peace. Furthermore, since these skills are needed during wars, the military is capable of fulfilling many of these tasks at present without further investment or coordination. For this reason, Dr. Irwin Redlener, the Director of the National Center for Disaster Preparedness at Columbia University, advocates that the United States assign the military a much more prominent role in disaster response and preparedness.⁹²

The military's operational capacity, however, should not be misinterpreted as a reason to militarize the responsibility for disaster response and preparedness. A major criticism of the current structure is that FEMA is located deep within the bureaucratic framework of the Department of Homeland Security, and thus disaster response is not the department's first priority. If the military were given primary responsibility for disaster preparedness and response, it would necessarily subordinate both preparedness and response to the military's other national security concerns. For that reason the military must be made aware that it may be called upon at an instants notice to provide substantial assistance during catastrophic disasters but the military should not be tasked with the overall responsibility for coordinating and implementing the American disaster preparedness and response system. Preparedness responsibilities, grant administration, and other essential administrative tasks would likely be neglected.

Personal Recommendations

In reality, despite the clear failures enumerated in this paper, the overall concept of shared responsibility for disaster response, with some significant changes, is ideal. It is respectful of the American federalist tradition and can be extraordinarily effective if

⁹² Redlener, American At Risk, 217.

structured appropriately. Each state should maintain its own self-sustaining disaster response system capable of handling all but the most catastrophic disasters. Operational assistance from the federal government for ordinary disasters should be reduced and perhaps even eliminated since the scale of these disasters can feasibly be handled using state resources, including the National Guard under the governor's control.

Despite increased reliance on state resources, the federal government should continue to offer the states and affected citizens financial assistance; however, the distribution of this assistance should be the responsibility of the states. In other words, the federal government's involvement in responding to ordinary disasters should be minimal. The Canadian and Australian systems demonstrate that this model, which places the burden of preparedness on the states, is feasible. Furthermore, just as is the case is Canada and Australia, the initiation of federal financial assistance should be based on objective standards. These changes will enable FEMA to focus almost exclusively on preparing for catastrophic disasters. This change will eliminate day-to-day pressing issues that prevent FEMA's 2,500 full-time employees⁹³ from focusing on its primary mission which is to supplement state resources when they are completely overwhelmed.

In every disaster in recent time, FEMA has struggled to achieve adequate cooperation from other federal agencies. An adequate disaster response may require cooperation from dozens of different federal agencies most of which could not be practically subordinated to FEMA. For that reason, FEMA should be extracted from the Department of Homeland Security and the vice-president of the United States should be officially charged with overseeing and coordinating federal disaster efforts during catastrophic disasters. During Hurricanes Andrew and Katrina, as well as during most

⁹³ Miskel, *Disaster Response and Homeland Security*, 55.

other recent catastrophic disasters, a high level administration official has been charged as the ad hoc disaster coordinator to help FEMA navigate the complex federal bureaucracy. The American people would be better served if one high level administration official was given that formal responsibility. The vice-president is the federal official, aside from the president, most able to remove bureaucratic obstacles and circumnavigate inappropriate federal policies during an emergency. During Hurricane Katrina, the Coast Guard was widely credited with providing the best disaster relief and saving the most lives. One primary reason that the Coast Guard was so successful was probably its institutional approach. Coast Guard commanders recognized that their primary mission was to save lives and thus circumvented ordinary operating procedures to do so. While individual agencies are capable of adjusting operations, only the vice-president or other similarly high-ranking official is capable of forcing such an institutional approach across the federal bureaucracy.

The system used to activate federal disaster response efforts, however, also requires improvement. In Hurricane Katrina, for example, the state delayed its formal request for federal disaster assistance, failed to accurately assess the damage, and failed to request appropriate aid from the federal government. An improved federal disaster response system would permit FEMA to determine, without state approval, when to activate the federal catastrophic disaster system. The system should permit the federal government to legally preposition supplies and even spend preparedness dollars when a potential disaster is predicted; these precautions should be taken with the full realization that sometimes predicted disasters will not occur.

These suggested changes would force a dramatic change in the focus of disaster preparedness. It would prevent politically motivated federal disaster involvement and force the federal government to take an active role in preparing for and responding to catastrophic disasters. However, this system will not avoid the general bureaucratic problems that pervade the American democratic system. John J. DiIulio, Jr., Gerald Garvey, and Donald F. Kettl note in their book, *Improving Government Performance: An Owner's Manual*:

Political micromanagement and the mismatch of government's tools with its problems have crippled public management, increased government inefficiency, and impeded performance. Perhaps worst of all, they have provoked a widespread distrust of the American system: by elected officials. who cannot understand whv administrators do not produce better results; by administrators, who complain about constant interference by elected officials as they try to do their jobs; and by citizens, who curse elected officials and administrators for squabbling among themselves and for overlooking why they are there to begin with.⁹⁴

These overall government shortfalls will continue to effect disaster response and preparedness. Implementing these suggested improvements would require Congress to pass new legislation and the Executive Branch to restructure administrative responsibilities. However, if these changes can be implemented, by focusing FEMA only on catastrophic disasters and charging the vice-president with the overall responsibility for success, there is a chance to improve government efficiency, accountability, and performance.

In conclusion, even a strengthened federal capacity to handle catastrophic disasters will not be perfect. Catastrophic disasters will continue to affect American

⁹⁴ John J. DiIulio, Jr. et al., *Improving Government Performance: An Owner's Manual* (Washington, DC: The Brookings Institute), 82.

citizens, destroy families, and cause inexplicable suffering. Even bolstered state and federal disaster response capabilities will be incapable of providing instant relief to everyone. For that reason, people will continue to rely on local first responders, non-profit organizations, and their neighbors. The strengthened catastrophic disaster response system must be respectful of the services offered by these entities. In fact, it must encourage these individuals and organizations to do more, not less. In the book, *Americans at Risk*, Dr. Irwin Redlener recalls a conversation he had with a Chaplain in Baton Rouge, Louisiana. The Chaplain asked, "Could we have done better than this? It looks like a military POW camp or a refugee village in the Third World." He then answered himself:

Of Course. And it didn't need to be government's job alone. There are scores of churches and community organizations that were willing and able to absorb everybody who's now trapped in here. They would have fed and clothed all of these people. They would have helped families get back on their feet and made sure that the kids got the medical care they needed. And they certainly would have made sure that every child got into school ⁹⁵

This is not to dismiss the government's role in disaster response. However, in improving federal coordination and response to catastrophic disasters it is essential that all available resources are maximized. Faith based organizations have proven their ability to provide essential services during and after disasters. Collegiate Emergency Medical Services organizations, such as Tulane EMS, are essential resources located throughout the nation that should not be neglected. Community safety teams and volunteer rescue teams should not be forgotten.

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⁹⁵ Redlener, American At Risk, 14.

Routine disasters will strike the United States several times in the coming years. Nobody knows for sure when the next catastrophic disaster will strike. However, everyone knows that America has not experienced its last catastrophic disaster. Creating a truly comprehensive federal disaster preparedness and response plan requires unprecedented coordination, resources, and accountability. Extracting FEMA from the Department of Homeland Security, refocusing its resources on catastrophic disaster preparedness, and making the vice-president accountable for the program's success would be several steps in the right direction. However, ultimate success will require more than administrative steps. Dr. Redlener refers to these administrative changes as "the easy issues" and writes, "Far more difficult, however, is the grueling work of examining and addressing the pertinent underlying issues that genuinely interfere with long-term, meaningful improvements in the level of national preparedness." Nonetheless, these administrative changes are necessary to make comprehensive improvements to the system possible.

⁹⁶ Redlener, American At Risk, 200.