BUILDING POPULATION RESILIENCE TO TERROR ATTACKS:

Unlearned Lessons from Military and Civilian Experience

by

Michael T. Kindt

The Counterproliferation Papers
Future Warfare Series No. 36
USAF Counterproliferation Center

Air University
Maxwell Air Force Base, Alabama

BUILDING POPULATION RESILIENCE TO TERROR ATTACKS:

Unlearned Lessons from Military and Civilian Experience

Michael T. Kindt

November 2006

The Counterproliferation Papers Series was established by the USAF Counterproliferation Center to provide information and analysis to assist the understanding of the U.S. national security policy-makers and USAF officers to help them better prepare to counter the threat from weapons of mass destruction. Copies of No. 36 and previous papers in this series are available from the USAF Counterproliferation Center, 325 Chennault Circle, Maxwell AFB AL 36112-6427. The fax number is (334) 953-7530; phone (334) 953-7538.

Counterproliferation Paper No. 36

USAF Counterproliferation Center

Air University

Maxwell Air Force Base, Alabama 36112-6427

The Internet address for the USAF Counterproliferation Center is:

http://cpc.au.af.mil/

Contents

Disclaimer

The views expressed in this publication are those of the author and do not reflect the official policy or position of the U.S. Government, Department of Defense, or the USAF Counterproliferation Center.

The Author

Lieutenant Colonel (Dr.) Michael Kindt is currently the Deputy Director of the USAF Counterproliferation Center, and adjunct professor at the Air War College. Prior to this assignment he was a student at the Air War College where he earned a Masters of Strategic Studies with academic distinction. Lt Col Kindt has a M.A. and Ph.D. in clinical psychology from Bowling Green State University and is licensed to practice in the state of Alabama. His previous assignments include directing provision of mental health services at Moody AFB and RAF Molesworth, UK. He also has extensive experience in education and training having worked as an instructor, flight commander and squadron commander of the 382d Medical Training Squadron at Sheppard AFB. In this role he directed 40 resident and distance learning courses in a wide range of medical specialties training over 5,500 students annually.

Building Population Resilience to Terror Attacks

Unlearned Lessons from Military and Civilian Experience

Michael T. Kindt

I. Introduction

On September 11, 2001, terrorists attacked the United States in a coordinated attack on our air transportation system and U.S. public symbols, causing the greatest single loss of civilian life in the history of our nation due to terrorism. The attacks in Washington D.C., New York, and Pennsylvania rocked the entire nation, awakening all Americans to the dangers of terrorism that had been known for years by other nations.

The response by America was dramatic as the nation hunkered down in an effort to ensure no more attacks. All air traffic was grounded for three days, security was increased throughout the nation, the list of targets perceived to be at-risk increased, and travel, particularly by air, plummeted. It took months for Americans to return to the air in the same numbers as before these horrific attacks, and many Americans still fear airline travel. The caution of our leaders in shutting down the system and the public reluctance to travel by air, while understandable, multiplied the negative impact of the terror attacks on the U.S. economy, furthering the aims of our attackers.

On July 8, 2005, terrorists attacked the United Kingdom, killing 58 and injuring hundreds in a coordinated attack on the London mass transit system. Despite the shock of these attacks, London mass transit resumed some routes the same afternoon and opened all routes as soon as they were repaired. Londoners returned to these systems the next day in apparent

defiance of the risks posed by terrorists. Is this dramatically different response seen in these two nations that share so much in common, a uniquely British characteristic?

This ability to maintain normal operations is not the sole property of the British. Large groups of Americans respond in heroic fashion to tragedies every day. These Americans represent our armed forces and our emergency first responders. How then, do some seem to maintain business as usual or bounce back quickly while others struggle following a tragedy? The answer is resilience.

Resilience, according to psychological literature, is the ability to cope with a negative or traumatic event and return quickly to a healthy level of functioning. Traumatic events which can test the resilience of a nation or community include not only terror attacks, but also natural disasters and accidents. Clearly the British population was more resilient to a traumatic terror event than the American population. Although it is impossible to determine precisely why the British were able to return to normal functioning more quickly than the Americans, an understanding of resilience suggests some very likely explanations.

Resilience to trauma is increased by a number of factors, which include preparation for the trauma, perceived ability to cope with trauma, and, perhaps most important, experience of successful recovery to past trauma. Clearly, London has had more experience dealing with the effects of bombing than the United States. Beginning with attacks on civilian targets by the Germans in WWII and continuing through attacks by the Irish Republic Army over the past few decades, the United Kingdom has had to learn to live with terror to a much greater extent than America.

Has our nation learned from our recent experiences and those of the United Kingdom? A review of current programs and initiatives reveals that while there are both historical and current models of resilience, our population is not prepared to cope effectively with another significant attack or disaster. The model of resilience provided by the United States military has not been modified to benefit the nation, past national programs to build resilience have not been revitalized, and current efforts build resilience are inadequate or ignored. These shortcomings leave the people of the United States unprepared for attack.

This paper will examine in detail the concept of resilience and techniques to enhance the resilience of the public. It will examine the

model of resilience preparation provided by the military, explore past national efforts to prepare for attack, and examine initiatives related to this area that have not yet borne fruit in terms of their ability to enhance our resilience. Finally, recommendations will be made to improve the overall resilience of the United States to terror attacks and disasters.

II. Resilience

The Concept of Resilience

According to the American Psychological Association, resilience "is the process of adapting well in the face of adversity, trauma, tragedy, or even significant sources of stress."[1] Sir Michael Rutter defined it as facing "…stress at a time and in a way that allows self-confidence and social competence to increase through mastery and appropriate responsibility."[2] Resilience then has several components. It involves facing a stress or a threat in a way that builds confidence in the individual's ability to master future threats. It also involves somehow having personal responsibility for the successful response to that threat. That is, resilience cannot grow from having someone else manage a crisis or threat. A lack of personal responsibility for the successful response to a threat cannot build resilience or confidence.

Thus, one key to the development of resilience is having had the experience of being faced with responsibility in a threat or crisis and successfully managing that crisis. Resilience does not guarantee that an event will not have an impact on an individual or that person will never experience distress or difficulty coping. Rather, resilience is the characteristic that allows one to resume functioning with minimal disruption.

Further, resilience is not an all-or-nothing characteristic. Everyone has a degree of resilience, and some may be more resilient to one type of stress than to another.[3] For example, some people may manage the stress induced by time pressure at work much better than they handle relationship stresses at home. More relevant to the preparation for terror attacks, individuals and communities on America's Gulf Coast may have developed a significant amount of resilience to the effects of hurricanes, based on past experience of successfully preparing for, surviving and recovering from them. While this resilience to hurricanes may enable confidence in coping with future hurricanes, it may not translate well to the response to a chemical or biological terrorist attack. The degree to which resilience translates from one event to another may depend on the

extent to which an individual is familiar with a threat or feels a sense of control in the response to it.[4]

While different individuals may manifest resilience in different situations, there are a number of characteristics common to resilient individuals. The characteristics can be grouped into three general categories. These categories are individual characteristics, social ties, and coping strategies.

The first category of resilience factors is individual characteristics. This category includes *optimism*, the ability to see hope for the future even in difficult circumstances. Another individual feature is *self-efficacy*, or a sense that the individual can utilize available resources to manage the event or task at hand effectively. Self-efficacy is related to *mastery*, which is the ability to take control of the situation one is placed in, and break a large problem down into smaller pieces and begin with these small steps to work to resolve the problem. Resilient people also demonstrate a sense of *coherence*, which represents a belief that the events that happen in life make sense, and allows them to place even traumatic events in a bigger picture of life.[5]

While the definitions are informative, they do not directly illustrate how these individual characteristics relate to better coping during a terrorist attack. In preparation or response to a bombing or chemical or biological attack, a resilient person would demonstrate optimism by believing that he or she, their community, and the nation would be able to cope with the crisis and recover to see better days. Self-efficacy would enable the individual to believe that by accessing and making use of available information and resources they can work to protect themselves and begin to recover. Mastery would allow them to use available information and personal resources to take steps to evacuate or prepare shelter, or identify personal plans for safety. A sense of coherence would allow the person to see the attack as part of a larger war on terror (rather than an unforeseen bolt from the blue) and part of a larger life that, although negatively affected by the attack, can still go on.

These resilient features allow an individual to respond well and be maximally effective in the event of a crisis. An individual without one or all of these individual characteristics is more likely to be overwhelmed by the stress of crisis and be more reliant on the support of others, creating drain on the rescue and healthcare systems.

In addition to these individual characteristics, the social ties that bind people together also contribute to resilience. People who are able to ask for and receive support from social groups such as family, friends, church, or community are more resilient to stress than those who either cannot seek support or have none available. While it seems obvious that receiving support would help an individual cope well with stress, there is also evidence that providing support for others in times of crisis is helpful for the person providing the support. This may explain why one in three Americans contributed to the recovery after 9/11 by contributing either time, money, or blood.[6]

The final set of factors contributing to resilience is related to coping strategies. Even with the individual characteristics identified above, a person must still utilize coping strategies to respond effectively to an attack. These strategies include stepping back to see the big picture before rushing to solve a problem, breaking large and potentially overwhelming problems into more achievable tasks, and taking breaks from the crisis to rest or refocus energy.[7]

High resilience to stress is the combination of a positive individual perspective, strong social connectedness, and effective problem solving skills all of which allow an individual to cope positively with even traumatic events such as a terror attack. Although some individuals are by nature or experience more resilient than others, resilience is a trait that can be improved.[8]

Building Resilience

The American Psychological Association (APA) has produced a series of brochures reviewing information to enhance resilience. These are posted on their website for public access. The APA identifies several factors toward building resilience that may not only be utilized by individuals, but could also be enhanced by federal, state, and local policy. The APA recommends that individuals build connections with others, including social and civic groups, to help develop avenues for social support in the event of a crisis. Creation or support of local organizations with abilities to bring individuals together to create support networks is one method of helping the population to build resilience.

Another technique for increasing resilience is taking decisive action. This is a way of reducing the anxiety of indecision. By taking action, individuals can focus on the action at hand, rather than feeling stuck in uncertainty. Government agencies could facilitate this aspect of resilience by providing clear guidance of actions that should be taken in preparation for the general risk of disasters and terror attacks. Additionally, direct guidance should be provided for coping with specific threats as risk increases or immediately following an attack.

Keeping things in perspective is another method of enhancing resilience. As individuals improve their ability to look at the big picture of events they can better direct their actions and moderate emotional reactions. Larger efforts to communicate clearly about the risk of terror attacks, particularly in comparison to the other threats inherent in modern life, can help reduce anxiety associated with terror attacks. For example, despite the emphasis placed on securing our nation from terrorism, the relative risk to Americans is rather low, with more people in the United States killed by lightning over the last 40 years than killed by terrorist attacks.[9] Providing accurate data to allow the population to place the threat of terror attacks in the proper perspective would be one method of enhancing resilience.

A final technique for increasing resilience is to avoid seeing crises as too large to be managed, and by beginning to break down a crisis into more manageable pieces. Authorities could greatly enhance resilience in this area by providing pre-attack information, directing small steps that the population could take to improve their security from attacks. Thus, it appears clear that with the proper motivation and allocation of resources, the nation could embark on a program to mobilize the population to be confident in its own ability to respond to a significant threat. In fact, such a program has been utilized by the United States in past.

This understanding of resilience and how it can be enhanced is particularly important in light of current knowledge regarding human behavior in the face of threat or disaster. Recent work by Anthony Mawson highlights the marked disparity between how people are presumed to behave during disasters and their actual behavior. He finds that in contrast to the prevailing belief that in the face of disaster there will be mass panic and/or violence as people recklessly flee to safety, there is little evidence to support this belief.

Mawson finds that rather than panicking and fleeing, research suggests that people are much more likely to engage in activities that are supportive of others or involve seeking familiar people or places. He cites four mistaken assumptions that contribute to the belief that panic is likely in disaster situation. First, that the drive for self-preservation will result in fleeing the scene or fighting others. Second, individuals will choose to move toward a safe location. Third, physical dangers will create more panic than other types of stress. Fourth, panic is only prevented by strict social discipline and leadership.[10] These mistaken assumptions can lead those in positions of responsibility and authority to attempt to avert such panic by not releasing information about a potential disaster or attack. This behavior could potentially make panic more likely when a disaster does occur.[11]

Mawson goes on to outline four corollaries to these mistaken assumptions that reflect research on human behavior in times of crisis or disaster. First, more than the drive to flee to safety, people are motivated by a desire to be with familiar people (family, friends, etc.) and in familiar places, even if this means moving toward the danger. Second, people tend to move not toward an objectively safe place but toward people and places they perceive to be safe. Third, separation from these familiar people or places during a disaster may be more disturbing than the actual physical threat. Fourth, the key to avoiding panic may not be firm social control or discipline but the presence of familiar people.[12]

These findings by Mawson mesh well with the basic concepts of resilience reviewed earlier. One of the key factors in resilience was the ability to reach out to provide support to and receive support from others in times of stress. This ability to affiliate with others during crisis or stress then appears to not only help individuals cope with a crisis, but on a large scale enables groups to avoid panic behavior. This drive for the familiar has both advantages and disadvantages for emergency planners.

On the positive side, based on Mawson's research, mass panic is a much less likely outcome of disaster than may often be feared. On the negative side however, the tendency to seek out familiar people and places may lead many to ignore early warnings to evacuate or seek shelter leaving them at greater risk when danger occurs.[13] This potential appears to have been clearly demonstrated by the behavior of tens of thousands of citizens of New Orleans who opted to remain in their homes and with their

families despite warnings before Hurricane Katrina to seek higher ground. This unwillingness or inability to heed warnings and seek shelter resulted in an overwhelmed emergency response system. The challenge for those seeking to build population resilience to attack will be to build on this desire to be with familiar others and support each other while enabling people to follow evacuation warnings and other directions.

In the devastation of the Gulf Coast left by Hurricane Katrina, the nation turned to the one organization in America that exemplifies facing stress in a way that builds self confidence and mastery, the United States military.

U.S. Military as a Model of Resilience

By virtue of its mission to protect the nation, members of the military must be prepared at all times to respond to and perform in a wide range of life threatening circumstances around the world. Despite the risk of chemical, biological, radiological, nuclear, and conventional attack, thousands volunteer to accept these risks each year and perform exceptionally around the world. Thus, while not discussing it directly, military training and organization has long recognized the importance of building the ability to master intense threat and stress in a productive and unified manner.

Research and commentary from as early as the 1940s speak of the preparation of combat troops and their reactions on the battlefield in terms very similar to those used today to talk about resilience. S.L.A Marshall, in his classic, *Men Against Fire*, addresses many of the challenges of preparing men for and leading men into the intense danger that is combat. Marshall wrote of the need to prepare soldiers for the type of situations they would encounter on the battlefield so they would feel more prepared when encountering that danger. Such preparation requires realistic training, including live fire exercises, that will allow soldiers to approximate the fear they may feel in battle and prepares them to have the confidence to cope effectively.[14]

Marshall writes at length of the factors that enable men to face the fear and danger of the battlefield noting, “I hold it to be one of the simplest truths of war that the thing that enables an infantry soldier to go on with his weapons is the near presence or presumed presence of a

comrade…he would rather be unarmed with comrades around him than altogether alone, though possessing the most perfect of quick firing weapons."[15] Even 60 years ago, while not described as resilience, then the concepts of efficacy and perceived social support were recognized as key features in preparing soldiers to cope well with crisis.

Marshall goes on to address the factors that prevent panic and uncontrolled fleeing of troops in combat. Marshall notes that it is intelligence and training that allow soldiers to overcome their fear and desire to huddle together for safety and continue with their mission. He also notes the importance of leaders providing clear instructions in order to ensure continued focus on the mission. In fact, Marshall asserts that it is only when this communication breaks down that soldiers are likely to panic on the battlefield.

Based on his investigation of seven incidents of panic among troops in combat, he determined that none were caused by a "spontaneous movement of a body of men."[16] Rather these incidents of panic grew out of deliberate acts of a few that were misunderstood by others and led to the panic of many. In each case, the deliberate withdrawal of as few as one soldier, when not explained to others, led to mass disorderly panic. Marshall concludes then that in the chaos and danger of combat it is of primary importance to communicate clearly so that individuals will know what is happening and what is expected of them.[17]

Marshall's personal conclusions about the importance of the social bond in combat and the need to prepare soldiers adequately for battle were echoed in a large scale study of attitudes of soldiers in WWII. This study, authored by Samuel Stouffer and first published in 1949, found that soldiers responded less to worries about self-preservation and more to concerns about finishing the task at hand and preserving the unity of the unit in the face of attack. This environment placed a priority then on developing connections to others in the unit and the ability to make friends with and rely on others quickly. This report also emphasized the importance of training to simulate battle and create fear. This experience of fear would help men to learn to acknowledge fear and see their ability to continue to perform despite it.[18]

Although these historical accounts do speak directly of resilience, it is clear that they address many significant resiliency components that are vital to coping with acute stressors, including self-efficacy, mastery, the

value of supporting and being supported by others. These same factors are still addressed by the U.S. military today and many military programs are designed to create a sense of resilience in members of the military. While all branches of the service have generally comparable programs, this analysis will focus on the programs of the United States Air Force that directly or indirectly contribute to the resilience of its members.

Returning to the definition of resilience as "the process of adapting well in the face of adversity, trauma, tragedy, or even significant sources of stress,"[19] we can see its parallels in modern military training. Most aspects of military training throughout history have been designed to create a sense of confidence that soldiers, sailors, or airmen can face threats of danger and overcome them.

Today, this process starts in basic training. Basic military training is designed to teach the critical importance of discipline, teamwork, and foundational knowledge needed to succeed as an airman. It also prepares recruits physically as warriors in the profession of arms.[20] These concepts of discipline and teamwork combine to create the sense that the individual is no longer alone and they can accomplish more by working together as team.

These concepts, along with the knowledge of how to respond to a wide range of threats and the trust that following the commands of leadership will lead to success, create some of the initial facets of resilience. Specifically, basic training starts to build the sense of social connectedness, that the recruit can support others and will be supported by others (emphasized in the work of Mawson and Stouffer), while simultaneously increasing self-confidence and self-efficacy.

This concept of connectedness is enhanced in the Air Force on mastery of wartime skills during Warrior Week, when a recruit is first recognized as an Airman and presented with an Airman's coin as a symbol of the bond with other airmen. In addition to these aspects of resilience, Airmen also learn the specific skills necessary to protect themselves and their fellow airmen. Some of these specific skills include how to wear the chemical protection suit and how to perform self-aid and buddy care in the event of an injury. These specific training programs build the sense of mastery that the airman can respond appropriately in the event of a crisis. These initial facets of resilience learned in basic training are reinforced throughout the military experience.

The entire military environment of on-base housing areas, commissaries, exchanges, and chapels continues to build a strong sense of community that strengthens the connectedness encouraging resilience. Each unit further works to create a sense of camaraderie and esprit de corps that fosters not only a feeling of being part of the Air Force but also as being part of a smaller unit family. Airmen are taught that First Sergeants are available to help them with their problems, and First Sergeants work to identify the needs of the members of the unit and ensure that personnel are referred to the agencies on base that are able to provide assistance.

Base communities provide a wide range of support services that strengthen the bonds of community connectedness and facilitate members of the base community in helping others to be successful. Programs such as Life Skills, Family Advocacy, Family Support Centers, and Chapels provide services designed to address personal, financial, and spiritual needs at all stages of a military career. These services are not only designed to support individuals, but also to ensure that the stresses of military life are being taken care of so that military members can focus, when necessary, on deployment and crisis, confident that they and their families are prepared. Together these military culture and community-based programs create a firm foundation of the basic facets of resilience. Military members are trained and supported to feel connected and capable of responding to any situation they may encounter.

Other Air Force programs are specifically designed and implemented to help build resilience, the capability to perform when called upon, and the ability to adapt to extreme circumstances when necessary. The Family Care Program requires all military members to have a plan for the care of their families in the event of deployment or recall. Airmen who are married to other military members, single parents, and members with special needs family members must document a workable plan to ensure families are cared for should the airman be deployed or recalled for a crisis. These plans must be periodically reviewed to ensure they can be activated at any time.[21] This plan helps to ensure that a call to duty will not overly stress a member with difficult family circumstances.

Another program designed to build resilience is the Suicide and Violence Prevention Education and Training program. This program, while not focused on the threat of terrorism or attack, serves to educate all

personnel regarding the risk factors for suicide and workplace violence, with the goal of reducing suicides and incidents of violence. The program emphasizes the role of supervisors and co-workers being involved in the lives of those around them and recognizing the signs of difficulties in coping. The program specifically addresses a number of resilience factors addressed earlier in this article including self-efficacy, optimism, personal control, and social support as critical factors in preventing suicide and violence. The program reviews local procedures for seeking help from the range of base helping agencies and ensures members are aware of the support available to help with stress. This training is required for all Air Force members every 15 months in conjunction with the Air Expeditionary Force cycle.[22]

A final program that warrants specific consideration in terms of the resilience of the Air Force population is the Traumatic Stress Response Program. The goal of this program is to increase resilience in those who may be, or have been, exposed to a traumatic event, through education, training and referrals. This training, then, is one military program that works directly to building resilience in the face of trauma. The program requires trained multi-disciplinary Traumatic Stress Response Teams to be maintained at each base. These teams, with representatives from key helping agencies, may be augmented by peer members who assume a special role of helping those assigned to their specific functional unit. The policy states the goal of providing preventive critical incident stress management services to Air Force members whenever possible.[23]

These preventive programs focus on educating members about the stress they may encounter during a particular deployment or as part of a traumatic duty such as body recovery following an accident. Prevention training provides insight into the normal reactions during trauma so individuals are prepared not just for the stressful events, but also for their own reactions. Individuals are specifically trained in coping techniques to use in response to any stress reactions to ensure they maintain the highest level of functioning possible. Since many stressors and traumatic events cannot be predicted, debriefings are also conducted for those who have been exposed to a traumatic event. This debriefing also normalizes the reaction to stress and works to facilitate a sense of mastery over the reaction and the expectation for a return to normal functioning.

While it is clearly impossible to send all Americans through Air Force Basic Training to improve their ability to respond in the event of a terrorist attack, the programs produced by the Air Force and other military services demonstrate that individuals and groups can be made more resilient through focused preparation efforts. These efforts, however, have not been adopted on a national level and represent a missed opportunity in our national preparedness efforts. Despite the failure to learn lessons from the military regarding resilience, the federal government has in the past pushed the population toward greater resilience and has made some new (if not yet successful) efforts in that direction since 9/11.

III. Federal Efforts to Build Resilience

Historical Precedent

The threat of terrorism in the aftermath of the 9/11 attacks on New York and Washington D.C. was not the first grave danger that has threatened the American citizenry. The United States as a nation actually has experience in building national preparedness for attack. In the late 1940s the United States faced a significant threat--atomic attack by the Soviet Union. In evaluating how to prepare Americans to respond to such a threat, the Federal Civil Defense Act was passed in 1950 creating the Federal Civil Defense Agency (FCDA).[24]

In her book, *Civil Defense Begins at Home*, Laura McEnaney outlines some of the practical and political motivations of the government's decision to place preparedness in the hands of the population rather than establishing the federal government as the primary protector of Americans against attack. She notes that civil defense had been a grass roots organization since WWI, and had been continued successfully during WWII.

McEnaney observes that precedence was not the only motivation for placing preparation in the hands of the communities. Planners at the time had also observed in cities that had been subjected to aerial bombing, most lives had been saved by local defense teams and these efforts had been a great success in coping with WWII bombings in Great Britain.

Yet other factors were also involved. The government wanted to avoid the expectation that it could protect everyone, a task that would have been impossible following an atomic attack. Additionally, there was concern that if the population came to expect the government to protect them they would not practice effective civil defense. Thus, McEnaney concludes the proposal for reliance on self-help "was advantageous because it released the government from complete responsibility for citizen protection while giving people a tangible role to play in the defense of their own country."[25]

Despite the catastrophic level of risk to the population posed by atomic weapons (compared to the threat faced in WWII) the government

embarked on an extensive program in the 1950s and 1960s to put homeland response to an attack firmly in the hands of the population. McEnaney details the efforts during this period to create an elaborate program to educate the public regarding preparation for an atomic attack. This effort reflected the primary view and approach taken in the face of nuclear war. A 1947 War Department study recommended "the fundamental principle of civil defense is self-help…it is incumbent upon each individual to protect himself, his home and his family to the maximum before calling for aid. To implement the self-help principle, the populace should be organized into small groups under leaders and trained…Calls for aid should not be made until the situation is beyond the control of the group."[26]

The efforts of the government, enhanced by cooperation from all sectors of society, including the mass media, generated a tremendous amount of response from the public. The Federal Civil Defense Agency, created in 1950, reported that by 1953, 4.5 million people had enlisted in the United States Civil Defense Corps, and by 1956 the Warden Service, comprised of those who led neighborhood efforts, numbered 800,000.[27]

Although resilience as a concept was not studied at the time, these efforts in the face of nuclear war reflect many of the principles outlined in the earlier discussion of resilience. When faced with the potentially overwhelming threat of a nuclear attack, the government made systematic efforts to put the focus of survival on the individual Americans. They provided education and training on responding to a nuclear attack and empowered individuals to believe that by taking small manageable actions, they could increase their ability to survive an attack. This empowerment and direction likely enhanced the resilience of the nation at the time.

Despite this recent historical example of a massive campaign to involve the population of the nation in a primary role in enhancing their own security, this has not been the primary focus in securing the nation against terrorism. Although there is much more an individual can do to adequately prepare for or even prevent a terrorist attack (compared to person's ability to prepare for or prevent a nuclear attack), the focus since 9/11 has been heavily on government responsibility for security.[28] The focus at the federal level has been on aviation security, improved intelligence gathering and coordination, and direct military action against

terrorist threats. Despite this focus, there have been some federal initiatives that have the potential to address the need to increase population resilience.

Current Efforts Toward Resilience

Although resilience is not mentioned specifically, the National Strategy for Homeland Security clearly addresses the idea that securing the nation requires not only the reliance on public resources but also the focused effort of the American people.[29] There are two major initiatives that address issues relevant to psychological resilience. Both, though well-intentioned, have failed to meet the mark in enhancing the ability of American citizens to respond effectively in the event of a major attack or catastrophe. These initiatives are the Homeland Security Advisory System (HSAS) and the Citizen Corps.

The Homeland Security Advisory System was unveiled by then Assistant to the President for Homeland Security Tom Ridge (he was later named the first Secretary for Homeland Security) on March 12, 2002. The system was established by Homeland Security Presidential Directive-3 to provide "a comprehensive and effective means to disseminate information regarding the risk of terrorist acts to Federal, State, and local authorities and to the American people."[30] The Homeland Security Advisory System appears to have never experienced very wide-ranging support from either the public or government agencies. From its inception, the Homeland Security Advisory System has faced criticism from the public, including jokes from comedians and cartoonists, and more serious critiques from journalists and security experts.[31] Despite this ridicule and criticism, the system did initially appear to have some effectiveness in capturing the attention of the American people and altering their behavior in regard to the terrorist threat.

The pinnacle of public respect for and confidence in the Homeland Security Advisory System may have been demonstrated in February 2003. On February 7, 2003, Attorney General Ashcroft, Secretary Ridge, and FBI Director Mueller made a joint announcement of an increase in the Homeland Security Advisory System level from Yellow to Orange. This increase was accompanied by clear statements indicating that there were specific threats against "apartment buildings, hotels, and other soft or

lightly guarded targets."[32] In this same announcement, the Attorney General mentioned a specific chemical, biological, or radiological threat with ricin having recently been connected to an Al Qaeda group in England.

Secretary Ridge made some of his first statements advising Americans on actions they could take to prepare themselves for attack, including developing family emergency plans and putting together an emergency supply kit. The combination of identification of a more specific threat and concrete recommendations for public action addressed the features for improving resilience noted earlier by providing concrete, small steps the public could take to counter the threat, and a dramatic public response followed.

The days following the Homeland Security Advisory System increase to the Orange level saw Americans rush to stores to purchase duct tape and plastic sheets, among other emergency supplies. One writer described the public reaction as a "zero-to-60 mobilization" of the American public in the war on terrorism.[33] Despite the success of the Homeland Security Advisory System in mobilizing the population in this situation, the overall trend is one of decreasing confidence in the system as accusations were leveled proposing that the system was being manipulated for political purposes.[34]

Confidence in the Homeland Security Advisory System was further eroded in May 2005 by statements made by former DHS Secretary Ridge. He stated there were often significant disagreements within the administration about whether or not to raise the threat levels. According to former Secretary Ridge, he often argued the threat level should not be raised because of poor intelligence or because the country did not need to be put on alert. He further stated that in some cases where he disagreed with raising the threat level he was over-ruled by other members of the Homeland Security Advisory Council.

The new Secretary for Homeland Security, Michael Chertoff, has also acknowledged the system is under review and that it requires improvements.[35] Without specific, credible threats that can be trusted by the American public, the Homeland Security Advisory System will not be an effective tool for encouraging the population to prepare for and effectively cope with a terror attack. Thus, the Homeland Security Advisory System must be considered a failure relative to its potential to build resilience.

The second major federal initiative relevant to psychological resilience is the Citizen Corps. Launched by President Bush in his 2002 State of the Union address, the mission of the Citizen Corps is "to harness the power of every individual through education, training, and volunteer service to make communities safer, stronger, and better prepared to respond to the threats of terrorism, crime, public health issues and disasters of all kinds."[36] Although not mentioning the concept of resilience directly, the mission statement of the Citizen Corps clearly echoes both the themes of resilience in making people better able to respond as well as the techniques of increasing resilience through preparedness and building support through community ties. The Citizen Corps (part of the larger Freedom Corps) included 5 major programs.

- The Community Emergency Response Team program which trains members in basic disaster response skills; these skills enable individuals to assist their communities and workplaces to become more prepared for attack or disaster.
- The Fire Corps advocates the use of trained civilian volunteers to provide support to local fire and rescue teams thereby increasing their capabilities.
- An expansion of the Neighborhood Watch Program to build on existing community focus on crime prevention and enable these groups to also focus on terrorism awareness.
- The Medical Reserve Corps which organizes volunteers to increase the capacity of local medical teams to respond in the event of a tragedy.
- The Volunteers in Police program which encourages individuals to support the local police departments to increase outreach capacity particularly in times of emergency.[37]

These programs together create a wide range of activities that can benefit both the individuals participating and the community at large by increasing preparedness and disaster capability. The guide for community leaders states that having citizens who are better prepared to care for themselves will enable the emergency personnel to focus on the most serious local problems, and that building of the Citizen Corps will build community pride and cohesion.[38]

The Citizen Corps webpage suggests that these programs are meeting with great success throughout the country, reporting that there are 2,117 Citizen Corps councils serving 210,000,000 people or 73% of the United States population.[39] While these numbers appear to suggest an impressive level of public involvement in these valuable programs, other data suggests that this may not be the case. Despite a call for all communities to establish a Citizen Corps program and a report of 69% coverage of the nation, the National League of Cities reports that there are 19,429 municipal governments in the United States.[40] This indicates that fewer than 11% of municipal governments have established a Citizen Corps council. The difference in the number of communities with councils and the reported percentage of the population served by the Citizen Corps may be due to a disproportional creation of councils by large cities.

There is also significant disparity in the number of people who are reportedly served by Citizen Corps Councils (210 million) and the number of people who even know the Citizen Corps exists. According to a survey conducted in June and July of 2003, by OCR Macro for the Department of Homeland Security, only 8% of the population was even aware the Citizen Corps existed. They also reported that of the 8% who had heard of the Citizen Corps, many could not give an accurate description of what the program was.[41] This general lack of awareness seems to be supported by the numbers of individuals actually being trained and taking part in Citizen Corps programs.

The 2004 Citizen Corps Annual Report (no further reports has been released as of this publication date) indicates that relatively few individuals were actually taking part in training volunteer programs being offered the by Corps through the end of 2004. The report cites that 58,756 individuals had completed Community Emergency Response training since the program became part of the Citizen Corps. The report also cited total numbers participating in the Volunteers in Police Service program at 73,000 and the number in Medical Service Corps at 30,000. Only 1,194 people had taken part in the Fire Corps by the end of the reporting period.[42] Combining these figures provides a total involvement of approximately 165,000 people participating in the Citizen Corps programs. With an estimated United States population of approximately 295,000,000 this equates to only .05% of the population being engaged in these programs. This compares very unfavorably to the 4.5 million who

enrolled in the Civil Defense Corps in the first three years of its existence.[43]

There has been some significant criticism of these programs which helps explain the differences in the numbers reported served by the Citizen Corps and the number aware of the program and participating in it. These criticisms suggest that many of the Citizen Corps Councils are merely preexisting programs such as Neighborhood Watch that have been renamed Citizen Corps programs, or some of the Councils may exist on paper only without actual citizen involvement.[44] Recent studies appear to confirm this assessment. The quarterly review of citizen preparedness released in the fall of 2006 revealed that despite the increased media attention and impact of Hurricane Katrina, "Americans today are no better prepared for a natural disaster or terrorist attack than they were in 2003."[45] Regardless of the cause of low involvement, it is clear that federal government efforts to inspire civilian involvement in homeland security have failed to achieve the level of involvement prompted by the civil defense movement of the 1950s. These programs have also apparently failed to increase the overall preparedness of the population. Thus, the Citizen Corps must also be considered a failure relative to the development of resilience in the American citizenry.

Today's programs appear to have great potential to increase the resilience of the individuals who participate in them, but figures indicate that this promise is being wasted. While some people are benefiting, and some councils may be working effectively to build resilience in the community, the overall program does not appear to be effective. If utilized effectively to reach out to and engage Americans in working toward their security and the security of their communities, personal and community resilience could be greatly enhanced. The current program metrics of tracking percentage of population covered by a council seems to be a dramatic misrepresentation of the Citizen Corps ability to meet the mission to "harness the power of every individual."[46]

Efforts to Address Deficits

There has been some recognition within the government of the need to increase the focus on improving the psychological preparedness of the population to terror attacks. The Department of Homeland Security

(DHS) has identified the need for additional research on behavioral health issues related to resilience and sponsored one initiative to address this need. During 2005, the Department of Homeland Security created a number of Centers of Excellence at universities to increase understanding of different factors relating to domestic preparedness for terror attacks.

In January of 2005, the Department of Homeland Security announced the creation of a Center of Excellence for Behavioral and Social Research on Terrorism and Counter-Terrorism. In addition to research on the questions related to the causes of terrorism and strategies to counter it, this center will "examine the psychological impact of terrorism on society and strengthening the population's resilience in the face of terrorism."[47]

Headquartered at the University of Maryland with support of universities across the country, the center, renamed the National Consortium for the Study of Terrorism and Responses to Terrorism (START), has already created several working groups including one focusing on societal responses to terrorist threats and attacks. This working group, chaired by some of the leading researchers in social resilience, has already started projects investigating best practices for preparing communities, school-based preparedness programs, and community resilience to terrorist threat.[48] If the funding for such programs continues, the START program could identify valuable tools and programs for enhancing individual and community resilience.

Another initiative to improve the focus on population resilience began in Congress. Prompted by a desire to increase the national focus on the development of resilience to terror attacks, Congressmen Kennedy, Weldon, Turner, Smith, Frost, and Thompson introduced, on February 5, 2003, to the House of Representatives a bill "to improve homeland security by providing for national resilience in preparation for and in the event of a terrorist attack."[49] This bill, entitled the *National Resilience Development Act* cites recommendations by the National Academy of Sciences to ensure the public health infrastructure is prepared to cope with the psychological as well as physical consequences of any attack. The bill also encourages use of techniques developed in Israel to enhance resilience of individuals and decrease the effects of terror attacks.

The overall goal of the Act is to "identify effective strategies to respond to the behavioral, cognitive and emotional impacts of terrorism; to coordinate efforts in researching, developing and implementing programs

to increase the psychological resilience and mitigate distress reactions and maladaptive behaviors of the of the American public."[50] The *National Resilience Development Act*, which has been endorsed by former New Jersey Governor and 9/11 Commission Chairman Thomas Kean,[51] would also establish an Interagency Task Force including the Director of the Centers for Disease Control, Director of the National Institute of Mental Health, the Surgeon General of the Public Health Service, the Director of the Office of Public Health Preparedness, and several other agencies, to track progress toward achieving community resilience goals. Despite the important issues raised in this bipartisan bill, the Act has been referred to the Committee on Energy and Commerce, Committee on Transportation and Infrastructure, and the Judiciary Committee for review. The Act was reintroduced in 2004 and again referred to committees and no action has yet been taken on the bill.[52]

The initiatives being taken in Congress and by the DHS confirm that there is interest (if little measurable accomplishment) in addressing America's need for increased resilience to attack. However, interest alone is not enough to prepare our nation for terror attacks and disasters. Concrete programs, based on the past successes of the government and military, combined with efforts to measure effectiveness, must be initiated to better prepare the population.

IV. Recommendations

Before recommendations for improving the resilience of the American population can be effectively considered, it is important to address a prerequisite for all resilience initiatives--establish national level leadership to make resilience an important national goal. The political dialogue on the Global War on Terror, to the extent that it has involved the American people at all, has been to recommend that they "go about their business." Homeland Security Advisory System levels change with no indication of how the public should prepare. The general public has been encouraged to believe that the best defense against terror is a military offensive against terrorists and those who harbor them. Americans' involvement in this military offensive has been limited to placing "I support our troops" stickers on their vehicles, with little personal sacrifice or effort required.

Although the strategy of pre-emption and taking the fight to the terrorists in Iraq has its merits, it does not eliminate the threat of attacks here at home. In fact, this general theme of "don't worry, we have it covered" serves to decrease resilience as individuals feel there is nothing they can or should do to prepare, decreasing their sense of efficacy and control. Without a clear emphasis at the national level on the vital role individuals can and should play in preparing themselves and their communities for attack, no other recommendations will bear fruit.

The establishment of a positive, consistent, national message which says, "We as American people are all vital parts of a team, each with our own critical roles, working together to prepare to ultimately defeat terrorism," would begin to create at a national level the sense of mission, purpose, and teamwork developed in a military basic training program. It would empower individuals to accept a role and try to fulfill it. This message would also give life to the mission of programs such as the Citizen Corps "to harness the power of every citizen" toward preparing our nation. With this emphasis on resilience established, other recommendations can be considered.

First, the Homeland Security Advisory System should be significantly revised or abandoned. The most constructive revision to the HSAS would

be the elimination of general nationwide threat level changes in favor of more specific alerts targeted at specific regions or industries. These alerts should always be accompanied by specific recommendations for public action in response to that threat. The alerts should be followed by targeted surveys of affected individuals and organizations to assess the extent to which recommendations were followed. This would provide some structured feedback on the effectiveness of the warning system, and help to identify constraints on individual preparedness.

This system would then better mirror the Force Protection levels established by the military to secure bases. Under this system, changes can be made base, command, or DoD-wide and are accompanied by specific changes in procedures for all to follow. Moves toward greater specificity of warning and increased guidance as to how these warnings should be addressed by the public, would appear to be well received by the population, increase confidence in the system, and enhance resilience as people learn not just to be more afraid, but rather how they can be more prepared.

Second, existing programs in the Citizen Corps must be maximized to capitalize on their potential for success. As outlined earlier, many of the Citizen Corps programs that have been established have tremendous potential to increase individual and community resilience, but have underachieved. These programs should be re-energized and proper metrics established to track their progress and success. Resilience programs in the Air Force are not measured by how many Suicide Prevention programs or Traumatic Stress Response teams exist, but by what percentage of their population is trained and ready to go. Similarly, the metric for success of the Citizen Corps program should not be the percentage of people living in a community that has a Citizen Corps Council, but how many people in that community have been trained or engaged by that Council. Such metrics would allow for more accountability of the money being spent on Citizen Corps programs now, and be used to provide justification for additional spending. This would also allow benchmarking of the techniques used by the most successful Councils so these techniques can be distributed to all Councils.

Additionally, the Department of Homeland Security, along with other national leaders, should work to communicate more directly to the population regarding why and how they should be prepared. There is

currently a great deal of valuable, practical information on the *Ready.gov* website that can help an individual or family prepare for attack or disaster. The help in preparing emergency plans found on this website and the confidence preparedness brings can be a key step in building resilience. However, this information is only accessible if people become curious enough to look for it, or call the Department of Homeland Security phone line to request it. Without guidance that important information is available, few will likely take this initiative.

Increased national emphasis on resilience could include media campaigns or direct mailings, advising Americans of the specific risks and precautions that can be taken in their region to make them safer. Partnerships could be developed with retailers to pre-package readiness kits along with flyers advising buyers on how to use them. In the same way that the Air Force recognizes the completion of training with an Airman's coin, the Department of Homeland Security could provide stickers or flags that Americans could use to identity their homes and workplaces as "Ready."

Perhaps the most successful program that falls under the Citizen Corps is the Neighborhood Watch program, with over 11,000 neighborhood groups nationwide.[53] These programs, which have already expanded beyond crime prevention to terrorism watch, could be encouraged to expand further to help identify neighbor residents who may not be able to care for themselves in a time of emergency, or those without transportation during evacuation situations. The disabled or shut-in could also be identified through this program and information shared with the local police departments who sponsor the watches. This would build a greater sense of connectedness in the community and reduce the reliance on emergency personnel to respond in a crisis.

Two key factors in resilience are optimism and confidence in ability to respond to a threat. Consequently, training opportunities to build preparedness skills should be expanded. One training program that is very valuable both to individuals and communities is provided by Community Emergency Response Training. Although the full training requires 20 hours to complete, the program launched a web-based training program open to all Americans to familiarize them with the concepts of emergency response.

Created in 2003, this web-based program was completed by only 5,320 people in 2004. Clearly more emphasis needs to be placed

marketing and engaging individuals to complete the training. The military, of course, does not have to worry about marketing training programs in order to increase attendance; it simply makes things mandatory. Although it is not practical to make preparedness training mandatory for all Americans, partnerships that have been used in the past could be revitalized to increase Americans resilience.

Perhaps the easiest partnership for training and educating Americans, and one used heavily in the 1950s and 60s, is through the nation's schools. Many remember "duck and cover" drills and science films regarding the effects of atomic bombs. Although "duck and cover" drills are clearly outdated, a partnership between the Department of Homeland Security and the Department of Education could work to include preparedness and resilience topics in public school curriculum. While it may not be necessary for all Americans to complete Community Emergency Response Team training, self aid and buddy care skills or cardio-pulmonary resuscitation (CPR) could be added to health curricula. Israel has already taken steps in this area, developing resilience building programs for high school students, and is working to establish this nationwide.[54]

Finally, new efforts that have been initiated, such as the National Resilience Development Act and the new Study of Terrorism and Responses to Terrorism program, should be supported so that new tools and techniques for enhancing resilience can be developed and disseminated to ensure that all Americans can maximize their ability to respond to a disaster.

V. Conclusion

Based on this review, it can be concluded that resilience is a key attribute in being prepared to deal with crisis and adversity whether it comes in the form of an attack, a disaster, or a combat situation, and to recover in its aftermath. Resilience is a skill that can be improved both for individuals and communities, through building confidence, efficacy, problem solving skills, and social connectedness.

The United States has knowledge and experience in building such resilience in populations and groups dating back to the 1940s and 50s, when not only were troops prepared for battle, but the nation as a whole was prepared for a devastating attack. This knowledge continues to be utilized in the U.S. military to prepare troops for a wide range of traumatic experiences. Unfortunately, this knowledge and experience has not been more widely utilized to prepare the population for attack following 9/11. This lack of preparation on the part of individuals, families, and communities was clearly demonstrated in the aftermath of Hurricane Katrina. The ineffectiveness of warnings systems were highlighted in that even with days of advance warning, these systems did not create the desired behavior in the population. Thousands of people had difficulty coping with the storm.

The Homeland Security Advisory System was designed to help alert the population to the danger of an attack, but has been ineffective in advising people how to prepare for attacks and has subsequently failed in changing behavior. The Department of Homeland Security Citizen Corps programs show some potential for preparing people to better respond and recover in the face of attack but these efforts have reached far too few people to have any real impact on population resilience. Based on the review of these programs and the evidence provided by the response to Hurricane Katrina, the nation has not learned the lessons provided by the Cold War and the military, and the resilience of the American people to attack remains dangerously low. Although not addressed by the 9/11 Commission, utilizing the graded rating scale the commission used to evaluate progress toward implementing their recommendations, the

effectiveness of national efforts at building resilience in the population would be graded no better than a C-.[55] Clearly much remains to be done.

While there are many things the government can do to prevent an attack from happening, no amount of pre-emption, intelligence, or security can eliminate the possibility of attack. As long as the threat exists, efforts must be made to enable the general population to respond as well as possible when an attack occurs. Without greater emphasis on increasing the resilience of the population, thousands or millions could be at greater risk if or when another significant attack occurs. For any of the techniques or recommendations to enhance resilience to be effective on a large scale, it will take significant and sustained leadership at the national level.

Although our military is strong and our security sound, our nation could be significantly stronger if we were truly able to, "harness the power of every individual"[56] toward making our nation as strong as it could be. All Americans must be included and encouraged to build the confidence to do their part and to have the optimism that, by doing their part, they make themselves, their families, their communities, and our nation as safe as it can be from those who would do us harm.

Notes

1. "The Road to Resilience," *American Psychological Association*, On-line, Internet, available from http://apahelpcenter.org/featuredtopics/feature.php?id=6&ch=2.

2. Michael Rutter, "Family and School Influences on Cognitive Development," *Journal of Child Psychology and Psychiatry*, 1985, vol. 26, 683-704.

3. "Promoting Resilience," New York State Office of Mental Health; *OMH Quarterly*, March 2003, On-line, Internet, available from http://omh.state.ny.us/ omhweb/omhq/q0303/Resiliance.htm.

4. Ibid.

5. "Fostering Resilience in Response to Terrorism: A Fact Sheet for Psychologists Working with Adults," *American Psychological Association*, On-line, Internet, available from http://www.apa.org/psychologists/pdfs/adults.pdf.

6. Ibid.

7. Ibid.

8. Ibid.

9. John Mueller, "Simplicity and the Spook," reprinted from *International Studies Perspectives*, vol. 6, No 2, May 2005, AWC Terrorism Elective Reader.

10. Anthony Mawson, "Understanding Mass Panic and Other Collective Responses to Threat and Disaster," *Psychiatry*, 68, Summer 2005.

11. Ann E. Norwood, "Commentary on 'Understanding Mass Panic and Other Collective Responses to Threat and Disaster:' Debunking the Myth of Panic," *Psychiatry*, 68, Summer 2005.

12. Anthony Mawson, "Understanding Mass Panic and Other Collective Responses to Threat and Disaster," *Psychiatry*, 68, Summer 2005.

13. Ibid.

14. S.L.A. Marshall, *Men Against Fire: The Problem of Battle Command*; (1947; repr., Norman, OK: University of Oklahoma Press, 2000).

15. Ibid., 42-43.

16. Ibid., 145.

17. Ibid.

18. Samuel A. Stouffer et al., *The American Soldier: Combat and its Aftermath, Volume II*; (Princeton, NJ: Princeton University Press, 1949).

19. "The Road to Resilience," *American Psychological Association*.

20. United States Air Force, Basic Military Training, "About Basic Military Training," On-line, Internet, available from http://www.lackland.af.mil/737web/bmt.htm.

21. Air Force Instruction (AFI) 36-2908, *Family Care Plans*, 1 October 2000.

22. Air Force Instruction (AFI) 44-154, *Suicide and Violence Prevention Education and Training Program*, 3 January 2003.

23. Air Force Instruction (AFI) 44-153, Traumatic Stress Response, 1 May 2006.

24. "From Civil Defense to Emergency Management," On-line, Internet, available from http://fcgov.com/oem/civildefense.php.

25. Laura McEnaney, *Civil Defense Begins at Home*; (Princeton, NJ: Princeton University Press, 2000), 24.

26. Report to the War Department Civil Defense Board, February 1947. In McEnaney, *Civil Defense Begins at Home,* 24.

27. McEnaney, *Civil Defense Begins at Home*.

28. David Hunt, *They Just Don't Get It: How Washington is Still Compromising Your Safety and What You Can Do About It*; (New York: Crown Forum, 2005).

29. Office of Homeland Security, *National Strategy for Homeland Security*, (Washington, DC, July 2002), On-line, Internet, available from http://www.dhs.gov/interweb/assetlibrary/nat_strat_hls.pdf.

30. Homeland Security Presidential Directive-3, Homeland Security Advisory System, 12 March 2002, On-line, Internet, available from http://www.whitehouse.gov/news/releases/2002/03/20020312-5.html.

31. Wikipedia, "Homeland Security Advisory System," On-line, Internet, available from http://en.wikipedia.org/wiki/Homeland_Security_Advisory_System.

32. Remarks by Secretary Ridge, Attorney General Ashcroft, and Director Mueller, (Washington, DC: U.S. Department of Homeland Security, Office of the Press Secretary,

7 February 2003), On-line, Internet, available from http://www.dhs.gov/dhspublic/display?content=451.

33. Linda Feldman, "Terror Alerts Create a Run on Duct Tape," *Christian Science Monitor*, 13 February 2003, On-line, Internet, available from http://www.csmonitor.com/2003/0213/p01s02-ussc.html.

34. Mimi Hall and Kevin Johnson, "Ridge on Defensive after Terror Alert," *USA Today*, 3 August 2004, On-line, Internet, available from http://www.usatoday.com/news/washington/2004-08-03-terror-analysis_x.htm.

35. Mimi Hall, "Ridge Reveals Clashes on Alerts," *USA Today*, 10 May 2005.

36. Department of Homeland Security, *Citizen Corps Annual Report 2004*, (Washington, DC 2005, 1), On-line, Internet, available from http://www.citizencorps.gov/pdf/news/CC_AR2004_SFS.pdf.

37. Department of Homeland Security, "Citizen Corps Programs and Partners," On-line, Internet, available from http://www.citizencorps.gov/programs/.

38. Department of Homeland Security, "Citizen Corps: A Guide for Local Officials," On-line, Internet, available from http://www.citizencorps.gov/pdf/council.pdf.

39. Department of Homeland Security, "Council Profiles and Resources," On-line, Internet, available from http://www.citizencorps.gov/councils/.

40. National League of Cities; "About Cities," On-line, Internet, available from http://www.nlc.org/about_cities/cities_101/138.cfm.

41. OCR Macro, "2003 Citizen Corps Survey of U.S. Households," (11785 Beltsville Drive, Calverton, MD 20705), On-line, Internet, available from www.citizencorps.gov/ppt/citizen_corps_2003_survey_results.ppt.

42. Department of Homeland Security, *Citizen Corps Annual Report 2004.*

43. McEnaney, *Civil Defense Begins at Home*.

44. Natasha Chin, "Inspiring Preparedness in a Complacent America; Homeland First Response," On-line, Internet, available from http://www.jems.com/homeland firstresponse/CitizenResponder.HTML.

45. OCR Macro, "Fall 2006 Citizen Preparedness Review: A Quarterly Review of Citizen Preparedness Research" (11785 Beltsville Drive, Calverton, MD 20705) On-line, Internet, available from http://www.citizencorps.gov/pdf/cp_surveysdbase_112006.pdf.

46. Department of Homeland Security, *Citizen Corps Annual Report 2004*.

47. Department of Homeland Security, "Homeland Security Centers of Excellence," On-line, Internet, available from http://www.dhs.gov/dhspublic/display?theme=27&content=3856.

48. START "Areas and Projects," On-line, Internet, available from http://www.start.umd.edu/research/areas/index.asp.

49. HR 3774 IH National Resilience Development Act 4, Feb 2004, On-line, Internet, available from http://thomas.loc.gov/cgi-bin/query/z?c108:H.R.3774.IH.

50. Ibid.

51. Comments by Governor Tom Kean at Bill Drop of "The National Resilience Development Act of 2003," On-line, Internet, available from http://www.healthtogether.org/healthtogether/reseources/news_kennedy_bill_drop.html

52. HR 3774.

53. Department of Homeland Security, *Citizen Corps Annual Report 2004*.

54. "Immunizing the Public Against Terrorism: The ICT Educational Project," On-line, Internet, available from http://www.ict.org.il/institute/Projectdet.cfm?ProjectID=1.

55. Thomas H. Kean et al., *Final Report on 9/11 Commission Recommendations*, (Washington, DC: 9/11 Public Discourse Project, December 2005).

56. Department of Homeland Security, *Citizen Corps Annual Report 2004*.