# Comparative U.S.-Israeli Homeland Security

Jeffrey A. Larsen and Major Tasha L. Pravecek, USAF



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# COMPARATIVE U.S.-ISRAELI HOMELAND SECURITY

by

Jeffrey A. Larsen Tasha L. Pravecek

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Air University

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# **Contents**

	Page
Disclaimer	ii
About the Authors	iii
Acknowledgements	<i>v</i>
Foreword	vii
Executive Summary	ix
I. Introduction	1
II. Threats to U.S. and Israeli Homeland Security	11
III. Responding to the Threat: Comparative Organizational Structures	25
IV. Preventing Terrorist Attacks	45
V. Responding to an Attack	71
VI. Analysis: Observations from Israeli Experience	85
Notes	99

# **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.

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#### **Foreword**

This report compares United States and Israeli homeland security practices. Its purpose is to determine whether there are lessons from Israeli experience that might enhance U.S. homeland security efforts.

The research for this study included a literature review as well as field interviews with American and Israeli elites in Washington, D.C., and Israel during the summer of 2005. The principle investigator met with key Israeli homeland security and counterterrorism experts in Jerusalem, Tel Aviv, Ramla, and Hertzilya.

This report sets the stage for a comparison of United States and Israeli homeland security issues and policies by addressing the common and unique threats facing each state. It then looks at how each state has organized its governmental response to those threats, its policies for preventing terrorist attacks, and its response capabilities should an attack occur. In the final section it lists lessons from Israeli experience that might be considered by the United States, along with a discussion of the reasons the United States will likely be unable or unwilling to implement those lessons.

Unless otherwise noted, all photographs in this report were taken by Jeffrey Larsen in Israel, June 2005. The manuscript was completed in June 2006, prior to Israel's military incursion into Lebanon.

# **Executive Summary**

### **Purpose and Research Method**

This report examines the premise that there are lessons from Israeli experience that might enhance United States homeland security efforts. The research for this study included a literature review and field interviews with American and Israeli elites in Washington, D.C., and Israel during the summer of 2005.

## **Organization and Content of this Report**

This report addresses the common and unique threats facing each state and related homeland security issues and policies. It begins with the threats experienced by each nation, examining the respective homeland security organizational structures and ways of preventing attacks and responding to attacks that do occur. The report then compares each country's homeland security program. Where appropriate, personal observations derived from the authors' interviews in each country are included. The final section addresses a series of lessons the United States might consider in its efforts to improve its homeland security, as well as some discussion of where it might not be advantageous or feasible to follow the Israeli model.

#### Threats to U.S. and Israeli Homeland Security

The United States and Israel each face a number of threats to their homeland—some shared, some unique to each state. Some threats common to both the United States and Israel include:

- Terrorism and the Global War on Terror
- State Aggression by Sovereign Powers
- Weapons of Mass Destruction
- Trans-Border Issues

The United States was protected throughout most of its history by two great oceans, far from the great powers that could threaten its existence. This situation changed during the Cold War with the threat of nuclear weapons, strategic long-range bombers, and intercontinental ballistic missile (ICBM) delivery systems. While ICBM attacks from a few countries remain a concern today, other more immediate issues plague the United States. Today, the United States is concerned with protecting itself from international terrorist attacks and the threat from a small number of rogue states, including North Korea, Iran, and Syria. Additionally, illegal drug transport across U.S. borders remains a significant worry. However, the threat to the United States is still less, day to day, than it is in Israel.

Israel is a nation at arms, a situation reflected in its robust military forces, its emphasis on homeland defense, and its willingness to give up some civil liberties for the sake of security. Israel's Home Front Command describes four primary threats to Israeli territory: ballistic missile attack, mass disaster, air attack, and terrorist actions. Israel is plagued almost daily by Palestinian terror attacks, and lives under the threat of medium-range ballistic missiles from neighbors such as Egypt, Syria, Iran, and Saudi Arabia.

#### **Responding to the Threat: Comparative Organizational Structures**

The global events of the past two decades have shaped the security strategies found in U.S. and Israel homeland security programs. Israel undertook significant organizational changes in response to the SCUD missile attacks of the 1991 Gulf War. The United States progressively began to reshape its national homeland security strategy in response to terror attacks after the bombings at the World Trade Center (1993), Khobar Towers (1996), the U.S. Embassies in East Africa (1998), and the USS *Cole* (2000). However, it did not adopt truly sweeping policy changes until the devastating September 11, 2001, attacks.

The United States and Israel have developed organizations designed to protect their respective homelands from attack and to aid recovery after an incident occurs. In the United States, the primary agencies addressed are the Department of Homeland Security and U.S. Northern Command. In Israel, the Israeli Defense Forces and Home Front Command serve complementary roles in protecting their homeland.

Additionally, the United States and Israel have developed policies and strategies directing homeland security. The primary document that guides the United States' homeland security is the National Strategy for Homeland Security. This report instituted revolutionary changes to emergency response, including the National Response Plan and the National Incident Management System. In Israel, the Home Front Command directs its civilian population through a comprehensive brochure: "In the Event of a Genuine Alert, Information on Civil Defense for the Family." The brochure provides precise instructions for actions to take before, during, and after a conventional or unconventional attack.

#### **Preventing Terrorist Attacks**

Organizational initiatives are not the only approach to preventing terrorist attacks. Both countries have developed parallel approaches to preventing, or at least reducing, the possibility of terrorist attack on their homelands. In the United States, the plans and programs designed to prevent terrorist attacks are derived from the 2003 National Strategy for Combating Terrorism, the 2002 National Security Strategy, and the 2002 National Strategy for Homeland Security. Domestic counterterrorism initiatives are undertaken by the Department of Homeland Security, U.S. Northern Command, the Department of Defense, and other federal agencies. Some specific initiatives undertaken by the Department of Homeland Security are focused on:

- Intelligence and Warning
- Border and Transportation Security
- Critical Infrastructure Protection

Much of the U.S. effort focuses on improved intelligence capabilities to identify threats, and preemptive military measures to intervene when possible to stop an attack.

Israeli efforts are headed by the Israeli Defense Forces and the Home Front Command. Israel's security initiatives include a focus on borders and transportation security and international cooperation. These programs are further enhanced by inputs from the Israeli Armament Development Authority, which is engaged in the fields of border defense, defense of

public transport on land, sea and air, combating domestic crime and terrorism, preparing for a state of emergency, and dealing with national disasters. Other specific Israeli homeland security initiatives are focused on borders and transportation security.

#### Responding to an Attack

Very little, if any, anti-terrorism training is conducted in U.S. schools or the population at large. In Israel, on the other hand, there is a much greater focus on the citizen's responsibility to prepare for, and respond, should a terror attack or natural disaster occur. Specific areas of focus in the United States include the National Incident Management System, National Disaster Medical System, Strategic National Stockpile, Citizen Corps, Emergency Alert System, sheltering in place, and the Ready Campaign. The complementary Israeli programs include Israel's layered response, Magen David Adom, volunteer opportunities, Home Front Command's emergency notification system, protected spaces, personal protection, and readiness education.

## **Analysis: Observations from Israeli Experience**

The research and field interviews conducted have led the authors to identify several lessons of Israeli experience. Those highlighted include the following:

- **Know Your Adversary**—Local knowledge enables an in-depth understanding of one's neighbors and potential adversaries. This knowledge allows the Israeli intelligence and security apparatuses to prepare appropriately and pre-position its defensive forces accordingly to minimize such threats. When a state knows its adversary it can tailor its strategy to maximize its chances of dissuading, deterring, or defeating the threat.
- Interagency Cooperation—Israeli practices that the United States
  may wish to copy include realistic practices, drills, and scenarios,
  minimizing compartmentalization of information, and developing a
  process that ensures all organizations talk to one another more
  regularly. Israel has achieved a coordinated network-centric
  intelligence effort.

- **Tight Internal Security**—All public buildings, including shopping malls and bus and train stations, have armed guards and metal detectors at their gates. Israel feels like a police state to foreign visitors, one in which security concerns are omnipresent. This internal security provides a deterrence measure not seen in the United States.
- Profiling—Israel admits that it uses profiling of individuals in its
  efforts to uncover terrorists. Security personnel look at a number
  of indicators to determine whether a person is perceived to be a
  threat, including a color-coded license plate system that
  differentiates between Israeli Jews, Israeli Arabs, and Palestinians.
- Protected Spaces—Every new home and public building in Israel
  is required to have a protected space—a room built of reinforced
  concrete with blast door and window that is designed to provide
  overpressure protection against bombs and chemical or biological
  weapons attack.
- Barriers—Israel uses physical barriers to prevent illegal infiltration.
   This can be accomplished by walls or fences, making liberal use of sensors.
- Information Sharing Between the Two States—Ties between the United States and Israel should be close to maximize cooperative ventures and allow each country to benefit from the lessons of the other in the fight against terrorism and ensuring homeland security.
- **Public Education**—Israel has undertaken major measures to explain realistic threats, provide clear information in the form of civil defense booklets and warning sirens, and distribute personal protection kits to its population.
- Offensive Military Action—Israel has proven its willingness to pursue offensive actions whenever necessary, relying on preemptive acts, preventive wars, and targeted assassinations to dissuade or deter an adversary from attacking its homeland.
- **Security Decision-Making**—Israel's national security establishment is much smaller than that in the United States, making it easier for a

small group of senior leaders to make consensual decisions more efficiently and quickly.

- Compromise and Appeasement—Israel has attempted to ensure the harmonious coexistence of an Israeli state in an Arabdominated land to ensure its homeland security.
- Advanced Technology—Modern technologies, especially sensors, are extensively used in Israel, particularly in border control and noninvasive surveillance methods.

Despite the benefits that may accrue from adopting some of these lessons, the United States is unlikely to adopt many of them. Differences in country size, culture, attitudes toward security, historical experiences, and bureaucratic design contribute to the propensity of the United States to continue developing a homeland security strategy with the least impact on individual civil liberties and its population's accustomed way of life.

#### **Conclusion**

The United States and the entire international community can learn much from Israel's efforts in the homeland security arena. Coordinated teamwork between government agencies, the military, and emergency responders is imperative. Peacetime training with all emergency response entities goes a long way towards smoother operations during actual incidents.

Israel does an excellent job of teaching its civilian population how to be self sufficient in the event of an incident. The brochure distributed by the Home Front Command is very explicit in its content, providing a step-by-step format to follow in the event of an incident. Hopefully, the preparedness function of the United States National Incident Management System will be influential in ensuring a means for educating the general public regarding appropriate actions in the event of an incident.

The Israeli people live in a perpetual state of concern due to the constant threat of terrorism. If such a situation becomes the norm in American or other Western states, then U.S. counterterrorism policy has failed. The United States may benefit from lessons learned through hard experience by our Israeli allies.

# Comparative U.S.-Israeli Homeland Security

Jeffrey A. Larsen Tasha L. Pravecek

# I. Introduction: U.S. and Israeli Homeland Security<sup>1</sup>

"We are today a Nation at risk to a new and changing threat."

President George W. Bush
 National Strategy for Homeland Security, July 2002<sup>2</sup>

The September 11, 2001, terrorist attacks against the World Trade Center and the Pentagon were shocking and dramatic experiences for the United States and the world. These terror attacks emphasized that no nation, however powerful, is immune from attack on its homeland. As a result, many nations began to meticulously review the state of their homeland security programs in order to ensure adequate protection of their people. Israel, due to its experience with SCUD missile attacks during the 1991 Gulf War, frequent terror attacks, and daily threats to its security, has developed a premier homeland security organization in the Israeli Defense Forces (IDF) and its subordinate Home Front Command (HFC). United States practices could be enriched through the study and adoption of some of the ideas, policies, and organization of Israel's homeland security forces.

## Why Study Israel?

There are certainly lessons the United States can learn from Israel's nearly 60-year battle against terrorism and attacks from its neighbors. Some key factors have enabled or forced Israel to develop a superior homeland security organization and capabilities. First, Israel is more practiced in dealing with constant threats and attacks, and thus has had to develop an effective and efficient method of response before and after

attack. Israel's small geographic size and population compared to the United States simplifies the Israeli homeland security organization and response plans. The population of Israel is more accepting of the restrictions that come with increased homeland security because of the years of violence and bloodshed they have experienced. Israel requires a robust and effective homeland security program due to Israel's geopolitical situation and its need for both defenses and credible deterrence.

These differences between the United States and Israel demonstrate why it is somewhat easier for homeland security to be successful in Israel. However, the price for this expertise has been costly in terms of lives lost, property damaged, and entire lifetimes spent in a state of constant readiness to respond appropriately to terrorist attack.



Figure 1. Old City of Jerusalem from the Mount of Olives (Larsen)

#### Israeli Experience

Since declaring statehood on May 14, 1948, the people of Israel have endured regular attacks on their homeland. In addition to fighting five major wars, attacks from Israel's enemies have posed a persistent



Figure 2. Map of Israel (CIA)

challenge. For instance, during the 1991 Gulf War, 39 Iraqi SCUD missiles hit Israeli cities. resulting in 74 deaths (although all but one of those were only indirectly related to the attacks).<sup>3</sup> This war moved the combat line from the country's border to its home front and exposed weaknesses in the civil defense system.<sup>4</sup> The second Intifada, or "time of troubles," began on September 29, 2000. Palestinians believe the Intifada to be a war of national liberation against foreign occupation, but Israelis consider Intifada to be a terrorist campaign.<sup>5</sup> Between September 2000 and December 2005 Israel endured over 22,400 terror attacks causing 7,250 casualties and over 1,000 deaths.<sup>6</sup> Almost half of these deaths were caused by suicide bombings. Through all of the attacks in the past decade. the Israeli Defense Forces and Home Front Command have demonstrated their expertise in first response.

After the Iraqi SCUD attacks in 1991, the Israeli

Defense Forces determined that the entire emergency response system needed to be revamped to protect the civilian population from future conventional and non-conventional attacks. This realization led to the creation of the Home Front Command in February 1992.<sup>7</sup> The HFC became a component of the IDF and replaced the Civil Guard, which had been formed after the 1973 war.<sup>8</sup> The HFC was given the daunting task of

coordinating 260 local authorities throughout Israel in the event of a national emergency. Home Front Command is now a well-established organization, although some Israelis still question its necessity.

#### **Comparative Size**

Israel is a small country, approximately the size of the state of New Jersey, consisting of roughly 20,770 square kilometers (by comparison, the United States is 9.6 million square kilometers). The population of the United States is almost 300 million, while Israel has just over 6 million people. It may be argued that a coordinated, centralized homeland security system is easier to implement and sustain in a smaller country like Israel. If true, many of Israel's security initiatives may not be practical or feasible for implementation within the United States. However, emulating appropriate aspects of Israel's capability may be a goal worth pursuing.

#### **Israel's Security Culture**

Israeli civilians have paid a high price for the Home Front Command's expertise and world-class homeland security organization. The Israeli people have repeatedly experienced large-scale attacks, and are therefore willing to accept some limits to their freedom in return for greater protection. Israelis are born into the threat. Most citizens appreciate the need for a heightened state of readiness and support homeland security initiatives. It is a way of life much different than the history and experience of the United States.

Nevertheless, society learns to adjust to security measures. For instance, in the United States today, few question why only passengers are allowed to pass through the airport security checkpoint. The days of watching passengers walk off aircraft and greeting your family and friends at the gate are a distant memory. This security change occurred after only one major terrorist attack on the United States. The citizens of Israel have the unfortunate disadvantage of frequent reminders why homeland security is critical to their continued existence. Israelis possess a different mindset, and their degree of support for Home Front Command reflects more than simple nationalism. Israelis depend on Home Front Command

and civil defense measures because they know that they need it in order to survive and recover after the next attack.

#### Israel's Credible Deterrence and Defense

Israel recognizes the necessity of developing an ability to survive despite any attack, conventional or unconventional. Thus, Israel is prepared for any type of weapon coming from multiple directions. Israel maintains a significant military capability, demonstrates a willingness to conduct preemptive strikes, and maintains a credible deterrence capability based ultimately on an opaque nuclear capability. Credible deterrence has been their primary focus for thwarting an attack by a weapon of mass destruction (WMD). However, given the uncertainty of deterrence, especially in the current environment where the rationality and regard for the consequences of weapons of mass destruction by international actors is suspect, Israel has developed extensive civil defenses and passive defensive capabilities, as well.

Israel's defensive posture against chemical and biological threats, for example, is a combination of passive systems, such as protective gas masks and sealed rooms. Israel was the first and remains the only country to develop and implement measures to protect its entire civilian population against a full-scale chemical attack.<sup>12</sup> The Israelis began to address response options for dealing with chemical attacks in the mid-1960s, after Egypt used chemicals on Yemen. In the 1970s, as Iraq, Syria, and Libya began to develop chemical weapons capabilities, Israel continued to enhance its capability to respond to such an unconventional attack.<sup>13</sup>

#### **United States Progress**

Since September 11, 2001, U.S. local, state, and federal agencies have made exceptional progress in improving their ability to defend against catastrophic threats through the enactment of laws, development of sensors and detection equipment, and initiation of many disaster relief and threat-related programs. The National Strategy for Homeland Security called for expanded capabilities and improved coordination among federal agencies. The U.S. Department of Homeland Security (DHS), established in 2002, has made noteworthy advances in creating a more effective

disaster response and reinforcing the security of the United States homeland.

It is important to note that the United States may never fully be able to prevent a terrorist attack on the homeland. Nevertheless, the United States is more prepared today to defend against and react to catastrophic attacks. To enhance U.S. preparedness, it should look to other nations for potential capabilities to emulate. The success of the HFC has resulted in Israel being recognized as an expert in homeland defense and antiterrorism strategies. Although valuable interaction between homeland security officials from the United States and Israel has already occurred, the United States has much to learn from the Israeli experience. 14

## **Purpose of this Project and Report**

This report provides a comparative analysis of the United States and Israel homeland security programs, policies, and organizations. It presents an overview of the homeland security programs in both the United States and Israel. The study addresses similarities and differences in the policies, techniques, and lessons learned by these two nations, as well as recent initiatives within each country, and the modest collaborative efforts between the United States and Israel in support of homeland security. The purpose of the project and resulting report was to identify homeland security programs and ideas which could be adopted in whole or part by the United States to strengthen its homeland security. The report illustrates that while both nations have made great strides in their homeland security efforts, there is still much that needs to be done. Furthermore, the United States may be reticent to adopt some Israeli practices for reasons of cultural or geographical differences between the two states.

## **Organization and Content of this Report**

The report begins with the threats faced by each nation, examining the respective homeland security organizational structures and ways of preventing attacks and responding to attacks that do occur. The report then compares each country's homeland security program. Where appropriate, personal observations derived from interviews in each country are included. The final section addresses a series of lessons the United States might consider in its efforts to improve its homeland security, as well as some discussion of where it might not be advantageous or feasible to follow the Israeli model.

#### Threats to U.S. and Israeli Homeland Security

The United States and Israel each face a number of threats to their homeland—some shared, some unique to each state. This section reviews some of those threats to each country's homeland. Shared threats include terrorism and the global war on terror, state aggression, weapons of mass destruction, and trans-border issues.

The United States has been protected throughout most of its history by two great oceans, far from the great powers who could threaten its existence. This situation changed during the Cold War with the threat of nuclear weapons, strategic long-range bombers, and intercontinental ballistic missile (ICBM) delivery systems. While ICBM attacks from a few countries remain a concern today, other more immediate issues plague the United States. Today, the United States is concerned with protecting itself from international terrorist attacks and the threat from a small number of rogue states, including North Korea, Iran, and Syria. Additionally, illegal drug transport across U.S. borders remains a significant worry. However, the threat to the United States is still less, day to day, than it is in Israel.

Israel is a nation at arms, a situation reflected in its robust military forces, its emphasis on homeland defense, and its willingness to give up some civil liberties for the sake of security. Israel's Home Front Command describes four primary threats to Israeli territory: ballistic missile attack, mass disaster, air attack, and terrorist actions. More specifically, Israel is plagued daily by Palestinian terror attacks, and lives under the threat of medium-range ballistic missiles from neighbors such as Egypt, Syria, Iran, and Saudi Arabia.

#### **Responding to the Threat: Comparative Organizational Structures**

The global events of the past two decades have shaped the security strategies found in U.S. and Israeli homeland security programs. Israel

undertook significant organizational changes in response to SCUD missile attacks during the 1991 Gulf War. The United States progressively began to reshape its national homeland security strategy in response to terror attacks after the bombings at the World Trade Center (1993), Khobar Towers (1996), U.S. Embassies in East Africa (1998), and the USS *Cole* (2000). However, the United States did not adopt truly sweeping policy changes until the devastating September 11, 2001, attacks on the nation.

This section briefly reviews the major U.S. and Israeli organizations designed to protect their respective homelands from attack and to aid recovery after an incident occurs. In the United States, the primary agencies addressed are the Department of Homeland Security and U.S. Northern Command. In Israel, the Israeli Defense Forces and Home Front Command serve complementary roles in protecting their homeland.

#### **Preventing Terrorist Attacks**

Organizational initiatives are not the only approach to preventing terrorist attacks. Both countries have developed parallel approaches to preventing, or at least reducing, the possibility of terrorist attack on their homelands. In the United States, the plans and programs designed to prevent terrorist attacks are derived from the 2003 National Strategy for Combating Terrorism, the 2002 and 2006 National Security Strategies, and the 2002 National Strategy for Homeland Security. Domestic counterterrorism initiatives are undertaken by the Department of Homeland Security, U.S. Northern Command, the Department of Defense, and other federal agencies. Much of the U.S. effort focuses on improved intelligence capabilities to identify threats, and preemptive military measures to intervene when possible to stop an attack.

Israeli efforts are headed by the Israeli Defense Forces and the Home Front Command. Israel's security initiatives include a focus on borders and transportation security and international cooperation. These programs are further enhanced by inputs from RAFAEL, the Israeli Armament Development Authority. RAFAEL is engaged in the fields of border defense, defense of public transport on land, sea and air, combating domestic crime and terrorism, preparing for a state of emergency, and dealing with national disasters.

#### **Responding to Attack**

It is important to understand each state's anti-terrorism program and doctrine. Very little, if any, anti-terrorism training is conducted in U.S. schools or the population at large. In Israel, on the other hand, there is a much greater focus on the citizen's responsibility to prepare for, and respond, should a terror attack or natural disaster occur. Specific areas of focus in the United States include the National Incident Management System, National Disaster Medical System, Strategic National Stockpile, Citizen Corps, Emergency Alert System, sheltering in place, and the Ready Campaign. The complementary Israeli programs include Israel's layered response, Magen David Adom, volunteer opportunities, Home Front Command's emergency notification system, protected spaces, personal protection, and readiness education.

#### **Comparative Analysis: Lessons from the Israeli Experience**

The research and field interviews conducted have led the authors to identify several lessons of Israeli experience. Those highlighted in this section include: knowing one's adversary, tightening internal security, profiling, preparing protected spaces, constructing barriers, promoting information sharing between organizations, conducting public education, pursuing preemptive actions, making adequate security decisions, and adopting advanced technologies.

Despite the benefits that may accrue from adopting some of these lessons, the United States is unlikely to adopt many of them. Differences in attitudes toward security, historical experiences, government structure, and bureaucratic design contribute to the propensity of the United States to continue developing a homeland security strategy with the least impact on individual civil liberties and its population's accustomed way of life.

# II. Threats to U.S. and Israeli Homeland Security

The United States and Israel each face a number of threats to their homelands: some shared, some unique to each state. This section reviews those threats to homeland security in each country.

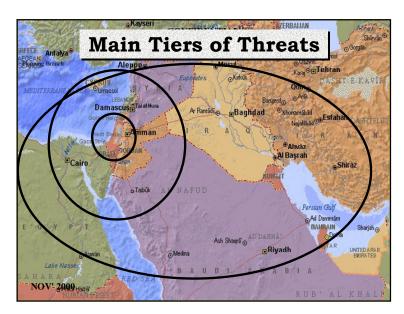
The United States has been protected during much of its history by the barriers of two great oceans and friendly neighbors. The rivalry with the Soviet Union, equipped with long-range nuclear and biological weapons threatened the existence of the United States. But, as the Cold War ended, so too did that threat. Today, as the 2002 U.S. National Security Strategy states, "the gravest danger the nation faces lies at the crossroads of radicalism and technology, as rogue state and non-state adversaries openly pursue weapons of mass destruction."

In the Holy Land, promised to the Israelites by Jehovah in the 3rd millennium B.C. and to the Muslims by Allah in the 8th century A.D., we find the most fought-over piece of real estate in the world. It lies between the Mediterranean Sea and the River Jordan, with its capital in Jerusalem, a city sacred to the three great monotheistic religions of Judaism, Christianity, and Islam. Born in war and beset by adversaries ever since, Israel lies at the junction of the three continents of Europe, Asia, and Africa, with links to the Arabian Peninsula. Invaders have come to and through this region throughout recorded history. And because it is at the crossroads where Muslims, Jews, and Christians intersect, it has been the site of numerous religious wars as well.

Today, while peace occasionally punctuates the long-simmering dispute between the Jewish state of Israel, its Arab neighbors, and its internally displaced Palestinian population, the multiple parties holding claims to the territory of the Israeli state remain locked in a bitter long-term conflict. Israel considers its very existence threatened. As such, it remains in a status of constant threat, with the peaceful periods between conflicts known as "dormant war." In many ways Israel is a garrison state, a nation at arms, a situation reflected in its robust military forces, its emphasis on homeland defense, and its willingness to give up some civil liberties for the sake of security.

Official Israeli briefings often use three overlapping circles of threat to demonstrate their levels of concern and preparedness, as shown in

Figure 3. The first and largest circle encompasses most of the Middle East, including the eastern Mediterranean, Iran, Egypt, and Saudi Arabia. The countries within this arc represent traditional state threats to the existence of Israel, using multiple means to deliver conventional and WMD warheads.



**Figure 3. Three Circles of Threat**<sup>15</sup>

The second circle surrounds Israel's immediate neighbors: Egypt, Jordan, Syria, and Lebanon. These are the proximate state threats to the sovereignty and survival of Israel, states with which Israel has fought numerous conventional wars over the past 60 years, and despite a recent quiet period, the states against which it must be ready to defend on a daily basis.

The third and smallest circle includes only Israel and the occupied territories—Gaza and the West Bank. This represents the terrorist threat from within the country and its territories gained in the 1967 war. The threat here is Palestinian-inspired terrorism, as well as attacks from any source inside the country, potentially including disgruntled elements of Israeli society. This smallest circle reminds the reader that Israel cannot

simply focus on foreign threats, nor solely on its Arab neighbors – it has an equally important concern on a daily basis with internal security.

#### **Common Threats**

#### Terrorism and the Global War on Terror

Both the United States and Israel face the global threat of violent nonstate terrorism from multiple sources. This has been a predominant feature of Israeli security concerns since its recognition as a country in 1948, and it came to the forefront for the United States as a result of the attacks on September 11, 2001. Many of the adversarial organizations with which the two states are concerned come from the Middle East region, including the most powerful and deadly of those groups, Al Qaeda. The United States and Israel have both felt it necessary to increase their security awareness and preparedness as a result of 9/11 and the imminent threat posed by such groups. In addition, some nation-states actively sponsor or condone terrorism; these include Israel's neighbors Syria, Lebanon, and until recently, Iraq, as well as regional threats such as Iran, Egypt, and Saudi Arabia. Home-grown terrorism, whether from Palestinian Arabs, Arab Israelis, or right wing orthodox Jewish conservatives, remains a concern to Israel that is without parallel in the United States.

The Al Qaeda terrorists are relentless and patient, as evidenced by their persistent targeting of the World Trade Center towers over the years. They are also opportunistic and flexible, learning from experience and willing to modify their tactics and targets to exploit perceived vulnerabilities while avoiding observed strengths. As we increase security around more predictable targets, they, in turn, shift focus to less protected assets. Basically as we strengthen our countermeasures for any one terrorist tactic or target, they shift their tactic and targets to avoid detection and capture. Likewise, we must understand their intent if we are to effectively counter their efforts. <sup>16</sup>

Terrorists' pursuit of their long-term strategic objectives includes attacks on critical infrastructures and key assets to achieve three general types of effects:

- *Direct infrastructure effects:* Cascading disruption or arrest of the functions of critical infrastructures or key assets through direct attacks on a critical node, system, or function.
- *Indirect infrastructure effects:* Cascading disruption and financial consequences for government, society, and economy through public- and private-sector reactions to an attack.
- Exploitation of infrastructure: Exploitation of elements of a particular infrastructure to disrupt or destroy another target.<sup>17</sup>

#### **State Aggression**

While less of a threat than it was during the Cold War, the United States also faces the potential of attacks by a sovereign power. For the United States, the greatest concern today is the set of "rogue" states including North Korea, Iran, and Syria. That grouping used to include Iraq and Libya as well, but neither of those states poses a direct threat any longer as a result of recent changes to their internal situations. In addition, the United States must remain cognizant of the existential threat posed by nuclear powers Russia and China, both of which have nuclear—tipped ICBMs that can reach North America.

Israel faces a more specific threat from some of its regional neighbors, although much of that threat has been mitigated in the past two decades by peace treaties with former enemies Egypt and Jordan, and general improvement with respect to the situation in Lebanon. As a result, the borders established between Israel and its neighbors during conflicts in 1948, 1967, and 1973, as modified in some cases by peace agreements, are now fairly stable and accepted by nearly all parties. The likelihood of state aggression against Israel appears to be less than it has been at any other time in its history. The exceptions to this generalization come in the form of the medium-range missile threat posed by Iran (as well as its emerging nuclear weapons program) and potentially from Saudi Arabia, and the shorter range threat from Syria due to the unresolved Golan Heights dispute – although the conventional military threat from Syria today is extremely low.

#### **Weapons of Mass Destruction**

Both countries face the possibility that the next attack against their homeland may involve some form of weapon of mass destruction (WMD). This could include nuclear, chemical, or biological weapons or radiological dispersal devices. The United States is most concerned with a weapon being smuggled into the country through its porous borders or through an unsearched trade vehicle, such as a shipping container. Of the weapons of concern, for various reasons the United States is most concerned with, and potentially least prepared to deal with, an attack from a virulent and contagious biological pathogen.

Israel is equally concerned with such weapons, but the delivery means of nuclear weapons are more likely to be medium range ballistic missiles (MRBM) or aircraft. Israel has much better border controls and security than does the United States. It also has neighbors that are within range of tactical missiles, artillery, and aircraft, any of which could deliver a WMD package, without warning, to the populated sections of Northern and Central Israel. Iraq had an extensive research and development program in all types of WMD; Iran is actively pursuing nuclear power and, presumably, a nuclear weapons capability; and Syria has long been suspected of possessing chemical weapons and perhaps biological weapons as well.

#### **Trans-Border Issues**

Both states face a number of trans-border issues that spill over from neighboring states, or are simply a fact of modern life that each must deal with. The first of these "threats" is unchecked illegal immigration. The United States is particularly concerned with this threat along its southern border with Mexico, a 2,000 mile no-man's land that is virtually uncontrolled. Across this border each year travel tens of thousand of illegal immigrants, potentially including international terrorists bent on more than simply finding a job and sending money home. The border is also porous for transshipment of illegal drugs and counterfeit or unregistered goods.

Israel is less concerned with this immigration issue. They have worried more about these problems for a longer period of time and have developed a stronger national consensus, which allows them to build physical barriers, provide stronger customs and immigration policies, and generally insulate their territory from outside influence.

One reason for the difference in perception is the economic benefit that the United States receives from such a porous border in the form of inexpensive guest labor. Taking this argument a step further, one could argue that immigration has been vital to the development and growth of both states. Both continue to benefit from the influx of new citizens seeking economic prosperity and increased freedoms found only in capitalist democracies like Israel and the United States. America, for example, is currently benefiting from the large-scale movement of Latinos and Asians into the United States. Similarly, Israel's population has ballooned in the past decade with the arrival of a wave of Russian Jews escaping the Former Soviet Union (this group now makes up 1 of every 6 Israelis). Neither country would be as strong, as large, or as economically powerful as it is without the help of such new residents. The influx of Russian immigrants has been particularly valuable to Israel since 2000, when it determined that the threat from the flow of inexpensive Palestinian labor across the border had become too great to allow it to continue.



Figure 4. Israeli Arab Mosque near Nazareth (Larsen)

A final threat is cyber attack. The potentially immense impact on a society and its economy from an electronic cyber attack has only recently become understood. For example, cyber attack would be impossible to prevent using traditional military means such as deterrence or defense, yet it could potentially bring down a nation's entire economic, transportation, or communication infrastructure.

#### **Country Unique Threats**

#### **United States**

The United States is primarily concerned with a small number of socalled "rogue" states: North Korea, Iran, and Syria. In particular, North Korea and Iran pose the greatest immediate threats to the United States with their nuclear weapons programs, their constant saber-rattling, and their avowed anti-American foreign policies. In addition to nuclear weapons, both states have developed medium-range ballistic missiles, and are on their way to having the capability of reaching North America and Europe with intercontinental range missiles.

Another state of concern to the United States is China. China is the state with the largest population in the world, is the globe's fifth nuclear power, and poses a perpetual threat to a United States ally, Taiwan. While the United States would prefer to see China continue its momentum toward becoming a capitalist state, and eventually a democracy, it cannot ignore its security obligations to Taiwan or fail to consider the consequences of a more militaristic and adventurous China arising in the future.

The greatest concern to the United States in terms of weapons delivery vehicles remains the ICBM. Only half a dozen states have ICBM capabilities today, including Russia and China, but others, such as North Korea, Iran, India, and Pakistan are seen as moving toward that capability in the future, as well. In addition, many states possess or are seeking cruise missiles, which can be launched against their targets from shorter ranges from ships or aircraft.

A final threat of major concern to the United States, one which is not normally considered a purely military threat, is illegal drugs finding their way into American society. Most of these come across the southern border, but others undoubtedly are smuggled into the country in shipping

containers, tourists' luggage, and traditional smuggling drops on the seacoasts and northern border—which is even less guarded than the border with Mexico. The negative economic and societal impact of illegal drug use in the United States has an incalculable impact on the country's productivity.

#### **Israel**

Tel Aviv also faces a number of discrete threats that are not found in the security literature of the United States. This is not to imply that the United States does not care about these issues. America's long-standing commitments to Israel, including the guarantee of Israel's survival as a nation, ensure that Israel's problems are, if only indirectly, also American problems. Nonetheless, there are certain country specific issues that we can ascribe to Israel. Home Front Command lists four primary threats to Israeli territory: ballistic missile attack, mass disaster strikes, air attacks, and terrorist actions.

The foremost immediate threat to Israel is that posed by terrorist attacks, primarily from the nearby Palestinian population. The ongoing conflict with the Palestinians has caused immeasurable suffering to the Jewish population, who moved into the Holy Land over the past 100 years. While the two groups had problems living together prior to World War II, once Palestine was partitioned by the United Nations in 1947 the differences and hatred grew considerably.

There are several million displaced Palestinians living in the occupied territories of Israel or in refugee camps in neighboring states. How best to deal with this Palestinian-Israeli problem—permanent removal from the Jewish state of Israel, granting some level of autonomy within their territories (the two state solution), or living together as two nations in one state—is a matter that no one has yet devised. As a result, the Israeli people have faced daily attacks from Palestinian terrorists for decades. Only recently has the pace subsided, perhaps due to physical barriers and a more aggressive military campaign to find and capture or kill the leaders of the Palestinian cause. However, the occasional suicide bombing or rocket attack proves that the issue has not been permanently resolved.

In addition to the Palestinian cause, Israel faces additional threats from within its own society. Extreme right wing or orthodox groups oppose any compromise with the Palestine Authority. These groups believe that God gave the Holy Land to the Jews, that their mission is continual expansion of their territory and their security buffer, and that it would be morally wrong to give any territory back or agree to other concessions with Arabs. Such hard-liners were responsible for the assassination of Israeli Prime Minister Yitzhak Rabin in 1995, and opposed the withdrawal of Israeli settlements in Gaza and the West Bank in 2005.



Figure 5. Burned Disco on Tel Aviv's Ocean Front (Larsen)

Today, Iran poses the greatest near-term state threat to Israel. Throughout 2005 and early 2006, the Iranian president ratcheted up the level of anti-Israeli rhetoric. Meanwhile, Iran appears to be inching closer to its own nuclear weapons capability despite its Non-Proliferation Treaty pledges. In response, Israeli statements have made it clear that it will not allow Iran to achieve nuclear status. It proved its willingness to undertake military action against an enemy state nearing nuclear weapons capability in its June 1981 attack on the Osirak nuclear reactor in Iraq. Israel might be tempted to interrupt the Iranian nuclear weapons program in the same way if the international community can not convince Iran's leadership to stop the program.

Another potential military threat to Israel comes in the form of medium-range ballistic missiles in the inventories of several neighbors, including Egypt, Syria, and Iran. While not seen as an immediate concern, such formidable capabilities would present a serious threat if a future conflict were to arise between Israel and the Arab world.

Underlying much of this regional virulent anti-Israeli view is radical Islam. Similar in its views in many ways to the Zionist right wing Israeli groups, this branch of Islam is responsible for much of the anti-Jewish and anti-American rhetoric and terrorist attacks in the Middle East. There is not much either side can do to counter this extremist position, other than long-term efforts to improve relations with the Islamic states that harbor these groups.

## Responses

#### **United States**

United States efforts to respond to and defend against threats to its security are enumerated in national security documents, such as the National Security Strategy (2002 and 2006), Quadrennial Defense Review (2001 and 2006), Nuclear Posture Review (2002), National Strategy to Combat WMD (2002), National Military Strategy (2004), National Defense Strategy (2005), and related publicly released documents. The latest National Security Strategy emphasizes the threats from terrorism, weapons of mass destruction, and unfair economic practices. The document highlights the need for alliances, cooperation with other states and international organizations, counterterrorism, counterproliferation, nonproliferation, consequence management, better intelligence and intelligence sharing, and pushing the spread of free market economies.

The National Security Strategy (2002) specifically addresses America's firm commitment to Israel, while calling for greater efforts to find peaceful solutions to the Palestinian situation and other problems in the Middle East. It makes clear, however, that the foremost responsibility of government in the wake of 9/11 is to "disrupt and destroy terrorist organizations of global reach," especially those pursuing WMD.<sup>18</sup>

As part of its transformation to the new world of global terrorism, the United States has undertaken the greatest reorganization of its government

bureaucracy since the end of World War II. This included the creation of two new organizations dedicated to homeland security and homeland defense: the cabinet-level Department of Homeland Security and a new military unified command, U.S. Northern Command.

The United States has also put into place a modest national missile defense system to provide some protection to the continent against ICBM threats from Northeast Asia. The layered defensive system being implemented is a scaled-down descendent of ballistic missile defense research and development that began in the late 1950s, was rejuvenated by President Ronald Reagan's Strategic Defense Initiative begun in 1983, and modified but continued by each president since. The present system includes both sea- and land-based mid-course and terminal defensive missiles. The United States has developed some of these systems cooperatively with Israel.

#### **Israel**

Perhaps the strongest defensive system in Israel's favor is the sense of a unique "security culture" within its citizenry. As one writer has put it, "there is no other democratic country in which the problem of security occupies as central a place in and of itself as is the case of Israel. Moreover, both in the national consciousness and in the considerations of the government, security occupies a central qualitative position that makes it unique in comparison with other democratic countries." <sup>19</sup>

The assumption is that the threat to Israel's existence is very real. The issue is not one of borders, nor of sovereignty, but of the physical existence of Jews in Palestine. This view was frequently highlighted in speeches by neighboring Arab heads of state in years past, and most recently by the Iranian president.

In response to this threat, which has led to several large scale wars and constant smaller-scale attacks on the state of Israel in its 58-year history, nearly the entire population has participated in military service, including extended time in the reserve forces. Many citizens keep automatic weapons close at hand in their homes. A pervasive air of a highly militarized and security conscious society is obvious to visitors. As a result, despite the existence of a security elite at the decision-making

levels, the borders between the military and civilian sectors of society are quite permeable.

Security has first place in the view of most Israelis, ahead of democratic considerations and civil liberties. This consensus has eroded a bit in recent years due to questionable military moves by the Israeli Defense Forces (IDF) into Southern Lebanon in the early 1980s, and the influx of new citizens that have not shared the same war-time experiences of the first generation of Israeli leaders. Nonetheless, the security community still carries a disproportionate weight in determining national security policy. Still, Israel has not developed into a Spartan military state. It is more like the Athenian model, which "despite its involvement in wars, perhaps no less than that of Sparta, maintained a democratic society and fostered a civilian way of life in times of calm."



Figure 6. Couple carrying automatic weapon while shopping in Jerusalem (Larsen)

In a parallel reorganization to that in the United States after 9/11, the IDF recognized a shortfall in its ability to respond to ballistic missile attack after the 1991 Gulf War. In response, it created IDF Home Front Command to provide early warning, public education, and improved responses to attacks and better consequence management following an attack. HFC is responsible for ensuring the construction of mandatory secure zones in every home and public building in Israel, as well as for the

distribution of chemical weapon defensive kits to each citizen (containing a gas mask and atropine injector). Given Israel's geographic location and its past experience, passive defenses are necessary to protect citizens from the actual threats.

Active defenses have also received increased emphasis. Theater missile defenses include a layered approach employing land-based weapons, including the American-made Patriot PAC III and the jointly developed Arrow anti-missile missile.

## **Conclusion**

The United States and Israel face multiple threats to their borders, their societies, and their ways of life. Some of these are common threats that both countries share; others are specific to their homelands. The two states have a commitment to the protection of liberal democratic capitalism, and have worked together on several joint projects to defend against the threats they face. Some of those responses to these threats are highlighted in the next two sections.

# III. Responding to the Threat: Comparative Organizational Structures

The global events of the past two decades have reshaped the security strategies of many nations. The United States and Israel have developed noteworthy homeland security programs, responsive to each country's perceived and actual threats. Israel underwent significant organizational changes in response to the SCUD missile attacks during the 1991 Gulf War. The United States progressively began to reshape its national homeland security strategy toward response to terror attacks after the bombings at the World Trade Center (1993), Khobar Towers (1996), U.S. Embassies in East Africa (1998), and the USS *Cole* (2000). The United States adopted more sweeping policy changes after the devastating September 11, 2001, attacks on the nation.

This section briefly reviews the major U.S. and Israeli organizations designed to protect their respective homelands from attack, and to recover should an incident occur. In the United States, the primary agencies addressed are the Department of Homeland Security and U.S. Northern Command. In Israel, the Israeli Defense Forces and Home Front Command serve parallel roles to protect their homeland.

#### **United States**

#### **Department of Homeland Security**

In response to terrorist attacks on the United States homeland, President George W. Bush and the U.S. Government took many bold actions, including the establishment of the Office of Homeland Security and publication of focused strategic guidance in the National Security Strategy. President Bush established the Office of Homeland Security within the Executive Office of the President by executive order on October 8, 2001. This office published the National Strategy for Homeland Security in July 2002 to mobilize and organize the nation and secure the United States homeland from terrorist attacks.<sup>22</sup>

The National Security Strategy release was delayed by the terrorist attack of September 11, 2001. This event was the greatest impetus

causing two major variations from previous security strategies. The major differences included a heavy focus on terrorism and the use of weapons of mass destruction in acts of terrorism. In the 2000 National Security Strategy there was already an emphasis on WMD; however, after 9/11 the emphasis was much greater.<sup>23</sup> The strategic guidance in the 2002 National Security Strategy led to the development of the Homeland Security Act which, in turn, directed the creation of the Department of Homeland Security (DHS).

With its mission, "preserving our freedoms, protecting America...we secure our homeland," the Department of Homeland Security was established to unify the extensive national network of organizations and institutions involved in efforts to secure the nation. It brought together 22 entities with critical security missions, with a primary task of protecting the homeland against terrorist threats. DHS consists of eight directorates: Management, Border and Transportation Security, Emergency Preparedness and Response, Science and Technology, Information Analysis and Infrastructure Protection, U.S. Coast Guard, U.S. Secret Service, and U.S. Citizenship and Immigration Services.

After the events of Hurricane Katrina in August 2005 and general experience since the establishment of DHS, many have proposed a DHS re-organization to a more "flat" organizational structure which would allow for more efficient and effective accomplishment of the Department's ability to prepare, prevent, and respond to terrorist attacks or other emergencies. This realignment of DHS organization is also proposed in the Department's "Six-Point Agenda," published in July 2005. The agenda was a result of the second stage review of the DHS in order to recommend ways that they could better manage threat, vulnerability, and consequence risks; prioritize policies and operational missions; and increase security at multiple levels. The agenda will guide the department in the near term and result in changes that will:<sup>27</sup>

- 1. Increase overall preparedness, particularly for catastrophic events;
- 2. Create better transportation security systems to move people and cargo more securely and efficiently;
- 3. Strengthen border security and interior enforcement and reform immigration processes;

- 4. Enhance information sharing with partners;
- 5. Improve DHS financial management, human resource development, procurement, and information technology; and
- 6. Realign the DHS organization to maximize mission performance.

DHS has accomplished significant steps in fortifying its response and recovery should a terrorist attack or major accident or natural disaster occur. On September 30, 2003, DHS rolled out its Initial National Response Plan (NRP) as directed by the President in Homeland Security Presidential Directive 5 (HSPD-5). The Initial National Response Plan identified DHS as the lead federal agency responsible for coordination and development of a unified incident response plan. The Initial National Response Plan was a significant first step towards integrating federal domestic prevention, preparedness, response, and recovery plans into a single all-discipline, all-hazards plan. <sup>28</sup> On January 6, 2005, Secretary Ridge announced the final National Response Plan. The NRP established a unified and standardized approach for protecting citizens and managing homeland security incidents. Its goal was as follows:

All federal departments and agencies that may be required to assist or support during a national incident will use this Plan, whether from threats or acts of terrorism, major natural disasters, or man-made emergencies. The National Response Plan standardizes federal incident response actions by integrating existing and formerly disparate processes. The Plan uses the National Management System to establish standardized training, organization, and communications procedures for multijurisdictional interaction and clearly identifies authority and leadership responsibilities. The Plan also provides a comprehensive framework for private and non-profit institutions to plan and integrate their own preparedness and response activities, nationally and within their own communities.<sup>29</sup>

The NRP established multi-agency coordinating structures to accomplish emergency response execution. The keystone national-level organization which coordinates this execution, providing situational

awareness, is the Homeland Security Operations Center. On July 8, 2004, the Department of Homeland Security stood up the state-of-the-art Homeland Security Operations Center to serve as the primary, national-level nerve center for real-time threat monitoring, domestic incident management, and vertical and horizontal information sharing efforts.<sup>30</sup>

The Homeland Security Operations Center dramatically increased the vertical coordination between federal, state, territorial, tribal, local, and private sector partners. The Center continuously collects and integrates information from a variety of intelligence sources to help detect and prevent terrorist acts.

The information gathered by the Homeland Security Operations Center is communicated to all levels of government, the private sector, and the American public through the Homeland Security Advisory System, which was established in March 2002. The Homeland Security Advisory System provides threat conditions and protective measures that can be taken by DHS partners to reduce United States vulnerability to attack. Through the use of this coordinated national advisory system, DHS provides warning and situational awareness to the American public, giving them the opportunity to personally take steps to further safeguard themselves, their families, and their communities.

### **National Strategy for Homeland Security**

On July 16, 2002, President Bush unveiled the U.S. National Strategy for Homeland Security.<sup>31</sup> The strategy implemented the many proposed changes to the national system for emergency response. These changes ranged from developing and implementing the National Incident Management System to developing a common communication infrastructure for the over 87,000 jurisdictions throughout the United States.

The National Strategy for Homeland Security assumes that terrorists wish to attack the United States and that the United States must work to prevent such attacks and respond if an attack occurs. The three objectives outlined in the strategy are: 1) prevent terrorist attacks within the United States, 2) reduce America's vulnerability to terrorism, and 3) minimize the damage and recover from attacks should they occur. In order to accomplish these objectives, the strategy addresses multiple vulnerabilities and response and recovery assets of the nation. It states that "a national

strategy requires a national effort," and identifies six critical mission areas:<sup>33</sup>

- Intelligence and Warning
- Border Transportation Security
- Domestic Counterterrorism
- Protecting Critical Infrastructure and Key Assets
- Defending Against Catastrophic Threats
- Emergency Preparedness and Response

Each of these mission areas includes detailed initiatives to be undertaken. In all, there are 43 initiatives defined for the 6 critical mission areas.

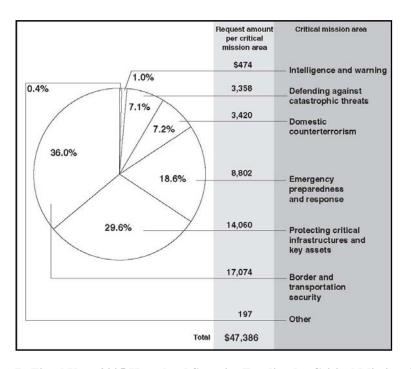


Figure 7. Fiscal Year 2005 Homeland Security Funding by Critical Mission Area (dollar amounts in millions)<sup>34</sup>

Significant funding will be required to accomplish the tasks set out in the National Strategy for Homeland Security. According to data from the Office of Management and Budget, over \$47 billion was proposed for fiscal year 2005, allocated as shown in Figure 7. While that funding level would provide adequate resources to address the initiatives in the National Strategy for Homeland Security, the United States still faces significant challenges in implementing the strategy in a coordinated and integrated manner. Nevertheless, integrating the initiatives detailed in the strategy into existing U.S. capabilities will make the nation better able to meet the challenge of larger and more complex incidents.

## **United States General Disaster Response**

Local and State. In a disaster, the first line of defense is at the local and state levels. A local government responds, supplemented by neighboring communities and volunteer agencies, as needed. If overwhelmed, the local government turns to the state for assistance. The state responds with resources such as the National Guard and other state agencies. The state may also request assistance from nearby states under Emergency Management Assistance Compacts. This requires that losses and recovery needs be determined through damage assessment by local, state, federal, and volunteer organizations.

For incidents involving chemical, biological, radiological, nuclear, or high-yield explosive agents (CBRNE), the National Guard employs Weapons of Mass Destruction Civil Support Teams. The mission of these teams is to support the governor and the local incident commander in response to a local WMD event. The WMD-Civil Support Team may be employed as a reserve or reinforcing element for other WMD-Civil Support Teams, or as unilateral military support in a state without a WMD-Civil Support Team.

The WMD-Civil Support Team has the ability to identify agents, assess consequences, advise on response measures, and assist with requests for state support. If the incident is determined to be of national impact, these Civil Support Teams work as part of the overall national response with the Joint Task Force for Civil Support or another Joint Task Force commander, both U.S. Northern Command assets.

The National Guard provides a third level of security for the American people, after first responders and the WMD-CST teams. These are the 12 CBRNE Enhanced Response Force Package (CERFP) teams that have been stationed in each FEMA region since August 2004. They provide rapid, effective additional capabilities in a WMD situation when requested by a governor.<sup>36</sup>

*National.* If it is determined that state resources are insufficient to mitigate the disaster, the governor may request a major disaster declaration through the Federal Emergency Management Agency (FEMA) based on the damage assessment, and an agreement to commit state funds and resources to the long-term recovery. FEMA evaluates the request and recommends action to the White House based on the disaster, the local community, and the state's ability to recover.<sup>37</sup>

The Department of Defense may become involved in any disaster response at several levels or functions. Local base commanders are authorized to respond locally for a limited period of time, usually on a reimbursable basis, to "save lives, prevent human suffering, and mitigate great property damage." The governor may also activate the National Guard under state control and state funding. In the event that a Presidential Disaster Declaration is made, and state and federal resources are overwhelmed, longer-term DoD assistance may be requested.

The procedure for requesting DoD assistance is detailed in Figure 8. The Principle Federal Official (PFO),<sup>39</sup> usually FEMA, initiates a Mission Assignment. If a Joint Field Office has been established, a Defense Coordinating Officer will evaluate the Mission Assignment and determine whether the resources requested are available elsewhere. If the Defense Coordinating Officer determines the additional resource request is warranted, he sends the Mission Assignment to the DoD Executive Secretary and later to the Assistant Secretary of Defense for Homeland Defense for validation. If validated, the Joint Director of Military Support processes the order and a copy is sent to NORTHCOM for mission analysis. The Secretary of Defense and the Assistant Secretary of Defense for Homeland Defense approve the order and the Joint Director of Military Support issues the order. The Services may then be tasked directly for resources, and Joint Forces Command, U.S. Transportation Command, the National Guard Bureau, or other unified commands may be tasked to support the desired requirements. Once federal DoD assets arrive in the area of operations, NORTHCOM assumes operational control of these forces.

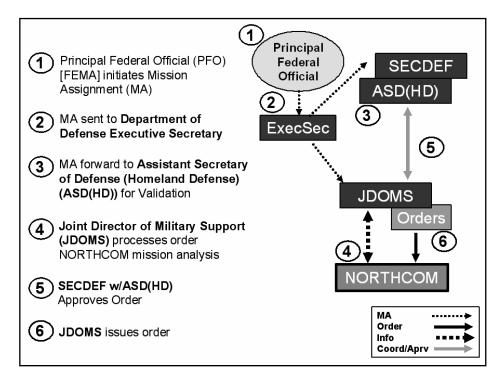


Figure 8. Defense Coordinating Officer Deployment Process

#### **U.S. Northern Command**

The National Security Strategy stated the need for the military to provide a broad portfolio of military capabilities which include the ability to defend the homeland, conduct information operations, ensure United States access to distant theaters, and protect critical U.S. infrastructure and assets in outer space. One of the key results of this demand for transformation was the creation of Northern Command for the purpose of homeland defense.

NORTHCOM is a unified combatant command responsible for establishing liaison with other federal agencies to provide disaster response capabilities during emergencies. NORTHCOM was established on October 1, 2002, to ensure the military defense of the United States. NORTHCOM announced full operational capability on September 11, 2003. Its purpose is to ensure national security against domestic threats and assists in the response to natural and man-made disasters.

NORTHCOM is responsible for the defense of the continental United States, Alaska, Puerto Rico, the U.S. Virgin Islands, the Gulf of Mexico, and the Pacific and Atlantic Oceans within 500 miles of North America. NORTHCOM is also responsible for defending over 5,000 miles of coastline and 6,000 miles of land borders between Canada, Mexico and the United States. Canada and Mexico are also included in NORTHCOM's area of responsibility because their close cooperation and coordination is critical to the defense of North America.<sup>40</sup>



Figure 9. USNORTHCOM Headquarters, Peterson AFB, Colorado Springs (Larsen)

The NORTHCOM mission focus is two-fold: to conduct operations to deter, prevent, and defeat threats and aggression aimed at the United States, its territories, and interests within the assigned area of responsibility; and as directed by the President or Secretary of Defense, to provide military assistance to civil authorities, including consequence management operations.

NORTHCOM's mission is homeland defense, not homeland security. Homeland defense is defined as the protection of United States territory, sovereignty, domestic population and critical infrastructure against military attacks. Homeland defense, however, is only one piece of the national homeland security effort. Homeland security is defined as a national effort that includes individuals and organizations working together to prevent terrorist attacks within the United States, reduce the vulnerability to terrorism, and, if terrorist attacks should occur, to minimize damage and recover from them.<sup>41</sup> One of NORTHCOM's primary missions is to provide military assistance to civil authorities involved in disaster response and recovery operations, control of civil disturbances, and law enforcement activities.

NORTHCOM is the principal operational command responsible for planning and executing Defense Support to Civil Authorities within the continental United States. NORTHCOM fulfills this mission by establishing liaison and planning for support with many different government agencies and departments. NORTHCOM may be asked to support the response to natural disasters, CBRNE events, National Security Special Events, and other contingencies within its area of operation. NORTHCOM has coordinated and provided military support to California wildfires, the space shuttle disaster, hurricanes in the Southeast, and national security events such as political conventions, the G-8 summit, the Reagan funeral, and presidential elections.

Military forces must be requested by local, state, or federal agencies and approved by the President or Secretary of Defense. NORTHCOM provides assistance after it is tasked by DoD, and the military forces are subject to the limits of the Posse Comitatus Act. Normally, military support to civil authorities is provided only after the resources available to local, state, and federal agencies have been exhausted or are inadequate or unavailable. Once activated by the President or the Secretary of Defense, NORTHCOM would most likely be in a supporting to DHS as the lead federal agency.

As the unified commander for North America, NORTHCOM is normally the supported command during a national crisis, including terrorist emergencies. NORTHCOM possesses few organic resources. During an emergency, the military services, Joint Forces Command, and others will provide resources to NORTHCOM as approved by the Secretary of Defense.

Joint Task Force Civil Support is a standing joint task force comprised of active, reserve, and National Guard members from each of the military departments, including the Coast Guard. The stated purpose of Joint Task Force-Civil Support is "to save lives, prevent injury and provide temporary critical life support during a chemical, biological, radiological, nuclear or high-yield explosive situation in the United States or its territories and possessions." Joint Task Force-Civil Support is the only military organization dedicated solely to planning and integrating forces for consequence management support to civil authorities. This support would most likely be to FEMA, the federal agency under DHS in charge of managing the consequences of a WMD incident. The deployment of Joint Task Force-Civil Support would occur only after a governor requests federal assistance from the President, and the President issues a Presidential Disaster Declaration. In any domestic setting, Joint Task Force-Civil Support remains in support of the lead federal agency throughout the consequence management operation.

#### **Israel Defense Forces**

The military is one of the most respected institutions in Israeli society and has long been a unifying agent for the many groups comprising Israel's diverse population. The mission of the Israel Defense Forces (IDF) is "To defend the existence, territorial integrity and sovereignty of the state of Israel. To protect the inhabitants of Israel and to combat all forms of terrorism which threaten the daily life." In order to accomplish the IDF mission, Israel has defined some basic points of IDF doctrine: <sup>47</sup>

- Israel cannot afford to lose a single war.
- Conduct strategic level defense with no territorial ambitions.
- Avoid war by political means and a credible deterrent posture.
- Prevent escalation.
- Determine the outcome of war quickly and decisively.
- Combat terrorism.
- Maintain a very low casualty ratio.

Nearly the entire nation serves in the IDF, which is made up of career servicemen, a regular army of conscripts, and a large reserve force. <sup>48</sup> Since

Israel is a small country compared with its Arab neighbors, it relies heavily on a reserve force, and most of the population is called up in time of war. There is compulsory military service for both men and women at age 18, which lasts 3 years for men and 21 months for women. Israel's first prime minister, David Ben-Gurion, saw the IDF "not only as the means to defend the country, but also as a framework for integrating Israeli society." 50

Over the years, Israel has provided aid to countries requiring assistance. The IDF has been at the center of humanitarian operations in Macedonia, India, Rwanda, and Kosovo, and has made an important contribution towards saving lives in foreign countries, such as Mexico, Armenia, Romania, Georgia, Kenya, Turkey, and Bosnia. After Hurricane Katrina devastated the U.S. Gulf Coast in 2005, Israel sent 80 tons of supplies to the United States. In addition, Defense Minister Shaul Mofaz ordered the IDF to assemble a team of expert personnel, including search and rescue teams, medical staff, psychologists, and experts in identifying bodies.<sup>51</sup> Despite their outward looking capabilities, the IDF's single defense goal is to ensure the existence of Israel and the security of its citizens. Therefore, it is a natural fit for Israel's Home Front Command to fall under the IDF.

#### **Israel Home Front Command**

Seventy-four Israelis died and an additional 228 were wounded when 39 Iraqi El-Hussein SCUD missiles were launched against Israeli cities during the 1991 Gulf War. 52 While most of those casualties were the result of indirect causes, such as heart attacks or suffocation from improper use of gas masks, missiles destroyed 28 buildings and structurally damaged some 4,100. Home Front Command was established in February 1992 as a subordinate organization of the IDF to respond to issues that emerged during the 1991 Gulf War and the constant terrorist attacks upon Israel. HFC replaced the Civil Guard, formed after the 1973 war, which was ineffective at coping with the 1991 attacks on Israel. 53 The vision of the HFC is to be the "National leader of civil protection for lives saving, worthy of population trust, and a knowledge center in different subjects in Israel and abroad." 54

There were three main reasons providing the impetus for the creation of HFC. First, leadership wanted to free the three regional commands

(Northern, Central and Southern) to deal primarily with the front line. Second, they needed to improve cooperation between emergency services, local authorities, and government ministries (police, emergency medical service and fire). Finally, they hoped to unite responsibility with authority. <sup>55</sup>

The goals of the Home Front Command are to:

- Define the civilian defense concept;
- Steer, direct, and prepare the civilian population for a state of emergency;
- Direct and guide all civilian systems, auxiliary organizations, the Israeli police, and the military systems;
- Prepare the home front for a state of emergency, according to the Civil Defense Law;
- Serve as the primary professional authority in the IDF for civil defense; and
- Serve as a territorial command in its area. 56



Figure 10. First Responders after 1991 SCUD Attack on Tel Aviv<sup>57</sup>

One challenge for Israeli leadership in building an effective HFC was to develop comprehensive doctrine to cover conventional threats, WMD and terrorist threats, and natural disasters. A second challenge was to implement this doctrine by training the military, civil organizations, and the civilian population. The HFC doctrines developed to date include guidance on how to handle bioterrorism, chemical terrorism, earthquakes, conventional events, and unconventional events.<sup>58</sup>

There exists within Israel a sub-culture that disagrees with the value of Home Front Command. This group finds fault with military control of civil defense matters, or its bureaucratic difficulties, or even the rationale for its existence. Some feel that the military could do this job without a separate command; others think that civil defense should be a civilian responsibility. There was a debate underway prior to the Gulf War about these issues, but the SCUDs landing on Israeli territory made a military command the easy choice. Those who disapprove of the HFC structure are clear in their advice to the United States to not use HFC as a model for America's organizational efforts to protect the homeland.

On the other hand, supporters of Home Front Command raise several points in response. First, the fact that the IDF created an entire command to tackle this job, rather than making it an additional duty for a combat command, shows the value and importance that the Israeli government places on the mission of civil defense. Second, having these responsibilities under a military command brings a number of benefits, such as round-the-clock availability and a large pool of assets on which it can call if necessary. Finally, the argument goes, HFC represents a unique blend of military and civilian forces that works; why consider changing it?<sup>59</sup>

*HFC Responsibilities.* Home Front Command, headquartered in the Ramla area, is ultimately responsible for protecting the civilian population.<sup>60</sup> HFC has authority over the majority of Israel's rear area civil, police, and medical services during national emergencies.<sup>61</sup> More specifically, the responsibilities of the Home Front Command are to:

- Command and coordinate all forces involved in the incident, in order to optimize the national response;
- Develop a combined doctrine for all the forces involved in the incident;

- Carry out combined training at all levels of command;
- Inform and instruct the civilian population in personal and collective protection issues;
- Plan and deploy warning systems; and
- Be in continuous readiness to help police forces during terrorist incidents. 62



Figure 11. Home Front Command Headquarters, Ramla (Larsen)

HFC Organization. Home Front Command is divided into six national districts: North, South, Central, Dan, Haifa, and Jerusalem. Mapping of districts was based on the distribution of people in the country, with major urban areas such as Jerusalem, Tel Aviv (Dan), and Haifa given their own district. Each district has an active duty staff commanded by an officer with the rank of colonel. These six districts are further divided into 27 sub-districts and then into battalions. There are six types of battalions within the Home Front Command: Rescue, National Rescue, Salvage, Nuclear/Biological/Chemical, Light Infantry, and Military Police. All battalions are composed of reserve forces. In addition, there are five other types of units available to help protect the

Israeli home front: observation companies, medical units, fire brigade units (combined military and civilian), warning and alarm systems, and information, instruction, and civilian care departments.<sup>67</sup>

The organizational effectiveness of Home Front Command reflects a commonly heard truism in Israel: that it is a much smaller country than the United States, small enough that everyone in the same business knows everyone else, and can call the right person directly when necessary due to less bureaucratic rigidity in its government. Given the number of attacks since the second Intifada began in 2000, Israeli organizations are now working in concert, cutting through the bureaucracy, and communicating. The fact that first responders, HFC personnel, command and control nets, the media, psychologists, and the government are all talking brings bonuses in all areas, not just homeland defense.<sup>68</sup> They are living with immediate threats, so homeland security is a real day to day concern.

HFC Protection of the Israel Civilian Population. In January 2003 Home Front Command published a comprehensive 52-page brochure titled "In the Event of a Genuine Alert, Information on Civil Defense for the Family." (See Figure 12.) The foreword, signed by Major-General Yosef Mishlev, commanding general of the HFC, states, "This brochure is intended to help you and your family prepare for a state of emergency and make it easier to deal with possible events." The brochure, distributed to every home in Israel, describes both conventional and unconventional threats. It outlines precise instructions for action during an attack, including procedures to be taken during an attack, how to cope with a state of emergency, a review of the civilian protection package, preparation of the standard protected space, installation of ventilation and filter systems, use of the protective kit, procedures for accessing the health system, general first aid instructions, and information on select emergency organizations.

In addition, a national public awareness campaign is ongoing using a variety of media sources. Complete emergency guides are placed in readily available telephone books.<sup>72</sup> Trained HFC soldiers visit schools to instruct children how to protect themselves, and teachers attend seminars to learn how best to prepare their students for attacks.<sup>73</sup> The goal for these and other educational programs is to reduce anxiety so people can continue their daily routines without experiencing constant fear of an attack.

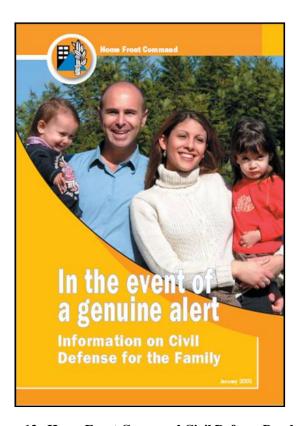


Figure 12. Home Front Command Civil Defense Brochure

The civilian population is also supplied with a government funded civilian protection program. The civilian protection program consists of warnings and sirens, a medical response kit, a protective kit, protected spaces, and public information with guidelines on how to cope with a state of emergency. Israel uses a rising and falling alert siren as a signal for citizens to take protective action, and this is also broadcast on the television with specific instructions. The medical response kit includes antibiotics, and atropine to be used in the event of a chemical nerve gas attack. Citizens are instructed when to use this medication through the media. The protective kit contains a personal gas mask and filter. Children up to age 3 receive a "babysitter" kit which covers the upper torso of a child, children ages 3 to 8 receive a protective hood, and individuals age 8 and up receive youth or adult-size gas masks that are

personally fitted to the size of the person's face.<sup>76</sup> Distribution of protective kits is carried out by the HFC at centers throughout the country during times of need.<sup>77</sup>

*General Disaster Response.* During times of high threat, the HFC operates a "silent" radio channel. The radio remains silent, allowing people to sleep, until an attack occurs. In the event of an attack, a declaration of a state of emergency is issued. This initiates a national warning system that consists of sirens, radio, and television broadcasts.

Upon declaration of a state of emergency, individuals are directed to go to a protected space with their personal protection kits. If an attack occurs, the police are responsible for the initial management of an event. Command shifts to the HFC by request of the police or during wartime. In the event of a missile attack, specialized HFC teams are deployed to examine and identify the contents of the warhead. If the warhead is identified as unconventional with chemical or biologic agents, the HFC manages the rapid evacuation of the population from the contaminated area. The goal is to save lives, and success is dependent on coordination, training, and responsiveness of key personnel.

Four phases or responses are coordinated by the HFC. An "immediate response" within 30 minutes of a missile attack includes police control of the area, identification of any chemical agents, first aid and medical treatment for the injured, and evacuation of casualties to the closest hospital. This is followed by an "initial response" after 30 minutes has passed which includes providing further guidance to the population, arrival of additional rescue forces, continued medical treatment of the injured, and organization of the site for rescue tasks. The next stage is entitled "completing response" and involves finishing rescue tasks, expanding medical treatment, clearing blocked roads, providing additional population guidance, securing the area, and identifying the deceased. The final stage, "restoration," entails storing assets, demolishing dangerous buildings, clearing wreckage, and fixing damaged buildings and infrastructure. Command and control is critical throughout this process to orchestrate a timely response.

A key piece of the HFC's response to an attack involves medical capability. Israel has an expansive medical system with an infrastructure which allows hospitals to readily accommodate injured people following an attack. The primary medical facilities throughout the country include

general hospitals, geriatric hospitals, psychiatric hospitals, health fund clinics, and public health offices. The key players in the process are the Magen David Adom (emergency medical service) workers who are responsible for transporting victims to facilities that will provide definitive care.

The emergency medical system is set up around 11 regional dispatch centers with a national dispatch center in Tel Aviv. Ref Clear direction has been provided to workers so that the first ambulance that arrives at the scene immediately takes a command position. Staff from this ambulance report to the HFC on the scope of the incident with approximate casualty numbers so that adequate resources can be directed to the site. Victims are triaged, and immediate attention is given to those who are unable to sit or stand. A "scoop and run" approach is implemented by Magen David Adom personnel for these victims.

Patients are quickly transferred to the closest medical facility for life-saving procedures and additional triage as appropriate. Israeli police play a key role in providing crowd control and restricting access to newly created one-way roads for ambulances that are transporting patients to medical facilities. Israeli medical personnel take great pride in being able to move people quickly and efficiently to an appropriate care setting. Twenty minutes is an unofficial goal for completely clearing a terrorist site of all victims. 89

## **Conclusion**

The global events of the past two decades have shaped the security strategies found in U.S. and Israel homeland security programs. Israel undertook significant organizational changes in response to SCUD missile attacks during the 1991 Gulf War. The United States did not begin to seriously reshape its national homeland security strategy until the devastating September 11, 2001, attacks.

The major organizations designed to protect the homeland from attack and to aid recovery after an incident occurs in the United States include the Department of Homeland Security and U.S. Northern Command. In Israel, the Israeli Defense Forces and Home Front Command serve complementary roles in protecting their homeland. To safeguard any civilian population from present and future threats, the most effective

## 44 . . . Comparative U.S.-Israeli Homeland Security

homeland security programs of both states must be studied, adopted, and modified in light of enduring and evolving world threats.

## IV. Preventing Terrorist Attacks

The 2003 National Strategy for Combating Terrorism defined terrorism as "premeditated, politically motivated violence perpetrated against noncombatant targets by sub-national groups or clandestine agents." Terrorism is carried out by those who "strive to subvert rule of law and effect change through violence and fear." The United States, according to this document, "will not allow itself to be held hostage by terrorists. Combating terrorism and securing the homeland from future attacks are our top priorities." Further, on September 17, 2002, President George W. Bush released the National Security Strategy. The National Security Strategy clearly stated for the first time that the United States would use preemption as a strategic response to the threat of terrorism and the use of weapons of mass destruction (WMD). Similarly, the Israeli government has made it clear, through its statements and actions, that it will not abide terrorists or their attempts to influence Israeli policies through violence. 91

Preventing terrorist attack requires a proactive approach anchored on the pillars of domestic counterterrorism, intelligence and warning, and border and transportation security. This approach must strive to eliminate terrorist surprise with actionable intelligence and predictive warning. It must also endeavor to stop terrorists and their means of destruction from entering the country with layered defenses that extend beyond one's homeland. Terrorism prevention demands a robust domestic counterterrorism mechanism that honors the delicate balance between freedom and security while protecting the population. Security of the homeland is any nation's number one priority.

## **U.S.** Efforts

America's concern over terrorism grew as a result of the 1993 terrorist bombings of the World Trade Center in New York and Alfred P. Murrah Federal Building in Oklahoma City, the 1995 sarin nerve gas attack in Tokyo, and the U.S. embassy bombings in East Africa in 1998. At the time the United States lacked a clear, comprehensive, and truly

integrated national domestic preparedness strategy and was incapable of responding effectively to a serious terrorist attack.

In 1998 the federal government established the first of three commissions to study the problem of WMD and terrorism. The Gilmore Commission, an independent advisory panel created to study, analyze, and report to the President and Congress, recommended courses of action to address United States inabilities to plan for and respond effectively to terrorist attacks. The 2000 National Commission on Terrorism, also known as the Bremer Commission, approached the issue of terrorism with an evaluation of America's laws, policies, and practices for preventing and punishing terrorism directed at American citizens. The Commission concluded that although American strategies and policies were basically on the right track, significant aspects of implementation were seriously deficient.

The third pre-9/11 commission was the U.S. Commission on National Security in the 21st Century, also known as the Hart-Rudman Commission. It was chartered to review U.S. national security requirements for the next century. The commission described the future security environment the nation should anticipate, delineated a strategy to address that future, and focused on necessary changes to the national security apparatus, structures, and processes, with an aim toward redesigning them to succeed in the future security environment. The committee's conclusion was that the primary national security challenge the United States would face in the next 20 years would be an attack by an adversary on the American homeland which could produce thousands of casualties. That prediction came true only seven months later.

## **National Strategy for Homeland Security**

The National Strategy for Homeland Security, published in 2002, emphasized six critical mission areas. Domestic counterterrorism was one of the three critical mission areas that focused on preventing terrorist attacks. As a result of the attacks on September 11, 2001, the missions of all federal, state, and local law enforcement authorities were redefined. In addition to their normal investigation and prosecution of criminal activities they now put priority on preventing and interdicting terrorist activities within the United States. The strategy focuses on the

application of all law enforcement offices to confront the direct threat of terrorism. To effectively reorient law enforcement organizations to focus on counterterrorism, the strategy called upon those organizations to improve intergovernmental law enforcement coordination; facilitate apprehension of potential terrorists; restructure the Federal Bureau of Investigation to emphasize prevention of terrorist attack; identify and freeze sources of terrorist financing; and track foreign terrorists and bring them to justice. <sup>97</sup>

Laws have always been the key means of safeguarding and ensuring America's liberties. It is within this context that the government is evaluating and, where necessary, rewriting laws that will provide the mechanism to act while defining the appropriate limits of those actions. The Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT) Act was the major post-9/11 effort to adjust U.S. laws to better deal with domestic terrorism. The USA PATRIOT Act provisions:

- Gave federal law enforcement and intelligence officers greater authority to gather and share evidence, particularly with respect to wire and electronic communications;
- Amended federal money laundering laws, particularly those involving overseas financial activities;
- Created new federal crimes, increased the penalties for existing federal crimes, and adjusted existing federal criminal procedure, particularly with respect to acts of terrorism;
- Modified immigration law, increasing the ability of federal authorities to prevent foreign terrorists from entering the United States, to detain foreign terrorist suspects, and to deport foreign terrorists; and
- Authorized appropriations to enhance the capacity of immigration, law enforcement, and intelligence agencies to more effectively respond to the threats of terrorism.<sup>98</sup>

## **Department of Homeland Security**

From the strategic guidance laid down in the National Security Strategy, President Bush encouraged Congress to establish and pass the Homeland Security Act (HSA). On November 23, 2002, the President signed into law the HSA, which directed the creation of the Department of Homeland Security. Its mission includes:

- Preventing terrorist attacks within the United States;
- Reducing the vulnerability of the United States to terrorism;
- Minimizing the damage, and assisting in the recovery from terrorist attacks that do occur within the United States;
- Carrying out all functions of entities transferred to the Department, including by acting as a focal point regarding natural and manmade crises and emergency planning;
- Ensuring that the overall economic security of the United States is not diminished by efforts, activities, and programs aimed at securing the homeland; and
- Monitoring connections between illegal drug trafficking and terrorism, coordinating efforts to sever such connections, and otherwise contributing to efforts to interdict illegal drug trafficking.

Once Congress passed the Homeland Security Act the President encouraged lead Federal agencies to join the fight against terrorism. In February 2003 he placed special emphasis on domestic counterterrorism efforts in his Homeland Security Presidential Directive (HSPD)-5. HSPD-5 focused on the management of domestic incidents; its key purpose was to enhance the ability of the United States to manage domestic incidents by establishing a single, comprehensive national incident management system and a National Response Plan.

*DHS Homeland Security Operations Center.* In 2004 the Department of Homeland Security introduced a new state-of-the-art Homeland Security Operations Center (HSOC) to serve as the primary national-level nerve center for real-time threat monitoring, domestic incident management, and vertical and horizontal information sharing

efforts. HSOC provides situational awareness and monitoring of the homeland. Working in conjunction with the DHS Office of Information Analysis, the HSOC coordinates incidents and response activities, issues advisories and bulletins to homeland security partners, and provides protective and counter measure guidance.

The HSOC dramatically increased the vertical coordination between federal, state, territorial, tribal, local, and private sector partners. It collects and fuses information from a variety of sources to help deter, detect, and prevent terrorist acts. Information on domestic incident management is shared with Emergency Operations Centers at all levels through the Homeland Security Information Network.

**DHS Science and Technology Directorate.** The Directorate of Science and Technology within DHS focuses on the two core competencies of research and technology. It leads the procurement and standardization of CBRNE countermeasures, focusing on catastrophic terrorism—threats that could result in large-scale loss of life or major economic impact. <sup>99</sup>

Two examples of initiatives spearheaded by the DHS Science and Technology Directorate are the BioWatch program and Project Bio Shield. DHS established the BioWatch program to protect many large U.S. cities by monitoring the air for biological agents that could be released by terrorists. Additionally, DHS has teamed up with the Department of Health and Human Services with funding for Project BioShield, through which America is able to develop and acquire more advanced vaccines and treatments for biological agents.

## **U.S. Northern Command**

U.S. Northern Command was deemed necessary because of the physical size of the United States and the openness of its borders to non-U.S citizens. These apparent vulnerabilities made it necessary to give top priority to the homeland defense missions and put it under a single command.

Terrorism targeted against the United States is fundamentally a homeland security matter that is usually addressed by law enforcement agencies. NORTHCOM's roles in support of homeland security are limited to defense against military threats emanating from outside the United States, and civil support. DHS and NORTHCOM have a cooperative relationship focused on preventing and defending against terrorist attacks on the United States.

## Chemical/Biological Rapid Response Team

Forming the core of the federal military response to domestic WMD terrorism is the Chemical/Biological Rapid Response Team (C/B-RRT). The Nunn-Lugar-Domenci Act in 1996 set the stage for this team by proposing a standing DoD response force for chemical and biological terrorism comparable to the Department of Energy's Nuclear Emergency Search Team (NEST) for nuclear emergencies. The C/B-RRT provides a graduated response ranging from pre-positioning prior to high-profile events, to assisting civil authorities with hazardous materials, to responding to a WMD terrorism incident. C/B-RRT's membership is drawn from multiple military organizations, each of which has its own specialty. This allows the C/B-RRT commander to tailor the deployed team to the needs of the situation and the requirements of the joint force commander. This structure enables a rapid start to the consequence management efforts that will then receive necessary follow-on support from other agencies.

#### **Nuclear Emergency Search Team**

NEST teams were created in 1975 by President Gerald Ford. This group of more than 1,100 men and women from a wide range of backgrounds work for the Department of Energy. Most work at the nation's weapons plants, but when alerted to a NEST call-up, they can be delivered, fully equipped, to any place in the country within four hours.

The heart of the NEST operation is the security force. Highly trained, they are well armed and equipped with a collection of radiation detectors. If necessary, the security teams can fight their way into a terrorist stronghold and secure a nuclear device. NEST members carry belt-clip detectors and multiple sensors in vehicles, and they try to do their work unobtrusively. <sup>100</sup>

### **Intelligence and Warning**

Terrorism depends on surprise and the opportunity to strike at a time and place of a terrorist's choosing. Today's terrorist is armed with a broad arsenal of weapons ranging from conventional means to weapons of mass destruction. In the future, one can anticipate that they will also employ cyber attack and new and unexpected tactics. Preventing terrorist attack requires proactive, predictive, and preventive intelligence and warning. Such an approach depends on an essential commodity: information. To date, the greatest challenge to attack prevention is a lack of information sharing between and within the major federal intelligence agencies.

To address this shortcoming, elements of the Department of Homeland Security, the FBI's Counterterrorism Division, the Director of Central Intelligence's Counterterrorist Center, and the Department of Defense formed the Terrorist Threat Integration Center (TTIC) to fuse and analyze all-source information related to terrorism. The goal of the Terrorist Threat Integration Center is to make the analysis of foreign and domestic intelligence on terrorism seamless, and to ensure that all members of the federal government's Intelligence Community have access to the same information.

Another multi-agency facility, the Terrorist Screening Center (TSC), was established to consolidate terrorist watchlists and numerous terrorist screening mechanisms into a single, comprehensive anti-terror watch list. The goal is to provide "one-stop shopping" so that every federal anti-terrorist screener is working off the same page. The FBI will administer the TSC. The center includes CIA, FBI, and Department of Defense, State, and Homeland Security personnel along with other agencies. It maintains a top-secret database of known and suspected international terrorists—information that is available to 2,600 users who can search 3.5 million documents and over 100,000 names.

Currently, the White House, Congress, and two independent commissions are contemplating wholesale reform of the nation's Intelligence Community. Motivation for reform stems not only from 9/11, but also from the perceived inaccuracies surrounding Iraq's weapons programs prior to the U.S.-led invasion in 2003. Furthermore, the National Strategy for Homeland Security and the Homeland Security Act both call for interagency cooperation and information sharing. 103

However, attempts at reform have proven counterproductive in the past and involve inevitable political controversy and turf battles.

One proposed reform involves streamlining the entire Intelligence Community under a single national intelligence director with overall budgetary and operational authority over the entire structure. Proponents argue that such a change would make collection and dissemination of data more efficient and hence augment information sharing. Opponents say that such a measure would harm the military and undermine the director's overall effectiveness. The ultimate objective is proactive, predictive, preventive, and actionable intelligence for all homeland security agencies to use as needed to secure the homeland. The ultimate objective is proactive agencies to use as needed to secure the homeland.

## **Border and Transportation Security**

The United States is a nation built on immigration with a free and open society. Given the ease of global travel, securing the nation's air, land, and sea borders from terrorists is a difficult but critical task. Couple the offensive launched by Islamic fundamentalist organizations such as Al Qaeda against the United States with 7,514 miles of border with Canada and Mexico and 95,000 miles of coastline, border security is crucial. Without tight security, sleeper cells can penetrate the border and disappear into the shadows of a 3.4 million square mile exclusive economic zone and hide among nearly 300 million Americans. Once in place, they enjoy civil liberty protection as they prepare to attack the American way of life. 106

In light of America's dependence on global trade and travel, the United States cannot isolate itself and close its borders. The efficient flow of lawful traffic and commerce is essential to a healthy economy, while prevention of terrorist entry is paramount. This is the Department of Homeland Security's first priority. To accomplish this mission, the DHS Border and Transportation Directorate is creating a "border of the future," a concept that leverages international partnerships, integrated intelligence, technology, and a coordinated national effort to provide greater security while ensuring the efficient flow of people, goods, and conveyances. This includes managing the 11.2 million trucks and 2.2 million rail cars that enter the United States annually, along with 7,500 foreign flagships that make 51,000 calls to more than 300 American ports. A series of

initiatives is meant to create a layered defense and effectively extend America's borders outward. The end result will be a border that is nearly transparent, yet protects against terrorists, their instruments of destruction, and other international threats such as illegal drugs, illegal migrants, and organized crime. <sup>109</sup>

*U.S. Customs and Border Protection (CBP)*. The CBP unifies numerous border related agencies that existed under various departments of the federal government before the Homeland Security Act of 2002. Its priority is to prevent terrorists and terrorist weapons from entering the United States, while facilitating the flow of legitimate trade and travel.

*Transportation Security Administration (TSA)*. TSA was created shortly after 9/11 and has statutory responsibility for protecting the nation's maritime and surface transportation systems from terrorist and other intentional disruptions. Historically, approximately one-third of terrorist attacks worldwide have targeted transportation systems. TSA uses intelligence, regulation, enforcement, inspection, screening, and education of carriers, passengers, and shippers to balance public convenience and security. <sup>110</sup>

U.S. Coast Guard. Operating in concert with the DHS border and transportation security agencies is the U.S. Coast Guard, the federal government's principal maritime law-enforcement agency. Guard became part of DHS with the passage of the Homeland Security Act. It fulfills several vital homeland security functions by securing the nation's shoreline and inland waterways while ensuring the reliable operation of the nation's ports. Specific Coast Guard homeland security missions includes: protecting ports, commerce, and marine transportation from terrorism; providing maritime border security against illegal drugs, aliens, firearms, and WMD; protecting against illegal fishing and destruction of marine resources, preventing and responding to accidental and intentional oil and hazardous material spills; and coordinating its efforts and intelligence with federal, state, and local agencies. 111 The Coast Guard relies on information sharing from federal, state, local, and private agencies to maintain maritime domain awareness—the continuous understanding of commercial shipping on a global basis so high interest vessels can be identified and tracked before entering the country. 112

National Targeting Center. The National Targeting Center is a Customs and Border Patrol establishment that came into existence in October 2001 and provides a centralized coordination center for all antiterrorism operations. It fuses intelligence, information sources, targeting systems, and analytical expertise to develop actionable passenger, conveyance, and cargo targets for examination by CBP inspectors nationwide. It shares information with multiple agencies including the Transportation Security Administration's Terrorism Screening Center, the Coast Guard, the Department of Energy, U.S. Immigration and Customs Enforcement, the Food and Drug Administration, the FBI, the CIA, and other intelligence services.

Customs-Trade Partnership Against Terrorism (C-TPAT). Efforts to emphasize partnerships between government agencies and foreign and private sectors include the C-TPAT and the Free and Secure Trade program, a cooperative program between the United States, Canada, and Mexico. It is designed to enhance security and bolster trade at commercial ports along the Canadian and Mexican borders.

Container Security Initiative (CSI). Another mutually beneficial measure that counters terrorism and greatly reduces the potential for catastrophic loss is the Container Security Initiative. CSI was launched in January 2002 to increase security against terrorist manipulation of containerized cargo. The Container Security Initiative allows inspection of shipping containers at foreign ports by Customs and Border Control officials before they are loaded and shipped to American ports. This is a critical undertaking since containerized shipping accounts for approximately 90 percent of the world's cargo. Annually, almost seven million cargo containers are offloaded at U.S. seaports. 113

Seaport security at home provides additional layers of defense against organized crime and terrorist threats. Currently, the top 30 U.S. seaports handle 99 percent of the imported goods that arrive into the United States and have security funding priority. Concerns over this issue were sharpened in early 2006 when the U.S. Government suggested turning over seaport operations at six of the largest U.S. East Coast ports to a company based in the United Arab Emirates, leading to a major public debate over security.

The Maritime Transportation Security Act of 2002 provided landmark legislation designed to protect the nation's ports and waterways from

terrorism. The U.S. Coast Guard enforces key provisions of this act which require high risk sectors of the maritime industry to complete security assessments, develop security plans, and implement security procedures that collectively provide a layered strategy to protect America's ports and waterways. <sup>115</sup>

### **Critical Infrastructure Protection**

The United States began a more systematic review of ways to protect its critical infrastructure as a result of the events of 9/11. Many of these concepts can be found in the National Strategy for Homeland Security. The strategy describes critical infrastructure as the "fabric that holds together our society and modern way of life." The United States has a modern society with a progressive way of life dependent on networks of infrastructure—both physical networks such as energy and transportation systems and virtual networks such as the Internet. An attack on one or more pieces of that infrastructure may disrupt the entire system and cause significant damage to the nation. Certain aspects of America's infrastructure make it vulnerable to attacks that could have a catastrophic and lasting impact.

America's critical infrastructure encompasses a large number of components, including systems and functions vital to national security, governance, public health and safety, economy, and national morale. Figure 13 lists the categories of systems and functions specifically identified by the strategy.

Critical Infrastructure Sectors <sup>118</sup>			
Agriculture	Government		
Food	Energy		
Water	Transportation		
Public Health	Banking and Finance		
Emergency Services	Chemical Industry		
Defense Industrial Base	Postal and Shipping		
Information and Telecommunications			

Figure 13. Critical Infrastructure Sectors

*Key Assets.* Key assets are individual structures which, if targeted, may not endanger vital systems, but could create local disaster or profoundly damage the nation's morale or confidence. Key assets include symbolic or historical attractions, such as prominent monuments and icons. In some cases, these include quasi-public symbols that are identified strongly with the United States, and fall completely under the jurisdiction of state and local officials or even private foundations. In addition, the United States will also be concerned with protecting its large urban centers and key leaders from attack.

The Bush administration has identified eight major initiatives on which federal, state, and local governments and the private sector are to focus in an effort to deny terrorists the opportunity to attack the United States' critical infrastructure. These include building and maintaining a complete and accurate assessment of America's critical infrastructure and key assets; enabling effective partnerships with state and local governments and the private sector; developing a national infrastructure protection plan; securing cyberspace; harnessing the best analytic and modeling tools to develop effective protective solutions; guarding America's critical infrastructure and key assets against "inside" threats; and partnering with the international community to protect the transnational infrastructure.

The vast critical infrastructure of the United States presents a daunting task requiring prioritization and resources if it is to succeed. DHS is charged with leading this task and ensuring unity of command and effort. See Figure 14 for other key participants in the business of infrastructure protection.

The White House also developed a national strategy specifically focused on protecting critical infrastructures. The National Strategy for the Physical Protection of Critical Infrastructure and Key Assets (NSPPCI & KA) is designed to provide clear goals and objectives and an outline of all national efforts to protect critical infrastructure.

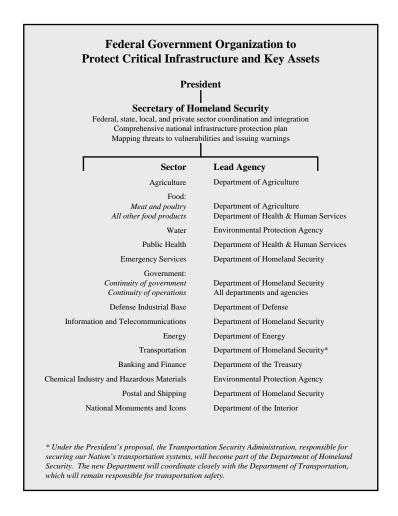


Figure 14. Critical Infrastructure Protection Lead Federal Agencies

The NSPPCI serves as a critical bridge between the National Strategy for Homeland Security and a national protection plan to be developed by the Department of Homeland Security. The strategic objectives that underpin the national infrastructure and key asset protection effort include:

 Identifying and assuring the protection of those infrastructure and assets deemed most critical;

- Providing timely warning and assuring the protection of those infrastructures and assets that face a specific, imminent threat; and
- Assuring the protection of other infrastructures and assets that may become targets over time by pursuing specific initiatives and enabling a collaborative environment between the public and private sector.<sup>120</sup>

As important as the NSPPCI is to the protection of critical infrastructure and key assets, the most important point it makes is that this effort involves the entire nation working together. Because of the enormity in scale and scope of U.S. critical infrastructure and key assets and the ubiquitous nature of the terrorist threat, it will take the federal, state, local, and the private sector working together closely for these efforts to be successful.

**Private Sector Responsibilities.** The lion's share of most critical infrastructures and key assets are owned and operated by the private sector. Normally, private sector firms establish their own risk management planning and safety and security measures necessary to function as a profitable business while maintaining customer confidence. In the present threat environment, the private sector retains the responsibility as the first line of defense for its own facilities. However, due to the nature of the threat—particularly the potential use of weapons of mass destruction—the private sector will need the support of federal, state, and local governments in their security effort.

### **Key Recommendations of the 9/11 Commission**

Since September 11, 2001, local, state, and federal agencies have made exceptional progress in defending against catastrophic terrorist threats through the enactment of laws, development of sensors and detection equipment, and initiation of many disaster- and threat-related programs. The National Strategy for Homeland Security called for expanded capabilities and improved coordination among federal agencies. Progress over the past five years reflects notable expansion and improvement. As first responders field and employ novel technologies currently under development, the U.S. homeland defensive posture will

improve. It is important to note, however, that the United States may never fully be able to prevent a terrorist attack on its homeland.

Intelligence Integration. The 9/11 Commission was chartered to assess vulnerabilities and failures to predict and prevent the terrorist attacks on the United States in September 2001. It made a number of recommendations, one of which was to replace the current position of Director of Central Intelligence with a National Intelligence Director who would oversee national intelligence centers on specific subjects of interest across the U.S. Government, manage the national intelligence program, oversee the agencies that contribute to it, and have hiring, firing, and budgetary authority over the Intelligence Community's 15 agencies. The Commission recommended that the director be located in the Executive Office of the President and that a deputy NID be established to oversee the day-to-day operations of the Central Intelligence Agency. This position was created in February 2005.

**Better Nuclear Sensors and Procedures.** The primary areas of concern regarding the detection of nuclear materials is finding these materials at shipping ports and in major cities. Multiple companies are developing sensors and equipment to support these requirements. In addition, many first responders in the Department of Energy, Department of Defense, and Environmental Protection Agency are obtaining and using new detectors for all types of radiological hazards. <sup>121</sup>

There are a number of potential whole cargo container detection devices and solutions to prevent radiological/nuclear material from entering the U.S. through shipping ports. A second method to prevent shipment of nuclear/radiological material in cargo containers is the use of the "smart box" program. The shipping companies install electronic tamper sensors and use reinforced metal seals on cargo containers to avoid extensive customs inspections at U.S. ports. However, no comprehensive national strategy exists to control nuclear or radiological material transport through air and seaports.

All DHS Customs and Border Protection inspectors are armed with radiation pagers to alert them of the presence of radioactive material. Authorities hope to be able to detect or stop terrorists attempting to transport nuclear or radiological material into major cities through a

network of detection devices. Currently, sensors have been deployed in New York and Washington. 123

The best method of protection against terrorist attack by nuclear weapons is to control the materials at their source. In 1995, remote sensors and video cameras were installed in enriched uranium storage vaults in Russia and Idaho as part of a pilot program. Activity in the vaults is transmitted to DOE for review. <sup>124</sup> In the U.S. Air Force, the Dispersed Integrated Security System (DISS), in development since the early 1990s, allows for relocatable sensors with wireless signals. The DISS kits create a layered detection zone and a secure area. The DISS systems can also be deployed to provide security for nuclear weapons and delivery systems. <sup>125</sup>

Harness Scientific Knowledge and Tools to Counter Terrorism. The National Strategy for Homeland Security has called for a DHS National Biological Weapons Analysis Center. The center would research infectious disease prevention and treatment, forensic epidemiology, and microbial forensics and conduct risk assessments to determine the highest priority threat agents. DHS initiated a Regional Technology Integration Initiative (RTI)<sup>126</sup> and the CDC/ATSDR published a "National Public Health Strategy for Terrorism Preparedness and Response 2003-2008." <sup>127</sup>

The DHS' RTI initiative serves as a principal mechanism to align the Science and Technology's assessments and expertise with the needs of the first responders. The initiative facilitates transition of innovative technologies and organizational concepts to regional, state, and local jurisdictions. The initiative gives the science and technology researchers a realistic environment to test their tools and concepts.

In 2004 President Bush approved the creation of a common surveillance system to collect and analyze information about bioterrorist threats. The plan calls for the DHS to conduct a national risk assessment every two years on new biological threats. <sup>128</sup>

### Israeli Efforts

The people of Israel have endured multiple threats to their homeland since their declaration of statehood in 1948. In addition to fighting five major wars, terrorist attacks from Israel's enemies have been a persistent challenge. SCUD attacks during the 1991 Gulf War "moved the combat line from the country's border to its home front" and exposed weaknesses in the civil defense system. <sup>129</sup> The Israeli Defense Forces decided that the entire system needed to be revamped to protect the civilian population from future conventional and non-conventional attacks, and this led to the creation of the Home Front Command in February 1992. <sup>130</sup> The various intelligence and homeland security agencies within Israel—Home Front Command, Mossad, Shin Bet, local police, border police (MAGAV), and military intelligence—seem to work well together. While there remains some compartmentalization of information, the problem is not as pervasive as it is in the United States interagency community. And when it comes to terrorism, according to Israeli participants in the process, there are no secrets between agencies. In cases involving terrorist attacks on Israel, the interagency process works smoothly as an integrated, cohesive team that shares information and seeks practical, immediate solutions. <sup>131</sup>

Overall, actions in preparation for an attack or to limit the likelihood of a terrorist event have become a way of life in the Israeli culture and are not looked upon as a major inconvenience, as is often the case in the United States. This provides reassurance to citizens who realize that an attack may occur at any moment due to an ever-present threat.

### **Israel Defense Forces (IDF)**

Israel uses active and passive forms of response to protect itself. Active responses, provided by the Air Force, include a theater missile defense system which includes the Arrow and Patriot anti-missile missiles. Theater missile defense is a layered system primarily designed to protect Tel Aviv, with Patriot providing close-in terminal defense, and the joint U.S.-Israeli Arrow II providing middle tier protection. The IDF hopes to get American Aegis cruisers to provide upper tier defenses, although given Israeli's budgetary situation this appears quite unlikely in the near term. Passive response, provided by the Home Front Command, includes a siren system, search and rescue forces, protective kits, medical response teams, and protected spaces. Home Front Command is responsible for the overall readiness of Israel's home front during a state of emergency and is prepared to deal with threats.

The targeted killing of terrorist leaders is an area of great success from the Israeli point of view. It has been an effective counterterrorism tactic that may also deter future acts of violence. The Israeli Air Force has led a joint campaign in recent years to find, fix, and attack terrorist leaders in the occupied territories. As a result, some 25% of the Hamas leadership has been killed. This success reflects a very aggressive counterterrorism program that has relied on local knowledge of the area, extensive intelligence, reconnaissance, and surveillance capabilities, and less restrained rules of engagement than most Western countries apply to the use of military forces, all underlain by a ruthless determination to stamp out terrorism. <sup>134</sup>

## **Israeli Homeland Security Initiatives**

The Israeli government has developed a highly-trained and multi-layered response infrastructure to protect its citizens from the daily terrorist threat. The military and other security and intelligence forces provide the outer layer of protection through offensive operations against terrorist activities. Defensive measures are deployed at the inner layer of response in an effort to disrupt and thwart attempts by terrorist groups to carry out operations against Israeli targets. Disaster rescue teams, including special security elements, police crowd control and forensic units, bomb dispersal experts, body handlers, and paramedics, who usually arrive only minutes after an attack, are responsible for responding to terrorist attacks. Security is created by a series of early warning systems that alerts the public, provides information and protective kits, establishes procedures for creating "protected spaces," and deploys search and rescue teams and medical response teams to safeguard the population under attack.

**Borders and Transportation Security.** Because of the relatively good control Israel has over its borders, plus strong military defenses against conventional attack, the public faces more mundane concerns over daily attacks on restaurants, clubs, and buses. This has led to a focus on tactical measures for better warning and quicker response to potential attacks.

Internal security forces regularly set up road blocks and check driver and passenger ID cards. The fact that Israeli Jews and Israeli Palestinians have different colored license plates gives the security forces advance notice about who is in the vehicle. Internal security is seen everywhere in Israel: from the private guard waving an electronic wand over guests entering a restaurant or shop, to the joint foot patrols in the Old City of Jerusalem by police and army troops, to the nine separate checkpoints a passenger has to go through between the entrance to Ben Gurion Airport until he or she is on the airplane, to the wall going up around Jerusalem, to traffic stops on the road to the Mount of Olives—not to mention along the roads coming from the West Bank.



Figure 15. Israeli checkpoint along Highway 90 to the Dead Sea (Larsen)

Israel feels little restriction on its willingness to apply "profiling" in its attempt to ferret out terrorists. Given its past experience, Israel is willing to discriminate against certain groups. Restrictions, particularly at the borders and upon entry to public transportation nodes, are noticeably geared toward certain races, ethnicities, and age groups. Israel does not have the constitutional constraints on its action, nor the history of civil liberty that the United States is built upon. From colored license plates to color-coded identification cards, racial profiling is a part of daily life in Israel as people try to identify the potential threats among them.

A new and advanced security system aimed at stopping suicide bombers from boarding public buses was released by Israel's Transportation Ministry and the Israel Military Industries in January 2004. The new system gives the bus driver control over the front door barrier which contains electronic explosive detectors, and allows him to prevent anyone suspicious from boarding the bus by hitting a red button that will automatically close the turnstile. A device on the bus sounds an immediate warning if explosives are detected. In addition, the front of buses will be armor-plated below the windshield to lessen the impact of shrapnel from a bomb that is detonated outside the bus. Five buses were outfitted with the new technology in the pilot study. Israel plans to eventually market the technology worldwide.

Walls along roads that face nearby Palestinian settlements are common, as are electronic fences and sensors around Israeli settlements in the West Bank. Certain neighborhoods housing Israeli families have been back-fitted with bulletproof glass in windows that face Palestinian neighborhoods.

On a much larger scale, Israel has begun building a security barrier around much of its border with the West Bank and Gaza. The concept of physical separation of the two major groups in Palestine has been in existence for some time, but a physical barrier of this magnitude is a new step. The Sharon government carefully defined the security fence as a temporary barrier rather than a marking of Israel's international border. But the Ehud Ohlmert government has publicly stated its determination to unilaterally establish final borders, making the security fence likely to become that border. <sup>138</sup>

Israel decided to proceed with building a security barrier in April 2002 following a spate of suicide bombings during the second Intifada. Originally designed to block three primary infiltration routes, it was later expanded to protect isolated Jewish communities in the West Bank as well as Jerusalem. When complete, the barrier will be approximately 500 kilometers long. Its construction has sparked considerable controversy on both sides of the fence, Jewish and Palestinian. The United Nations has condemned the barrier and demanded that it be torn down, and the European Union has expressed its opposition, as well.



Figure 16. Security fence in Jerusalem viewed from the Old City (Larsen)

In response to these criticisms, Israel responds with statistics that prove that the wall has been effective in keeping suicide bombers out of Israel. In addition to providing a barrier, it also channels terrorists to certain areas that allow the Israel military to respond appropriately. On the other hand, while incidents of suicide bombings have decreased dramatically since the wall was built, the number of indirect attacks (such as by mortars and rockets) has risen, and Hezbollah has even flown an unmanned aerial vehicle from Lebanon into Israeli airspace on several occasions. This may show that terrorist groups have simply changed tactics in response to the new barrier. 141

**Research and Development.** RAFAEL, the Israeli Armament Development Authority, known primarily for the military systems it has developed, has begun to direct its focus towards homeland security over the past two years. RAFAEL has concentrated its efforts on several of the topics President Bush listed as focus areas for the United States' war on terrorism following the 9/11 attacks. A leading research and development authority in the Israeli Ministry of Defense, RAFAEL is engaged in the

fields of border defense, defense of public transport on land, sea and air, combating domestic crime and terrorism, protection of sensitive facilities such as energy installations and military bases, preparedness for a state of emergency, and national disasters. <sup>142</sup>

Other areas of particular tactical interest, investment, and progress include unmanned aerial vehicles, sensors of multiple types, tethered balloons, non-invasive search techniques, and enhanced measures for indicators and warning. These reflect a much quicker research, development, and testing cycle than is found in the United States, and faster application of lessons learned on the battlefield that become real-world responses. Again, this emphasis on speed reflects the hard realities and experiences Israel has faced in dealing with terrorism. <sup>143</sup>

### **International Cooperation**

The Washington, D.C., police department has engaged in extensive training with Israeli counterterrorism experts and bomb technicians. D.C. police leaders and FBI counterterrorism experts traveled to Israel in December 2002 for training in the prevention and response to suicide bombings. The Capitol Police force has begun training in Israeli counterterrorism techniques. The head of the Israeli bomb squad has traveled to Washington at least twice to meet with Capitol Police officers. 144

Thirty-three North American law enforcement officials participated in a four-day trip to Israel in January 2003 to attend a seminar on "Law Enforcement in the Era of Global Terror." Workshops included identifying terrorist cells, enlisting police support for the fight against terrorism, and coping with the aftermath of a terrorist attack. Boston Police Commissioner Paul E. Evans, who attended the workshops, said, "We went to the country that's been dealing with the issue for the past 30 years. The police are the front line in the battle against terrorism. We were there to learn from them – their response, their efforts to deter it. They touched all the bases."

A bill was introduced in the House of Representatives on March 2, 2004, to establish the United States-Israel Homeland Security Foundation to make grants to joint business ventures between United States and Israeli private corporate entities to develop products and services with

applications related to Homeland Security, and other purposes. <sup>146</sup> The bill (House Rule 3871) was referred to the Select Committee on Homeland Security, and subsequently to the House Subcommittee on Cybersecurity, Science, Research and Development for consideration.

Despite these low-level efforts to share tactical experiences, there is minimal high-level cooperation between the two countries. In particular, according to interviews, Israel is somewhat frustrated by the seeming lack of interest on the part of the DHS Science and Technology Directorate to pursue cooperative efforts. It is uncertain why the United States would block these attempts. Nor is there any direct relationship with the U.S. Border and Customs Patrol or with FEMA since 9/11. HFC has better relations with DoD, in particular the Office of Homeland Defense within OSD, and U.S. Northern Command. But apparently DHS has not yet taken advantage of the opportunity to learn from Israeli experiences. Even cooperative efforts through such programs as military-to-military relations go through the ups and downs of a close political relationship between the two countries. Concerns over illegal technology transfer from Israel to China in 2005, for example, led to strained relations for several months. The relationship is also personality dependent.

On the other hand, U.S. intelligence cooperation with Israel is closer than with any other state except the Anglo countries (Britain, Canada, and Australia). There are multiple black world information exchanges and, presumably, cooperative tactical programs underway that are not publicly known. The Defense Intelligence Agency says that its largest account in terms of exchange conferences is with Israel, primarily in the fields of counterterrorism and counterproliferation. The United States recognizes Israel's experience and skills in the fields of counterterrorism and the development of intelligence sources.

## **Conclusion**

The United States is decades behind Israel in coming to terms with terrorism, and accepting the need for enhanced security measures on a day to day basis. One could argue that this is not a bad thing—the fact that the United States has not had the experience necessary to create the frame of mind in its citizenry to accept such measures as are found in Israel today reflects both luck and a predisposition on the part of the American people

to covet and safeguard their civil liberties. We will return to this theme in the final section. Nonetheless, should the United States come under increasing terrorist attacks, it will need to turn to Israel for help and suggestions on preventing and countering those attacks.

In Israel today people are more worried about small attacks on small, everyday targets like restaurants. Americans, on the other hand, worry about their porous borders and the potential for a large-scale WMD attack on a major city or national symbol. This difference in concern may reflect a mindset driven in part by Israel's tight border controls and fatalism regarding conventional military attack by its Arab neighbors. Since there isn't much the average citizen can do about the latter, and since Israel's borders are pretty much sealed, the biggest threat at the moment comes from those random bombings of shops and buses.

Home Front Command is much like U.S. Northern Command, but it has more freedom of movement since Israel doesn't have state-level political structures interposed between the federal level and the military command. As a result, HFC can act without a formal request from anyone, as its procedures are established in advance of an attack. It can also deal more directly with hospitals since Israel is a socialist country, with no private medical centers. This allows HFC to dictate the requirement for chemical and biological decontamination capabilities to Israeli hospitals, something NORTHCOM could never do in the United States. On the other hand, Israel has much to learn from the United States when it comes to police and fire departments, with their attached emergency services and hazardous materials teams, all of which are more powerful and better trained than is the case in Israel.

There is little evidence that the United States is focusing much emphasis on the physical protection of its people or buildings—an area ripe for cooperation and learning from Israeli experiences, since this is what they've been dealing with day-by-day for decades.

Finally, Israel's success at preventing and countering terrorism is based on several case-specific factors that do not apply to the United States. Israel is a small country, the size of New Jersey, with a police force for the entire country the size of New York City's police department. Their bureaucracy is smaller, less rigid, and less ideological than the United States'. They are also a more homogenous population than the diversity found in the United States. The combination of those factors

means that "everyone knows everyone" in the homeland security field, and they work together toward a common goal more easily. They occupy their main enemy's territory, and can see inside the occupied territories with ease. They can also use their native or regional immigrants to exploit human intelligence in those areas. Finally, compared to Israel, the U.S. populace is naïve about security, and quickly forgets the last threat to its freedoms. In this regard Israel is, sadly, much more experienced, much more practical, and more willing to sacrifice some individual liberty for the sake of security in the face of a known and immediate threat.

# V. Responding to an Attack

Attitudes toward response after an attack or natural catastrophic event demonstrate one significant difference between the United States and In Israel there is a much greater focus on the citizenry's responsibility to prepare for and respond should a terror attack or natural disaster occur. By contrast, very little anti-terrorism training is conducted in U.S. schools or in the general population. The days of individual Americans being thoroughly prepared for a nuclear attack are a distant memory... No longer is "duck and cover" taught in schools, nor are signs posted for bomb shelters. Although information is available in the United States regarding how to protect against chemical, biological, and radiological events, it is usually only those who are viewed as alarmists who put the information into practice. In Israel, on the other hand, virtually every person is prepared to respond to multiple types of attack. Education regarding response to terror attacks is provided from elementary grades through high school. Overall, Israel appears to be much better prepared to respond to an attack—and presumably to recover more quickly as a result.

This section presents a broad overview of the doctrine, plans, medical systems, and citizen's responsibilities in both the United States and Israel. The purpose is to provide background information to better understand the response organizations and assets of both countries and more clearly detail United States strengths and areas of improvement.

# **Response Plans**

Both countries have developed robust incident response plans in reaction to attacks on their nations. The United States modified its response plans significantly following September 11, 2001. Israel has developed and practiced its response plans regularly since the 1991 missile attacks on Tel Aviv. The centerpiece of the U.S. response is the National Incident Management System. Meanwhile, the Israeli government uses a highly trained and multi-layered response infrastructure to protect its citizens from daily terrorist threats and less frequent, yet potentially highly destructive attacks by other countries.

## **U.S. National Incident Management System (NIMS)**

The tragedy of September 11, 2001, forced the United States government to examine how first responders react to catastrophic events. Responses could be more effective and efficient with major changes to U.S. response planning and structure. Department of Homeland Security Secretary Tom Ridge announced approval of NIMS on March 1, 2004. NIMS, the nation's first standardized management plan, created a unified structure for federal, state, and local governments to use when responding to incidents. 150 The NIMS framework allows incident management organizations to respond in an all-hazard context, including acts of terrorism, wildland and urban fires, floods, hazardous materials spills, nuclear accidents, aircraft accidents, earthquakes, hurricanes, tornadoes, typhoons, and war-related disasters. 151 NIMS employs common doctrine, terminology, concepts, principles, and processes to ensure consistent and seamless response execution during incidents.

There are five key elements of NIMS.

- Incident Command System. The Incident Command System is a standardized incident management organization with five functional areas: command, operations, planning, logistics, and finance/administration. The Incident Command System applies a standardized, scaleable organization and common terminology to its approach to management of a crisis situation. If followed correctly, it will allow units from different jurisdictions and organizations to become essentially "plug-and-play" building blocks of an effective emergency response unit. 152
- Preparedness. The preparedness function of NIMS recognizes that responder readiness to manage and conduct incident actions is enhanced considerably when professionals have worked together before an incident occurs. NIMS defines advance preparedness measures such as planning, training, exercises, qualification and certification, equipment acquisition and certification, and publication management. It also incorporates public education, enforcement of building standards and codes, and preventive measures to minimize the loss of life or property. Preparedness also

includes measures to educate the public and ensure compliance with local standards and codes, and to enforce acceptable practices.

- Communications and Information Management. Because standardized communications are critical in the event of an incident, NIMS stipulates interoperable communications systems for incident and information management. Universally incorporated into NIMS is the concept of unified command which provides for and assures joint decisions on objectives, strategies, plans, priorities, and public communications. Anyone who has been at a major accident or hazardous materials scene where interagency coordination was required can attest to command and control shortcomings. Each jurisdiction, state, tribe, county, or city has a unique communication system that often is not compatible with other agencies. And, within a local area, often the basic first responders, such as police and medical personnel, do not have interoperable communication systems. 153 RapidCom 9/30 is one solution introduced by DHS in July 2004 to allow first responders in ten high-threat urban areas to communicate with each other during a large scale emergency. 154
- Joint Information System. At large multi-jurisdiction incidents public communication and information are always valid concerns. Joint Information System gives the public timely and accurate information and unified public messages. By utilizing Joint Information Centers, the federal, state, tribal, and local levels of government release the same information in the event of an incident.
- NIMS Integration Center. The NIMS Integration Center provides strategic direction and oversight to the NIMS. It assesses proposals for changes to the NIMS, captures and evaluates lessons learned, and employs best practices. NIMS Integration Center also creates and oversees the implementation of national standards for NIMS education and training, first responder communications and equipment, and qualification and credentialing of incident management and responder personnel.

## Israeli Layered Response

Israel's response philosophy is based on preparations in a series of concentric circles of increasing protection that operate daily among the populace, in peacetime and war. The military, security, and intelligence forces provide the outer layer of protection through offensive operations against terrorist activities. Defensive measures are deployed at the inner layer of response in an effort to disrupt and thwart attempts by terrorist groups to carry out operations against Israeli targets. Disaster rescue teams are responsible for responding to terrorist attacks. The individual citizen is located at the center of this concept and has very specific responsibilities. The individual citizen must establish and maintain protected spaces, understand how to effectively use protective kits, and assist as requested in an emergency response situation.

## **Medical Systems**

The United States and Israel each have extensive emergency medical systems. In a large scale emergency situation, the United States employs the National Disaster Medical System, while Israel utilizes the Magen David Adom. Both systems of medical management appear to be effective in conducting medical responses. Should additional pharmaceuticals be required, both countries have a system in place to address the elevated needs.

#### **U.S. National Disaster Medical System (NDMS)**

Under the National Response Plan, the lead federal agency for medical response is the National Disaster Medical System section within FEMA. It has the responsibility for managing and coordinating the federal medical response to major emergencies and federally declared disasters. There are three distinct but inter-related components of NDMS. The first component is medical response to a disaster area and includes medical teams, medical supplies, and equipment. The second component is patient movement from the disaster site to unaffected areas. The final component is definitive medical care at participating hospitals in unaffected areas of the nation. 159

The National Disaster Medical System is comprised of six teams. 160

- Disaster Medical Assistance Team is a group of professional medical personnel designed to provide medical care during a disaster or event. Disaster Medical Assistance Teams deploy to disaster sites with sufficient supplies and equipment to sustain themselves for a period of 72 hours while providing medical care at a fixed or temporary medical care site.
- Disaster Mortuary Operational Response Team provides victim identification, temporary mortuary facilities, forensic dental pathology, forensic anthropology methods, processing, preparation, and disposition of remains. Once activated, team members work under the direction of local authorities, providing technical assistance and personnel to help recover, identify, and process deceased victims.
- Veterinary Medical Assistance Team provides assessment of medical needs, treatment, and stabilization of animals, animal disease surveillance, zoonotic disease surveillance and public health assessments, technical assistance to assure food and water quality, hazard mitigation, animal decontamination, biological and chemical terrorism surveillance. Veterinary Medical Assistance Teams are composed of private citizens who work under the guidance of local authorities.
- Federal Coordinating Centers recruit hospitals and maintain local non-federal hospital participation in the National Disaster Medical System, and coordinate exercise development and emergency plans with participating hospitals and other local authorities in order to develop patient reception, transportation, and communication plans.<sup>163</sup>
- National Pharmacy Response Teams assist in chemoprophylaxis or the vaccination of Americans. These teams are located in each of the ten DHS regions.
- National Nurse Response Teams assist in chemoprophylaxis, mass vaccination programs, or scenarios that overwhelm the nation's supply of nurses in responding to a weapons of mass destruction event. Each team is composed of approximately 200 civilian nurses.<sup>164</sup>

Gas Masks. Unlike the practice in Israel, the U.S. Department of Homeland Security recommends against purchasing gas masks for family members, citing safety concerns due to improper use of masks and hoods as well as a false sense of security against chemical and biological agent exposure that masks may provide. 165

## Israeli Emergency Medical Services

The Emergency Medical Service of Israel is called Magen David Adom (MDA) or the Red Shield of David. The Magen David Adom is a group of professional medical and volunteer personnel whose duty is to save lives. The system was founded in 1930 in Tel Aviv by a group of volunteer doctors in response to the 1929 riots; their purpose was to provide emergency medical services to the Hagana (the Jewish Self-Defense Force) and private citizens. In 1950, MDA was officially recognized by the Knesset and has provided medical services during all Israeli wars and during times of terrorist crisis. <sup>166</sup>

Magen David Adom employs a highly organized and structured approach to emergency medical services. All activities are coordinated from a National Dispatch Center that oversees the activities of eleven regional dispatch centers. The system is designed and operated in three tiers: dispatch, ambulance services, and first responders. Over 9,000 emergency medical technicians, dispatchers, paramedics, blood bank operators, and volunteers staff the system and operate over 500 emergency medical service vehicles throughout the country.<sup>167</sup>

Use of the nationwide emergency call-in system also aids in quick and efficient response. Similar to the U.S. 911 system, all calls made to the 101 number are immediately connected to an emergency dispatcher in the National Dispatch Center. This center pages all Magen David Adom personnel to relay the emergency information, and notifies all hospitals within the emergency medical system that an incident has occurred. The dispatch center also directs the movement of large quantities of blood from Magen David Adom blood banks into the hospitals of the effected area. All this takes place while the first responders are making their way to the scene.

In January 2004, Magen David Adom deployed a new Supervision and Control System. This system outfitted every emergency vehicle with

global positioning system trackers and computerized communication devices to allow two-way, real-time data transmission between dispatch and the crews. This system allows dispatchers to track the vehicles and patients in real-time to aid in response and better patient tracking. Additionally, the Supervision and Control System contains coordinated inter-region and inter-service (police, ambulance, and fire) modules that increase overall incident management communication and coordination. <sup>169</sup>

*Personal Protective Kits.* Home Front Command has protective kit distribution centers throughout the country capable of distributing kits to thousands of Israeli citizens each day. The protective kits contain an appropriately sized and age-specific gas mask with filter and an instruction manual. Home Front Command advises that the protective kits should not be opened until they have issued a specific broadcast telling the Israeli public to do so. HFC periodically invites the public to refresh and replenish the kits. In 2001, it cost the Israeli government \$8.50 per person to distribute and maintain gas masks.

The Israeli medical response kit includes a gas mask and filter as well as antibiotics, a syringe, and a dose of atropine to be used in the event of a chemical nerve gas attack. Citizens will be instructed when to use this medication through the media. 175

**Personal Firearms.** Another form of personal protection is one which mirrors the history of America's "wild west." Israel is a state in which many, if not most, citizens own weapons, both personal and military, and many people carry them on the street—and are ready and willing to use them when necessary. In settlements of greatest threat, such as those in the West Bank and (formerly) in the Gaza Strip, the IDF actually provides training and weapons to the citizens so they can serve as their own first response protection in case of attack. <sup>176</sup>

# **Stockpile Programs**

## Strategic National Stockpile (SNS) Program

Congress charged the Department of Health and Human Services and the Centers for Disease Control and Prevention (CDC) with the establishment of the National Pharmaceutical Stockpile in 1999. The

National Pharmaceutical Stockpile became the Strategic National Stockpile on March 1, 2003, and is now managed jointly by the U.S. Departments of Homeland Security and the Health and Human Services. This stockpile is a national repository of antibiotics, chemical antidotes, IV administration, airway maintenance supplies, and medical/surgical items.<sup>178</sup>

The Strategic National Stockpile has 12-hour "push packages" positioned in strategically located warehouses ready for deployment to designated sites within 12 hours of the federal decision to deploy Strategic National Stockpile assets. These packages are configured for immediate loading onto trucks or aircraft for the most rapid transport. When Strategic National Stockpile supplies arrive in a disaster stricken state or community, a Technical Advisory Response Unit accompanies the shipment. The U.S. Department of Homeland Security transfers authority for the Strategic National Stockpile supplies to the state or local authorities once they arrive at the receiving sites. State and local authorities are then responsible for the breakdown and distribution of the packages. 179

## Israeli "Strategic National Stockpile Program" Equivalent

According to the Armed Forces Medical Intelligence Center the Home Front Command has, in addition to the atropine auto-injectors included in the protective kits, Pyridostigmine bromide tablets for the civilian population in the event of attacks by adversaries using chemical nerve agents. The Home Front Command also stockpiles and can readily distribute broad-spectrum antibiotics. In times of emergency, high school students can be recruited to assist the Home Front Command and rescue forces in the distribution of medications, rendering assistance to the population in shelters, and assisting in hospitals.

# Citizen Responsibilities During and After Attack

Citizen responsibilities regarding preparation for and response to attack are treated very differently in the United States and Israel. The United States has *recommended* that individual citizens undertake many actions in preparation for a natural disaster or terror attack. By contrast, the Israeli government has *mandated* that its citizens be adequately

prepared. By ensuring appropriate preparation prior to attack or major disaster, the Israelis reduce potential casualties.

Both countries use volunteers to enable more efficient disaster response through the U.S. Citizen Corps or the Israeli Magen David Adom volunteer program. However, because attacks in Israel occur more frequently and the terrorist threat is perceived to be more pressing, Israeli citizens appear to demonstrate a greater commitment to volunteer activities.

### **U.S. Citizen Corps**

The Citizen Corps was established by the White House in 2002 as part of the USA Freedom Corps. On October 1, 2003, the Citizen Corps Program was transferred to the Office of Domestic Preparedness. Their charter asks members to "embrace the personal responsibility to be prepared; to get training in first aid and emergency skills; and to volunteer to support local emergency responders, disaster relief, and community safety." There are four main Citizen Corps programs: Community Emergency Response Team, Medical Reserve Corps, Neighborhood Watch, and Volunteers in Police Service. There are currently more than 1,200 Citizen Corps Councils nationwide which serve approximately 50 percent of the population of the United States. Despite its sponsors' hopes however, the initiative is still new and has not yet achieved national level buy-in by the public.

The Citizen Corps offers potential benefits to the community such as a greater sense of security, responsibility, and personal contributions that build community pride. Additionally, this initiative is meant to develop unity and patriotism, promote risk reduction, enhance preparedness practices within the community, and prepare citizens for helping others in a crisis. The Citizen Corps program creates better informed and better prepared citizens that can take care of themselves and others during times of crisis, allowing first responders to address the most critical needs.<sup>187</sup>

## Israel's Magen David Adom Volunteer Initiatives

The Magen David Adom depends on a large volunteer force to conduct its daily operations. Magen David Adom operates with approximately 1,000 paid employees and about 6,000 volunteers. Many

volunteers are 15-18 years old, serving as assistant medics, dispatch center workers, and first aid instructors. Volunteers receive extensive training and are required to work for the Magen David Adom for a minimum of two years. Often, volunteering becomes a tradition, with multiple generations of the same family volunteering at the same station. 189

## **Notification Systems**

#### **United States**

The Emergency Alert System is intended to be an all-hazard warning system for American citizens. The Emergency Alert System was built on top of the Emergency Broadcast System infrastructure that was initiated in 1951 as way to warn of a nuclear ballistic missile attack. The original Emergency Broadcast System was limited to federal use, only at the authorization of the President. In 1963 the system was expanded and access was provided to state and local authorities to warn local populations about other threats or hazards, such as tornados, hurricanes, and other potential disasters.

The Emergency Alert System retains many of the original design standards. The system uses public radio, television, and the National Oceanic and Atmospheric Administration radio as the primary communication methods. Its messages can incorporate elements of broader and more detailed information including the type of hazard, location, and actions to take. The Emergency Alert System broadcast is mandated on public systems at the direction of the President, but is only a voluntary transmission for local or state level emergencies. <sup>190</sup>

### Israel

Communication with the population is a high priority for the Israeli government to minimize the "fog of war." During periods of imminent threat, the outer circle of the Home Front Command defensive response is initiated. The government provides general warnings of a possible attack. After an attack has occurred, a national system of warning sirens and all Israeli radio and television stations transmit the issued declaration of emergency. The Home Front Command broadcasts attack information,

such as where missiles landed, types of missile (including conventional or unconventional warhead), and extent of casualties.<sup>191</sup>

## **Protected Spaces**

## **U.S. Shelter in Place Program**

The U.S. Department of Homeland Security identifies three key steps individuals and families should take in preparation for unexpected emergencies. These key steps are: assemble an emergency kit, make a family communication plan, and learn more about readiness. DHS advises that citizens should be able to survive comfortably on their own in their homes for at least three days in the event of a chemical, biological, or radiological attack.

Since the 2001 attacks, various public and private organizations have developed sheltering guides for use in homes, businesses, schools, and vehicles. Three such sheltering guides are available from the Department of Homeland Security, the American Red Cross, and the Center for Disease Control. These organization's sheltering guides provide web accessible, in-place sheltering information detailing different types of incidents, a step-by-step planning process, and implementation actions if disaster strikes. All three guides identify the facility user as the responsible person to prepare the shelter plan.

#### **Israel's Protected Space**

After the Gulf War, changes were made in civil defense regulations that required all new buildings to have a built-in protected space made of reinforced concrete with sealed blast-resistant windows. Rooms are designed to protect against conventional and non-conventional attack with chemical and biological weapons. Communal shelters are made available for those citizens who do not have a home shelter or may not be able to reach their homes during an attack.

All new homes, hotels, and commercial buildings are required to have a protected space large enough for all people likely to be using that facility. This is an airtight, sealed room of reinforced concrete with blast doors and metal covers over blastproof windows that will allow the people inside to survive nearby blasts or WMD use for several hours. The regulations call for stronger spaces in the north of the country, which faces a more direct threat from Syrian or Hezbollah artillery and rocket fire. All personnel must be able to reach a protected space within three minutes of warning—the amount of time Tel Aviv had in 1991 when Iraqi SCUDs began falling. 195

Some of the technological challenges that Israel is facing include developing a protective window or glazing that will work sufficiently without requiring a metal cover; dealing with ceilings; and creating and enforcing building codes for commercial structures so they can withstand attack.<sup>196</sup>

Since 1992 Israeli law has required that every new building or building addition must be constructed with an Apartment Protected Space or a Floor Protected Space. 197 The protected space is designed to provide protection to its occupants against conventional and unconventional attacks for several hours. Shelters can be found in private, joined buildings; private houses; and dual-purpose, public buildings. ventilation and filtering system creates an over-pressure inside the shelter which allows people to remain in the protected spaces for an unlimited period of time without the need for wearing gas masks. 198 Examples of protective space requirements include concrete envelopes, stable concrete towers, blast doors and windows, sealed envelopes, air filtering systems, internal finishing layers, and communication means. <sup>199</sup> On March 17. 2003, the Home Front Command announced that the public must obtain the necessary materials and complete preparations for their sealed rooms as detailed in a widely distributed booklet.<sup>200</sup>

Some Israelis oppose the whole concept of mandatory protected spaces, largely because they resent the government telling them how to build their homes. Incorporating a concrete protected space inside a home complicates the building process and adds to the cost. This is a minority viewpoint, however; there is a general societal acceptance of the necessity for such measures based on harsh experience.<sup>201</sup>



Figure 17. Protected space in basement of Tel Aviv Hilton Hotel (Larsen)

## **Readiness Education**

## **U.S. Ready Campaign**

The Ready Campaign, a national public service advertising campaign geared to educating and empowering American citizens to prepare for and respond to potential terrorist threats and other emergencies, was introduced by the Department of Homeland Security in February 2003. The Ready Campaign offers one-stop-shopping for citizen preparation for a terrorist attack at its website, www.Ready.gov. Additionally, the Listo Campaign, the Spanish-language version of the Ready Campaign, was launched in December 2003. Despite these initiatives, most Americans are not aware of, nor have they accepted, the need for such preparations.

### **Israeli Readiness Education**

One of the more proactive methods of preparing their country for an unconventional attack is the education of Israeli youth. Today, Israeli Defense Force soldiers can be seen in public schools teaching children ages 4 to 18 about the possibility of being attacked by weapons of mass destruction. <sup>203</sup> In coordination with the Education Ministry, Home Front

Command launched this program knowing that the children cannot avoid hearing about the possibility of attacks in the media. Their aim is to curb the childrens' fears and anxieties through better understanding, which includes how to properly don protective gear. They believe that the more familiar children are with the concept, the less anxiety they will feel.

## **Conclusion**

The organizations and assets employed by the United States and Israel to respond to a catastrophic event are based on past experiences and perceived future threats. While both countries appear to have complementary organizations and capabilities, the Israeli system is more experienced due to the constant attacks they suffer. Additionally, the Israeli people appear to be more prepared and cognizant of attacks and response assets and responsibilities after an event. While the United States continues to develop its response capabilities, it should take lessons from its more experienced ally.

# VI. Analysis: Observations from Israeli Experience

Research and field interviews have identified several successful tactics, techniques, and procedures from Israel's experience that might be considered for the United States to emulate. Whether the United States chooses to adopt any of these "lessons" is still to be determined. Nonetheless, these concepts have proven to work in Israel.

The United States has much to learn from Israel's experience in providing homeland security through the Home Front Command. However, to put this in proper perspective, several key differences between Israel and the United States must be appreciated before discussing lessons learned. These differences make it easier for homeland security initiatives to be successfully applied in Israel. Israel's populace has been in a constant state of alert since the founding of the country given its unique geography, history, demographics, and adversarial neighborhood.

Most U.S. citizens appreciate the need for a heightened state of readiness and support homeland security initiatives. Yet this implies changing to a way of life much different than the history and experience of the United States. Although it may seem impossible to most Americans that homeland security will ever take a lesser role following the events of 9/11, it is human nature to forget or minimize tragic events with the passage of time. Some in the United States would suggest that key lessons from 9/11 have already been lost. The citizens of Israel, on the other hand, have the unfortunate disadvantage of having frequent reminders why homeland security is critical to their continued existence, thus creating a different mindset and level of support for the HFC throughout the nation. It is also true that a coordinated, centralized homeland security system is easier to implement and sustain in a smaller country like Israel.

## **Potential Lessons from Israel**

Following are a number of thematic lessons from Israeli experience that may prove helpful in America's fight against terrorism. These appear in no particular order or priority.

## **Know Your Adversary**

Israel does a particularly good job understanding its neighbors and adversaries. This knowledge allows its security apparatus to prepare appropriately and pre-position its defensive forces accordingly to minimize such threats. When a state knows its adversary it can tailor its strategy to maximize its chances of dissuading, deterring, or defeating the threat. Israel's success is due to a number of factors. For one thing, it places much more emphasis on cultural and regional studies than does the United States. This is obviously made easier by the fact that Israel controls much of the territory of its adversaries, and because it has closer linguistic, racial, and territorial ties to its neighbors—which also happen to be its adversaries. As a result, it can draw covert agents from a large pool of native or immigrant area specialists. There is no doubt that the United States has neglected human intelligence for several decades.



Figure 18. Street scene in the Muslim Quarter, Jerusalem (Larsen)

## **Interagency Cooperation**

Israel is also way ahead of the United States in its practice of sharing information between bureaucratic organizations, in cooperation between response agencies, and in requesting and sharing responsibility for civil defense. Its major intelligence organizations, for example, act as an integrated team. The Mossad, Shin Bet, and local police units share a common intelligence pool, and work together closely when necessary. Israeli practices that the United States may wish to copy include realistic practices, drills, and scenarios, minimizing compartmentalization of information, and developing a process that ensures all organizations talk to one another more regularly. Israel has, in short, achieved a coordinated network-centric intelligence effort. This is a goal for the U.S. Intelligence Community, but it has a long way to go before it achieves that level of cooperation.

The support of the IDF and HFC by the Israeli people is the cornerstone that creates a cooperative environment for an effective response by emergency personnel. This cooperation needs to be present not only after a crisis, but during planning and exercises, which is a clear weakness in the United States. This is not to suggest that there are no problems in Israel regarding a cooperative response. In fact, some have expressed concerns that when the HFC activates its reserves during a crisis, the Israeli economy suffers due to a shortage of manpower in critical places, such as the electric company. Unlike the situation in the United States, manpower is a problem for Israel.

Some Israelis also worry that fighting terrorism will come at the expense of fighting crime. This has been refuted as being a misconception, since the fight against terrorism should theoretically help police and other security forces do their regular functions. In fact, the Israeli experience has shown that for fighting terror, it is best to use existing infrastructure. Once again, it is less important to spend money on creating new initiatives, but to place the effort and funds in making the best use of existing resources. Cooperation is always a challenge in any bureaucracy with multiple organizations vying for limited funds, and the Israeli political system is certainly not unique with its many competing factions. Yet the overall success of Israel's defensive efforts in homeland security has been based on enhanced cooperation between government agencies, the military, emergency response providers, and the public at large.

## **Tight Internal Security**

A visitor to Israel is immediately struck by the presence of armed military and police forces on the street, in public places. Reserve military members carry their automatic weapons openly with them when in uniform. Nearly every upscale restaurant has private security at the door, including metal detectors and bomb sniffing sensors. All public buildings, including shopping malls and bus and train stations, have armed guards and metal detectors at their gates. In short, the country feels like a police state, one in which security concerns are omnipresent.



Figure 19. IDF and Israeli Police patrol, Via Dolorossa, Jerusalem (Larsen)

## **Profiling**

Unlike the United States, which has a longer and stronger tradition of individual liberties, Israel is proud to admit that it uses profiling of individuals in its efforts to uncover terrorists. This is not just racial profiling; security personnel look at a number of indicators to determine whether a person is perceived to be a threat. For instance, there is a color-coded license plate system that differentiates between Israeli Jews, Israeli Arabs, and Palestinians. On approaching a checkpoint the security guards

will first check the license plate of an approaching car, then see whether the driver is alone or has passengers, whether the passengers include children, then check the identification card to see if the driver is an Israeli Jew, before making a decision on the physical look and demeanor of the driver herself. While this may be done in the United States by local police forces, FBI, and border patrol agents, it is not publicly acknowledged due to concerns over personal liberties and political correctness. To better protect against terrorist infiltration and terrorist acts, the United States may want to give profiling a higher profile.

### **Protected Spaces**

Every new home and public building in Israel is required to have a protected space—a room built of reinforced concrete with blast door and window that is designed to provide overpressure protection against bombs and chemical or biological weapons attack. Older buildings must be retrofitted to include a protected space for each family or all workers or customers in a public building. All plans require the approval of the military (Home Front Command). A protected space is meant to be an integral part of the home that is used in a day to day fashion, but can be quickly converted to a bomb shelter and protective living space in a few minutes. It should contain the essentials for survival for several hours: water, food, and a portable radio.

Some places in the United States also have protected spaces and warning systems. These are primarily located in communities near nuclear power plants, or downwind from chemical weapons storage facilities, biological laboratories, or industrial chemical facilities. In those cases there is, for the most part, public acceptance of the need for such shelters and a good level of interagency cooperation. But to date there has not appeared to be much need for such measures on a national level, because there does not appear to be a proximate threat facing the general population. Nor are North American homes typically built of concrete, making the addition of a protected space an expensive proposition.

# **Barriers**

Another technique which has proven quite successful in Israel is the use of physical barriers to prevent illegal infiltration. This can be accomplished by walls or fences, making liberal use of sensors. The most well-known of these barriers is the wall Israel is building around Jerusalem, but the Gaza Strip has been completely surrounded by a barbed wire fence and border security, and there are plans to eventually surround most of the West Bank and the Jewish settlements that were established there. Technology plays a major role in thwarting infiltration and terrorist attacks. The United States is considering similar barriers in crucial locations, such as the border with Mexico. The American concern is more about stemming illegal immigration and countering drug smuggling than counterterrorism per se, although preventing terrorists from entering the United States across that border would be a welcome secondary benefit of such a barrier.



Figure 20. Security fence under construction, east side of Jerusalem (Larsen)

# **Information Sharing Between the Two States**

Ties between the United States and Israel should be very close in order to maximize cooperative ventures and allow each country to benefit from the lessons of the other in the fight against terrorism and ensuring homeland security. Yet this relationship has not been as close or as beneficial as it could be. For example, while Home Front Command and U.S. Northern Command have an ongoing relationship, and with occasional lapses the IDF and OSD have been close, there is as yet no known linkage between Home Front Command the Department of Homeland Security. While there was a memorandum of understanding between Home Front Command and FEMA prior to 9/11, that MOU was allowed to lapse.

## **Public Education**

Israel takes public education very seriously. It undertakes major measures to explain realistic threats to its population. By doing so it can achieve public buy-in for its policies. In return, the public can help identify threats and often acts as first responders until the police or military arrive. This assumes, correctly, a substantial amount of military training on the part of the general population, and an equally substantial set of pre-positioned weapons in the hands of that population. In some of the more isolated settlements, in fact, the military has actually provided small arms and training to the local population in order to prepare them for first responder responsibilities.

In training the population, the military has chosen to keep things as simple as possible. For example, every household has received a civil defense booklet, "In the Event of a Genuine Alert: Information on Civil Defense for the Family." In addition, there is only one type of warning siren notifying people to move to their protected spaces, used only in case of ballistic missile attack. In the case of other types of attack, Home Front Command has the ability to override commercial media transmissions and broadcast emergency notifications and provide information on the threat, actions for the public to take, and, when appropriate, all clear notifications. Finally, the government has also provided every citizen in Israel with a personal protection kit, consisting of an appropriately sized gas mask and filter, an atropine injector, and an instruction book.

# **Offensive Military Action**

An imperial approach to foreign policy can keep adversaries at arm's length. Taking the fight to the enemy, or pursuing "an away game," can reap enormous benefits for homeland defense. Israel has proven its willingness to pursue such actions whenever necessary, relying on preemptive acts or preventive wars when necessary to dissuade or deter an adversary from attacking its homeland. To successfully accomplish such an act it helps to reduce the rules of engagement on offensive military actions. This may include accepting the value of targeted killing of an adversary's leaders, something the Israeli military has learned to do quite successfully. This requires the exquisite intelligence that the United States has called for in future capabilities, as well as a responsive offensive infrastructure that can tackle such missions.

# **Security Decision-Making**

Security decisions are made quickly in Israel. Its national security establishment is much smaller than that in the United States, making it easier for a small group of senior leaders to make decisions more efficiently and quickly. Furthermore, there is little public debate over security issues; nor is there involvement to any degree in the security decision-making process by the media or by interest groups, as in the United States. As a result, decisions are easier and faster to make—albeit in a less democratic fashion than that to which American citizens are accustomed.

One could argue that in the United States the national security community has made decisions about the nature of the threat and the best means to meet it in the future—and those means are a continuation of present trends in weaponry and organization. By the very fact that little has changed since the end of the Cold War, despite the psychological impact of the 9/11 attacks, one could surmise that the United States does not really think the terrorist threat is that serious. The bulk of the military and homeland defense budgets are still going to conventional military forces, rather than to civil defense. This may also, of course, reflect the Bush administration's perspective that "the best defense is a good offense," in line with Israel's views as expressed in the previous section.

# **Compromise and Appeasement**

Israel has had mixed success in its efforts to ensure the harmonious coexistence of an Israeli state in an Arab-dominated land. In recent years it has bequeathed large portions of territory to its Palestinian minority under the nominal control of the Palestinian Authority. These moves, which some have called appeasement, have not necessarily led to a safer security environment. The most well-known examples are the Gaza Strip, the West Bank, and Southern Lebanon. In all of these cases, opponents of granting the Palestinians home rule or returning conquered territory to the Lebanese (and, by extension, Syria and Hezbollah) argue that this has simply given the radical elements of Palestinian population a secure base from which to carry out attacks on Israel. Security has seen little if any improvement, according to this view. On the other hand, in the Golan Heights, Israel refused to return that territory to Syria since taking it in the 1967 Six Day War. By keeping those strategic highlands overlooking the Sea of Galilee, the people in that part of Northern Israel are much more secure than they were previously.



Figure 21. Ferry crossing the Sea of Galilee, from Tiberias, with Golan Heights in the background (Larsen)

# **Advanced Technology**

Modern technologies, especially sensors, are extensively used in Israel, particularly in border control and noninvasive surveillance methods. These help identify infiltration attempts and thwart attacks. Such modern methods as noninvasive search techniques, unmanned aerial vehicles, and high-tech balloons are real-world solutions to the security dilemma of having adversaries on one's borders as well as within society.

# **Reasons the United States is Unlikely to Adopt These Measures**

#### **Differences in Size**

Israel is a small state, about the size of New Jersey. At its narrowest point the distance from the Mediterranean Sea to the West Bank is only 8 miles. The population of six million is the size of an average U.S. state. The entire police force in Israel numbers the same as the New York City police department.

The advantage of such a small community is that everyone in the homeland security business knows everyone else. Israel also lacks the intermediate level of federal states, so it can pass decisions directly from the federal decision-makers to local authorities. This makes coordination much simpler than in a country as large, diverse, and far-flung as the United States. Israel's small size means that its population has a more communal feel, and is in general more willing to accept security policies that the U.S. population would not, given its diversity, size, and stronger commitment to personal freedoms and individual liberty.

#### **Differences in Culture**

In addition to being larger, the United States has a different attitudinal approach to running government. For example, as some Israeli analysts pointed out to our study team, "in Israel everyone wants responsibility; in American nobody does." This differing perspective as to being in charge has direct implications for first responders and for taking the initiative to ensure preparations are in place to prevent or respond to attacks. In addition, many Israeli analysts believe that "Israelis will do what is

necessary first and ask where the money will come from later." This again reflects a different, more proactive approach that Israeli officials take, as opposed to those in the United States. While such anecdotal comments are, of course, just that, they nonetheless may hold some truth that explains the more robust approach to civil defense taken by the Israelis.

# **Differences in Attitudes toward Security**

Israeli citizens, whether born in Israel or immigrants, are immediately inculcated into a society permeated by violent attacks by numerous adversaries. This creates a state of mind in which security is foremost. Some Israelis say that their country is still fighting for its independence, surrounded as it is by hostile and often threatening neighbors and facing a shadowy enemy within. As a result, Israel is a fully mobilized society. It subscribes to universal military service for males and females, and most older generations remain in the reserve forces. Americans, on the other hand, still view conflict as an aberration to the norm of peacetime.

# **Differences in Experience**

Israel's short modern history is replete with stories of war, terrorism, and the requirement for continual watchfulness. It is, in short, a series of bad experiences. The United States does not share that dark background, despite a much longer history. Israeli citizens grow up with a visible security threat, so they are more willing to accept security measures and adapt to that situation. Americans, on the other hand, are less likely to relinquish many personal freedoms for the sake of improved homeland security until there is a better defined threat, and/or more direct attacks on its society. As one Israeli analyst told the authors, "The United States has not suffered enough yet to adopt the same measures we have taken."

## **Differences in Bureaucratic Design**

The organizational framework of the United States government is much larger and more complex than that of Israel, especially as regards national security decisions. It is therefore easier to make quick security decisions in Israel because of its smaller decision-making cohort, all of whom know one another and have participated in joint exercises. In addition, the Intelligence Community in Israel shares a common central repository of intelligence information, something that the U.S. Intelligence Community lacks. This also precludes information sharing and the intelligence that is needed to make snap decisions properly.

## Conclusion

The United States and the entire international community can learn much from Israel's efforts in the homeland security arena. Coordinated teamwork between government agencies, the military, and emergency responders is imperative. Peacetime training with all emergency response entities goes a long way towards smoother operations during actual incidents. To date, despite the best of intentions, the United States has not been very successful in conducting coordinated peacetime training efforts. It seems there is always some "real world" event that prevents the emergency responders from following through with plans to conduct mass casualty training scenarios. Training must be a priority. The preparedness function of the National Incident Management System should help in this endeavor.

Israel does an excellent job of teaching its civilian population how to be self sufficient in the event of an incident. Again, there is much the United States can learn in this arena. The brochure distributed by the Home Front Command is very explicit in its content, providing a step-by-step format to follow in the event of an incident. The United States Department of Homeland Security's public website also contains good information. But this begs two questions: Who knows the public website exists? How do we reach those Americans without access to the Internet? A recent survey by Mediamark Research Inc. found that 63 percent of the American adult population are regular Internet users. Prior to the deployment of the National Incident Management System on March 1, 2004, the United States had no provision for a unified program comparable to that of Israel for training its civilian population. It will likely be years before education for the general public is widely available.

Arguably, it is not realistic, due to logistics and cost constraints, to equip 293 million plus Americans with personal gas masks and atropine injectors. The United States can, however, train its population in basic self-aid procedures. It can also provide classes on procedures to be

followed in the event of an incident. But it will have a tough time getting people to attend these classes voluntarily. Hopefully, the preparedness function of the National Incident Management System will be influential in ensuring a means for educating the general public regarding appropriate actions in the event of an incident.

Americans are, in general, very complacent. They have not been subjected to terrorism acts to the same extent as have the Israelis. September 11, 2001, was a wake-up call for America, but the events of that day are already beginning to fade from its consciousness. As the former Secretary of Homeland Security said, "Homeland security must be a priority in every city, every neighborhood, and every house across America." But it is not.



Figure 22. Security outpost overlooking Jerusalem on the campus of Hebrew University (Larsen)

The set of observations in this section regarding Israeli homeland security should give us pause as we debate the future of American homeland security. The fact that Israel has adapted so many successful techniques, tactics, and procedures is not to imply that these were necessarily "good" for Israel. They may have been expedient, and they may have achieved some measure of success in the short term, but in some cases

they may feed the vicious cycle that causes the regular flare-ups of domestic terrorism by the Palestinians. Similarly, one could argue that Israel's supposed nuclear weapons program actually decreases its security by pushing its Islamic neighbors toward procuring their own WMD capability.

Does Israel provide the model for future U.S. homeland security requirements? Let us hope not. The Israeli people live in a perpetual state of concern due to the constant threat of terrorism. If such a situation becomes the norm in American or other Western states, then U.S. counterterrorism policy has failed. The United States may indeed benefit from lessons learned through hard experience by our Israeli allies. But let's hope we don't have to implement many of those lessons until absolutely necessary.

# **Notes**

- 1. Thanks to several students and staff members at the Air War College who contributed ideas to this section, including Major Chris Whitmire, Lt Colonel Consuella Pockett, Lt Colonel Jeffrey Jackson, Lt Colonel Robert Miller, and Lt Colonel Trevor Noel.
- 2. National Strategy for Homeland Security, Office of Homeland Security, July 2002.
- 3. Joshua Sinai, "How Israel Approaches Homeland Security," *The Journal of Counterterrorism & Homeland Security International*, vol. 10, no. 1 (Summer 2004), www.iacsp.com/latest article.html.
- 4. Home Front Command, In the Event of a Genuine Attack Information on Civil Defense for the Family, (Ramla, Israel: January 2003), 4.
  - 5. On-line, Internet, available from http://en.wikipedia.org/wiki/Al-Aqsa\_Intifada.
- 6. Terrorism Statistics from the IDF Homepage, On-line, Internet, 16 December 2005, available from www.idf.il.
  - 7. Sinai, "How Israel Approaches Homeland Security," 1.
- 8. John Pike, "Home Front Command," *Global Security.org*, 15 July 2002, On-line, Internet, available from www.globalsecurity.org/military/world/israel/homefront.htm.
- Col Gilad Shenhar, "Structure and Aim of the HFC," lecture notes, Kirya, Israel, 13 March 2002.
- 10. CIA, *The World Factbook*, 2004-2005, On-line, Internet, available from www.odci.gov/cia/publications/factbook/index.html.
  - 11. CIA, The World Factbook, 2004-2005.
- 12. Gerald Steinberg, "Israeli Responses to the Threat of Chemical Warfare," Fall 1993, On-line, Internet, available from www.faculty.biu.ac.il/~steing/arms/chem.htm, 9-10.
  - 13. Steinberg, "Israeli Responses to the Threat of Chemical Warfare," 3.
- 14. David Brinn, "Global Democracy Maryland and Washington DC rely on Israel's homeland security expertise," *ISRAEL21c*, 8 August 2004, On-line, Internet, available from www.israel21c.org/bin/en.jsp?enZone=Democracy&enDisplay=view&enPage=Blan; also see "Enhancing Homeland Security," *Jewish Virtual Library*, 3 March

- 2003, On-line, Internet, available from www.jewishvirtuallibrary.org/jsource/US-Israel/homeland.html.
- 15. From Home Front Command briefing, "IDF Home Front Command: Structure and Aims of the HFC."
- 16. The White House, *The National Strategy for the Physical Protection of Critical Infrastructure and Key Assets*, February 2003, vii.
  - 17. Ibid.
- 18. National Security Strategy of the United States of America (Washington: The Whitehouse, September 2002), 5.
- 19. Yeherzkel Dror, *Memorandum for the Prime Minister: II. To Build a State* (Jersualem, Akademon, 1989), 25.
  - 20. Interview with Reuven Pedhatzur, Tel Aviv, June 2005.
- 21. Dan Horowitz and Moshe Lissak, "Democracy and National Security," in *Modern Judaism, Vol. 4* (1988).
- 22. National Strategy for Homeland Security (Washington: The White House Office of Homeland Security, July 2002), vii, On-line, Internet, available from http://www.whitehouse.gov/homeland/book/.
  - 23. National Security Strategy of the United States of America (2002).
- 24. "The DHS Strategic Plan Securing our Homeland," *U.S. Department of Homeland Security*, On-line, Internet, 14 December 2005, available from www.dhs.gov/dhspublic/interapp/editorial/editorial\_0413.xml.
  - 25. National Strategy for Homeland Security, 13.
- 26. "DHS Organization," 14 December 2005, On-line, Internet, available from www.dhs.gov/interweb/assetlibrary/DHSOrgChart.htm.
- 27. "DHS Organization: Department Six-point Agenda," 14 December 2005, Online, Internet, available from www.dhs.gov/dhspublic/interapp/editorial/editorial\_0646.xml.
- 28. Initial National Response Plan Fact Sheet, 14 December 2005, On-line, Internet, available from www.dhs.gov/dhspublic/display?theme=43&content=1936.

- 29. "Department of Homeland Security Secretary Tom Ridge Announces Completion of the National Response Plan," 6 January 2005, On-line, Internet, available from www.dhs.gov/dhspublic/interapp/press\_release\_0582.xml.
- 30. Fact Sheet: Homeland Security Operations Center (HSOC), 14 December 2005, On-line, Internet, available from www.dhs.gov/dhspublic/display?theme=30&content=3813.
  - 31. National Strategy for Homeland Security.
  - 32. Ibid., 3.
  - 33. Ibid.
- 34. "Homeland Security: Agency Plans, Implementation, and Challenges Regarding the National Strategy for Homeland Security," 6.
- 35. Government Accounting Office, "Homeland Security: Agency Plans, Implementation, and Challenges Regarding the National Strategy for Homeland Security," January 2005, GAO-05-33, 3.
- 36. Lt Colonel Ken Franklin, "National Medical Response," PPT presentation, 30 November 2004.
- 37. National Response Plan, Department of Homeland Security, December, 2004, 46.
- 38. Department of Defense Directive 3025.1 (DODD 3025.1), *Military Support to Civil Authorities (MSCA)*, Department of Defense, January 15, 1993, 8.
  - 39. PFO designates a staff or agency, not an individual person.
- 40. U.S. Northern Command's Strategic Vision (Colorado Springs: U.S. Northern Command, 11 September 2003), 2.
- 41. Major Don Gillich, "USNORTHCOM 101," 19 November 2004, Power Point Presentation.
  - 42. U.S. Northern Command's Strategic Vision, 15.
  - 43. Ibid., 16.
- 44. "Supported Command" refers to the command that prepares operations plans or operation orders in response to requirements of the Chairman of the Joint Chiefs of Staff. "Supporting Command" refers to the command that provides augmentation forces or

other support to a supported command or develops a supporting plan. Joint Publication 1-02 (JP 1-02), *DoD Dictionary of Military and Associated Terms*, Department of Defense, 12 April 2001, as amended through 31 August 2005, 515-516.

- 45. Department of State, "Welcome to Israel" (Tel Aviv, Israel: Embassy of the United States of America, 2002), 8.
- 46. Israel Defense Forces, "Doctrine: IDF Mission," accessed 15 December 2005, www1.idf.il/DOVER/site/mainpage.asp?sl=EN&srch=&id=31&clr=1.
- 47. Israel Defense Forces, "Doctrine: Main Doctrine," accessed 15 December 2005, www1.idf.il/DOVER/site/mainpage.asp?sl=EN&id=3.
- 48. Israel Defense Forces, *The Israel Defense Forces: Looking to the Future* (Tel Aviv: Ministry of Defense Publishing House, 1998), 11.
  - 49. Ibid., 11.
  - 50. Ibid., 12.
- 51. Allison Kaplan, "Israelis launch aid efforts for Katrina victims," 4 September 2005, On-line, Internet, available from www.israel21c.org/bin/en.jsp?enDispWho=Articles^11084&enPage=BlankPage&enDisplay=view&enDispWhat=object&enVersion =0&enZone=Democracy.
- 52. Ina Friedman, "No Panic, Yet, on the Home Front," *The Jerusalem Report.com*, 22 October 2001, www.jrep.com/Israel/Article-58.html.
- 53. "Home Front Command," *GlobalSecurity.org*, 15 July 2002, On-line, Internet, available from 9 November 2004, www.globalsecurity.org/military/world/israel/homefront.htm.
- 54. Colonel Nitzan Nuriel, Home Front Command Doctrine and Development Department, "IDF Home Front Command, Structure and Aim of the H.F.C.", Power Point Presentation, 31 July 2003.
  - 55. Ibid.
  - 56. Ibid.
  - 57. In the Event of a Genuine Attack Information on Civil Defense for the Family.
  - 58. Ibid.
  - 59. Interviews in Tel Aviv and Hertzilya, June 2005.

- 60. Leonard J. Marcus, "Israel's Preparedness for Responding to the Health Requirements of Its Civilian Population In the Event of Deployment of a Nuclear, Biological or Chemical Weapon of Mass Destruction," 27 October 2002, On-line, Internet, available from www.calhealthofficers.org/Documents/Marcus\_Israel\_WMD\_Report.doc
  - 61. Friedman, "No Panic, Yet, on the Home Front."
  - 62. Nuriel.
  - 63. Ibid.
  - 64. Ibid.
  - 65. Ibid.
- 66. Interview with Jay Fawcett, NORTHCOM J-5, Doctrine and Legislative Liaison, 10 November 2004.
  - 67. Nuriel.
  - 68. Interviews in Tel Aviv, June 2005.
- 69. In the Event of a Genuine Attack Information on Civil Defense for the Family, 4.
- 70. "Home Front Command Commences National Distribution of Educational Pamphlets," *Israel Defense Forces, the Official Website*, 29 January 2003, www1.idf.il/DOVER/site/mainpage.asp?clr=1&sl=EN&id=7&docid=16606.
  - 71. *In the Event of a Genuine Attack Information on Civil Defense for the Family.*
- 72. Joshua Sinai, "How Israel Approaches Homeland Security," *The Journal of Counterterrorism and Homeland Security International*, vol. 10, no. 1 (Summer 2004), www.iacsp.com/latest\_article.html.
- 73. "Israel Defense Forces The Official Website News," 2 December 2003, www1.idf.il/DOVER/site/mainpage.asp?clr=1&sl+EN&id=7&docid=17271.
- 74. In the Event of a Genuine Attack Information on Civil Defense for the Family, 20.
  - 75. Ibid., 20 and 38.
  - 76. Ibid., 36-37.

- 77. "Israel Defense Forces The Official Website News," 29 January 2003, www1.idf.il/DOVER/site/mainpage.asp?clr=1&sl+EN&id=7&docid=16606.
  - 78. Sinai, "How Israel Approaches Homeland Security."
- 79. Col Gilad Shenhar, "Structure and Aim of the HFC," lecture notes, Kirya, Israel, 13 March 2002.
  - 80. Sinai, "How Israel Approaches Homeland Security."
- 81. Home Front Command, "Conventional Event Doctrine International Disaster Site Management Course," power point presentation, Israel, 2002.
  - 82. Ibid.
  - 83. Ibid.
  - 84. Ibid.
- 85. In the Event of a Genuine Attack Information on Civil Defense for the Family, 40.
- 86. Leonard Marcus, "Israel's Preparedness for Responding to the Health Requirements of its Civilian Population in the Event of Deployment of a Nuclear, Biological or Chemical Weapon of Mass Destruction," (A Report on Meetings and Interviews from Sept 29-Oct 4, 2002), 25.
  - 87. Ibid., 22.
  - 88. Ibid.
  - 89. Ibid., 23.
- 90. *National Security for Combating Terrorism* (Washington: The White House, February 2003).
- 91. Thanks to several students and staff members at the Air War College who contributed ideas to this section, including Major Chris Whitmire, Lt Colonel Consuella Pockett, and Lt Colonel Robert Miller.
- 92. James S. Gilmore, III, Chairman, "Assessing the Threat," First Annual Report to The President and Congress. Advisory panel to Assess Domestic Response Capabilities for Terrorism Involving Weapons of Mass Destruction, 15 December 1999.

- 93. Paul Bremer III, "Countering the Changing Threat of International Terrorism," *Report of the National Commission on Terrorism*, 7 June 2000, www.mipt.org/bremerreport.asp.
  - 94. Available at www.nssg.gov/addedum/Implementation\_Plans.pdf.
- 95. Ian Roxborough, "The Hart-Rudman Commission and Homeland Defense," January 2001.
  - 96. National Strategy for Homeland Security, Executive Summary, ix.
  - 97. Ibid.
- 98. Charles Doyle "Terrorism: Section by Section Analysis of the USA Patriot Act," CRS Report for Congress, Order Code RL31200, Dec10, 2001; see Z:\CPC HLS data\USA PATRIOT Act\rl31200.pdf.
  - 99. Department of Homeland security, www.dhs.gov/dhspublic/theme\_home5.jsp.
- 100. Andrew Schneider, "Elite U.S. Team Works to Keep Nuclear Bombs from Terrorists," *St. Louis Post-Dispatch*, 21 Oct 2001, www.cdi.org/terrorism/nest-pr.cfm.
- 101. Terrorist Screening Center "Fact Sheet" On-line, Internet, available from www.fbi.gov/pressrel/pressrel03/tscfactsheet091603.
- 102. Walter Pincus, "Intelligence Reform Will Not Be Quick," *Washington Post*, 3 May 2004, On-line, Internet, available from www.washingtonpost.com/wp-dyn/articles/A63926-2004May3.html.
- 103. Wikipedia online encyclopedia, On-line, Internet, available from http://en.wikipedia.org/wiki/United\_States\_Department\_of\_Homeland\_Security.
  - 104. Pincus.
- 105. Tabassum Zakaria, "Terrorist Threat Center Tackles Technology, Privacy," Reuters On-line, Internet, available from http://homelandsecurity.osu.edu/focusareas/intelligence.html.
- 106. Department of Homeland Security website, 12 May 04, On-line, Internet, available from www.dhs.gov/dhspublic/display?theme=50&content=875.
  - 107. Ibid.
  - 108. Ibid.

- 109. *National Strategy for Homeland Security* and Department of Homeland Security website, 13 May 04, On-line, Internet, available from www.dhs.gov/dhspublic/display?theme=50&content=875.
- 110. On-line, Internet, available from www.dhs.gov/dhspublic/display?theme=50&content=875, 20 May 04.
- 111. On-line, Internet, available from www.uscg.mil/hq/g-cp/comrel/factfile/Factcards/Homeland.htm, 26 May 04.
- 112. On-line, Internet, available from www.uscg.mil/deepwater/pdf/CRSreport.pdf,  $26\,\mathrm{May}~04.$
- 113. CBP briefing 6 Nov 03 presented by Chief Inspector Robert Galloway and U.S. Customs and Border Protection website, 14 May 04 On-line, Internet, available from www.customs.gov/xp/cgov/enforcement/international\_activities/csi/csi\_in\_brief.xml).
- 114. Robert Galloway, CBP briefing to Air War College, 6 November 03; also see Daniel Byman, "Do Targeted Killings Work?" *Foreign Affairs*, March/April 2006, 95-111.
- 115. On-line, Internet, available from www.uscg.mil/hq/g-cp/comrel/factfile/Factcards/AIS.html, 21 May 04.
  - 116. National Strategy for Homeland Security, Executive Summary, vii.
  - 117. Ibid., ix.
  - 118. National Strategy for Homeland Security, 30.
  - 119. Ibid., 31.
- 120. White House website, On-line, Internet, available from www.whitehouse.gov/pcipb/physical.html.
- 121. Christopher Helman, "Stopping Porta-Nukes," *Forbes*, vol 168, no. 16 (2001), 97.
- 122. Philip Shenon, "U.S. Plans to Toughen Rules for Cargo Shipping Industry," *New York Times*, 19 Nov 2003, A25.
- 123. James Glanz, "Despite New Tools, Detecting Nuclear Material is Doubtful," New York Times, 18 March 2002, A13.
- 124. "U.S. and Russia Unveil Remote-Control Checks of Nuclear Sites," *New York Times*, 2 Apr 1995, 21.

- 125. Hughes, 62-63.
- 126. U.S. Department of Homeland Security, "Fact Sheet: Regional Technology Integration Initiative," On-line, Internet, available from www.dhs.gov/dhspublic.
  - 127. CDC, 1-44.
- 128. Judith Miller, "Bush Issues Directive to Bolster Defense against Bioterrorism," *New York Times*, 28 April 2004.
- 129. Home Front Command, In the Event of a Genuine Attack Information on Civil Defense for the Family (Ramla, Israel, January 2003), 4.
  - 130. Sinai, 1.
  - 131. Interviews in Tel Aviv and Hertzilya, June 2005.
  - 132. Interviews, March 2006.
  - 133. In the Event of a genuine alert, Information on Civil Defense for the Family, 4.
  - 134. Interviews in Tel Aviv, June 2005.
  - 135. Sinai.
- 136. This comment is in no way meant to pass judgment on the Israeli people; it is simply an observation heard regularly in both Washington and Israel during interviews for this study, one that undoubtedly reflects the tough reality that this country has faced since its beginnings.
  - 137. Sinai.
- 138. Richard Kilroy, Jr., "Do Fences Make Good Neighbors? A Case Study on Israel's Security Policy Choices," paper presented at the annual ISSS/ISAC conference, Denver, CO, 29 October 2005, 18-19.
  - 139. Kilroy, 20.
  - 140. Interviews in Tel Aviv and Hertzilya, June 2005.
  - 141. Kilroy, 23.
- 142. Zvika Rubins, "Experience Tells," *Homeland Security*, May 2004, On-line, Internet, available from www.fafael.co.il/web/rafnew/products/brochures/HLS%20% 20Globes%200504.pdf.

- 143. Interviews in Tel Aviv, June 2005.
- 144. David Brinn, "Maryland and Washington, D.C. Rely on Israel's Homeland Security Expertise," *ISRAEL21c*, 8 August 2004, On-line, Internet, available from http://www.israel21c.org/bin/en.jsp?enZone=Democracy&enDisplay=view&enPage=Blan.
- 145. "Enhancing Homeland Security," *Jewish Virtual Library*, 3 March 2003, Online, Internet, available from www.jewishvirtuallibrary.org/jsource/US-Israel/homeland.html
- 146. "United States-Israel Homeland Security Foundation Act," *The Orator.com News and Information*, On-line, Internet, available from www.theorator.com/bills108/hr3871.html.
  - 147. Interviews in Washington, May 2005.
  - 148. Interview at Ramla, June 2005.
  - 149. Interviews in Washington, May 2005.
- 150. "Department of Homeland Security Secretary Tom Ridge Approves National Incident Management Systems (NIMS)," *U.S. Department of Homeland Security*, 1 March 2004, On-line, Internet, available from www.dhs.gov/dhspublic/dispaly?theme=15&content=3255&print=true.
- 151. U.S. Department of Homeland Security, 2004, "National Incident Management System," 1 March 2004, 1.
- 152. National Incident Management System website, On-line, Internet, available from www.fema.gov/nims.
- 153. Interview with Michael Petrie, Administrator of the EMS and Operations Section of the Department of Public Health for the City and County of San Francisco, 5 October 2004.
- 154. "Emergencies and Disasters, Planning and Prevention, Fact Sheet: A Better Prepared America: A Year in Review," *U.S. Department of Homeland Security*, 1 March 2004, On-line, Internet, available from www.dhs.gov/dhspublic/display?theme= 14&content=3855.
  - 155. NIMS website.
- 156. Joshua Sinai, "How Israel Approaches Homeland Security," *The Journal of Counterterrorism & Homeland Security International*, vol. 10, no. 1 (Summer 2004), Online, Internet, available from www.iacsp.com/latest\_article.html.

- 157. Sinai, "How Israel Approaches Homeland Security," 2.
- 158. National Disaster Medical System, On-line, Internet, 16 Sep 2004, available from www.ndms.dhhs.gov.
- 159. "Welcome to NDMS," *National Disaster Medical System*, 2004, On-line, Internet, available from www.ndms.dhhs.gov/index.html.
  - 160. National Disaster Medical System.
- 161. "What is A Disaster Mortuary Operational Response Team (DMORT)?", *National Disaster Medical System*, On-line, Internet, 9 November 2004, available from www.ndms.dhhs.gov/dmort.html.
- 162. "What is a Veterinary Medical Assistance Team (VMAT)?," *National Disaster Medical System*, On-line, Internet, 9 November 2004, available from www.ndms.dhhs.gov/vmat.html.
- 163. "What are Federal Coordinating Centers?," *National Disaster Medical System*, On-line, Internet, 9 November 2004, available from www.ndms.dhhs.gov/fcc.html.
- 164. "National Nurse Response Team (NNRT)," *National Disaster Medical System*, On-line, Internet, 9 November 2004, available from www.ndms.dhhs.gov/nnrt.html.
- 165. "Frequently Asked Questions About Citizen Preparedness," *U.S. Department of Homeland Security*, On-line, Internet, 5 October 2004, available from www.dhs.gov/dhspublic/dispaly?theme=47&content=473.
- 166. M. Drucker, "Magen David Adom Saving Worlds," 20 September 2004, Online, Internet, available from www/jewish-holiday.com/mdaorg.html.
- 167. Michael Petrie, Administrator of the EMS and Operations Section of the Department of Public Health for the City and County of San Francisco, address to San Francisco EMS Training, San Francisco, CA., 29 June 2003.
  - 168. Drucker, 2.
  - 169. Petrie, address to San Francisco EMS Training.
- 170. "Home Front Command Commences National Distribution of Educational Pamphlets," *Israel Defense Forces, the Official Website,* 29 January 2003, On-line, Internet, available from www1.idf.il/DOVER/site/mainpage.asp?clr=1&sl=EN&id=7&docid=16606.

- 171. In the event of a genuine alert, Information on Civil Defense for the Family, (Ramla: Home Front Command, January 2003), 36.
- 172. "Home Front Command Commences National Distribution of Educational Pamphlets."
- 173. "Home Front Command, *GlobalSecurity.org*, 15 July 2002, On-line, Internet, available from www.globalsecurity.org/military/world/israel/homefront.htm.
- 174. Ina Friedman, "No Panic, Yet, on the Home Front," *The Jerusalem Report.com*, 22 October 2001, On-line, Internet, available from www.jrep.com/Israel/Article-58.html.
- 175. "Israel Defense Forces, "The Official Website News," 29 January 2003, Online, Internet, available from www1.idf.il/DOVER/site/mainpage.asp?clr=1&sl+EN&id=7&docid=16606.
  - 176. Interviews in Tel Aviv, June 2005.
- 177. "Strategic National Stockpile," *CDC Emergency Preparedness and Response*. 11 August 2003, file://C:\DOCUME~1\Owner\LOCALS~Temp\MBQJNAJ9.htm.
  - 178. Ibid.
- 179. Centers for Disease Control and Prevention, 2003, "Strategic National Stockpile," 11 August 2003, On-line, Internet, 15 June 2004, available from www.bt.cdc.gov/stockpile/index.asp.
- 180. Armed Forces Medical Intelligence Center (AFMIC), 24 November 2004, Online, Internet, available from www.admic.dia.smil.mil/intel/afmic/is/isa042304/isa042304.html.
  - 181. Ibid.
  - 182. "Home Front Command, GlobalSecurity.org.
- 183. "Citizen Corps Program," U.S. Department of Homeland Security, Office of Domestic Preparedness, 25 October 2004, On-line, Internet, available from www.ojp.usdoj.gov/odp/odp\_citizencorps.htm.
- 184. Citizen Corps, Uniting Communities Preparing the Nation, 12 December 2004, On-line, Internet, available from www.citizencorps.gov.

- 185. Citizen Corps: Supporting the Community and Our First Responders," and Citizen Corps, "Programs and Partners," On-line, Internet, 14 June 2004, available from www.citizencorps.gov/programs.
- 186. "Emergencies and Disasters, First Responders, Fact Sheet: RapidCom 9/30 and Interoperability Progress," U.S. Department of Homeland Security, 9 November 2004, On-line, Internet, available from www.dhs.gov/dhspublic/dispaly?theme=63&content=4092.
- 187. "Citizens Corps: Uniting Communities and Preparing the Nation," *Citizens Corps*, September 2004, On-line, Internet, available from www.citizencorps.gov/ppt/cc\_overview\_060804.ppt, 14.
  - 188. On-line, Internet, available from www.magendavidadom.org/volunteering.asp.
  - 189. Ibid.
- 190. Congressional Research Service, "Report for Congress on Emergency Communications: The Emergency Alert System and All-Hazard Warnings," On-line, Internet, 1 March 2006, available from www.fas.org/sgp/crs/homesec/index.html.
  - 191. Sinai, "How Israel Approaches Homeland Security," 2.
- 192. "Three Key Steps that Individuals and Families Should Take to be Properly Prepared for Unexpected Emergencies," U.S. Department of Homeland Security, 6 October 2004, On-line, Internet, available from www.dhs.gov/dhspublic/display?theme=14&content=462&print=true.
- 193. Department of Homeland Security: Ready America, "Terrorism Forces Us to Make a Choice. Don't Be Afraid...Be Ready," On-line, Internet, available from www.ready.gov/index.html; American Red Cross, "Get Prepared," On-line, Internet, available from www.redcross.org/services/prepare/0,1082,0\_239\_,00.html; and Centers for Disease Control and Prevention, "Radiation Emergencies," On-line, Internet, available from www.bt.cdc.gov/radiation/.
- 194. In the Event of a Genuine Attack Information on Civil Defense for the Family, 22.
  - 195. Interviews in Tel Aviv and Ramla, June 2005.
  - 196. Interview in Ramla, June 2005.
  - 197. "Home Front Command, GlobalSecurity.org.
  - 198. Ibid.

- 199. Colonel Nitzan Nuriel, Home Front Command Doctrine and Development Department, "IDF Home Front Command, Structure and Aim of the H.F.C.", Power Point Presentation, 31 July 2003.
- 200. "The Home Front Command Calls Public to Complete Purchases of Necessary Materials," *Israel Defense Forces, the Official Website,* 17 March 2003, On-line, Internet, available from www1.idf.il/DOVER/site/mainpage.asp?clr=1&sl=EN&id=7&docid=21256.
  - 201. Interviews in Tel Aviv and Ramla, June 2005.
- 202. "Emergencies and Disasters, Planning and Prevention, Fact Sheet: A Better Prepared America: A Year in Review," U.S. Department of Homeland Security, 1 March 2004, www.dhs.gov/dhspublic/dispaly?theme=14&content=3855.
- 203. Julie Stahl, "Israel Preparing Children for Possibility of Non-Conventional War," CNS News.com, December 23 2002, On-line, Internet, available from www.cnsnews.com/ViewForeignBurueaus.asp?%5CforeignBurueaus%5archive, 1-2.
- 204. "Israel Defense Forces The Official Website News," 28 December 2002, On-line, Internet, available from www1.idf.il/DOVER/site/mainpage.asp?clr= 1&sl+EN&id=7&docid=15819.
- 205. Assal Heffetz, "Homeland security and the public budgets the Israel experience," 26 August 2004, On-line, Internet, available from www.gsa.gov/gsa/cm\_attachments/GSA\_DOCUMENT/13-TIXGroup1-Israel\_R2G.

206. Ibid.

- 207. "U.S. Internet growth flattens with 63% online," *inq7.net*, 26 June 2004, Online, Internet, 6 October 2004, available from www.inq7.net/2004/jun/27/inf-3-1.htm.
- 208. Tom Ridge, "Remarks by Secretary of Homeland Security Tom Ridge at the Miami-Dade Office of Emergency Management," U.S Department of Homeland Security, 30 July 2004, On-line, Internet, available from www.dhs.gov/dhspublic/dispaly?theme=63&content=3868&print=true.

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