IN FRONT OF THE THREAT: EVOLVING THE DEPARTMENT OF DEFENSE STRATEGIC ORGANIZATIONAL STRUCTURE TO PREPARE FOR THE CHALLENGES OF WEAPONS OF MASS DESTRUCTION

A thesis presented to the Faculty of the U.S. Army Command and General Staff College in partial fulfillment of the requirements for the degree

MASTER OF MILITARY ART AND SCIENCE
General Studies

by

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other government agency. (References to this study should include the foregoing statement.)

The increasing likelihood and potentially devastating effects of weapons of mass destruction (WMD) use against the United States has forced a reexamination of America’s national security posture here at home. Fortunately, much has been done recently to define and address the threat. Many federal agencies, including the Department of Defense (DoD), now contribute steadily increasing amounts of manpower, resources, and expertise to the cause.

This thesis asks: Is DoD adequately organized at the strategic level to address this evolving WMD threat? Has its strategic organizational structure kept pace with the threat and the recent actions taken to address it?

The study finds that it clearly has not. There is an identifiable lack of strategic integration of effort in this area. This thesis examines the relevant literature and capabilities then suggests that, while much has been done at the tactical and operational levels, very little centralized strategic direction exists. Two potential solutions are proposed: (1) The creation of a Commander in Chief (CINC) Homeland Security within which WMD strategic direction and integration resides; and (2) An expanded Joint Task Force for Civil Support (JTF-CS) capable of the full range of strategic level tasks required to address the threat.
ACKNOWLEDGMENTS

I would like to acknowledge the patience and understanding offered by my wife Christina and children Ryan, Michael, Jason, and Lauren. Their support during the research and writing of this thesis was critical to its completion.
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<td>Area of Responsibility</td>
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<tr>
<td>BMD</td>
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<td>Biological Warfare</td>
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<td>CBD</td>
<td>Chemical and Biological Defense</td>
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<td>CBIRF</td>
<td>Chemical Biological Incident Response Force</td>
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<td>CBRNE-CM</td>
<td>Chemical, Biological, Radiological, Nuclear, and High Yield Explosives--Consequence Management</td>
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<tr>
<td>CINC</td>
<td>Commander in Chief</td>
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<td>Director of Military Support</td>
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<td>DP</td>
<td>Domestic Preparedness</td>
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<td>Acronym</td>
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<td>DTRA</td>
<td>Defense Threat Reduction Agency</td>
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<td>Military Operations Other Than War</td>
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<td>Technical Escort Unit</td>
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<td>United States Navy</td>
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CHAPTER 1
INTRODUCTION

Our potential enemies, whether nations or terrorists, may be more likely in the future to resort to attacks against vulnerable civilian targets in the United States. At the same time, easier access to sophisticated technology means that the destructive power available to rogue nations and terrorists is greater than ever. . . . The United States will act to deter or prevent such attacks and, if attacks occur despite those efforts, will be prepared to defend against them, limit the damage they cause, and respond effectively against the perpetrators.¹


Throughout American history, the Department of Defense (DoD) and its predecessors have always faced up to the security threats confronting our nation and our national interests. As those threats changed, our Defense Department managed to change with them--albeit sometimes slowly and at great cost. Today, we see a marked increase in the Weapons of Mass Destruction (WMD) threat. As a result, DoD managed to adjust some of its organizational structure to keep the pace. Much of this change is directed towards the Nuclear, Biological, and Chemical (NBC) threat to traditional military forces and their support structure in the assumption that the enemy will play by a set of traditional military rules. However, the central flaw in this assumption is that a nation, or a nonstate organization or actor, will follow traditional rules in the first place. Many of these hostile elements list development and use of asymmetric weapons against the vulnerabilities of their enemies as a viable course of action. That factor, coupled with a means to deliver these unconventional weapons, create the greatest threat to the US population since the beginning of the nuclear era.
According to three notable experts, “The danger of weapons of mass destruction being used against America and its allies is greater now than at any time since the Cuban missile crisis of 1962.” Simply put, while these weapons are not necessarily new to mankind, the threat of their use against unconventional targets in unexpected ways has grown. This growth now has many prominent officials emphasizing that it is now not a question of “if,” but one of “when.”

This thesis will attempt to combine the most pertinent and current information in the area of WMD defense, discuss the organizations charged with addressing the WMD threat, develop logical conclusions based on this information, and then culminate with suggestions of additional areas where further research may be required. Ultimately, this thesis will examine whether DoD has or has not kept pace with the WMD threat by way of its strategic organizational structure.

Problem Statement

To date, DoD has addressed the NBC and WMD threat by imbedding its NBC defense capabilities within each of the organizational levels of command. The Army, DoD’s traditional and congressionally mandated leader in NBC defense preparedness, maintains an NBC special staff or its equivalent in virtually all commands from company to service level. These experts are charged to provide expert advice and recommendations to their commanders on all NBC defense matters.

Additionally, DoD (and specifically the Army) maintains NBC defense related organizations at the tactical and operational levels of war. These organizations range from NBC detection and reconnaissance sections to chemical defense brigades. However, with the exception of the newly formed Joint Task Force for Civil Support
(JTF-CS), there are currently no DoD strategic level commands chartered to centrally integrate NBC defense or address the WMD threat to the US homeland. Instead, each service contributes organizations at the tactical and operational level with little centralized strategic direction. There is a clear lack of unity of effort in the face of a deadly and ever growing challenge—a challenge that is increasingly being accepted as inevitable. This results in a highly splintered approach to one of the most dangerous threats facing the US for the foreseeable future.

**Thesis Question**

The question is simple, is DoD adequately organized at the strategic level to address the evolving WMD threat? This thesis question is intended to focus specifically on two things: WMD threat challenges, and DoD’s strategic organizational structure to anticipate and meet those challenges.

The WMD threat challenges can be further divided into traditional WMD threats to military forces and nontraditional threats to civilians and property not affiliated with the US government itself. These two threats, though they may be delivered through the same means, are distinctly different.

Implied in the research question is the expectation to review current DoD structure and explore the potential WMD challenges. The Defense Department’s strategic organizational structure to anticipate and meet the WMD challenges refers to the ability of our national-level defense organization to integrate the nation’s defense capabilities to deter, defeat, or mitigate the effects of a WMD attack. It is therefore critical to examine what exists and what does not exist in the current DoD structure.
Further, it is important to discuss the missions of these organizations and how well the existing structure works.

**Subordinate Questions**

The primary research question is intentionally posed to require an affirmative or negative answer. If, after examining related research in this area, the DoD strategic organizational structure is sufficient to meet today’s (and tomorrow’s) WMD challenges at home and abroad then there is no problem at all. The Defense Department should therefore be given high marks for preparing well to meet an increasingly dangerous threat. If the answer is in the negative then there is a problem that must be addressed quickly. One should logically look for a proposed alternative to the current structure. Such a recommendation is outside the scope of this study and would be suggested as a topic for follow-on research.

In support of the primary question the following subordinate questions must be addressed:

1. What are the primary WMD threats to the military forces or homeland of the US?
2. How is DoD currently structured to address these threats at the tactical, operational, and strategic levels?
3. What is functional and dysfunctional or efficient and inefficient about the current organizational structure at the strategic level?
4. If the current DoD structure at the strategic level is not optimal to meet the threat, why is that so?
Significance of Study

This thesis has relevance to all national strategic policy makers who have an interest in national security matters. It may be particularly relevant to senior defense executives, defense organizational planners, and organizational integrators seeking to match structure and capabilities against the threats to the US homeland.

Why may it be significant? The increasing WMD threat, coupled with ever-evolving delivery means and an enhanced desire of nation and nonnation aggressors to strike at the US center of gravity--its people, may require DoD to proactively address these threats with a strategic level organization to defend its homeland. Currently, there is no such command at the strategic level within DoD charged with overseeing the protection of the US homeland from these threats. If one assumes that strategy determines force structure requirements and force structure in turn ensures readiness, then--as evidenced by its current force structure--logic follows that DoD believes it has adequately addressed the WMD threat to the US homeland through its existing force structure. It therefore does not feel a necessity to add or change its force structure at all.

Only recently has the United States started to seriously question this assumed state of WMD readiness. Governmental actions over the last five years by both the executive and the legislative branches hint that the concern over US preparedness to defend itself at home is questionable. This thesis will examine some of these actions as they relate to DoD and attempt to determine their contribution to answering the research question. The process of DoD evolution is not the primary purpose of this research thesis. However, this examination may be helpful in showing how external to DoD
findings and initiatives sometimes lead to changes in national security policy and force structure.

It may also have significance regarding active and passive defense against other forms of asymmetric warfare capable of inflicting substantial effects and potentially massive damage on the US homeland. These forms may include: computer network attack (CNA), computer network defense (CND), ballistic missile attack (BMA), and ballistic missile defense (BMD). It is these forms of asymmetric warfare that are causing some defense representatives to use the term weapons of mass effects (WME) in the place of WMD. Regardless, this study may have significance in examining each of the forms of asymmetric WME.

Assumptions

There are four assumptions that must be accepted as true regarding this study. First, it is assumed that the reader has a basic understanding of the traditional NBC threats. This means that the concept of NBC weapons and agents, and the potentially massive damage to life and property they cause, must not be completely new. If additional background is required before continuing, the 2001 DoD report entitled *Proliferation, Threat and Response*, is an excellent source. It discusses in detail the NBC and WMD threats throughout the world in unclassified form and is easily accessible at the official DoD website (www.defenselink.mil).

Second, there is a fundamental assumption that the reader accepts the NBC threat to the US as valid. One must accept that our potential adversaries have the capability and will to develop, produce, and effectively deliver WMD devices against the US. This assumption is not necessarily new. What is new, is the assumption that there are a greater
variety of WMD weapons, potential adversaries, a more adaptable and technologically sound means to deliver them, and an enhanced willingness to use them. That is the assumption the reader must follow. This paper will provide periodic credible reinforcement of these ideas.

Third, this study applies the assumption that the reader is somewhat familiar with national security and DoD in general. At a minimum one must be familiar with at least some of the programs executed by the armed services. If a greater degree of preparation is necessary before continuing, the comprehensive “DoD Annual Report to Congress” is likely the best source to brush up. It is also easily accessible through a search of the DoD website. However, with this, it is also assumed that the reader does not have a firm grasp of all the specific DoD programs intended to address the WMD threat. Many of these programs will be summarized while attempting to answer the primary and subordinate research questions.

Fourth, this thesis carries the assumption that adequacy in strategic structure cannot be determined in this case by quantitative means. Rather, it must be determined by first summarizing the threat. Then, one must identify and analyze the forces that exist to counter, defeat, or mitigate the threat. After this analysis, one must determine using a cumulative assessment whether our current strategic structure is optimal or even efficient in integrating the US response. In answering the research question, history provides little evidence and no discernible US or international parallels exist for which a quantitative judgment can be made. It must therefore be made by cumulatively matching aggressor threat to US capability and result in an objective verdict.
Limitations

The sole limitation to this paper is its security level of classification. This thesis is written using unclassified research materiel only. In cases where references are made to classified materiel all information referenced comes from unclassified excerpts or is summarized in unclassified fashion. It is also often information that is readily available in open source documents or public statements. This limitation is not disruptive to the thesis because most classified information in this area is very specific. Much of it discusses the specifics of the threat and U.S. plans, capabilities, and vulnerabilities to the threat. This paper addresses a much broader problem of whether the strategic structure is optimal in the face of the general WMD threat. Additionally, the unclassified nature of this thesis permits its wide and easy dissemination throughout the national security community.

Delimitations

This thesis will spend little time on specific NBC agents or their potential delivery means. It is not the intent of this paper to digress into a discussion of one particular WMD threat or another. The majority of the specific agents, weapons, and delivery systems have been widely covered in various publications. Rather, this thesis refers to the WMD threat in general. By doing this, it will adhere to the broad subject matter without becoming encumbered by details. As discussed above, it also ensures that the thesis remains an unclassified document.

Another self-imposed constraint to this paper may be evident in the chapter three capability review. This review of DoD and non-DoD organizations will focus on organizations that address the WMD threat as one of its primary functions only. The
thesis delimits organizations that do not contribute general WMD defense capabilities. In
addition, it does not review missions or capabilities of organizations which specialize in
one specific area of the WMD threat or provide its capabilities on a regional basis only.

**Defining Terms**

Several doctrinal terms and non-doctrinal, but often used, references have evolved
in the debate over WMD recently. In an attempt to better grasp their collective meaning
several of the most common terms in this area are defined below.

**Civil Defense.** All those activities and measures designed or undertaken to: a.
minimize the effects upon the civilian population caused or which would be caused by an
enemy attack on the United States; b. deal with the immediate
emergency conditions which would be created by any such attack; and c. effectuate
efforts to, or the emergency restoration of, vital utilities and facilities
destroyed or damaged by any such attack.4

**Combatting Terrorism.** Actions, including antiterrorism (defensive measures
taken to reduce vulnerability to terrorist acts) and counterterrorism (offensive measures
taken to prevent, deter, and respond to terrorism), taken to oppose terrorism throughout
the entire threat spectrum.5

**Consequence Management (CM).** Measures to protect public health, safety, and
the environment, to restore essential government services, and to provide emergency
relief to governments, businesses, and individuals affected by the consequences of
terrorism.6
Counterproliferation. The full range of military preparations and activities to reduce, and protect against, the threat posed by nuclear, biological and chemical weapons and their associated delivery means.  

Counterterrorism (CT). Offensive measures taken to prevent, deter, and respond to terrorism.

Crisis Management (CrM). Measures to identify, acquire and plan the use of resources needed to anticipate, prevent, and/or resolve a specific threat or act of terrorism.

Full-Dimensional Protection. Control of the battlespace to ensure our forces can maintain freedom of action during deployment, maneuver and engagement, while providing multilayered defenses for our forces and facilities at all levels.

Military Support to Civil Authorities (MSCA). Those activities and measures taken by the DoD Components to foster mutual assistance and support between the Department of Defense and any civil government agency in planning or preparedness for, or in the application of resources for response to, the consequences of civil emergencies or attacks, including national security emergencies.

Passive Defense. Measures taken to reduce the probability of and to minimize the effects of damage caused by hostile action without the intention of taking the initiative.

Weapons of Mass Destruction (WMD). In arms control usage, weapons that are capable of a high order of destruction and/or of being used in such a manner as to destroy large numbers of people. Can be nuclear, chemical, biological, and radiological weapons, but excludes the means of transporting or propelling the weapon where such means is a separable and divisible part of the weapon.
Weapons of Mass Destruction (WMD) Incident. A deliberate or unintentional event involving a nuclear, biological, chemical, radiological weapon or device, or large conventional explosive, that produces catastrophic loss of life or property.

It is important to note that NBC and WMD are generally used interchangeably throughout this paper. Although WMD is a somewhat newer term that may entail neither traditional nuclear, biological, nor chemical weapons. Weapons of Mass Destruction appears to be a term that attempts to cast a broader net over NBC and virtually all other potential forms of tangible yet unconventional weapons. For example, it may include weapons such as very high yield explosives, crop infestation, or radiological waste. It may also generally refer to the means that deliver the weapon, such as the ballistic missile. In this paper, the term WMD does not include information warfare as can be seen by using propaganda, computer viruses, computer network attack, and others. Information warfare acts of aggression are better included under the even broader term of “asymmetric warfare.”

Outline

In order to conceptually prepare for all the considerations surrounding the research question, one must follow a logical sequence of issues. To that end, following this introductory chapter a literature review will be covered in chapter 2, a capability review in chapter 3, the research methodology used in chapter 4, an analysis of threat versus capability in chapter 5, and will culminate with a set of conclusions in chapter 6.

Subordinate to the chapter two literature review will be a better description and validation of the threats. Then, the thesis provides a summary of where DoD currently stands in the face of these threats. This will be measured cumulatively by a number of
credible governmental and nongovernmental sources within their public statements, testimony, and articles relating to the matter. Lastly, this chapter reviews the growing literature on what structure and capabilities the US and DoD need in the future.

Chapter 3 will begin with a brief discussion of federal and DoD priorities. Each of the defense and nondefense organizations involved with the WMD threat is then examined for its contribution to answering the basic research question.

Chapter 4 then lists the research methodology used to gather and process the information summarized in the previous two chapters.

In chapter 5 this information will be tallied and analyzed. The analysis will then lead to a set of logical conclusions. Each conclusion is followed by a discussion of the reasons why it was derived.

The final chapter attempts to conclude with what potentially could be done. It does not favor any particular course of action. That is better left for additional research and analysis. However, chapter 6 does suggest broad-level changes that could be explored to stay in front of the WMD threat. In addition, this chapter highlights other defense challenges that in some way appear to parallel the WMD threat and therefore should be considered when addressing that threat.

Contributions This Study Will Make

This study will provide the strategic defense community with developed thought regarding integration of NBC defense capabilities at the strategic level. An integrated strategic direction in this mission area is critical to coordinating overall US strategic, operational and tactical objectives. Only an adequate organizational structure is capable of providing this strategic direction in support of US national interests. This study will
provide a more clear picture of the current NBC defense organizational structure operating at the strategic level. It will provide a brief overview of the growing WMD threat. It will also provide background which justifies the threat as a valid problem in order to gain a better understanding of why organizational change may be necessary. Ultimately, this study will provide the reader an assessment of what our WMD defense structure’s strengths and weaknesses are and how that structure may be changed or adjusted to meet the continuing WMD threat.

This study should be helpful in highlighting any shortfalls in efforts to integrate capabilities (and desired capabilities) as the WMD threat evolves. Once highlighted, DoD could then address these integration shortfalls individually or collectively and thereby have the ability to significantly increase WMD readiness.

Lastly, this thesis will study the strategic organizational structure of DoD as a whole and may be helpful in identifying necessary changes to DoD’s or other Federal Agency’s structure to deal with the increasingly difficult threat of use of WMD against a vulnerable U.S. homeland.

**Summary**

While the US enjoys what is arguably the largest technological advantage over any of its potential adversaries, it cannot overlook and it should not underestimate its vulnerabilities. This is especially true in the case of US relative vulnerability to asymmetric attack. As former Defense Secretary Cohen suggests, our future enemies will likely find asymmetric attack against vulnerable U.S. targets even more attractive because of the technology gap itself. Cohen argues, “America’s military superiority cannot shield us completely from this (nuclear, biological, and chemical) threat. Indeed,
a paradox of the new strategic environment is that American military superiority actually increases the threat of nuclear, biological, and chemical attacks against us by creating incentives for adversaries to challenge us asymmetrically.\textsuperscript{14}

If the US is to be prepared for this threat, ironically heightened by its own technological dominance, then it must dedicate the appropriate measures to prevent its use, defend against it, and mitigate its overall effects. American public policy indicates that it is the role of DoD to do all of these and more. According to the *National Military Strategy*;

The continued proliferation of WMD, particularly chemical and biological weapons (CBW), has made their employment by an adversary increasingly likely in both major theater wars and smaller-scale contingencies. U.S. forces must have a counterproliferation capability balanced among the requirements to prevent the spread of WMD through engagement activities; detect an adversary’s possession and intention to use WMD; destroy WMD before they can be used; deter or counter WMD; protect the force from the effects of WMD through training, detection, equipment, and immunization; and restore areas affected by the employment of WMD through containment, neutralization, and decontamination.\textsuperscript{15}

So what is the DoD to do? It must follow a rational course. It must dedicate the appropriate organizational structure and resourcing commensurate with the threat. This is especially so at the strategic level. Because of its experience with WMD and the requirements to interface with other federal agencies and direct its own services and defense agencies, DoD must ensure its strategic organizational structure for WMD defense is up to the task. Is DoD adequately organized at the strategic level to address the evolving WMD threat? This thesis will attempt to answer that question.

\textsuperscript{1}The White House, *A National Security Strategy for a New Century* 16.


Ibid., 77.


CHAPTER 2

LITERATURE REVIEW

Since the War of 1812 the continental United States has been relatively immune from the bloody consequences and physical destruction of conflict. As a result, the concept of homeland defense has been generally absent from American thinking. Recently, however, the issue of conflict and possible catastrophic consequences for the United States and its population is emerging in opinion polls as an important public concern.¹

_Dr. Max G. Manwaring,_
_Domestic Tranquility and Common Defense_
_ROA National Security Report, August 2000_

**Introduction**

There has been a significant amount of official and unofficial literature on the WMD threat and NBC defense in general. This is especially true during the past decade following the collapse of the Soviet Union. Communism’s collapse resulted in the loss of a global threat that could be conventionally measured and articulated. The Defense Department, in its ever-changing environment, reacted to the new world order by converting to a two nearly simultaneous major theaters of war (MTW) strategy. This is the strategy that exists today—and this is the strategy DoD is organizationally structured and sized to execute today.²

However, much of the recent emerging threat discussion focuses on a WMD threat to America itself. In fact, many government leaders no longer suggest a WMD attack on the US may happen, rather they emphasize the assumption that it will happen.³ And, the effects of WMD attacks on the homeland may be more devastating than the MTWs themselves. Consider then Secretary Cohen’s remarks to the Center for Strategic and International Studies, “If you take a five-pound bag of sugar and you say, assuming
this were filled with, let’s say, anthrax instead of sugar, and you spread that with the right kind of temperatures and the right kind of wind over a city the size of Washington, DC, you could wipe out 70 percent of the population just with five pounds. There are tons of anthrax in existence.”

Discussion of the WMD threat is not limited to government officials and defense think tanks. The media has also shown a remarkable ability to highlight the dangers of WMD. This chapter examines these various sources of WMD threat literature and discussion--both credible and fictional.

This chapter also reviews WMD-related literature about DoD’s current force structure and capabilities. Finally, this chapter examines WMD-related materiel regarding the direction DoD should take now or in the future to address the WMD threat. It is this forward-thinking materiel that will prove most valuable in the cumulative assessment of what structure is required to keep America secure.

**Weapons of Mass Destruction Threat**

The proliferation of weapons of mass destruction and their means of delivery continues to pose an unusual and extraordinary threat to the national security, foreign policy, and economy of the United States. Accordingly, I have extended the national emergency declared in Executive order 12938.

> President William J. Clinton, Text of a letter from the President to the Speaker of the House of Representatives and the President of the Senate, November 9, 2000.

The President clearly saw a need to recognize the growing threat these weapons present. As would be expected, the subject of WMD has also had an enormous amount of discussion in published media. In fact, it appears WMD has become one of the catch-
all threats of choice for determining everything from national direction to acquisition program funding. This topic enjoyed an increase in available literature, governmental policy, military doctrine, and public opinion over the past ten years for three primary reasons:

1. The fall of the Soviet Block as the most significant and dangerous threat faced by the US and the Western world. The Soviet Block developed, produced, and trained with NBC weapons; maintained redundant and ready delivery means; and portrayed a credible and certainly viable threat to the US homeland. This threat was effectively accepted in the public eye by balancing it against the unthinkable mutual assured destruction doctrine. The philosophy of--no rational state would think about using these weapons in the United States lest the favor be returned to them--was enough to deaden the public’s perception that it was of real concern to their immediate life and liberty.

Therefore, Congress and the Defense Department, while building and maintaining a credible nuclear deterrent, focused most of its attention on containing the Soviet Block’s conventional threats. Afterall, the Soviet Block conventional forces were the other measurable threat of the day. Today however, that threat is gone yet the world remains an highly uncertain place. At least one senior Army General pointed out that this rapidly changing world driven by enhanced technological innovations brings with it “a time when we in this country are subject to attack with WMD delivered by well-informed terrorists.” The Commander of the US Army Forces Command (FORSCOM) goes on to stress that, while the US is the sole remaining superpower, it may not be such a good thing after all. Simply put, it appears the loss of the Soviet conventional threat
contributed to policy makers focusing more acutely on the uncertainty associated with asymmetric threats, such as the use of WMD.

The public, far from being blind to the post Cold War realities, also began to imagine the use of WMD in the US homeland in the place of their visions of American soldiers engaging Soviet tanks on the Western European plains. It follows then that the collapse of the Soviet Union and the resulting loss of a sizable conventional threat was somewhat of a linchpin for the increase in discussion of the WMD threat.

2. A second reason for the increase in WMD related literature and discussion is the perceived increase in WMD terrorism. The use of WMD by non state-sponsored groups to achieve or contribute to their goals has tended to increase emphasis on this as a threat to our own homeland. The 1993 Tokyo subway bombing by the Aum Shinrikyo cult is perhaps the most often used example of non state-sponsored terrorism using WMD devices. That event alone has spawned numerous articles in the international press and caused policy concerns at all levels of government. This perceived increase in terrorism, whether real or imagined, contributes to the discussion about WMD readiness. It is perhaps magnified by the idea that the world’s only remaining superpower makes a favorable target to advance a given terrorist’s causes. Suddenly, governments at all levels are realizing that it could happen to them.

3. Technological innovation and the information age has arguably caused an enhanced sensitivity and awareness to the WMD issue for the public as a whole. Real-time news reporting and the growth of the internet have enhanced the general public’s awareness to terrorism both at home and abroad. Breaking news, including terrorist events, is routinely piped to television sets around the world as it
happens. This adds to the public perception of an increased likelihood of terrorism, and perhaps NBC weapons, being use against the United States. In addition, widespread growth of the internet and email as information sharing tools logically brings with it a heightened awareness of the threat itself.

Public perception of an increased WMD threat has also been formed by the movie industry. Hollywood helped push that perception by scrambling to find another credible threat at the Cold War’s end. A recent survey of major films released in the 90s uncovered no less than five blockbusters each grossing between 41 and 146 million dollars by highlighting a WMD threat. Their message? WMD use in the US provides a direct threat to individuals with a promise of what is shown to be a horrible death. No longer is the threat only to Americans abroad or American service members. It is a direct threat to the public’s personal lives and their individual well being.

This perception is reinforced by the logical conclusion that foes will use these weapons in the absence of conventional means. All this is arguably resulting in a kind of governmental awakening to the threat and a sizable increase in the pace and volume of literature that confronts it.

**Threat Literature**

This governmental and public awakening in turn has created a significant amount of literary concentration on the threat in the written media. Trends from this literature indicate that the WMD threat to the US homeland and US interests overseas is valid and growing. The Army’s *Chemical Vision 2010* states,

Tomorrow, we will not have the luxury of viewing CONUS as a sanctuary. America’s unrivaled military superiority means that potential enemies (whether
nations or terrorist groups) that choose to attack us will be more likely to resort to asymmetric attack instead of conventional military assault. Moreover, easier access to sophisticated technology means that the destructive power available to terrorists is greater than ever. Adversaries may be tempted to use unconventional tools, such as WMD, to target our cities and disrupt the operations of our government.  

Research on the threat also indicates that these weapons pose significant problems for the military in carrying out their conventional missions. While the burdens of enhanced protective posture is not new to the military, the increased threat of WMD terrorism to logistics bases and deployment platforms causes difficulty for planners who must still meet tactical requirements. A recent conclusion by a panel of congressmen, senior military leaders, and other credible public policy makers pointed out that, “New elements in warfare such as information systems, space operations, and weapons of mass destruction are likely to increase the problems inherent in planning and preparing for future conflicts.”

The reasons they came to that conclusion likely include the current difficulty in detection of certain WMD agents. For example, current technology against biological agents fielded within DoD primarily enables its forces the ability to detect in order to treat (detect-to-treat) the patients infected and also to identify the hazard in order to mitigate losses. Still mostly on the drawing board is a detect in order to warn (detect-to-warn) personnel capability. A detect-to-warn system or set of systems would increase the probability US forces could assume protective posture or avoid the contamination altogether. This capability would thereby eliminate, or at least minimize, losses from a biological agent release. Although some standoff detection systems are being fielded, the
desired detect-to-warn capability throughout the force is still mostly in development and relying on further technological advances in the field.\textsuperscript{11}

Additional WMD threat research indicated that our potential adversaries are assessed to be more likely to develop and use WMD now than ever before. There are a number of logical reasons for this conclusion. They are summarized below:

1. The financial cost of developing NBC weapons is considerably less than building a conventional military force. According to one United Nations expert the overall cost may be as much as 2,000 times cheaper for the same effects. The bar charts in figure 1 depict his estimates by category of weapon.

![Figure 1. Estimated Cost to Produce Mass Casualties Per Square Kilometer](image)

Much of the threat literature suggests that cost is a significant factor for America’s potential adversaries when determining which offensive capability to develop.

2. In addition to the lower costs associated with NBC weapons, they are also considerably easier to conceal during the development, acquisition, and even employment
phases. A conventional force requires large industry, troop barracks, motorpools, logistics, transportation, and associated training grounds. These assets can be externally monitored by a number of national collection assets developed during the cold war and subsequently perfected by enhanced technological innovation. Existing conventional forces of our potential adversaries are often observed closely for indicators of future operations and intentions. On the other hand, NBC weapons (and biological weapons in particular) require less infrastructure and support to achieve the same number of casualties. Iraq, as an example, during the 1991 Gulf War possessed a sizable conventional military force. It was comparatively easy for coalition intelligence gatherers to identify its major troop positions, military assets, and conventional capabilities. However, it was not as easy to identify Iraq’s WMD assets and capabilities. In fact, the post Gulf War United Nations Special Commission (UNSCOM), established under paragraph 9(b) of UN Resolution 687, spent nine years from 1991 to 1999 attempting to determine the full nature of Iraq’s WMD programs. In the end, it was not able to fully accomplish its mission of monitoring the destruction of Iraq’s WMD capabilities and was subsequently replaced by the United Nations Monitoring, Verification and Inspection Commission (UNMOVIC).

3. A third reason America’s adversaries are more likely now than ever to develop and use WMD is the overwhelming US superiority in its conventional forces. The demonstrated success of conventional forces in US uses of force, such as Panama, Iraq, and Yugoslavia, highlights the idea that US military and allied conventional strength is unmatched. Newly appointed Defense Secretary Donald Rumsfeld, in referring to the Gulf War argues that it, “taught people that contesting Western armies, navies and air
forces, is not a good idea. It is expensive and you would probably lose.” He believes that, in response, potential US adversaries will be more likely to look into other ways to confront the US, such as development of WMD to influence world events in their favor. They may also develop these weapons to lessen the probability of retribution following aggressions against their neighbors. In this capacity, the value of a WMD capability is increased and acts as a cheap tool to further causes or interests that may conflict with US interests. Therefore, the likelihood of WMD development or use as a kind of regional deterrent has increased. Ironically, it is America’s own conventional military strength that is the partial cause.

All this results in something of a conundrum for the national security community. Nuclear, biological and chemical weapons are smaller, have a reduced signature, and are more easily concealed. It is comparatively more difficult to measure who specifically has them, what types they have, and what their state of weaponization, deliverability, and intent for use is. They cost less than a conventional force to produce the same effects in terms of casualties. With the technological know-how, they can be delivered against US interests more easily. They entail less warning time of attack than that afforded by conventional attack. About the only thing that is known with any degree of certainty is their effects; and those effects are somewhat daunting. The combined result is a frightening realization that WMD is more difficult than conventional forces when measuring the overall level of risk to the US and her interests.

Measurement of risk has always been the key to defense sizing and structure in a resource constrained defense environment. The lesser degree of assurance that the WMD risk is accurate because of its greater ability to conceal itself than conventional forces
complicates that US measurement. Additionally, the idea that adversaries are more likely to use WMD and asymmetric attack against the US than conventional assaults adds to the concern. But, before one can determine what to do about it, an assessment of what currently exists must be done. Many have done that assessment. So, there is also an abundance of researchable materiel in that regard.

Current DoD Structure and Capabilities Literature

Traditionally, DoD’s role in the defense of the homeland has been limited by law. Since the collapse of the Soviet Union, the most prominent and direct threat to the US homeland has been by way of international terrorism. The most dangerous form of this terrorism is the use of relatively easily acquirable and increasingly deliverable WMD. Unfortunately, DoD has not been at the forefront of the response to this threat despite its expertise in NBC defense. This is potentially due to legal restrictions and a misperception of executive agency responsibilities. In 1995, Presidential Decision Directive 39 (US Policy on Counterterrorism) designated the Federal Bureau of Investigation (FBI) as the “lead federal agency for the management of all terrorist crises, including those involving NBC weapons, that occur in the United States.”

In addition, some military experts seem to question the basic organizational structure of the Defense Department itself. In a postretirement article in *Proceedings magazine* entitled “A Commander Reflects,” the former Commander in Chief of the US Central Command, General (Retired) Anthony Z. Zinni opinioned, “The National Security Act of 1947 set up the most dysfunctional, worst organizational approach to military affairs one can possibly imagine. In a near-perfect example of the Law of Unintended Consequences, it created a situation in which the biggest rival of any US
armed service is not a foreign adversary but one of its sister services.” Although General (Retired) Zinni did not provide any solutions he did seem to imply that a more optimal structure is more joint service oriented. He seemed to argue that service competitiveness effectively ties the hands of the war-fighting CINC in their efforts to defend US interests in their area of responsibility (AOR). He continued by discussing the lack of attention DoD had paid to preparing for WMD attacks. “On his watch,” he said, “my son is likely to see a weapons of mass destruction event. Another Pearl Harbor will occur somewhere in the world where Americans are gathered, when a nasty bug or gas or nuke is released that will forever change him and his institutions. At that point, all the lip service paid to deal with such an eventuality will be revealed for what it is—lip service. And he will have to deal with it for real.”

Although General (Retired) Zinni has not been impressed with the department’s efforts, there has been some tangible jointness added specifically in the area of NBC defense. The Defense Department’s annual Chemical and Biological (CB) Defense Report to Congress points out the fact that all CB defense programs are by law integrated across service lines. The report states, “The National Defense Authorization Act for Fiscal Year 1994, Public Law No. 103-160, Section 1703 (50 USC 1522), mandates the coordination and integration of all Department of Defense chemical and biological (CB) defense programs.” One result of that law was the creation within DoD of a singular office charged with overseeing research, development, and acquisition (RDA) of all CB defense items intended for the services. This office, the Deputy Assistant to the Secretary of Defense for Chemical and Biological Defense (DASD-CBD), provides the civilian oversight to the process. To assist in complying with the law, the services established the
Joint NBC Defense Program. This program coordinates the specific requirements of the services to ensure they are not wastefully duplicating RDA efforts. It also serves as an integrating body to more efficiently produce and field CB defense equipment. This, in turn, results in greater interoperability for the services.

So, there is an organizational structure at the strategic level that is purely focused on CB defense. The problem appears to be that it is a relatively small office at the deputy assistant level. In addition, its managerial body, the Joint NBC Defense Board, is sometimes bogged down by a cumbersome one-service-one-vote structure. This structure ensures all services get a roughly equal share of the CB defense pie--regardless of expertise or requirements. Additionally, DoD’s CB defense program only addresses the materiel requirements, and the research, development and procurement process. It has a very limited role in coordination of service training and doctrine development. Finally, at the managerial level, this program is not a stand-alone organization with any real clout in the Pentagon. It is merely a set of meetings.  

Future Structure and Desired Capabilities Literature

Discussion about what to do regarding the asymmetric WMD threat has increased commensurate with the growth in the concern about the threat itself. The upcoming Quadrennial Defense Review (QDR) appears to be at the hub of this discussion. In preparation for the QDR there has been a flurry of activity among defense officials and national security strategists.

One of the most recent and forward-thinking forums was a conference the Fletcher School of Law and Diplomacy, Tufts University and The Institute for Foreign Policy Analysis, Incorporated. This conference was widely attended by senior national
security and defense officials as well as credible strategic thinkers from the public sector and around the world. The two-day conference, which was broken down into six expert panels, resulted in a number of findings regarding the WMD threat to the US. They concluded in finding and recommendation number eight, “The enormous consequences of weapons of mass destruction (WMD) incidents justify the increased effort and expense to prepare for this looming threat. The United States must press ahead with counterproliferation programs.”

It goes on to read,

The primary threats to US interests will take two forms. First, North America is increasingly vulnerable both to missile attack and to terrorist action. While the probability of WMD strikes remains low, they directly threaten vital US interests—the security of the United States itself. Second, WMD-equipped actors could target American forces or those of allies. The fear of such attacks could either deter US intervention or intimidate allies into opting out of future coalitions. More disturbing, accelerating technological change will contribute to the complexity of the future security environment. . . . Preparing to counter such asymmetric strategies is critical to US defense strategy in the twenty-first century.

The conclusions of this conference also reveal that the US must now face new forms of warfare. Implied is the assumption that the US may not currently be set up to defend against all or some of these new forms. “Future missions are not likely to resemble those of the Cold War and new requirements such as missile defense, homeland defense, and information operations must be central to the debate,” said the report.

Finally, the gathering of congressmen, military leaders, and government and nongovernment officials concluded that,

New threats, especially those categorized as threats to vital interests, but also the other types of contingencies for which military forces are deemed necessary, call for a reorganization of the Department of Defense. Such an undertaking would require a fundamental revision of the 1947 National Security Act, perhaps along functional lines. There are several areas that fall outside the existing DoD organizational hierarchy: asymmetric warfare, joint information technology development, joint procurement, homeland defense, and peace enforcement.
This is not the only credible forum to come to the conclusion that significant restructuring of the national security apparatus may be necessary. A recent policy brief released by the Brookings Institution, a private Washington think tank, recommended a complete revamping of the National Security Council (NSC).  

And, in perhaps the most anticipated pre-QDR report, the Hart-Rudman commission also recommended significant changes in the national security strategy and structure. This commission, chaired by former Senators Gary Hart and Warren B. Rudman, and comprised of a dozen other notable leaders, conducted a three phase examination of the new strategic environment looking forward for the next 25 years. They concluded that, “Significant changes must be made in the structures and processes of the US national security apparatus.” Their conclusions specifically called for a new federal agency, the National Homeland Security Agency (NHSA), to plan, coordinate, and integrate all governmental activities relating to homeland security. This cabinet level agency would use DoD’s considerable resources to assist it in its mission. To facilitate that assistance, the commission also recommended that DoD establish a new office on the Secretary of Defense’s staff to coordinate and integrate DoD’s efforts. In addition, the commission says that, “new priorities also need to be set for the US armed forces in light of the threat to the homeland.”

Summary

In the frenzy to maintain threat-based forces after the 1989 fall of the Berlin Wall and subsequent breakup of the communist Eastern Block, WMD has become a somewhat handy threat of choice. However, it is evident that this threat is valid and has the
potential to cause devastating effects to the US and her interests. There appears to be no choice but for DoD to keep pace with this increased WMD threat. In addition, it must do so regardless if the WMD threat is posed to our allies and forces abroad or to our homes and communities here in the United States.

There appears to be a consensus among the national security leadership and forward-looking strategists that indicates they more clearly recognize the reality (or even the inevitability) of the WMD threat. They also appear to demonstrate a growing willingness to act against it. In the past, DoD has shown that it can meet new challenges as they emerge. Today’s, and tomorrow’s, challenge is to develop a strategy and structure against the WMD threat in defense of the nation. The QDR has proven to be the logical place for the debate on strategy and structure to bloom. In the words of one panel of experts, “The next QDR must match resources with mission requirements. In the resource allocation process, many Cold War defense systems that are no longer needed must be discarded. For instance, the need to invest and acquire counterproliferation capabilities for missions ranging from missile defense to consequence management are now greater than ever given that WMD use is among the most likely threats to the United States and its forces abroad.”

President George W. Bush says it even more succinctly as he addressed the need for a new defense strategy that is not reliant on funding driven by Cold War requirement. As he put it, “In our broader effort, we must put strategy first, then spending,” he said. “Our defense vision will drive our defense budget, not the other way around.”

30


4. Ibid., 8.


7. Ibid, 1.


15. Ibid., 3.


18 Ibid., 36.


20 Ibid., 13-21.


22 Ibid., 2.

23 Ibid., 35.

24 Ibid., 19.


27 Ibid., ix.


CHAPTER 3
CAPABILITIES REVIEW

The growing threat of chemical and biological weapons will force a transformation in the Armed Forces and put greater emphasis on increased cooperation between DoD and other governmental agencies.¹

Fletcher School of Law and Diplomacy, Tufts University & The Institute for Foreign Policy Analysis, Inc., Final Report on Strategic Responsiveness, Early and Continuous Joint Effectiveness – Across the Spectrum, April 2000.

Introduction

This paper has now reviewed the relevant literature on the WMD threat, existing thought on the current DoD structure and capabilities, and various ideas on future structure and desired capabilities. It is now time to determine what DoD has currently operating at the strategic level to defend against this emerging threat. To its credit, there are several defense organizations that play an active role in addressing this threat. This chapter will show that the challenges inherent in WMD use have not gone entirely unnoticed within DoD. This conclusion is reached because of the relatively new creation of some DoD strategic level organizational direction and various operational level capabilities. Additionally, there exists a number of non-DoD governmental organizations now contributing to the defense against WMD.

It is clear that there is momentum moving to face the threat. But are these steps enough? Are there gaps? Has DoD changed its strategic organizational structure sufficiently after the fall of the Soviet Union to keep pace with the new realities of this form of asymmetric warfare? More to the point, are the strategic level organizations
effectively integrating DoD’s operational and tactical capabilities? To help answer these questions, this chapter will attempt to highlight selected DoD and non-DoD organizations, discuss their contributions to staying in front of the threat, and determine how they operate collectively in the defense of the US.

**Threat**

Much of the discussion of the current and future threat centers specifically on WMD and the means to deliver it. Another conclusion of the Fletcher Conference, which included several currently serving defense leaders summarized that the threat to US interests will effectively take two forms. First, they determined that, “North America is increasingly vulnerable both to missile attack and to terrorist action.” Although they conclude that the likelihood of such attacks delivering WMD is currently low, they point out that these attacks, “directly threaten vital U.S. interests--the security of the United States itself.” The second form of threat this particular conference highlighted was, “WMD-equipped actors could target American forces or those of allies.” After studying this challenge the panel decided that the, “fear of such attacks could either deter US intervention or intimidate allies into opting out of future coalitions.” It is the “accelerating technological change” that adds to the “complexity of the future security environment,” they argued. In the end, the conference’s final report determined that preparing to defend against these two likely forms of threat to US interests are, “critical to US defense strategy in the twenty-first century.”

2
DoD Priorities

As stated previously, the executive branch, and DoD specifically, have not been completely blind to these threats. To counter them DoD, as it does with many other initiatives, establishes requirements, programs, and systems to allow its warfighting Commanders-in-Chief (CINC) to meet the threat.

The National Security Strategy (NSS), published annually by the White House, and National Military Strategy (NMS), last published in 1997 by the Joint Chiefs of Staff (JCS), are the baseline documents that identify the general requirements for the defense of the United States and her interests. These broad policy documents make several references to the WMD threat and the defense community’s need to address it adequately. As the NMS points out,

The continued proliferation of WMD, particularly chemical and biological weapons (CBW), has made their employment by an adversary increasingly likely in both major theater wars and smaller-scale contingencies. U.S. forces must have a counterproliferation capability balanced among the requirements to prevent the spread of WMD through engagement activities; detect an adversary’s possession and intention to use WMD; destroy WMD before they can be used; deter or counter WMD; protect the force from the effects of WMD through training, detection, equipment, and immunization; and restore areas affected by the employment of WMD through containment, neutralization, and decontamination.3

What the NSS and the NMS do not cover are the specific priorities of effort against the WMD threat. These priorities are both generated within each of the services and various defense agencies as well as each of the Unified Commands. To counter the WMD threat the CINCs submit their counterproliferation priorities to the Joint Staff. Those priorities are then integrated at the Joint Staff level to complete an overall priority list of required
capabilities for DoD as a whole. Table 1 lists the unclassified specific priorities for the year 2000.

Table 1. Required CINC Counterproliferation Capabilities

<table>
<thead>
<tr>
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<th>Description</th>
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<tr>
<td>1.</td>
<td>Provide individual protection for forces and assist allies/coalition partners with relief from the effects of NBC</td>
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<tr>
<td>2.</td>
<td>Intercept conventional delivery of WMD and control collateral effects</td>
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<tr>
<td>3.</td>
<td>Provide collective protection to forces and assist allies/coalition partners with relief from the effects of WMD</td>
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<td>4.</td>
<td>Mitigate the effects of WMD</td>
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<td>5.</td>
<td>Detect and monitor development, production, deployment, employment of WMD</td>
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<td>6.</td>
<td>Communicate the ability/will to employ interdiction/response capabilities</td>
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<tr>
<td>7.</td>
<td>Determine vulnerabilities in WMD development, production, transfer, deployment, and employment</td>
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<tr>
<td>8.</td>
<td>Conduct off-site attack to destroy, disable, and deny WMD targets</td>
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<tr>
<td>9.</td>
<td>Establish and maintain relations with allies, and potential adversaries to discourage development, production, and use of WMD</td>
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<tr>
<td>10.</td>
<td>Seize, destroy, disable, and deny transport of WMD</td>
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<tr>
<td>11.</td>
<td>Communicate the ability/will to employ defensive capabilities</td>
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<tr>
<td>12.</td>
<td>Determine vulnerabilities in decision making process related to WMD</td>
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<tr>
<td>13.</td>
<td>Conduct information warfare to destroy, disable, and deny WMD</td>
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<td>14.</td>
<td>Support treaties, export controls, and political/diplomatic efforts</td>
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<tr>
<td>15.</td>
<td>Provide alternatives to the pursuit of WMD</td>
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<tr>
<td>16.</td>
<td>Provide intelligence collection capabilities in support of USG non-proliferation efforts</td>
</tr>
<tr>
<td>17.</td>
<td>Conduct on-site attack to seize, destroy, disable, and deny WMD targets</td>
</tr>
<tr>
<td>18.</td>
<td>Provide personnel, training, materiel, and equipment to support security assistance</td>
</tr>
<tr>
<td>19.</td>
<td>Destroy, disable, and deny actor’s non-WMD resources and capabilities</td>
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Beyond these specific requirements, it appears DoD is beginning to consider the need for organizational change at the strategic level. This is at least partially due to a growing need to integrate the capabilities these requirements call for.

In a recent address to the Center for Strategic and International Studies, former Defense Secretary William Cohen said, “The United States must begin to map a strategy
to guard against the threat of terrorist or cyber attack.” He stresses that no comprehensive policy to protect the country currently exists and hints that the Pentagon should spearhead the effort. Cohen argued, “the Defense Department is the only institution in the country that has the organizational and logistic capability to respond to such an attack.” He went on to indicate that, “we have yet to begin the debate on homeland defense.” “I believe,” he said, “that we as a democratic society have yet to come to grips with the tension that exists between constitutional protection of the right to privacy [and] the demand that we made. . . . to protect us.” Later, he gives credit to the Pentagon’s military leadership for developing the idea of a CINC Homeland Defense. Cohen pointed out that the requirements needed for protecting the US and her interests are, “one reason why the Joint Chiefs started to talk about a [commander-in-chief] for homeland defense.” “Because if you think about it in terms of terrorism coming to U.S. soil,” he said, “the prospects are that you will see multiple attacks that will occur nearly simultaneously.”

Defense Organizations

One of the primary means of addressing emerging threats is through changes in organizational structure. “The services must continue to foster a culture of innovation by constantly reassessing current thinking, structures, and doctrines,” concluded a recent panel of defense experts at the Fletcher conference. And so, the defense structure is seemingly in a continual period of refinement. However, what appears to be important is whether these changes follow a particular strategic direction or set of goals. The following is a review of several defense organizations, some new, some considerably
changed from their cold war days. It is intended to briefly highlight their missions, capabilities, and how they interoperate. This review will help determine whether the changes in organizational structure have contributed to a strategic integration of purpose.

**ASD-CS**

Secretary Cohen established the office of the Assistant to the Secretary of Defense for Civil Support (ASD-CS) in October 1999. This office can be seen as the logical complement to the establishment of the Joint Task Force for Civil Support (JTF-CS). It provides the day-to-day civilian oversight to the JTF-CS as it carries out its missions involving military support to civil authorities after WMD incidents in the US. The ASD-CS also chairs DoD’s WMD Preparedness Group where it “plays a primary role in coordinating DoD’s consequence management efforts throughout the interagency process.” The office of the ASD-CS, located in the Pentagon, has the formal mission of providing policy oversight for all domestic Chemical, Biological, Radiological, Nuclear, and High Yield Explosives--Consequence Management (CBRNE-CM). The ASD-CS reports directly to the Secretary of Defense and whose responsibilities include, “policy promulgation, preparedness for the CBRNE-CM domestic support missions, policy oversight of operations and coordination of Lead Federal Agency (LFA) requests for CBRNE-CM support.” Its capabilities beyond policy formulation and oversight of strictly WMD related consequence management are virtually nonexistent. However, it plays the principal role for DoD in terms of integration of internal DoD organizations for CBRNE-CM as well as serving as the DoD representative for interagency coordination of consequence management functions.
DASD-CBD

The Deputy Assistant Secretary of Defense for Chemical and Biological Defense Programs (DASD-CBD) is another civilian official on the OSD staff. The position is subordinate to the Director, Defense Research and Engineering (DDR&E) and the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD-ATL). The DASD-CBD serves as the single focal-point within OSD responsible for oversight, coordination, and integration of chemical and biological defense programs.11

The Chemical and Biological Defense Program (CBDP) is the DASD-CBD’s principal and most relevant program to the focus of this paper. However, it is important to note that this is not the only area the DASD-CBD is responsible for. For example, all of America’s chemical weapons stockpile disposal is within the oversight and direction of this office. The CBDP, on the other hand, is primarily a RDA activity. According to the Fiscal Year 2200--Fiscal Year 2001 Joint Service CBDP Overview, the mission of the DoD CBDP is to “allow the military forces of the United States to survive and successfully complete their operational missions in battlespace environments contaminated with CB warfare agents.” The overview goes on to state that the CBDP provides “materiel and systems to support the activities of training, doctrine, and military operations.” However, these activities are the responsibility of the Military Departments and the Commanders-in-Chief.12

The most recent CBDP Annual Report to Congress helps clarify DASD-CBD’s principal responsibility; “The vision, missions, values, and goals of the CBDP are focused on Research Development and Acquisition (RDA) activities.”13 This report makes it clear that all RDA of chemical and biological defense systems within DoD are
centrally funded through the oversight of this office. Capabilities of the office beyond materiel development and acquisition policy formulation and the ensuing oversight are therefore, like ASD-CS, essentially non-existent. And because it is inherently an OSD civilian oversight arm it has no operational capability. This office does however, due to its oversight of the CBDP budget, play a key role regarding interoperability of the services in terms of their ability to function in a WMD environment. This strategic level integration of research and development resources ultimately results in all forces within DoD utilizing effectively the same equipment. Prior to the establishment of centralized chemical and biological defense equipment RDA, each of the services developed their own WMD related equipment. These systems often were not compatible with each other and did not capitalize on the efficiencies provided by singular development and bulk procurement.

JTF-CS

The 1999 Unified Command Plan (UCP) designated the newly activated Joint Forces Command (JFCOM) as DoD executive agent for joint experimentation. JFCOM thereby supplements the efforts of each of the individual services and defense agencies by developing operational concepts, doctrines, and technologies more appropriate to the new security environment. It is hoped that JFCOM will also improve the ability of DoD to counter the asymmetric threats currently being developed by America’s potential adversaries. In addition to developing strategies to counter the WMD threats, JFCOM also became the logical place to house the principal military organization that attempts to assist civil authorities in mitigating the effects of a WMD incident.
To that end, the UCP also directed the establishment of the Joint Task Force for Civil Support (JTF-CS). On 1 October 1999, JFCOM created the JTF-CS as a standing military joint task force headquarters. The JTF-CS is currently commanded by a Army National Guard Major General who is charged with providing necessary military support and assistance to civil authorities following a WMD event.\(^{15}\) Previously, DoD had chosen to designate an existing headquarters on an ad hoc basis to provide the command and control required of military forces deployed to support civilian authorities. Joint Task Force-Los Angeles (JTF-LA) for example was an ad hoc establishment of a JTF headquarters to provide command and control during the 1992 Los Angeles riots. The JTF-CS fills a similar role for a WMD incident--but on a standing basis. The JTF-CS has geographical responsibilities that include all of the United States as well as its possessions and territories.\(^{16}\)

Its primary task after a WMD event is to coordinate all of DoD’s expertise and assets that are required to respond in an assist role and function as their higher headquarters. The JTF-CS, however, has a larger role than providing operational and tactical level post-event command and control of military assets. Because it is a standing headquarters, it also plays an important new role for DoD at the strategic level. The unit, through its planning and preparation for a WMD event, is serving an important integration function for each of the DoD organizations that may be called upon to contribute forces. As part of that integration function, JTF-CS has input into the training, equipping, and doctrine of these organizations. Hence, they are the beginnings of a consolidated strategic direction for support to civil authorities in a post WMD incident environment.
JTC-CS is capable of planning for and rapidly deploying a headquarters structure which provides DoD command and control of all military assets supporting the Lead Federal Agency (LFA) in the event of a WMD incident. JTC-CS would take operational control (OPCON) of all DoD forces except for a joint special operations task force and Army Corps of Engineers after the WMD event. The JTF-CS, partly because of the nature of its standing organizational structure, is becoming highly integrated with both WMD related military forces and non-DoD agencies charged with addressing the domestic WMD threat.

DTRA

The Defense Threat Reduction Agency (DTRA) is a relatively new Defense Agency. It was created by Secretary Cohen on 1 October 1998 with the intent of bringing together DoD resources and technical expertise into a joint command. DTRA’s formal mission is to “safeguard the United States and its friends from weapons of mass destruction (chemical, biological, radiological, nuclear and high explosives) by reducing the present threat and preparing for the future threat.” To execute this mission DTRA performs four distinct functions: combat support, technology development, threat control, and threat reduction. Its activities range from providing the US inspectors for nuclear, biological, and chemical related treaties to providing technical expertise on the transferring of technology in the international community. Organizationally it is structured as shown in figure 2.
The Director of DTRA is a civilian Senior Executive Service (SES) employee who, on a day-to-day basis, reports directly to the Under Secretary of Defense for Acquisition, Technology and Logistics. However, because of the wide variety of its functions and expertise, DTRA often directly supports other senior DoD leaders as well as the unified commands. It is a fairly large agency with an authorization of 2,110 civilian and military personnel and management responsibility of a $1 billion annual budget. The DTRA headquarters is located just outside of Washington DC at Fort Belvoir, Virginia. It also operates eight field offices across the US and in Germany, Russia, and Japan. For domestic emergencies, DTRA provides WMD expertise such as modeling and simulation of agent cloud locations. It also participates, when asked, as a supporting agency to the JTF-CS in domestic WMD consequence management exercises.

Overall, DTRA operates at the strategic, operational, and tactical level primarily as a joint supporting agency to another policy-making arm or joint command within the defense establishment. Its roles and functions for WMD are somewhat analogous to what
the Defense Logistics Agency provides to policy makers and CINCs in terms of logistics support. Simply put, it is a WMD support defense agency.

SBCCOM

The Soldier and Biological Chemical Command (SBCCOM), located at Edgewood Area, Aberdeen Proving Ground, Maryland, is a two Star level Major Subordinate Command (MSC) to its parent Major Army Command (MACOM) the U.S. Army Materiel Command (AMC). SBCCOM is a diverse organization whose mission is to “develop, integrate, acquire, and sustain soldier and NBC defense technology, systems, and services to ensure the decisive edge and maximum protection for the United States.” It also provides for the safe storage, treaty compliance, and destruction of America’s chemical stockpile and materiel.

SBCCOM’s various elements operate on the strategic, operational, and tactical levels. Its sizable responsibilities can be generally broken down into three broad mission areas:

1. RDA
2. Chemical weapons storage, remediation and disposal.

Regarding its RDA functions--SBCCOM provides scientists, engineers, and NBC technical experts in DoD's efforts to acquire essential WMD defense equipment. Its Edgewood Chemical and Biological Center (ECBC) is recognized as a world leader in research, development, and engineering of CB defense equipment. It is a primary tester of protection and detection equipment under development. Once it acquires the new equipment on behalf of all the services, SBCCOM provides complete life cycle
management of those items. In addition, its various laboratories, detection, and identification equipment provide the US with a full range of static, mobile, and deployable analytical services.

The SBCCOM Operations Enterprise provides safe storage and protection to America’s toxic chemical munition stockpile at each of the eight stockpile sites in the US. This is a sizable task and is arguably becoming more difficult to manage due to both the increasing age of the cold war era weapons and the public attention it receives as the weapons are prepared for destruction. All of the eight sites have significant analytical laboratory capability and chemical surety expertise. Although not readily deployable, they also are experienced in incident planning and are trained to respond quickly and professionally to a chemical event.

Because of its NBC RDA and chemical stockpile experience, SBCCOM is also a national hub of WMD emergency preparedness and response activity. It employs a Technical Escort Unit (TEU), which is discussed in detail below, as well as several other deployable WMD related units. It established the Chemical Biological-Rapid Response Team (CB-RRT) to deploy, coordinate, and manage the DoD technical capabilities from various organizations responding to a WMD event. It maintains the Chemical and Biological Forensic Analytical Center. This analytical center provides a world class on-site analytical laboratory capability capable of analyzing chemical materials, foreign chemical warfare agents, and all precursors and degradation by-products. SBCCOM is also DoD’s executor of the 1997 Public Law 104-201 Defense Authorization legislation directing DoD to “enhance the capability of federal, state and local emergency responders in incidents involving nuclear, biological and chemical
terrorism.” As a result, SBCCOM, functioning as the lead DoD agency, provides WMD response expertise and training to 120 of America’s cities.

TEU

The U.S. Army Technical Escort Unit (TEU) has the mission to “provide worldwide, no-notice capability to conduct field sampling, identification and verification; monitoring, recovery, decontamination, escort and mitigation of hazards associated with chemical and biological materiels in compliance with international, federal, state, and local laws.” It is a battalion size organization comprised of military and civilian WMD and Emergency Ordnance Disposal (EOD) experts. TEU operates at the tactical level in support of strategic and operational objectives. It has executed its Title 10 missions for the Army since the beginnings of America’s chemical stockpile. Its basic operational element is its Chemical-Biological Response Teams (CBRT) which generally consist of 12 WMD/EOD experts and their equipment. CBRTs can be deployed from any one of three locations across the US. Their capabilities include providing technical escort of CB agent materiel and munitions; rendering safe and/or disposal of weaponized CB munitions and materiel; as well as conducting technical intelligence exploitation of foreign CB munitions and materiel. TEU is an Army unit headquartered at Edgewood Area, Aberdeen Proving Ground, Maryland. It is subordinate to SBCCOM and the Army Materiel Command. The TEU effectively provides the Army with a rapid response (4 hours) capability to “detect, decontaminate (neutralize), contain (package), dismantle (render safe), and dispose of (transport and escort)” WMD related materials. The TEU often trains with other WMD response units within DoD and with various governmental
agencies. Elements of TEU often predeploy to support high WMD threat events such as the Olympics and national political gatherings. Because of their pre-event deployments and level of expertise, they are generally interoperable with other WMD defense organizations.

CBIRF

The Marine Corps’ Chemical Biological Incident Response Force (CBIRF) is also a battalion size unit although it is newer than TEU and has a completely different mission. While TEU focuses on the WMD agent, CBIRF concentrates on the victims. The CBIRF is charged with providing a “highly trained, rapid response force capable of providing consequence management (threat identification, casualty extraction, personnel decontamination and medical triage/treatment/stabilization) for terrorist initiated chemical and biological attacks in order to mitigate the effects of multiple/mass casualty incidents.”

According to CBIRF’s Deputy Commander it is the only unit capable of going into a chemically or biologically contaminated area, finding victims, providing them with immediate medical care, decontaminating them, then getting them off to a more robust medical treatment facility. They effectively turn victims into patients. “We are basically a life-saving, casualty force,” says the official.

Its birth came about in April 1996 during the aftermath of the 1995 Tokyo subway sarin gas attack by the religious cult Aum Shintikyo. The 333 marine unit was recently relocated from its original home of Camp Lejeune, North Carolina to just outside the Washington DC area where it was felt it could be more responsive to the higher threat to that area. Like TEU, this unit frequently pre-deploys to high-profile events such as the
Olympics, State of the Union Address’, Inaugurations, and the like.\textsuperscript{28} The CBIRF can deploy its Initial Response Force of 81 Marines and Sailors within four hours with prior indication and warning. During peacetime the CBIRF is subordinate to the United States Marine Forces Atlantic (MARFORLANT).\textsuperscript{29} In its operational mode, like other WMD consequence management units, it would be responsive to the JTF-CS. And, because of its extensive predeployment activities since its inception, it is generally interoperable with most of the other responding units. The Marine Corps’ CBIRF operates at the tactical level.

WMD-CSTs

The initial ten WMD Civil Support Teams (WMD-CST) were authorized by the Fiscal Year (FY) 1999 National Defense Authorization Act. These ten teams, initially labeled Rapid Assessment Initial Detection (RAID) teams, were formed from the National Guard and aligned with the ten Federal Emergency Management Agency (FEMA) regions across the US. Later, a total of 32 teams were authorized by congress. These 22 soldier teams are currently being manned, trained, and equipped to provide the first military response to a domestic WMD event.\textsuperscript{30} Their mission is to detect, assist, and advise the incident commander. Their goal is to reach the scene of the WMD event within four hours of notification. They are State assets under the direction of the respective Governor and often work closely with the State crisis centers and city and local government first responders.\textsuperscript{31} If federalized following an actual WMD event they would become subordinate to the JTF-CS. WMD-CSTs operate at the tactical level.
Nondefense Organizations

The various DoD organizations and response assets outlined above are not the only federal agencies prepared to address the WMD threat. There are several others which provide considerable capabilities. For example, the General Accounting Office (GAO) identified no less than 17 federal consequence management response teams from seven different agencies not including DoD. These agencies ranged from the Department of Energy to the Environmental Protection Agency. Additionally, the state and local governments are increasingly more focused on the WMD problem. With all the assets and attention domestic WMD events are getting, one may conclude that the federal, state, and local governments collectively may be adequately addressing the problem. However, the sentiment in the press appears to reach the opposite conclusion. As the Boston Globe put it, “there is a growing concern over whether the federal government’s various agencies--as well as emergency centers in the 50 states and major cities like New York and Los Angeles--would be able to respond to a bio-terrorist attack.”

This section will examine some of the federal, state and local organizations which are external to DoD but contribute to addressing the WMD threat to the US. In the context of this paper it is important to highlight these organizations because many of them coordinate directly with DoD strategic level organizations also postured against the threat. This discussion should provide an appreciation for the quantity and magnitude of coordination required by a DoD strategic level organizational structure. The review will
follow a similar format as the DoD organizations above. It will briefly highlight the organizations missions, capabilities, and then discuss how they interoperate with one another.

**FBI**

The Federal Bureau of Investigation (FBI) is the Lead Federal Agency (LFA) for WMD crisis management. In this capacity it will act as the on-scene commander for WMD incidents. Because crisis management and consequence management often overlap considerably, the FBI is requires a high degree of coordination with DoD and other responding agencies. This is especially so during the early stages of a WMD event. The FBI charges the Special Agent in Charge of its local field division as its WMD incident commander. It also employs elements of its Critical Incident Response Group (CIRG) out of Quantico, Virginia to provide operational assistance. Besides its post event assistance mission, the CIRG also provides WMD related crisis management training to various FBI organizations as well as to DoD, other federal agencies, and state and local organizations.

The CIRG’s Crisis Management Unit (CMU) deploys within four hours of notification and lists as its goals:

1. Resolve incident without further injury, loss of life or damage.
2. Ensure safety of all participants.
3. Apprehend the subjects.
4. Accomplish within the framework of applicable legal and ethical standards.

The CMU is a critical element at the event scene because they are the federal officials who define the command post structure, how the crisis management system operates, and how taskings are issued.
The FBI, as delegated by the Department of Justice, is also charged with the responsibility to develop and implement policies aimed at preventing terrorist acts from occurring in the first place. Some of the tools it uses for preventing attacks are deterrence and use of timely and accurate intelligence. Many of the deterrence functions and military intelligence activities routinely managed by DoD at the strategic level closely parallel this responsibility for the FBI domestically. Therefore, these policies require close consultation with DoD prior to implementation.

Another DoD related area under the purview of the FBI is overall coordination of federal agency activities for WMD related exercises. The Bureau’s National Domestic Preparedness Office (NDPO) has the mission of coordinating all federal efforts “to assist state and local emergency responders with planning, training, equipment, and exercise needs necessary to respond to a WMD incident.” The growth of the WMD threat to the homeland outlined in chapter two has led to a greater emphasis on pre-incident training. What this means to DoD, as a major partner in this training, is that it must provide various resources and capabilities to the training and effectively coordinate these events with the FBI organization serving as the lead.

FEMA

The Federal Emergency Management Agency (FEMA) is the LFA for WMD consequence management. They are charged with ensuring the overall Federal Response Plan is sufficient to handle the aftermath and consequences of terrorism, including WMD terrorism. According to the Department of Justice’s WMD Incident Contingency Plan, it is FEMA’s responsibility to direct and coordinate “any Federal
emergency response. . . to ensure appropriate coordination of Federal response activities in support of State and local authorities.”

This federal agency would leverage its significant disaster relief experience and capabilities in the event of a WMD incident. It is adept at coordinating the required relief with state and local officials. The FEMA, by virtue of its natural disaster relief missions, already has much of the support structure and connectivity that would be required for a WMD incident.

The FEMA also coordinates pre-deployment consequence management activities if the threat warrants and the FBI requests a consequence management advance presence. These activities would include various military units such as the TEU, CBIRF, and WMD-CSTs listed above. Therefore, like the FBI, FEMA requires close coordination with DoD organizations.

State and Local Governments

State governments normally utilize their emergency management divisions as their mechanism to prepare, respond, mitigate, and recover from natural disasters and emergencies. Likewise, state emergency management officials, at the direction of the Governor, normally coordinate all the state assets in the case of WMD events. State assets include the state police and various national guard units. Additionally, the states coordinate numerous inter and intra State agreements and memoranda of understanding for mutual support.

Local governments follow the same parallel as state governments on a smaller scale. Local leaders such as city mayors and county commissioners use their emergency management personnel to develop plans and programs responsive to local disasters.
Local assets are generally not as focused on incident management but on response. However, most local governments have at least some form of incident management capability. The local first responder would likely be the first personnel on the incident scene and therefore are the target for many of the new federal and state WMD response training programs. Local first responders may include fire fighters, police, and emergency medical technicians. The local governments also serve as coordinators of community specific efforts such as hospital mass casualty plans and facility utilization.

**Summary**

This direct WMD threat to US soil is obviously not entirely new in the modern era. It arguably dates back to the early days of mutually assured destruction (MAD) as it began to unfold as the best available deterrent. This deterrent was, and continues to be, effective against our strategic nuclear peers. However, it very likely would not be effective against what might be considered lesser nations that seek to blackmail the US.

What have we done to face up to this threat? It is clear DoD has taken some steps and at least one columnist argues that a great deal has been done in the US overall. An increased focus on the terrorist threat in general and significantly more spending across the board highlighted his point. The editorial states, "When Bill Clinton leaves office in January, he can claim credit for having done more than any other president to ensure that the United States is prepared to counter the threat of terrorism. Overall spending on preparedness and response measures nearly doubled, and terrorism was elevated to the top of the list of security threats confronting the United States." But, the article goes on to confirm that spending and focus has not been enough. Using the attack on the USS
Cole as an example of how hard it is to defend against these asymmetric attacks, the author argues that despite all this progress, “US capabilities to defend itself against terrorism, and to preempt or respond to attacks, remain inchoate and unfocused.”

He goes on to argue, while specifically speaking about counterterrorism, that an effective policy, “is not a question of more attention, bigger budgets and increased staff. Rather, it requires greater focus, a better appreciation of the problem and understanding of the threat, and, in turn, the development of a clear, cohesive strategy.” The problem is that DoD’s strategy is essentially unchanged. This unchanged strategy is complicated by the fact that, while some steps have been taken organizationally at the strategic, operational, and tactical levels, the preponderance of its post Cold War strategic organizational structure is unchanged in the face of these new threats.


2Ibid., 12.


4Department of Defense, DoD Chemical and Biological Defense Program Annual Report to Congress, March 2000, 5.


6Fletcher School of Law and Diplomacy, Tufts University & The Institute for Foreign Policy Analysis, Inc., “Finding and Recommendation # 9,” Final Report on
Strategic Responsiveness, Early and Continuous Joint Effectiveness – Across the Spectrum, April 2000, 29.

7William S. Cohen, SECDEF Memorandum “Assistant to the Secretary of Defense for Civil Support (ATSD(CS)),” The Secretary of Defense, 6 October 1999, 1.


9Ibid., 3.

10William S. Cohen, SECDEF Memorandum “Consequence Management Responsibilities within the Department of Defense for Incidents Involving Chemical, Biological, Radiological, Nuclear, and High Yield Explosives – Consequence Management (CBRNE-CM).,” The Secretary of Defense, 1 April 2000. 1.


12Dr. Anna Johnson-Winegar, Deputy Assistant to the Secretary of Defense for Chemical and Biological Defense Programs, FY00-FY01 Joint Service Chemical and Biological Defense Program Overview, 1.

13Dr. Anna Johnson-Winegar, Deputy Assistant to the Secretary of Defense for Chemical and Biological Defense Programs, DoD Chemical and Biological Defense Program Annual Report to Congress, March 2000, 2.


16Ibid., 1.


19Ibid., 1.


23. Ibid., 32.

24. Ibid., 14.

25. Ibid., 14.

26. Ibid., 44.


28. Ibid., 35.


39 Ibid, 6.


43 Ibid., 1.

44 Ibid., 1.
CHAPTER 4
RESEARCH METHODOLOGY

In order to answer the primary and secondary research questions the following research methodology was used. As stated previously, these questions can only be answered by a cumulative assessment of the threat balanced against the facts and thoughts of credible sources. They cannot be answered by a quantitative analysis. Therefore, this research primarily focused on publications from official government agencies and renowned non-governmental organizations not surveys or matrixes.

A large portion of the research specifically focused on Presidential, Congressional, DoD, and Army level documents that address NBC defense. Many also address strategic policy and procedures combating other threats. In these cases, the research narrowed to the portions that specifically mention the NBC threat and WMD events within the United States. Research showed that many of these documents are proactively developed as part of each organization’s mission. These documents range from comprehensive strategy publications to more specific doctrine manuals and regulations. An example of a publication that was proactively developed and also helpful in the research is the January 2001 released “Proliferation, Threat and Response” published by DoD. This proactive work hints that our national security leadership is willing to move against the WMD threat without having to be prodded into action.

In addition to the proactively written documents, there were many pertinent open-source publications from government offices that were reactive in nature. Most of the useful documents found were published as a result of either congressional investigations
and inquires or enacted legislation. One example of a reactive document was the General Accounting Office’s (GAO) Report to Congressional Requesters entitled, “Combating Terrorism: Federal Response Teams Provide Varied Capabilities; Opportunities Remain to Improve Coordination” published in November 2000. This provided an excellent example of the role of congressional oversight and leadership in steering defense strategy. Another example of a document reactive to congressional legislation that was useful in the research was the “DoD Chemical and Biological Defense Program Annual Report to Congress” last published in March 2000. This document, required by Public Law 103-160, is one of several legally mandated reports to be developed by the executive branch for the legislative branch in order to inform the congressional leadership of US NBC and WMD defense activities. They often enjoy wide dissemination when unclassified, as they often times are, and are easily accessed as part of the openness afforded to the general public. Most of these documents were attained and downloaded via the internet.

There were also numerous insights gained from non-governmental documents and sources. National and international policy think tanks such as the Center for Strategic and International Studies, the Brookings Institution, and The Institute for Foreign Policy Analysis, produce a wealth of developed thought on this and related topics. They are widely regarded and are often used as forums for national leaders to express America’s security requirements and ideas. These organizations also routinely sponsor the panels and conferences where our developing national strategy ideas are born. These ideas then have a hand in the direction and formulation of policy for strategic level organizational structures.
Another valuable source during research on the primary and subordinate questions was the national press. The press produces an incredible volume of stories and articles on the WMD threat. Sorting through these articles for credibility and applicability was often difficult and time consuming. However, a subscription to the Chemical and Biological Terrorism newsletter was extremely useful in refining what was useful and lending the needed credibility to the sources.

Additionally, some fictional accounts of WMD events such as the novel “The Cobra Event” were helpful in determining potential vulnerabilities and the limitations of our current readiness. Many of these novels are widely read and referred to by national security officials and arguably have had their hand in the development of policy.

Lastly, research of the relevant strategic and operational level commands that directly address the threat as a core mission was primarily internet based. This was primarily due to the need for recent information. Many of the publications found in the Army’s Combined Arms Research Library (CARL) at Fort Leavenworth Kansas, while useful in discovering what has happened regarding our strategic organizational structure, were not particularly useful in determining what these DoD organizations are currently structured to do. Neither were they generally useful on highlighting what may be needed in the future to address the evolving WMD threat.

1
CHAPTER 5

ANALYSIS

Introduction

This chapter attempts to tally information presented about the WMD threat, current capabilities to counter it, and the recommended future requirements to keep the US in front of it. Chapters two and three summarized literature and capabilities in each of these areas. Only now can a degree of analysis be done. This chapter draws eight conclusions using a cumulative assessment of the information contained in the previous chapters. In doing so, it explains each conclusion and summarizes the evidence contributing to that conclusion. As with any conclusion, they may be subject to a degree of discussion and disagreement. However, the conclusions set forth in this chapter are based on the cumulative result of comprehensive research of credible national security leader’s statements and related publications. A summary of some of this evidence is therefore provided. In the end, this chapter answers the research question and the related subordinate questions.

Conclusion One

Many senior government leaders and prominent defense experts see WMD and other asymmetric threats as one of the most critical challenges to national security today and in the foreseeable future.
Supporting Discussion

The perception of the US homeland as invulnerable to direct attack has changed. And, it has changed to such a degree that asymmetric threats to the homeland have become among the most critical national security issues of our day. Consider President George W. Bush’s recent statement that, “we have no higher priority than the defense of our people against a terrorist attack.”

The inherent vulnerability of the US is not what is new. The former Soviet Union’s nuclear threat, as discussed previously, obviously presented the potential for immense destruction within the US. What is new is the perception of increased likelihood of attack by asymmetric means. Fueling that perception is evidence of growing proliferation of WMD agents worldwide, enhanced technological innovation of WMD delivery means, and scattered but well publicized WMD use by terrorists in recent years. These are among the reasons why participants at the Fletcher Conference concluded that future missions for the armed forces are not likely “to resemble those of the Cold War.” “New requirements,” they argue, “such as missile defense, homeland defense, and information operations” must be at the center of debate regarding America’s future security.

Conclusion Two

WMD weapons are routinely lumped together as one threat while they are in fact very different in terms of challenges and effects. Therefore, US policy and planning working against these threats face broader integration challenges.
Supporting Discussion

There is another problem regarding the WMD threat that does not seem to garner much attention. It is a problem that can be termed generality of preparation and planned response. Many assume that because the WMD threat is generally accepted as one category of asymmetric warfare, the associated preparations and responses also fit into one category. The reality is somewhat different. Nuclear, radiological, chemical, and biological hazards each present their own set of challenges. They do not neatly fit into one basket. For example, an infectious disease such as small pox possesses a relatively long incubation period and presents a completely different set of responses than a quick acting nerve agent such a sarin gas. The same point could even be made when comparing some of the traditionally lumped together NBC threats within their own group. Many agents in their own category do not fit nicely together in terms of their own particular set of responses. Symptoms and associated response to a nonpersistent nerve agent for example vary greatly from those of a persistent blister agent.

The challenges obviously vary greatly in terms of post-event management. But they also require their own distinctly different set of threat assessments, preparation, specialization, training, and policy. One of the premier US experts on infectious diseases, Michael T. Osterholm, argues that because of this lumping together of the WMD threat into one basket, the current US response efforts are inherently flawed. Any divergence in policy and planning to effectively deal with the combined WMD threat would therefore require an even greater degree of integration of effort. Specialization is
effective only if it is effectively applied. And, it is clear that it can only be effectively applied if it is fully integrated on a broader front.

Conclusion Three

DoD spends a considerable amount of resources addressing the WMD threat. But, what it currently spends is not sufficient to meet the growing threat.

Supporting Discussion

Exact amounts on DoD’s level of spending specifically on WMD are difficult to measure. The DoD does not, nor should it, fund programs strictly on functional lines. Rather, it tracks spending by service, command, and broad category. Examples of these categories are: operations and maintenance; research, development, testing and evaluation; systems acquisition; etc. Additionally, many of the subcategories blend in only partially related activities with true WMD spending. One example is DoD’s habit of including spending of physical security equipment and law enforcement activities with domestic preparedness and consequence management programs all under the heading of combating terrorism. It would also be inaccurate to solely measure defense spending on NBC equipment because the majority of this equipment is dedicated to outfitting our forces against the current 2MTW wartime requirement. At least one study of the national security funding process complained that budgets are stuck in the past and have not kept pace with the changing global environment. Current budgets, they point out, “are still prepared and appropriated as they were in the Cold War,” while threats and strategies changed.
Nevertheless, one analyst, using data provided by the Office of Management and Budget (OMB), measures DoD combating terrorism and WMD defense spending during fiscal year 2001 as follows:  

Table 2. FY 2001 Combating Terrorism and WMD Defense Spending

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combating terrorism</td>
<td>$4,456</td>
</tr>
<tr>
<td>Force Protection</td>
<td>$3,521</td>
</tr>
<tr>
<td>Counterterrorism/SOF</td>
<td>$579</td>
</tr>
<tr>
<td>Consequence Management</td>
<td>$265</td>
</tr>
<tr>
<td>Intelligence</td>
<td>$112</td>
</tr>
<tr>
<td>National Security WMD</td>
<td>$476</td>
</tr>
<tr>
<td>DoD WMD</td>
<td>$275</td>
</tr>
<tr>
<td>*Total</td>
<td>$9,684</td>
</tr>
</tbody>
</table>
* - Figures in millions

The CB Defense Program’s FY 2001 President’s budget requested an additional $835 million split nearly equally between procurement, research and development, and science and technology programs. This brings the total to over $10.5 billion. Yet another source estimates the total to be slightly higher—in the range of $11 billion.

With all this money being spent on so many WMD related programs throughout each of the services and within many of the defense agencies, some experts still conclude that not enough is being done. For example, another finding from the Fletcher conference stated that, “the enormous consequences of WMD incidents justify the increased effort and expense to prepare for this looming threat.” “The United States must press ahead with counterproliferation programs,” it said.

Conclusion Four
The DoD has significant capabilities and expertise already in place at the operational and tactical levels to address WMD threats.

Supporting Discussion

As shown in the chapter three capabilities review, DoD maintains considerable capabilities at both the tactical and operational level. At the tactical level, DoD can bring to bear WMD-CSTs, the TEU, the CBRRT, the CBIRF, a number of analytical labs, and any one of a variety of NBC defense units specializing in areas such as biological detection, NBC reconnaissance, and decontamination. At the operational level DoD can employ organizations such as the JTF-CS, the DTRA, or the Army’s SBCCOM to address the WMD threat. Each of these organizations can provide a great deal of WMD related knowledge, technical expertise, and command and control assets.

Conclusion Five

There is no standing organization at the strategic level charged with comprehensively integrating all of DoD’s WMD related assets in a common direction.

Supporting Discussion

As the chapter three capability review indicated, there are several DoD organizations responsible for WMD on the strategic level. The ASD-CS, while operating on the strategic level, is basically a civilian oversight, policy making office. It is not
staffed or missioned to effectively integrate military forces in an operational capacity. It also only focuses on the consequence management end of the WMD threat.

The ATSD-CBD is likewise a civilian oversight office without the structure or expertise to direct military forces in an operational mode. Its primary functions address the development and procurement of WMD related equipment for the armed forces. It also presides over the destruction of the nation’s legacy chemical arsenal.

The JTF-CS is the only command operating at the strategic level whose primary mission is related to WMD and NBC defense. While lightly staffed for a standing JTF, it is certainly capable of the integration of effort required within DoD and also the coordination required with agencies external to DoD. Its problem however, is that JTF-CS only focuses on the consequence management portion of WMD defense. It has virtually no role in the strategic integration of counterproliferation, deterrence, prevention, intelligence, structure and equipment, or counterterrorism activities.

The DTRA is a defense agency headed by civilian leadership not a military command headquarters with a supporting staff along traditional lines. It is not capable of providing the strategic direction necessary nor does it have the clout to establish and enforce operational policy. It always functions in support of the services, military commands, and other agencies. Although its area of expertise is certainly WMD, it is in essence a supporting agency. As stated previously, it does for WMD what the Defense Logistics Agency (DLA) does for logistics support to the warfighters. It is not organized to function as a supported command.

The organizations above represent the principal armed forces strategic structure whose primary missions are related to WMD. All told, it is clear that none of them is
responsible for integrating all of DoD’s WMD related efforts. Each area is handled piecemeal with no overall integration and coordination of purpose. The recent Hart-Rudman commission came to a similar conclusion in their recent phase III report. Only, the highly regarded commission went a step further in terms of why it is necessary to unite DoD’s efforts. They found that DoD’s organizational responses are so, “widely dispersed” that such arrangements do not “provide clear lines of authority and responsibility or ensure political accountability.”

Conclusion Six

The emerging nature of the WMD threat, the complexities involved in addressing it and the probability that it will occur against civilian targets in the US, require an enormous degree of unity of effort and inter-governmental integration.

Supporting Discussion

The fundamental threat to American life, liberty, and pursuit of happiness has changed like no other time in history. The Defense Department, if it is to live up to its name and historical purpose of preserving those ideals, must lead the way in providing the strategic direction to stay in front of that threat. To do this, it must transform its strategic organizational structure as well as its forces. At least one panel of national security experts agreed that, “the growing threat of chemical and biological weapons will force a transformation in the Armed Forces.” They concluded that threat of WMD to the nation will also, “put greater emphasis on increased cooperation between DoD and other governmental agencies.” Another panel of experts felt that these “new elements in warfare,” elements including WMD, are “likely to increase the problems inherent in
planning and preparing for future conflicts." This conclusion makes the necessity for strategic level integration and interagency coordination even more apparent.

Conclusion Seven

While DoD spends a great deal more money on the WMD threat, it has not followed suit with the sizable organizational changes necessary in today’s environment.

Supporting Discussion

If the current combating terrorism and WMD $11 billion dollar figure is accurate, DOD managed to tuck it into what is effectively its Cold War structure. Each of the services still spends roughly the same share of the defense pie they did in the 1980s. Other than comparatively minor shifts in responsibility, the unified CINCs are also essentially unchanged. Only recently has DoD begun to change some of its organization structure and procedures related to WMD defense, although many of these changes were congressionally mandated not proactively pursued. Perhaps the first example of this was the fiscal year 1994 Defense Appropriation Act (Public Law 103-160) directing DoD to jointly develop and procure all NBC defense systems instead of conducting those functions by individual service. Another was the Defense Against WMD Act (Public Law 104-201) which initially designated DoD as the lead agency for domestic preparedness against WMD and directed it to train 120 of America’s cities on WMD defense.

As a result, DoD has changed some of its organizational structure to implement and assist in these initiatives. New offices and organizations such as the ASD-CS, DTRA, JTF-CS, and CBIRF reflect some of these changes. However, these coerced
changes are comparatively minor in scope when measured against the magnitude of the threat. For example, the Hart-Rudman commission concluded that the current steps were simply not enough. Among other things, they recommend DoD “broaden and strengthen the existing Joint Forces Command/JTF-CS to coordinate military planning, doctrine, and command and control for military support for all hazards and disasters.” They suggest that this step would provide the command and control necessary to respond to multiple incidents—not just a single WMD event.13

Conclusion  Eight

Rapidly growing technological innovation and the information age, and the emerging threats associated with it, justify and require significant structural changes to America’s defense establishment.

Supporting Discussion

There are many among the national security community who have reached this conclusion. For example, some of the most credible strategic thinkers at the Fletcher Conference flatly argue that these new threats “call for a reorganization of the Department of Defense.”14 They stress that many of the new threats are direct threats, not only to America’s vital interests, but also to the “other types of contingencies for which military forces are deemed necessary” in future conflicts.15 Thus, they combine America’s homeland vulnerability with the potential vulnerabilities of our military forces as they are being increasingly used in unconventional ways. “Such an undertaking,” they say, “would require a fundamental revision of the 1947 National Security Act.” They go on to argue that, because there are now several areas that “fall outside the existing DoD
organizational hierarchy” any reorganization of DoD should perhaps be along functional lines. The strategists include: “asymmetric warfare, joint information technology development, joint procurement, homeland defense, and peace enforcement,” on their list of functional lines.16

Another body of experts who determined that sizable reorganization is required to adequately address the new security environment is the US Commission on National Security. Among the Hart-Rudman commission’s most significant recommendations was the call for a new federal agency at the cabinet level. This new agency, the National Homeland Security Agency (NHSA), would have the “responsibility for planning, coordinating, and integrating various US government activities involved in homeland security.”17 This step would force the consolidation of “certain homeland security activities to improve [their] effectiveness and coherence.” They reached this conclusion partly because “within the federal government, almost every agency and department is involved in some aspect of homeland security.” However, “none have been organized to focus on the scale of the contemporary threat to the homeland.”18 Congress, it seems, has also paid attention to the homeland security issue by taking up many of the commission’s recommendations in newly introduced legislation on the matter.

Summary

It is abundantly clear that DoD’s strategic organizational structure has not kept pace with the WMD threat. Today, many national security experts see WMD and other asymmetric threats as not only valid, but increasingly dangerous over time. While DoD spends a great deal of money on the issue, many experts are beginning to understand
America’s inherent vulnerabilities and the overall complexity of the problem. Some steps have been taken in recent years to reduce these vulnerabilities. However, these steps were primarily at the operational and tactical levels. And, the few strategic level changes that have been made do not address the threat in a comprehensive fashion. This may be due to concerns over involvement of the military in domestic matters. Or, it could reflect the military’s general aversion to rapid change. DoD, it seems, often takes small steps instead of bold, giant leaps into new mission areas. One could argue that standing up the JTF-CS was one small step at the strategic level. While this step is undoubtedly in the right direction, it fails to be bold enough to meet the total requirements of strategic, operational, and tactical WMD integration in all areas.

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2 Fletcher School of Law and Diplomacy, Tufts University and The Institute for Foreign Policy Analysis, Inc., Final Report on Strategic Responsiveness, Early and Continuous Joint Effectiveness--Across the Spectrum, April 2000, Panel 6, 35.


9 Fletcher School of Law and Diplomacy, Tufts University and The Institute for Foreign Policy Analysis, Inc., Final Report on Strategic Responsiveness, Early and Continuous Joint Effectiveness – Across the Spectrum, April 2000. 6.


11 Fletcher School of Law and Diplomacy, Tufts University and The Institute for Foreign Policy Analysis, Inc., Final Report on Strategic Responsiveness, Early and Continuous Joint Effectiveness – Across the Spectrum, April 2000, Panel 9, 6.

12 Ibid., Panel 5, 29.


14 Fletcher School of Law and Diplomacy, Tufts University and The Institute for Foreign Policy Analysis, Inc., Final Report on Strategic Responsiveness, Early and Continuous Joint Effectiveness – Across the Spectrum, April 2000, 19.

15 Ibid., 19.

16 Ibid., 19.


18 Ibid., 14.
CHAPTER 6

CONCLUSION

While chapter 5 determined that DoD is not adequately organized at the strategic level to address the evolving WMD threat, this chapter summarizes why that is so. It also suggests what may be done to address the problem.

Conclusions generated by recent national security panels and commissions highlighted that domestic and international terrorism, as well as delivery of WMD by an adversary through asymmetric means, are primary threats to the nation and its vital interests. And, the cumulative effect of this conclusion appears to be shaping strategy and mission reviews such as the upcoming Quadrennial Defense Review (QDR). Many strategists determined that DoD must focus on other things. Consider this statement from the Fletcher Conference:

The next QDR must match resources with mission requirements. In the resource allocation process, many Cold War defense systems that are no longer needed must be discarded. For instance, the need to invest and acquire counterproliferation capabilities for missions ranging from missile defense to consequence management are now greater than ever given that WMD use is among the most likely threats to the United States and its forces abroad.1

The pre-QDR groups were mostly composed of credible and experienced national security specialists at the highest levels from both within the government and in the private sector. Most overwhelmingly see WMD as a primary threat. There is also widely published evidence that DoD is currently structured to address these threats with considerable operational and tactical force structure and expertise. However, DoD’s organizational structure at the strategic level lacks the breath and depth required to fully integrate all of its WMD assets towards a common focus. In addition, the other federal
agencies with homeland security and WMD related missions are forced to coordinate our
nations WMD defense activities with DoD organizations that only focus on portions of
the threat or only operate on the operational and tactical levels. The armed forces simply
lack the strategic integration required to do the job adequately. This conclusion becomes
difficult to swallow considering that DoD is perhaps the major asset available to the US
in protecting its own homeland and infrastructure.

At the center of the problem is that fact that no unified command is
geographically or functionally responsible for the defense of the US itself. Regional
CINCs exclude US soil and solely have the mission to protect US interests within their
assigned area of responsibility (AOR). And, while many CINCs have WMD defense
among their missions and priorities, not one has it as their principal mission. Figure 3
shows the regional CINC’s current AORs. The continental US is noticeably not assigned
to a CINC.

Figure 3. Regional CINC AORs
Overall, DoD is currently charged with providing military assistance as required to other federal agencies. According to the WMD Incident Contingency Plan, this assistance to the LFA may include: “threat assessment, Domestic Emergency Support Team (DEST) deployment, technical advice, operational support, tactical operations, support for civil disturbances, and custody, transportation, and disposal of a WMD device.”\textsuperscript{2} How can it do all this without someone in charge at the strategic level? As an example of the problem, the NDPO currently must coordinate its pre-WMD incident training activities independently with each of the DoD organizations operating at various levels of command. They cannot be expected to receive integrated DoD assistance without a strategic level organization providing the direction to all DoD agencies supporting their efforts.

Has the Department of Defense, with its constitutional mission of supporting and defending the US against all enemies--foreign and domestic, shirked its responsibilities to do just that? After all, the WMD threat to the US is here, it is now, it is sizable, it is directly facing the American public, and it has the potential to inflict great damage and loss of life.

If DoD is to restructure along functional lines, such as the Fletcher Conference suggested and the Hart-Rudman commission hinted through the establishment of the NHSA, then it must have a strategic organizational structure responsible for this area as a primary mission. “There's no question,” agreed new Secretary of Defense Donald Rumsfeld, “that the United States of America needs to get arranged, so that we can effectively deter and defend against threats that are new and emerging.”\textsuperscript{3}
Currently, DoD’s command and control structure at the strategic level rests with the CINCs. Only a CINC has the command responsibility, organic staff, and fundamental ability to integrate all aspects of WMD defense into a comprehensive strategy at the strategic level. To adequately address terrorism and the WMD threat to America, which is President Bush’s stated highest priority, at the DoD strategic level one must turn to a CINC specifically charged with that mission. Therefore, one could conclude that a homeland security (or homeland defense) CINC is required. This is perhaps one possible solution to the problem.

How might it look? What other functions might it entail? Those are questions better suited to further detailed review and analysis. However, one might envision a solution containing some or all of the following mission areas and their potential subcomponents within a comprehensive CINC Homeland Security:

Figure 4. Potential CINC Homeland Security Structure
Each subordinate arm of this new CINC could conceptually be organized with specific functions. Listed below are some of the more critical strategic functions that such an organizational structure could address.

**WMD Defense**
- Consequence management
- Counter-terrorism
- Medical defense

**Missile Defense**
- Ballistic missile defense
- Low level missile defense

**Critical Physical Infrastructure Defense**
- Man-made Defense
- Asteroid/Comet Impact Defense

**Critical Information Structure Defense**
- Computer Network Defense
- Computer Network Attack

Another potential solution specifically focused only on WMD, although a great deal smaller in size and scope than the option above, may be to bolster the JTF-CS. It may suffice for DoD to broaden JTF-CS’s missions and responsibilities to include all civil defense related functions. Obviously, this would entail a significant increase in its personnel strength and command structure.

However, before any of this could occur, a strong argument can be made for the sensible development of a comprehensive national strategy on homeland security and WMD defense. The current ad hoc contributions by most federal agencies, including the DoD, simply lead to an inefficient response to the threat. As the Government Accounting Office (GAO) recently put it after reviewing all the federal government’s WMD response teams, “federal agencies lack a coherent framework to develop and evaluate budget
requirements for their response teams because there is no national strategy with clearly defined outcomes.”

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1Fletcher School of Law and Diplomacy, Tufts University and The Institute for Foreign Policy Analysis, Inc., Final Report on Strategic Responsiveness, Early and Continuous Joint Effectiveness---Across the Spectrum, April 2000, Panel 6, 35.


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