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**MONTEREY, CALIFORNIA**

**THESIS**

**COMPELLED COMPLIANCE: WMD ELIMINATION IN  
THE NEW ERA OF ARMS CONTROL**

by

Johnny Hall Jr.

September 2006

Thesis Advisor:

Second Reader:

Peter R. Lavoy

James A. Russell

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**COMPELLED COMPLIANCE: WMD ELIMINATION IN THE NEW ERA OF  
ARMS CONTROL**

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Submitted in partial fulfillment of  
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**MASTER OF ARTS IN NATIONAL SECURITY AFFAIRS**

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## ABSTRACT

The United States invaded Iraq in 2003 to compel compliance with UN disarmament mandates. The invasion exposed the lack of a standing organization to conduct WMD elimination as a serious capability gap in the U.S. military force structure. This thesis demonstrates why it is necessary to establish such a capability. It argues that the United States cannot rely solely on multilateral, cooperative approaches to eliminate a determined adversary's weapons program. While non-coercive tactics are preferred, the mixed results of twelve-years of UN verification in Iraq show that a viable threat of force must accompany these approaches in order to induce compliance with UN Security Council disarmament mandates. Additionally, the U.S. elimination effort in Iraq demonstrated that *ad hoc* approaches inadequately address this capability shortfall. The lack of integrated training, unsecured sites because of inadequate prioritization, and misaligned intelligence assets are just some of the problems that occurred during the *ad hoc* OPERATION IRAQI FREEDOM elimination operation. When cooperative, nonproliferation measures fail to rollback aggressor states' WMD programs, DoD must have the capability to compel compliance if called upon. This thesis makes recommendations to facilitate the development of a viable and sustainable WMD elimination capability.



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## LIST OF ACRONYMS AND ABBREVIATIONS

AFMIC	Armed Forces Medical Intelligence Center
CBRNE	Chemical, Biological, Nuclear, Radiological, and high Explosives
CBIST	Chemical and Biological Intelligence Support Teams
CENTCOM	Central Command
CFLCC	Coalition Forces Land Component Command
CID	Criminal Investigation Division
CPX	Command Post Exercise
CWC	Chemical Warfare Convention
DCI	Director of Central Intelligence
DTRA	Defense Threat Reduction Agency
EOD	Explosive Ordnance Device
IMSL	Iraq Master Survey List
MCT	Mobile Contact Team
MET	Mobile Exploitation Team
MSIC	Missile and Space Intelligence Center
NGIC	National Ground Intelligence Center
NPT	Nuclear Nonproliferation Treaty
ORHA	Office of Reconstruction and Humanitarian Assistance
OSD	Office of the Secretary of Defense
PPRA	Plutonium Production Reactor Agreement
QDR	Quadrennial Defense Review Report
SAT	Site Assessment Team
SSTR	Stability, Support, Transition, Reconstruction
SST	Site Survey Team
START	Strategic Arms Reduction Treaty
TEU	Technical Escort Unit
TF D/E	Task Force Disablement and Elimination
TIC/TIM	Toxic Industrial Chemicals or Toxic Industrial Material
TTP	Tactics, Techniques, and Procedures
UFL	ULCHI FOCUS LENS
USANCA	U.S. Army Nuclear and Chemical Agency
UNSC	United Nations Security Council
WMD	Weapons of Mass Destruction
XTF	Exploitation Task Force



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## I. INTRODUCTION

On April 6, 1991, Iraq unconditionally accepted the terms of the United Nations Security Council (UNSC) Resolution 687<sup>1</sup>. The stipulations of UNSC Resolution 687, section C required Iraq to “unconditionally accept the destruction, removal, or rendering harmless under international supervision of all chemical and biological weapons and stocks; all ballistic missiles with ranges greater than 150 kilometers.”<sup>2</sup> The resolution required Iraq to declare the locations, amounts, and types of such items and established a system of ongoing monitoring and verification of Iraq’s compliance with the ban on these weapons and missiles. Furthermore, paragraph 9 (b) authorized the establishment of a UN Special Commission (UNSCOM) to “carry out immediate on-site inspections of Iraq’s biological, chemical, and missile capabilities based on Iraq’s declarations and any other locations that UNSCOM may deem worthy of inspection.”<sup>3</sup> The terms imposed by the UN manifested new arms control dynamics, marking the first time in the history of the United Nations that a state was compelled under the threat of force to rollback its WMD program.

Rolf Ekéus, the first Executive Chairman of UNSCOM, assembled an *ad hoc* team of inspectors and began inspection of Iraqi sites on June 9, 1991. However, after years of opposition to the inspections on October 31, 1998, Iraq ceased all cooperation with UNSCOM and declared a halt to all future inspections and monitoring activities. Iraq contended that the United States was using the UNSCOM inspection regime for intelligence-gathering purposes.<sup>4</sup> Inspections would later resume for 16 weeks under the

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<sup>1</sup> United Nations Security Council Resolution 687 was adopted at the 2981<sup>st</sup> meeting on April 3, 1991. It declared a formal cease-fire at the end of the Gulf War and imposed peace terms on Iraq. It was passed by 12 votes to one (Cuba) with two abstentions (Ecuador and Yemen).

<sup>2</sup> United Nations Security Resolution 687, April 3, 1991. <http://www.ste.gov/p/nea/rls/01fs/14906.htm> (accessed December 15, 2005).

<sup>3</sup> Ibid.

<sup>4</sup> Trevor Findlay, “The Lessons of UNSCOM and UNMOVIC,” in *The Verification Yearbook 2003*, (London: VERTIC, 2003), 67. Also available online at <http://www.vertic.org/publications/verification%20yearbook.html> (accessed June 19, 2006).

auspices of Security Council Resolution 1284, which replaced UNSCOM with the UN Monitoring, Verification, and Inspection Commission (UNMOVIC).

UNMOVIC conducted 750 inspections at over 500 different sites and although it found a few items that were undeclared by Iraq, its findings were unable to satisfy the governments of the United States and Great Britain.<sup>5</sup> In 2003, despite the Security Council's unwillingness to act, the United States led a "coalition of the willing" to compel Iraq's compliance with the UN disarmament mandate.<sup>6</sup> Having no standing capability to conduct WMD elimination, however, the Department of Defense (DoD) had to develop this capability *ad hoc* from its existing force structure.

This thesis proposes that the DoD must develop a permanent WMD elimination capability that is both viable and sustainable in response to the dynamics of the current arms control paradigm. Iraq's forced compliance with UN mandates to disarm serves as the paradigm case for arms control because of three elements: cheating by a treaty signatory, the levying of the United Nations Security Council mandate, and the rejection of the international norms denouncing WMD.<sup>7</sup> The U.S.-led invasion of Iraq in 2003 further solidified this new arms control paradigm. In light of this, the National Military Strategy (NMS) for Combating WMD asserts that U.S. military forces must be prepared to dissuade, deter, defend, and defeat adversaries seeking to use WMD against U.S. interests. Towards this end, it delineates eight missions that the U.S. military must have the capacity to accomplish in combating WMD. These missions are passive defense, threat reduction cooperation, security cooperation and partner activities, interdiction operations, active defense, WMD consequence management, and WMD elimination.<sup>8</sup> As an adversary's determination to possess WMD increase, options available to U.S. leadership become more limited, (see Figure 1). Of these eight missions, WMD

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<sup>5</sup> Sharon A. Squassoni, *Iraq: UN Inspections for Weapons of Mass Destruction*, (Washington D.C: Congressional Research Service, 2003), 2.

<sup>6</sup> *Ibid.*

<sup>7</sup> J. Peter Scoblic, "The Lessons and Legacy of UNSCOM: An Interview with Ambassador Richard Butler," *Arms Control Today* 29, no. 5 (June 1999), [http://www.armscontrol.org/act/1999\\_06/rbjun99.asp](http://www.armscontrol.org/act/1999_06/rbjun99.asp). December 3, 2004).

<sup>8</sup> DoD, *National Military Strategy to Combat Weapons of Mass Destruction*, December 2002, <http://www.defenselink.mil/pdf/NMS-CWMD2006.pdf>. (accessed July 2, 2006), 22.

elimination is the ultimate operation because the extensive military and political ramifications involved. It includes all operations to systematically locate, characterize, secure, disable, and/or destroy a State or non-State actor's WMD program and related capabilities in a hostile or uncertain environment.<sup>9</sup> Until DoD has integrated and institutionalized WMD elimination into the mission scope of U.S. forces, its ability to accomplish this task is circumspect and equivocal.

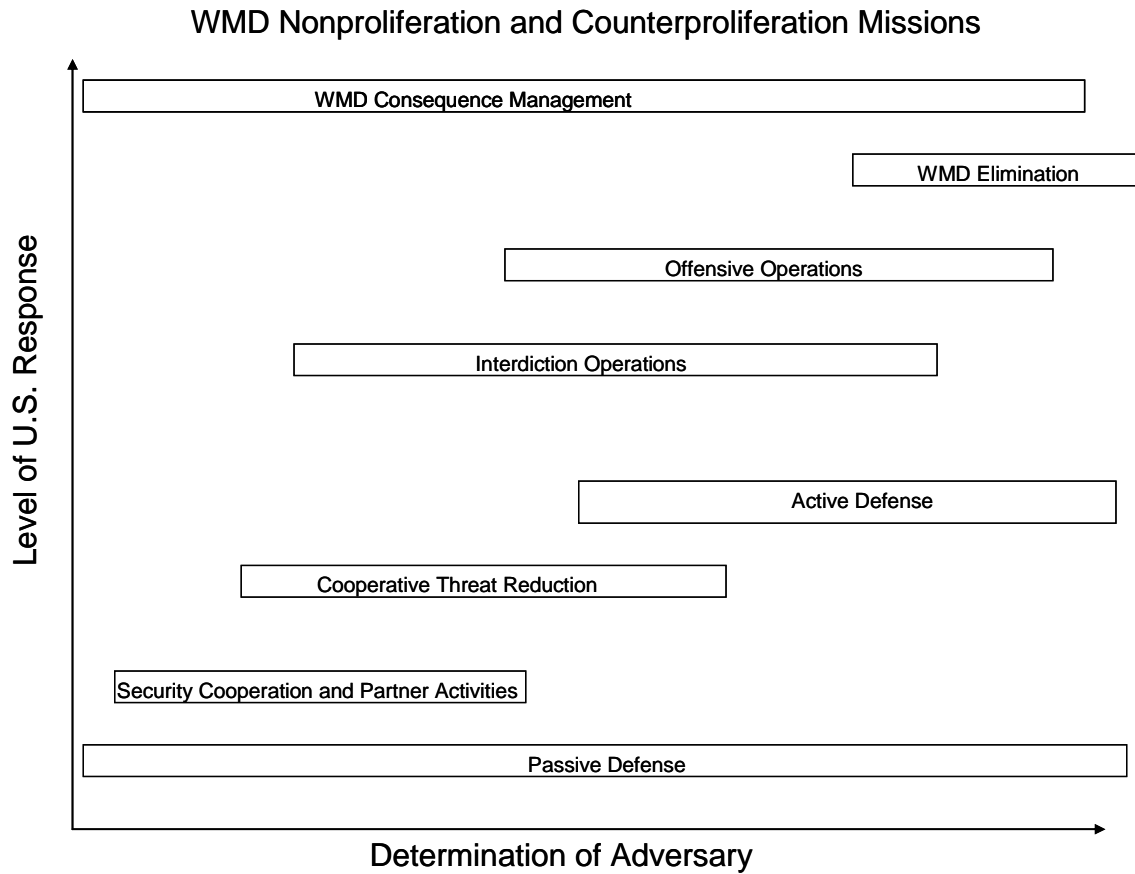


Figure 1: WMD Nonproliferation and Counterproliferation Missions (After Ref. 8). As an adversary's determination to possess WMD increases, the mitigating options available to prevent an adversary from possessing WMD become limited.

DoD relied on *ad hoc* measures to conduct the elimination mission in Iraq. Since Iraq had no WMD to eliminate, assessing the effectiveness (or ineffectiveness) of the *ad hoc* effort in Iraq is difficult. Nevertheless, there are numerous indicators that strongly

<sup>9</sup> DoD, *National Military Strategy to Combat Weapons of Mass Destruction*, 23.

suggest that the United States should develop a permanent capability to conduct such elimination missions. Recognizing this shortfall, DoD expanded the mission scope of the Army's 20<sup>th</sup> Support Command (CBRNE) designating it as the rapid deployment Joint Task Force to provide command and control of WMD elimination operations.<sup>10</sup> This thesis, however, asserts that a comprehensive approach to addressing the weapons elimination challenges must also include integrating and institutionalizing operational-level arms control. Until DoD integrates and institutionalizes WMD elimination, this critical gap will continue to exist. Continued reliance on *ad hoc* approaches to conduct this mission could jeopardize the security of the United States, its allies, and its forces stationed abroad. Although the United States has not conducted a counterproliferation mission since World War II, the post-September 11 security environment dictates that DoD must be prepared to meet these responsibilities if required.

#### **A. BACKGROUND**

In support of Operation Iraqi Freedom, the Department of Defense (DoD) created three *ad hoc* organizations to conduct WMD exploitation and site assessments. These organizations were Task Force 20 (TF-20), the 75<sup>th</sup> Exploitation Task Force (XTF), and the Iraqi Survey Group (ISG). Task Force 20 was a covert pre-invasion team charged with uncovering Iraq's WMD stockpiles and denying its use against invading coalition forces.<sup>11</sup> DoD fashioned the 75<sup>th</sup> XTF from the 75<sup>th</sup> Field Artillery Brigade commanded by Colonel Richard McPhee. Its purpose was to provide the command and control for the WMD elimination mission during Operation Iraqi Freedom. The Iraqi Survey Group (ISG) was the third and most ambitious of these *ad hoc* organizations. Major General Keith W. Dayton, a senior manager with the Defense Intelligence Agency, headed the organization. DoD formed the ISG based on an assessment that the 75<sup>th</sup> XTF was not robust enough for the elimination mission. Although these organizations failed to

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<sup>10</sup> Quadrennial Defense Review Report, February 6, 2006, 52.

<sup>11</sup> Frank R. Cleminson, "What Happened to Saddam's Weapons of Mass Destruction?", *Arms Control Today* 33, no. 7 (September 2003), [http://www.armscontrol.org/act/2003\\_09/Cleminson\\_09.asp](http://www.armscontrol.org/act/2003_09/Cleminson_09.asp). (accessed December 25, 2005).

discover any WMD in Iraq, DoD cannot access this effort as a failure. There were numerous lessons learned from the planning, training and execution of Operation Iraqi Freedom's (OIF) WMD elimination mission.

The 75th Exploitation Task Force conducted the brunt of OIF's WMD elimination mission. Its elimination concept consisted of three primary tasks—assessment/exploitation, destruction, and monitoring. The assessment/exploitation task has two phases. During phase I of assessment/exploitation, the objectives were to locate, identify, and isolate suspected WMD. The phase II objectives were to secure/disable the WMD cache and use appropriate steps to avoid its use against friendly forces or its exposure to non-combatants. The second task, destruction, entails safely and verifiably disposing of an adversary's WMD cache, means of production, equipment, or infrastructure.<sup>12</sup> The final task of the 75<sup>th</sup>'s WMD elimination plan was ongoing monitoring and inspections. This entailed the continuous or periodic observation and inspection as required to prevent reconstitution of an adversaries WMD program. Non-DoD government agencies, possibly assisted by DoD, would have been responsible for this step.

Of the three WMD elimination phases that comprised the OIF elimination concept, assessment/exploitation was the most crucial—particularly in a non-permissive environment. It circumscribed and facilitated the other WMD elimination tasks. Assessment/exploitation teams faced such concerns as booby-trapped entrances, looters, and the vandalistic dissemination of chemical, biological, or radiological agents. The teams integrated methods of mitigating such hazards into their operating procedures thereby forging a valuable knowledge base of WMD elimination under non-permissive conditions. In future operations to combat WMD, the U.S. military may only play only a supporting role to other U.S. government agencies or non-government organizations. Nonetheless, under nonpermissive conditions U.S. military forces will most likely be responsible for conducting the initial exploitation and securing of an adversary's weapons

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<sup>12</sup> Rebecca K.C. Hersman and Todd M. Koca, "Eliminating Adversary WMD: Lessons for Future Conflicts," *Strategic Forum* 211(October 2004), 4  
[http://www.ndu.edu/inss/strforum/SF211/SF211\\_Final.pdf](http://www.ndu.edu/inss/strforum/SF211/SF211_Final.pdf). (accessed June 25, 2006).



program. Developing, integrating, and institutionalizing the WMD elimination mission will enable DoD to establish a viable and sustainable elimination capability.

## **B. SIGNIFICANCE OF THE ISSUE**

In a speech presented at West Point, New York on June 1, 2002, President George W. Bush stated that “the greatest danger our nation faces lies at the crossroads of radicalism and technology...history will judge harshly those who saw this coming danger, but failed to act.”<sup>13</sup> The National Security Strategy assessment released in 2002 states that the United States must be prepared to stop rogue states and terrorist clients before they are able to employ WMD against the United States or its allies. The milieu produced by Bush’s policy of preemption and the subsequent invasion of Iraq exposed a critical capabilities gap. That gap is the reliance on *ad hoc* efforts to conduct WMD elimination missions.

On May 4, 2003, former Deputy Secretary of Defense Paul Wolfowitz stated:

In future conflicts we should not end up playing “pick-up games” when we are trying to put together forces for eliminating Weapons of Mass Destruction in the aftermath of a conflict. We must ensure that there are sufficient forces in peacetime, adequately trained, organized and equipped for the mission...but also ensure that they are well equipped and personnel have the proper concepts, doctrine, and training to use those capabilities effectively to accomplish their mission.<sup>14</sup>

The OIF counterproliferation mission met stiff resistance at the United Nations due to the uncertainty of Iraq’s WMD programs. Despite over ten years of inspections under permissive condition and intensive intelligence gathering, there was still no consensus of the state of Iraq’s WMD program. President Bush moved for military action against Iraq for failing to comply with the UN mandates to disarm. The United Nations requested that President Bush allow more time for UNMOVIC to complete its

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<sup>13</sup> National Security Strategy of the United States. April 2002, 13  
<http://www.whitehouse.gov/nsc/nss.pdf#search=%222002%20national%20security%20strategy%22>  
(accessed June 20, 2006).

<sup>14</sup> Paul Wolfowitz, Speech at National Defense University Conference on Counterproliferation, May 13, 2003, <http://www.defenselink.mil/speeches/2003/sp20030513-depsecdef0203.html> (accessed June 20, 2006).

inspections, but President Bush refused.<sup>15</sup> Subsequently, the failure of the United States to find WMD in Iraq gives validity to claims that the United Nations' soft WMD elimination efforts in Iraq had actually been successful.

In September 2002, during an interview on CNN regarding the U.S. position on Iraq's WMD program, the National Security Advisor Condoleezza Rice made a very fateful statement. She said, "...there will always be some uncertainty" in determining Iraq's nuclear status. Dr. Rice went on to state, "We don't want the smoking gun to be a mushroom cloud."<sup>16</sup> When deterrence fails, U.S. leaders should have the option to reduce uncertainty and place an adversary's WMD program in jeopardy. Once U.S. leadership makes the political decision that a zero degree of uncertainty is required, it is important that military assets are fully capable of accomplishing the mission. Eliminating WMD of an uncooperative adversary to a near zero degree of uncertainty, requires the proverbial "boots on the ground" strategy.<sup>17</sup>

U.S. forces must be able to conduct weapons elimination in support of counterproliferation missions across the spectrum of operational environments and integrate the lessons learned during OIF into its institutional knowledge base.<sup>18</sup> DoD should address this shortfall by establishing a permanent capability to conduct counterproliferation missions across the spectrum of operational environments. Failure to develop a viable and sustainable WMD elimination capability could have catastrophic

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<sup>15</sup> Richard Spertzel, "More Time," *National Review Online*, January 24, 2003, <http://www.nationalreview.com/comment/comment-spertzel012403.asp>. (accessed April 14, 2006).

<sup>16</sup> CNN Achieves, "Top Bush officials Push Case Against Saddam," <http://archives.cnn.com/2002/ALLPOLITICS/09/08/iraq.debate/> (accessed February 4, 2006).

<sup>17</sup> Counterforce operations refers to offensive operation directed at defeating an adversary's WMD before employment against friendly forces or interests. It does entail the systemic destruction that characterizes WMD elimination operation.

<sup>18</sup> In general, the Defense and Justice Departments conducts counterproliferation while nonproliferation is generally a responsibility of the State Department. This distinction is important to this paper because of the opaqueness between their functions. Joint publication 1-02, *DoD Dictionary of Military and Associated Terms* defines counterproliferation as "those actions taken to defeat the threat and/or use of WMD against the United States, our military forces, friends, and allies (e.g., detect and monitor, prepare to conduct counterproliferation operations, offensive operations, WMD, active defense, and passive defense)." It defines nonproliferation as "those actions taken to prevent the proliferation of weapons of mass destruction by dissuading or impeding access to, or distribution of, sensitive technologies, material, and expertise (e.g., diplomacy, arms control, multilateral agreements, threat reduction assistance, and export controls)."

consequences. Continuing to rely on *ad hoc* approaches to weapons elimination could enable an adversary to conceal its weapons cache—effectively nullifying preemptive efforts. The adversary could then deploy these weapons against U.S. forces or other interests at time and place of his choosing with destructive consequences. The implications are clearer, if one imagines the impact of Iraqi insurgents obtaining chemical agents or discharging a radiological hazard in the post-war insurgency.

### C. PREVAILING PERSPECTIVES

Barry R. Schneider, director of the U.S. Air Force Counterproliferation Center advocates that the United States should have a strong military option available to destroy an adversary's WMD stockpiles. In his article entitled "Radical Responses to Radical Regimes", Schneider noted that preemptive strikes might be the best option when all other options are ineffective. In a later essay entitled "Progress in Counterforce", he discusses advances that enable the United States to defeat, disrupt, and deny an adversary the use of WMD. He states that systems such as unmanned aerial vehicles with surveillance and offensive capabilities, stealth aircraft, and precision guided low yield munitions have improved the ability to conduct counterforce strikes against WMD assets.<sup>19</sup>

While Schneider makes a very cogent point on the U.S. counterforce capability, there is too little emphasis on the fact that air strikes, while accurate, may not decrease the "degree of uncertainty" to an acceptable level. This is especially the case considering the lessons potential adversaries gather from military actions such as the Israeli 1981 Osirak strike and the U.S. strikes against deeply buried sites in Afghanistan during Operation Enduring Freedom. The technology and skills related to constructing hardened and deeply buried sites is spreading; enabling adversaries to become adroit at hiding and

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<sup>19</sup> Barry Schneider and Jim A. Davis, "Progress in Counterforce," in *Avoiding the Abyss: Progress, Shortfalls, and the Way Ahead in Combating the WMD Threat*, 2d ed. (Westport Connecticut: Praeger Security International, 2005) 165-166.

protecting their assets from non-invasive counterforce air strikes. Analysts suspected that North Korea and Iran are using these tactics to mitigate counterforce air strikes.<sup>20</sup>

England's Dr Trevor Findlay is the Executive Director of the Verification Research, Training, and Information Centre (VERTIC). He is the editor of , *Verification Yearbook 2004*, which offers a detailed analysis of the lessons learned during the UNSCOM and UNMOVIC inspections from both an institutional and a technical perspective.<sup>21</sup> It discusses procedural and strategic changes the UN implemented during the UNMOVIC mission because of the lessons learned during UNSCOM. Ambassador Richard Butler's presentation to the UN Security Council on June 3, 1998 provides a comprehensive report on UNSCOM's assessment efforts in Iraq. Additionally, Butler's interview in *Arms Control Today* offers insightful retrospectives on the UNSCOM mission.<sup>22</sup> Its commentary provides excellent insight on how the Iraq disarmament case shapes the future of arms control.

Literature assessing the U.S. failure to find WMD in Iraq is abundant; however, there is a dearth of information assessing the arms control capability gap evident during the WMD elimination operation in Iraq. Rebecca Hersman's of the Center for the Study of Weapons of Mass Destruction at the National Defense University article advocating the creation of a permanent elimination capability. Hersman discusses the need for DoD to develop a permanent WMD elimination capability in support the growing possibility that U.S. forces may once again be called up to conduct another WMD elimination operation. <sup>23</sup>

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<sup>20</sup> Philip C. Saunders, "Military Options for Dealing with North Korea's Nuclear Program," *MIIS: Center for Nonproliferation Studies* (2003), <http://cns.miis.edu/research/korea/dprkmil.htm> (accessed June 20, 2006). Also, Paul Kerr, "Reports Grow That U.S. Plots Strike Against Iran," *Arms Control Today* 36, no. 4 (May 2006), [http://www.armscontrol.org/act/2006\\_05/iranreports.asp](http://www.armscontrol.org/act/2006_05/iranreports.asp) (accessed June 20, 2006).

<sup>21</sup> Trevor Findlay, "The Lessons of UNSCOM and UNMOVIC," in *The Verification Yearbook 2003*, (London: VERTIC, 2003).

<sup>22</sup> J. Peter Scoblic, "The Lessons and Legacy of UNSCOM: An Interview with Ambassador Richard Butler."

<sup>23</sup> Rebecca K.C. Hersman, "Eliminating Adversary Weapons of Mass Destruction: What's at Stake?" Occasional Paper 1, National Defense University: Center for the Study of Weapons of Mass Destruction, (December 2004) [http://www.ndu.edu/WMDCenter/docUploaded/NDU\\_OCPapers.pdf](http://www.ndu.edu/WMDCenter/docUploaded/NDU_OCPapers.pdf). 18-22.

American Barbra Hatch Rosenberg, Chair of the Arms Control Center Scientists Working Group on Biological and Chemical Weapons, wrote an article published in the *Journal of Disarmament Diplomacy* advocating the establishment of a permanent capability to enforce the UN nonproliferation resolutions.<sup>24</sup> Rosenberg's position is that the United Nations should establish a permanent nonproliferation commission rather than using a situational approach like UNSCOM or UNMOVIC. At the time of publication, Rosenberg was serving as the Chair of the Arms Control Center Scientist Working Group on Biological and Chemical Weapons. While her position is not without merit, this thesis argues that DoD must develop its own standing capability to combat WMD elimination. This U.S. capability will compliment any cooperative verification capability developed by the United Nations.

Synthesizing both Rosenberg's and Hersman's arguments, John Wolfsthal, an associate at the Carnegie Nonproliferation Project, recognized the importance of balancing the efforts of a nonproliferation regime with a capable counterproliferation force. Wolfsthal discusses the continued proliferation of WMD programs, specifically in the Middle East. He concluded that the willingness exhibited by the United States to take aggressive action is not dissuading foreign nations from continuing their pursuit of WMD. Wolfsthal discusses the fact that many nations now attempt to protect their programs by hiding them underground. If successful, their possession of WMD could make counterproliferation too costly.<sup>25</sup>

#### **D. THESIS ARGUMENT**

The argument of this thesis is that the United States should develop a viable and sustainable WMD elimination capability to eliminate adversaries WMD program. This will require a synergistic approach that encompasses integrating WMD elimination into the mission scope of U.S. forces and institutionalizing the mission as a core competency

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<sup>24</sup> Barbara Hatch Rosenberg, "Enforcing WMD Treaties: Consolidating a UN Role," The Acronym Institute for Disarmament Diplomacy: *Journal of Disarmament Diplomacy*, 75 (January/February 2004), <http://www.acronym.org.uk/dd/dd75/75bhr.htm> (accessed June 20, 2006).

<sup>25</sup> Jonathan M. Wolfsthal, "The WMD Proliferation Threat," in *Avoiding the Abyss: Progress, Shortfalls, and the Way Ahead in Combating the WMD Threat*, ed. Barry R. Schneider and Jim A. Davis (Westport, CT: Greenwood Publishing Group, 2005) 58-60.

within the military force structure. While multilateral efforts hold much promise, the U.S. must maintain a capability to conduct unilateral coercive disarmament of its adversaries without relying on *ad hoc* approaches.

The terrorist attacks of September 11, 2001, served to solidify the new arms control paradigm that was ushered in with the UN's disarmament of Iraq after the 1991 Persian Gulf War. The post-September 11 expanded definition of arms control has a more operational vice strategic spin. Unlike the traditional view, it is not necessarily between two equals. DoD defines arms control as:

a concept that connotes: a. any plan, arrangement, or process, resting upon explicit or implicit international agreement, governing any aspect of the following: the numbers, types, and performance characteristics of weapon systems (including the command and control, logistics support arrangements, and any related intelligence-gathering mechanism); and the numerical strength, organization, equipment, deployment, or employment of the Armed Forces retained by the parties (it encompasses disarmament); and b. on some occasions, those measures taken for the purpose of reducing instability in the military environment.<sup>26</sup>

UN Security Council Resolution (UNSC) 687, epitomizes today's arms control paradigm. Other multilateral cooperative measures and actions such as the adaptation of UN Resolution 1540, the Proliferation Security Initiative (PSI); and the ongoing diplomatic efforts aimed at preventing North Korea and Iran from expanding their nuclear capability also mark the new face of arms control—each having a potential impact on U.S. military forces. This potential military involvement was uncharacteristic in the previous paradigm. National leaders may call upon U.S. military forces to conduct disarmament operations in support of bilateral disarmament agreements, UN mandates, unilateral decisions, or as part of ongoing stability operations. U.S. military forces must be prepared to conduct disarmament operations under both permissive and non-permissive conditions. The absence of a capability to conduct operational disarmament, however, is evident by the *ad hoc* approach DoD used in preparing to conduct disarmament operations against Iraq in 2003.

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<sup>26</sup> DoD Dictionary of Military Terms (April 2006), <http://www.dtic.mil/doctrine/jel/doddict/> (accessed June 2, 2006).

Notwithstanding the fact that the United States found no weapons in Iraq, rogue states and non-state actors aspiring to obtain WMD must now recognize and account for the U.S. preemptive doctrine. While this may have a deterrent value, it will also motivate determined states to design, build, and operate their WMD programs in a manner designed to mitigate U.S. counterproliferation efforts creating an interdiction *learning curve* (see figure 1). The need for a standing WMD elimination capability is further substantiated by the fact the using nuclear weapons to destroy hardened and deeply buried sites remains a politically unacceptable option.

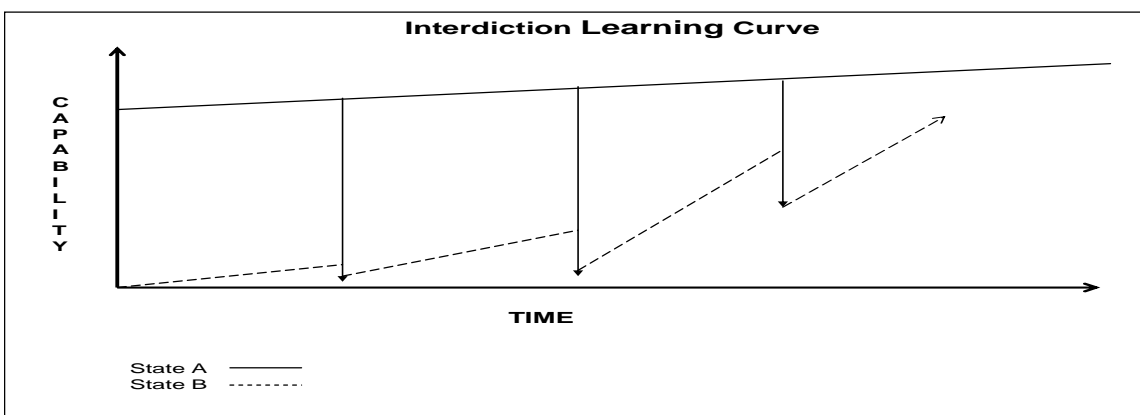


Figure 2: Interdiction Learning Curve. Determined states will learn from preemptive counterforce operations—against it or other states—and make adjustments until it reaches its desired WMD capability.

Three broad counterarguments exist to the position that DoD should develop a permanent WMD elimination capability in support of the current operational arms control requirements. The first is that developing this additional force requirement may not be cost effective considering the probability of conducting another OPERATION IRAQI FREEDOM-like operation. The fact is, however, that most of the potential adversaries of the United States either possess weapons of mass destruction or have the capacity to produce them. Additionally, there is the threat from non-state actors operating within failed states. U.S. military forces must be capable of conducting elimination operations if called upon by national leaders. With potential adversaries becoming increasingly adroit at building hardened and deeply buried sites, the need for a viable and sustainable

elimination option is increasing. Continuing to rely on *ad hoc* approaches to conduct this critical mission leaves U.S. military forces unprepared and unable to fulfill a critical function required for national security.

The second counterargument is that the United States can rely on the United Nations to conduct operational arms control. Retrospectively, considering the success of UNSCOM, one can make a case that the United States should be more reliant on UN nonproliferation regimes. What this counterargument fails to address is that as the world's only superpower, the international community expects the United States to enforce internationally imposed mandates. Additionally, the United Nations failed to confirm that Iraq had effectively complied with its disarmament mandate after ten years of inspections under the UNSCOM/UNMOVIC regimes. If political leaders decide that it is in the unilateral interest to strike preemptively and conduct WMD elimination under nonpermissive conditions, then DoD has a responsibility to maintain a force structure capable of accomplishing this mission.

Yet another counterargument to developing a standing WMD elimination capability is the efficiency of counterforce air strikes. Counterforce air strikes are precise, carry far less operational risk, and have fewer political connotations than committing ground forces to conduct an elimination mission. In 1981, Israel successfully preempted Saddam Hussein's nuclear aspirations when it struck Iraq's Osirak nuclear reactor at the Al Tuwaitha Nuclear Research Centre. Such counterforce operations, however, require detailed intelligence that may not be accurate. Short of using nuclear weapons, the success of preemptive strikes can be difficult to access. Anticipating preemptive attacks, adversaries may construct hardened and deeply buried underground facilities, redundant programs, or set up dummy facilities. Furthermore, the use of nuclear weapons to annihilate these programs may cause an international moral backlash against the United States. It may also solidify an adversary's tentative domestic backing for its WMD program and garner increased international sympathy towards its objectives.

Future counterproliferation operations may require a zero degree of uncertainty regarding the destruction of an adversary's WMD programs. A counterforce air strike is an integral option when planning counterproliferation operations. Military planners may



even incorporate counterforce strikes as part of a WMD elimination operation. The increasing ability of adversaries to conceal WMD production facilities and storage caches will mitigate the effectiveness of counterforce air strikes. There is also the risk of accidental exposure to noncombatants and friendly forces. Counterforce air strikes will undoubtedly remain a primary counterproliferation option. Nonetheless, it is imperative that DoD possess a unilateral standing WMD elimination capability that does not rely on a “pick-up game” approach

## **E. PREVIEW**

The purpose of this thesis is to propel the debate regarding the necessity of establishing, integrating, and institutionalizing a standing capability to conduct WMD elimination mission across the spectrum of operational environments. Toward that objective, Chapter II “The UN Verification Effort in Iraq, 1991–2003,” assesses the failure of the United Nations to confirm Iraq’s compliance with UN mandates. It proposes that the UN-led soft WMD elimination model used in Iraq was a cooperative endeavor incapable of withstanding non-cooperative behavior. Therefore, from the initial indication that Iraq was practicing deception and denial tactics, the legitimacy declined.

Chapter II addresses the question of why the United States cannot rely on UN-led, cooperative WMD elimination. It asserts that although these cooperative efforts are the preferred method of eliminating an adversary’s WMD, the DoD must be prepared to conduct elimination operations. It starts with an overview of UNSCOM strategy, objectives, and structure. Next, it examines the challenges circumstances surrounding the transition from UNSCOM to UNMOVIC. Thirdly, this chapter analysis the insurmountable challenges that transcended both UNSCOM and UNMOVIC. It concludes with an assessment of why the United States cannot rely on cooperative WMD elimination used by the UN to verify that Iraq was complying with UN disarmament mandates.

Chapter III, “A Capability Gap Exposed: U.S. Counterproliferation in Iraq, 2003–2004,” addresses the question of why the United States cannot rely on *ad hoc* approaches to WMD elimination. It asserts that both the novelty of the mission and the *ad hoc*

approach DoD employed in conducting the WMD elimination operation contributed to many of the problems associated with the OPERATION IRAQI FREEDOM (OIF) WMD elimination operation. It examines DoD's formulation of the WMD elimination plan for Operation Iraqi Freedom and looks at U.S. Central Command's (CENTCOM) strategy for conducting weapons exploitation in conjunction with the warfight. The chapter also discusses the capability shortfalls and challenges faced by the exploitation forces, lack of integrated training, and its integration with combat forces. It also discusses the changes that occurred in the elimination effort as the mission transition from the 75<sup>th</sup> XTF to the ISG. Chapter III captures some of the significant lessons learned from the OIF WMD elimination operation and exposes the risks of continued reliance on *ad hoc* measures.

Chapter IV, "Establishing a Viable and Sustainable WMD Elimination Capability," discusses the current U.S. strategy to combat WMD. It first examines the measures instituted by DoD since the OIF WMD elimination operation. Secondly, it forwards recommendations on how DoD can integrate the elimination mission into the mission scope of U.S. forces at the strategic, operational, and tactical levels. This chapter then discusses how DoD could institutionalize WMD elimination by embedding it as a core competency within the U.S. Army proponents primarily responsible for conducting the technical tasks associated with the elimination mission. Finally, it delineates some of the significant challenges that DoD must overcome in order to establish a viable and sustainable WMD elimination capability.

Chapter V reviews some of the key discussion and findings of this thesis. It also summarizes recommendations for DoD to establish a viable and sustainable WMD elimination capability. The chapter closes with some final thoughts on WMD elimination and the projected capability that DoD is currently developing.

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## II. THE UN VERIFICATION EFFORT, 1991–2003: THE LIMITATIONS OF COMPELLED COMPLIANCE

### A. INTRODUCTION

On April 6, 1991, Iraq accepted the terms of United Nations Security Council (UNSC) Resolution 687. The terms required Iraq to “unconditionally accept the destruction, removal, or rendering harmless under international supervision of all chemical and biological weapons and stocks; [and] all ballistic missiles with ranges greater than 150 kilometer.”<sup>27</sup> Furthermore, paragraph 9 (b) of the resolution authorize the establishment of UNSCOM to “carry out immediate on-site inspection of Iraq’s biological, chemical, and missile capabilities” based on Iraq’s declarations and any other locations designated by UNSCOM.<sup>28</sup>

UNSCOM started inspections on June 9, 1991, however, on October 31, 1998; Iraq ceased all cooperation with UNSCOM and halted future inspection and monitoring activities.<sup>29</sup> Inspections would later resume for a short period under the auspices of the Security Council Resolution 1284 that established UNMOVIC, replacing UNSCOM.<sup>30</sup> UNSCOM and UNMOVIC marked the first time in the history of the United Nations that international society had implemented such intrusive measures with the purpose of compelling a state to rollback its weapons of mass destruction (WMD). Despite Iraq’s initial agreement to disarm and the creation of a special regime to ensure compliance, in February 2003 the U.S. government determined that it was in its security interest to lead an invasion of Iraq to deny Saddam Hussein weapons of mass destruction

After the United States failed to find the “smoking gun” proving Iraq had a viable WMD program, many criticized the invasion and pointed out that the UN inspection

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<sup>27</sup> United Nations Security Resolution 687, April 3, 1991.  
<http://www.state.gov/p/nea/rls/01fs/14906.htm> (accessed December 15, 2005).

<sup>28</sup> Ibid.

<sup>29</sup> United Nations Security Council Resolution 1205, November 5, 1998  
<http://www.state.gov/p/nea/rls/01fs/14906.htm> (November 22, 2005).

<sup>30</sup> United Nations Security Council Resolution 1284, December 17, 1999  
<http://www.state.gov/p/nea/rls/01fs/14906.htm> (accessed November 22, 2005).

regimes had eliminated Iraq's WMD programs making the invasion unnecessary. While this *ex post* observation certainly has its merits, it does not account for the fact that the United Nations had over ten years to verify the elimination of Iraq's WMD but failed to do so. The failure of the UN to step up and unequivocally state that Iraq had complied with UN mandates left room for doubt that Iraq still possessed its arsenal in defiance of UN Resolution 687. The mere fact the UN regime could not close out the inspection process indicates a systemic problem with the inspection regime.

Why did the United States view an invasion of Iraq as being necessary to its security interest? Could a UN led inspection/verification regime have ever achieved an acceptable level of disarmament considering the U.S. hypersensitivity to the "radicalism-technology nexus" pitted against the indifference of the other Security Council members?<sup>31</sup> This chapter addresses these questions as it explains why the United States should not totally rely on the cooperative endeavors of the United Nations to conduct counterproliferation missions, but should instead integrate and institutionalize the WMD elimination mission in support of its strategy to combat WMD.

This chapter proposes that the UN's soft WMD elimination efforts in Iraq was a cooperative enterprise requiring total cooperation, therefore, it does not represent a reliable model for conducting counterproliferation. It begins with a discussion of the structure, strategy, and objectives of the UN inspection regimes in Iraq. It examines the transition from UNSCOM to UNMOVIC assessing what drove the change how the focus and strategy of the inspection regime changed. Next, the chapter evaluates the challenges transcending both regimes and accentuates an argument that the United States must develop a competent WMD elimination capability in support of the national strategy to combat WMD. Finally, it categorizes the UN effort in Iraq within the context of the U.S. military strategy to combat WMD. In conclusion, the chapter will counter the position

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<sup>31</sup> In the 2002 National Security Strategy there is an excerpt from a speech presented by President George W. Bush in West Point, New York on June 1, 2002. In the speech, President Bush refers to "crossroad of radicalism and technology" as the gravest danger to freedom.

that the United States can rely on the UN's cooperative model for effective counterproliferation arguing that it is too constrained by the deceptive acts of a determined adversary.

## **B. UNSCOM STRATEGY, OBJECTIVES, AND STRUCTURE**

The strategy of UNSC Resolution 687 was to promote peace and stability in the Middle East by ridding Iraq—the most aggressive country in the Middle East—of its WMD holdings and delivery means.<sup>32</sup> The predatory tendencies of Saddam Hussein facilitated a consensus on this issue. Hans Blix stated that for the long-term interests of non-proliferation in the Middle East, a treaty designating the Middle East as a “WMD Free Zone” is desirable and that ridding Iraq of its WMD would be “a step towards such a goal.”<sup>33</sup> In support of this overarching strategy, the immediate objective of resolution 687 was to destroy Iraq's chemical weapon stockpiles and bulk caches. Various intelligence agencies had long suspected that Iraq had a biological weapons program although unlike its chemical weapons, intelligence could not determine the extent of the program. The scarcity of intelligence on this issue would prove fateful, as it was a key issue taunted by the U.S. Secretary of State as *casus belli*.

The Security Council had charged UNSCOM with the task of dismantling Iraq's biological program and overseeing the destruction of any biological weapons, agents, or stockpiles. To restrict delivery means, Iraq's missiles were restricted to a range not to exceed 150 kilometers. The Security Council also tasked UNSCOM to support the International Atomic Energy Agency (IAEA) in its effort to disarm Iraq's nuclear program, assess the extent of its progress, and the recovery and removal of all fissile material.<sup>34</sup> Since no precedent existed for such action, the United Nation's only option

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<sup>32</sup> United Nations Security Resolution 687, April 3, 1991.  
<http://www.ste.gov/p/nea/rls/01fs/14906.htm> (accessed December 15, 2005).

<sup>33</sup> Hans Blix, “The Role of Inspection as a Part of the Effort To Prevent The Possession of Weapons of Mass Destructions,” Lecture at the 4<sup>th</sup> training course for future staff of UNMOVIC, Ottawa, Canada, May 28, 2001, <http://www.un.org/Depts/unmovic/ExecChair/Blix%20in%20Ottawa.htm> (accessed December 15, 2005).

<sup>34</sup> Ibid.

for implementing the program was to employ an *ad hoc* inspection regime that was *quasi* modeled after the U.S.–USSR (Russia) bilateral inspection structure.<sup>35</sup>

To achieve its disarmament objectives, UNSCOM implemented a three-phased plan. The first objective was to locate and identify Iraq’s WMD stocks and missile assets. UNSCOM relied on a combination of Iraq’s forthrightness in disclosing this information and input from national intelligence sources. This leaves the true status of Iraq’s WMD assets somewhere between these two positions. UNSCOM’s second task was to oversee and verify the destruction or disablement of these weapons. The international community was well aware of Iraq’s use of chemical weapons in the Iran–Iraq war. Additionally, coalition forces had inadvertently destroyed stockpiles of chemical weapons in the Iraqi storage depot at Khamisiyah; therefore, the task of chemical weapons disarmament was much clearer than the biological issue.<sup>36</sup> The final objective was to implement a plan for “ongoing monitoring and verification of Iraq’s compliance” with the disarmament resolution.<sup>37</sup> Presumably, this would have been a combination of electronic surveillance, short or no notice inspections, and continuous monitoring. Nonetheless, this phase of the operation to compel compliance would end before coming to fruition.

UNSCOM’s first Executive Chairman, Rolf Ekeus, headed a 19-member College of Commissioners charged with advising and developing policy for this nascent effort. This leadership contingent operated from the UN headquarters in New York as well as field offices in Bahrain and Baghdad.<sup>38</sup> Ekeus controlled a permanent team of 21 international arms control experts, 50 headquarters staff members and another 50 support staff at the field offices.

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<sup>35</sup> The bilateral nonproliferation agreements between the United States and the Soviet Union were amongst the first treaties to require verification of equipment destruction and the implementation of monitoring operations.

<sup>36</sup> CIA Report on Gulf War Illness, “Khamisiyah: A Historical Perspective on Related Intelligence” April 9, 1997, <http://www.cia.gov/cia/publications/gulfwar/whiteper/> (accessed December 2, 2005).

<sup>37</sup> United Nations Security Resolution 687, April 3, 1991. <http://www.ste.gov/p/nea/rls/01fs/14906.htm> (accessed December 15, 2005).

<sup>38</sup> Trevor Findlay, “The Lessons of UNSCOM and UNMOVIC,” 70-76.

UNSCOM's inspection team members took a "coalition of the willing approach" with most of the participants coming from Western states.<sup>39</sup> From 1991 to 1998, contributing governments augmented UNSCOM's inspection efforts with over 250 visiting inspection teams.<sup>40</sup> This approach is indicative of the *ad hoc* strategy taken by the Security Council to address the inspections needs. Additionally, the Security Council may have been reacting to the need to hastily move on "current intelligence" before the Iraqis could start manipulating their suspected stockpiles. Nonetheless, this "pay to play" tactic would have negative consequences for UNSCOM.

Most of UNSCOM participants were from Western countries willing to contribute to the funding structure of UNSCOM. The conspicuous lack of non-Western participation was in part because of this "pay to play" funding structure.<sup>41</sup> With only a \$30 million annual budget, UNSCOM's funding depended upon member governments to provide "*gratis* personnel, equipment, and service." In addition, contributing nations were responsible for training its own personnel because there was no institutionally standardized training available. Most training in preparation for UNSCOM operations focused on the technical aspects of weapons elimination and did not involve cultural awareness training to facilitate and foster good working relationships with Iraq.

The strategy, objectives, and structure of UNSCOM were an effort to meet the requirements of UNSC Resolution 687. From the outset, the nascent inspection regime faced an uncertain probability of success. Iraq helped solidify these doubts by challenging inspectors and consistently finding that the UN regime was mostly an innocuous endeavor backed by minimum resolve within the Security Council. Almost from the start, Iraq employed a strategy of deception and denial, effectively thwarting UNSCOM's efforts to assess its WMD assets.<sup>42</sup> Though there were numerous incidents

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<sup>39</sup> Trevor Findlay, "The Lessons of UNSCOM and UNMOVIC," 70-76.

<sup>40</sup> Stephan Black, "The UNSCOM Record," *Iraq, A New Approach*, ed. Jessica T. Matthews. Washington D.C. (Sep 2002), The Carnegie Endowment for International Peace, <http://www.ceip.org/files/publications/iraq/black.htm> (accessed December 2, 2005).

<sup>41</sup> Remarks by Hans Blix, 2004 Carnegie International Non-Proliferation Conference, 2004, <http://www.ceip.org/files/projects/npp/resources/2004conference/speeches/blix.htm>

<sup>42</sup> Trevor Findlay, "The Lessons of UNSCOM and UNMOVIC," 66.



causing contention, the final impasse between Iraq and UNSCOM came on October 29, 1997. Iraq's Deputy Prime Minister Tariq Aziz informed the Security Council that Iraq would no longer permit U.S. personnel to participate in the UNSCOM inspections. Aziz further demanded that UNSCOM no longer allow flights of the U-2 spy plane under the auspices of Resolution 687.<sup>43</sup>

After many rebukes from the UN and several admonishing air strikes from the United States and Great Britain, Iraq ended UNSCOM inspections in October 1998. The UN's first attempt at compelled compliance had failed to verify fulfillment with its mandate. On December 16, 1998, the Security Council withdrew all of UNSCOM's staff from Iraq. Its disarmament accomplishments included the discovery and disarmament of 40 nuclear research facilities, the destruction of 480,000 liters of chemical agents, and 1.8 million liters of precursors<sup>44</sup>. While progress on biological disarmament was poor, UNSCOM did manage to expose a vast array of information regarding Iraq's missile production capability.

The Security Council appointed a special panel headed by Ambassador Ceslo Amorin of Brazil to analyze Iraq's disarmament status. Focusing on the unresolved issues, the Amorin panel synthesized UNSCOM's disarmament activities and produced a prioritized list of unresolved issues. Subsequent to the Amorin Panel report, the Security Council adopted Resolution 1284 sponsored by Russia, France, China and Canada establishing the United Nations Monitoring, Verification, and Inspection Commission (UNMOVIC) as the new inspection regime responsible for ensuring Iraqi disarmament. Although it would operate under the same mandate as UNSCOM, UNMOVIC's inherent role was to "fill in the gaps" of unanswered questions from the previous regime.<sup>45</sup>

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<sup>43</sup> United Nations Special Commission: Chronology of Main Events, December 1999  
<http://www.un.org/Depts/unscom/Chronology/chronology.htm>.

<sup>44</sup> Trevor Findlay, "The Lessons of UNSCOM and UNMOVIC," 70-75.

<sup>45</sup> Ibid.

### C. TRANSITIONING TO UNMOVIC

UNMOVIC's *modus operandi* reflected the UN Security Council's polarity regarding Iraqi disarmament. This polarity developed from the concerns of the United States and Great Britain about Iraq's continued possession of WMD and the indifference of Russia, China, and France to Iraq's rebuff of the UNSC mandate. Also contributing to the polarity is the fact that the two sides also interpreted intelligence differently.<sup>46</sup> Additionally, there was a growing perception that UNSCOM Chairman Richard Butler's close relations with the United States prevented him from operating objectively.<sup>47</sup> The Security Council selected Hans Blix, who had led the nuclear inspections in Iraq, as UNMOVIC's chairperson. Blix's experience as head of the IAEA inspection team under UNSCOM made him aware of the challenges UNMOVIC faced. Though duly qualified, his nomination was not without its critics. Some commentators felt that Blix was too quick to give Iraq's nuclear program a "clean bill of health" during UNSCOM inspections.<sup>48</sup> These critics perhaps thought Blix would be too lenient on the Iraqi government allowing it to retain too much of its WMD stocks.

Many commentators saw the new inspection regime as a "step back" from the intrusive and confrontational approach of UNSCOM. One of the criticisms concerned the composition of UNMOVIC personnel.<sup>49</sup> Westerners made up the bulk of UNSCOM's staff. This was due in part to the funding structure of UNSCOM as nations pledged inspectors. Conversely, the United Nations used an Iraqi oil escrow arrangement to fund UNMOVIC.<sup>50</sup> This placed the budget outside the normal UN budgetary cycle, which prevented non-supporting states from intervening with the process.<sup>51</sup> All of UNMOVIC's staff and inspectors were employees of the United Nations—divesting them

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<sup>46</sup> Trevor Findlay, "The Lessons of UNSCOM and UNMOVIC," 70–76.

<sup>47</sup> Ibid.

<sup>48</sup> James A. Phillips, "Disarming Iraq: The Lessons of UNSCOM," *The Heritage Foundation*, October 28, 2002 <http://www.heritage.org/Research/MiddleEast/bg1608.cfm>. (accessed December 2, 2005).

<sup>49</sup> Ibid.

<sup>50</sup> Patricia Lewis, "From UNSCOM to UNMOVIC: The United Nations and Iraq" <http://www.unidir.org/pdf/articles/pdf-art77.pdf> (accessed June 20, 2005).

<sup>51</sup> Trevor Findlay, "The Lessons of UNSCOM and UNMOVIC," 79.

of national loyalty. This was an apparent attempt to assuage Iraq's claims of undue influence of the United States and Great Britain. Blix invited UNSCOM inspectors to apply for positions on UNMOVIC's staff and asked governments to nominate personnel for UNMOVIC duty.<sup>52</sup> This allowed Blix to retain some members of the cadre of inspectors that worked for UNSCOM.

UNMOVIC instituted a formal multi-disciplinary training program.<sup>53</sup> This avoided canalization of information within the various inspection arenas. Blix also included cultural sensitivity training as part of UNMOVIC's training and changed the flow of intelligence information under the UNMOVIC regime. Concerned with intelligence operatives on the inspection teams, Blix sought to make intelligence flow only one-way.<sup>54</sup> Nations could provide intelligence to UNMOVIC, but the inspection agency was not to serve as a collection asset for national intelligence agencies. To protect source information, UNMOVIC limited access to intelligence information to "special officers" entrusted by the provider nations and to team leaders responsible for exploiting the intelligence information.<sup>55</sup> If given more time, the changes Blix implemented could have paid dividends in gaining the trust of the government of Iraq and subsequently easing the concerns of member-states.

Although it may have appeared that UNMOVIC was a weaker inspection regime than UNSCOM, the new regime was actually more empowered because of its Chapter VII authorization gave it more teeth. With the growing polarity on how to close the books on Iraq's compliance with UN Resolution 687, as a proposed "final measure" UNMOVIC had greater political backing. Security Council resolution 1441 served as the final concession to Iraq. It stated that the Security Council would impose "serious

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<sup>52</sup> Hans Blix, "Press Briefing By Chairman of United Nations Monitoring, Verification, and Inspection Commission," Press Briefing March 1, 2000 <http://www.fas.org/news/iraq/2000/03/20000301-blix.htm>, (accessed December 22, 2005).

<sup>53</sup> Trevor Findlay, "The Lessons of UNSCOM and UNMOVIC," 70.

<sup>54</sup> Report of the First Panel Established Pursuant to the Note by the President of the Security Council on January 30, 1999 (S/1999/100) <http://www.un.org/Depts/unscom/sres401eng.htm>. (accessed December 24, 2005).

<sup>55</sup> Ibid.

consequences” if Iraq did not fully comply. In addition to reiterating previous demands, resolution 1441 permitted UNMOVIC to declare no-drive and no-fly zones around suspect sites, lifted restrictions on the inspection of presidential compounds, and established two regional offices that permitted quicker access to inspection sites.<sup>56</sup> These facts effectively allowed UNMOVIC to operate under procedures that were more intrusive and comprehensive than those of UNSCOM. It was also becoming obvious that the U.S. administration was growing intolerable to the deceptive antics of the Iraqi government and was advocating a more aggressive strategy for dealing with the disarmament issue. Ideally, this should have provided the edge to coax Iraq into cooperating with the new regime.

With almost five years elapsing between inspection periods, UNMOVIC also had technological advantages over UNSCOM. Advances in radiation sensors provided more accurate readings than previously possible. The IAEA employed advanced procedures to conduct environmental sampling with equipment capable of distinguishing between legitimate radioisotopes from those banned from nuclear weapon research or development. Additionally, cross-disciplinary analysis and integration of databases between UNMOVIC and the IAEA enabled better analysis of Iraq’s patterns of behavior.<sup>57</sup> Because it was frequently verifying previously destroyed stockpiles, UNMOVIC saw the first introduction of “forensic verification” or “verification archeology.”<sup>58</sup> This process was especially useful considering the absence of monitoring operations during UNSCOM’s absence.

UNMOVIC was seemingly a product of compromise between the U.S.–UK and the Russia–China–France blocs of the Security Council. The makeup of UNMOVIC personnel addressed the Iraqi concerns that the inspections only served as a cover for Western spies. The United States and United Kingdom were able to show resolve through resolution 1284, which kept Iraq “on the hook” for compliance with its

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<sup>56</sup> Report of the First Panel Established Pursuant to the Note by the President of the Security Council on January 30, 1999 (S/1999/100) <http://www.un.org/Depts/unscom/sres401eng.htm>.

<sup>57</sup> Trevor Findlay, “The Lessons of UNSCOM and UNMOVIC,” 70-75.

<sup>58</sup> *Ibid.*, 82.

disarmament commitments. UNMOVIC conducted its first inspection on November 27, 2002—about the same time that the United States announced that it was taking unilateral actions against Iraq for failing to disarm its WMD.<sup>59</sup> UNMOVIC identified numerous discrepancies relating to Iraq’s Chemical and Biological programs. During its tenure, UNMOVIC personnel conducted 260 inspections while the IAEA conducted 139 inspections.<sup>60</sup> Nonetheless, its findings never equated with the intelligence reports presented by the United States and the United Kingdom; and even if it had, it is doubtful that it would have been enough.

## **D THE INSURMOUNTABLE CHALLENGES**

The UN experience in Iraq was an exercise in cooperation. Once inspectors disclosed Iraq’s deception and denial tactics, the verification process lost a great deal of validity. The United States, however, did not always operate above board either—reportedly planting listening devices in monitoring equipment and using the verification inspections for national intelligence-gathering purposes.<sup>61</sup> Cooperation notwithstanding, the United Nations encountered five problems that influenced its operations in Iraq that neither regime was able to overcome. These problems included: (1) gaining trust and confidence of the target state (Iraq) and key member-states (United State and Great Britain), (2) leveraging sanctions to achieve objectives, (3) exploitation of biological agents, and (4) devising a comprehensive and responsive intelligence model.<sup>62</sup>

### **1. Gaining Trust**

Despite being more isolated from the influence of UN member-states than UNSCOM, there remained some WMD elimination challenges that UNMOVIC was still unable to overcome. Most evident was its inability to gain full trust and cooperation from the government of Iraq. With sanctions weakening and Iraq gaining international political support, full cooperation with UNMOVIC should have provided the motivation

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<sup>59</sup> Patricia Lewis, “From UNSCOM to UNMOVIC: The United Nations and Iraq.”

<sup>60</sup> Ike Skelton letter to President Bush requesting continuation of Arms Inspection in Iraq, January 27, 2003 <http://www.house.gov/skelton/pr012703.htm> (accessed August 21, 2006).

<sup>61</sup> Trevor Findlay, “The Lessons of UNSCOM and UNMOVIC,” 81.

<sup>62</sup> *Ibid.* 79.

and path towards ending sanctions. Just like during UNSCOM's tenure, Iraq continued to practice "denial and deception" tactics during UNMOVIC limited inspection and verification tenure.<sup>63</sup> For reasons only he can answer, Saddam Hussein was apparently unconvinced that it was in his security interests to cooperate with the disarmament process. From the very start of the inspection process, Iraq seemed to place a greater value on retaining some WMD capability, or achieving a level of ambiguity regarding its WMD capacity, than meeting dictated conditions for having sanctions lifted. Gaining the trust of the target state is inherent to a cooperative endeavor. The United Nations never addressed Iraq's regional security concerns.

Conversely, because of the initial episodes of non-cooperation, both regimes had problems convincing certain member-states that the inspections were going well. Retrospectively speaking, the public relations campaigns were failures. Considering the insular nature of verification inspections, a better use of the media by both regimes would have enabled them to convey their success and better address the accusation of its critics.<sup>64</sup> Additionally, a well-organized public relations campaign could have improved the U.S.–Iraq relationship and diluted Iraq's intransigent attitudes towards the disarmament mandate.

## **2. Leveraging Sanctions**

Although sanctions may have denied Iraq the resources needed to build its WMD programs, sanctions alone were not enough to force cooperation. Leveraging sanctions to achieve counterproliferation objectives proved to be another insurmountable challenge. The use of sanctions as a means of preventing the proliferation of WMD has historically been a poor deterrent to change the behavior of a state that has determined that it is in its security interest to have a WMD capability. Neither India nor Pakistan saw the imposition of sanctions as outweighing the impact of obtaining a nuclear capability on their security environment.<sup>65</sup>

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<sup>63</sup> Trevor Findlay, "The Lessons of UNSCOM and UNMOVIC," 79.

<sup>64</sup> *Ibid.*, 80.

<sup>65</sup> Gary C. Hufbauer, Jeffery J. Schott, and Kimberly Ann Elliott, *Economic Sanctions Reconsidered: History and Current Policy*, 2d ed. (Washington D.C.: Institute for International Economics, 1990), 373-378.

Likewise, the lifting of sanctions also proved an ineffective “carrot” to coax the government of Iraq to cooperate with UN counterproliferation mandates. The Security Council was unable during either regime to use sanctions to shape Iraqi cooperation with the disarmament processes. Many nations were moving towards supporting “smart sanctions” against Iraq.<sup>66</sup> The public debate in favor of “smart sanctions” did little more than serve as evidence to the ineffectiveness of comprehensive sanctions and the divisiveness within the international community regarding the issue.<sup>67</sup> There were many instances where states ignored UN imposed sanctions against Iraq, thereby further weakening its effects. In addition, non-state actors were more than willing to turn a blind eye on UN sanctions in favor of lucrative business deal. Even U.S. corporations were guilty of this transgression. <sup>68</sup>

Leveraging sanctions is primarily a political issue and outside the immediate control of inspectors; however, future UN counterproliferation endeavors must implement a more cogent “carrot and stick” strategy to be effective. For instance, if the United States had allowed UNMOVIC inspections to continue against a backdrop of a convincing ground force buildup, it may have provided the teeth to make the process more effective. Although sanctions had no role in crippling Iraq’s WMD reconstitution efforts between UNSCOM and UNMOVIC, it could have been much more effective if backed by a credible military threat.<sup>69</sup>

### **3. Exploitation of Biological Agents**

Another challenge that proved insuperable to the United Nations through both UNSCOM and UNMOVIC regimes was the inability to verify the reduction of Iraq’s biological agents. The dual-use aspects of biological agents contribute to this fact, as did Iraq’s deceptive practices and faulty intelligence input from the United States and Great

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<sup>66</sup> Smart sanctions focuses on weapons and military goods as opposed to comprehensive sanctions designed to stagnate a nation’s economic base.

<sup>67</sup> David Cortright, Alistair Miller, and George A. Miller, “Smart Sanctions: Restructuring UN Sanctions in Iraq,” Joan B. Kroch Institute, April 2001 <http://www.irak.be/ned/archief/Irak-smart%20sanctions.pdf> (accessed November 21, 2005).

<sup>68</sup> BBC, “U.S. Fines Sanction Busting Firms,” April 15, 2003 <http://news.bbc.co.uk/2/hi/business/2948553.stm> (accessed November 27, 2005).

<sup>69</sup> Barbara Hatch Rosenberg, “Enforcing WMD Treaties: Consolidating a UN Role.”

Britain. Before UNSCOM ended its inspection, it considered Iraq's biological inspection file to be the most incomplete of the three categories of WMD—nuclear, biological, and chemical.<sup>70</sup> UNSCOM identified the production of 19,000 liters of botulinum, 8,400 liters of anthrax, and 2,000 liters of aflatoxin and successfully destroyed a laboratory and production facility at Al Hakam.<sup>71</sup> Any non-cooperation regarding biological agents, no matter how legitimate, will raise red flags. Furthermore, it is not always practical to destroy the production means because of concerns that such equipment may be necessary for medicinal use. Total destruction of the target state's infrastructure to produce legitimate biological agents could latently contribute to a humanitarian crisis in the event some type of pandemic.

U.S. intelligence reports suggested that Iraq had outfitted several vehicles that served as mobile laboratories, dispersed throughout the country producing biological agents, while Iraq claimed that these vehicles were strictly for husbandry purposes.<sup>72</sup> The Iraqi Survey Group (ISG) reported that the U.S. intelligence reports were unfounded and subsequently repudiated the claims in its final report.<sup>73</sup> Biological agent inspection and verification will remain a challenge across the spectrum of WMD nonproliferation/counterproliferation because of its dual-use characteristic, small infrastructure requirement, and ease of concealment.

Neither regime implemented a WMD destruction plan that showed detailed consideration for public safety and health concerns. It is widely suspected that open pit demolition used by the Iraqis under observation of UNSCOM inspectors to destroy stockpiles of chemical munitions may have exposed some team members to toxic chemicals.<sup>74</sup> Although UNMOVIC may have improved the protection practices making

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<sup>70</sup> Hans Blix, "Press Briefing By Chairman of United Nations Monitoring, Verification, and Inspection Commission," Press Briefing March 1, 2000.

<sup>71</sup> Ike Skelton, "Letter to President Bush requesting continuation of Arms Inspection in Iraq," <http://www.house.gov/skelton/pr012703.htm> (accessed August 21, 2006).

<sup>72</sup> U.S. Secretary of State Colin Powell Addresses the UN Security Council, February 5, 2003, <http://www.whitehouse.gov/news/releases/2003/02/20030205-1.html> (accessed December 24, 2005).

<sup>73</sup> Comprehensive Report of the Special Advisor to the DCI on Iraq's WMD, September 30, 2004, [http://www.cia.gov/cia/reports/iraq\\_wmd\\_2004/](http://www.cia.gov/cia/reports/iraq_wmd_2004/), 4. (accessed December 24, 2005).

<sup>74</sup> Trevor Findlay, "The Lessons of UNSCOM and UNMOVIC," 83.



it safer for its inspectors, concern for public healthcare was still not a priority of the regime. A more comprehensive environmental awareness effort must be included in the destruction plans of future WMD eliminations endeavors.

#### **4. Intelligence Models**

The final challenge this section addresses is lack of access to and integration of accurate intelligence. Blix's implementation of the Amorin panel recommendation to restructure intelligence handling may have created a "one-way" street for intelligence, but it did little to counter the promulgation of erroneous information by the United States and Great Britain. Over thirty nations provided intelligence input during the UNSCOM regime.<sup>75</sup> Several nations provided information to the UN that was collected by highly sophisticated national technical means and human intelligence (HUMINT). Rolf Ekeus would later remark that these contributions proved only marginally beneficial at best in assessing Iraq's WMD programs.<sup>76</sup>

Contributing to the lack of an effective intelligence model was not only Iraq's "denial and deception" program effort, but also the fact that some of the tainted HUMINT information came from self-interested sources. These sources effectively manipulated the "intelligence void" to portray a picture that benefited their political and personal agendas. Further complicating the intelligence model were national interests in protecting the means and sources of intelligence. This may have tainted the sense of urgency necessary to exploit some intelligence and caused some inspectors to question the provenance of the information.<sup>77</sup> Nonetheless, the biggest disconnect seems to have been the skewing and shaping of intelligence to fit national perceptions.

In December 2005, President Bush admitted that most of the intelligence used to justify the invasion of Iraq was wrong.<sup>78</sup> For both regimes, working towards

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<sup>75</sup> Rolf Ekéus, "Intelligence Support for Weapons Inspectors in Iraq," Iraq, *A New Approach*, ed. Jessica T. Matthews (Washington D.C.: The Carnegie Endowment for International Peace, 2002).

<sup>76</sup> Trevor Findlay, "The Lessons of UNSCOM and UNMOVIC," 83.

<sup>77</sup> Rolf Ekéus, "Intelligence Support for Weapons Inspectors in Iraq"

<sup>78</sup> Sumi Das and Suzanne Malveaux, "Bush Takes Responsibility for Invasion Intelligence," CNN.com December 14, 2005, <http://www.cnn.com/2005/POLITICS/12/14/bush.iraq/> (accessed December 23, 2006).

disarmament in this type of intelligence model proved to be a losing proposition that adversely affecting the domestic political relations of all nations involved. The United Nations must adequately address these problems if future cooperative disarmament efforts are to be successful and unilateral action made unnecessary.

#### **E. WHY THE UNITED STATES CANNOT RELY ON THE UN TO CONDUCT WEAPONS ELIMINATION**

In the wake of U.S. failure to confirm its claims of WMD in Iraq, the UN's counterproliferation regimes have gained some questionable credibility. One of the advantages to UN-led operations is its inherent legitimacy. When the collective body of the UN speaks in unison, it presents a very powerful and persuasive case. It also has a large pool of experts available for participation, which was evident over the ten-plus year the UN operated in Iraq. Based on its elimination record, UNSOCOM was responsible for the destruction of more WMD stockpiles and related infrastructure than the counterforce strikes conducted by coalition forces during Operation Desert Storm/Shield.<sup>79</sup> This underscores the potential capability of UN-led efforts. Furthermore, future UN regimes would ultimately build on the collective knowledge of UNSCOM, UNMOVIC, as well as the experience gained from the unilateral exploitation during Operation Iraq Freedom.<sup>80</sup>

Within the past few years, the international community has become more aggressive in its counterproliferation effort. In 2004, the United Nations instituted innovative and aggressive policies such as UN Security Council Resolution 1540 to combat proliferation. According to the resolution, states are required to enact laws that prevent access to WMD.<sup>81</sup> Another measure that points towards a growing consensus regarding the international commitment to non-proliferation is the overwhelming agreement amongst member-states to such agreements as the Proliferation Security Initiative (PSI). Over 60 countries are signatories to this effort to improve the

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<sup>79</sup> Patricia Lewis, "From UNSCOM to UNMOVIC: The United Nations and Iraq."

<sup>80</sup> Barbara Hatch Rosenberg, "Enforcing WMD Treaties: Consolidating a UN Role."

<sup>81</sup> Merva Datum, "Security Council Resolution 1540: WMD and Non-state Trafficking," *Disarmament Diplomacy*, No. 79, April/May 2005.

international nonproliferation and counterterrorism endeavor.<sup>82</sup> This is a clear indication that the international community is inclined to trust a collective approach to counterproliferation.

Further solidifying this accord is the fact that the United States seems enthralled in a perpetual quagmire of civil strife in Iraq after rebuffing numerous requests to allow UNMOVIC more time to continue its work. Nonetheless, despite the potential of UN-led cooperative based weapons elimination, DoD must be prepared to conduct coercive weapons elimination if required. Two reasons why DoD should institutionalize WMD elimination are the difficulty in reaching a consensus on how much disarmament is required and the unwillingness of member-state to elevate from diplomatic nonproliferation operations to methods that are more coercive.

### **1. Difficulty in Reaching Decisions**

One key question that remains unexplored is the amount of residue that a target state can retain and still claim that it has disarmed. Why were the levels of degradation accomplished by UNSCOM and UNMOVIC not satisfactory to United States and Great Britain? Retrospectively, it is clear that the UN had achieved an acceptable level of degradation, but the UN failed to confirm this. Theoretically, the gap between the weapons that UNSCOM and UNMOVIC documented as destroyed and those that intelligence sources indicated still existed posed a credible threat to the regional security of this strategically important area. Considering the heightened state of concern over the technology-radicalism nexus, it is doubtful that anything short of total disarmament will assuage the concerns of governments reacting to domestic fear of terrorist attacks. This greatly detracts from the potential of the model of cooperative weapons elimination employed in Iraq.

### **2. Elevating from Nonproliferation to Counterproliferation**

Another reason that the United States should integrate and institutionalize WMD elimination is that the UN Security Council may be unwilling to elevate from diplomatic nonproliferation approaches to more forceful counterproliferation methods—as was the

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<sup>82</sup> “The Proliferation Security Initiative,” U.S. State Department, July 28, 2004, <http://www.state.gov/t/np/rls/other/34726.htm>. (accessed October 12, 2005).

case with Iraq in 2002 (see Figure 3). From the end of the Gulf War in 1991 through OIF, the UN and the United States employed both nonproliferation and counterproliferation tactics (counterforce air strikes) against Iraq's weapons program, but nothing forced Iraq to acquiesce to the UN's demands. It is now obvious that Iraq wanted to maintain a degree of plausible doubt about the status of its WMD capability because of regional security concerns. The threat of Iraq possibly transferring WMD to terrorist, however, was sufficient for the United States to make an argument that the intractable regime was a threat to its security. The efforts to deny WMD to Hussein's regime are indicative of the new arms control paradigm and underscore the new focus on combating WMD proliferation.

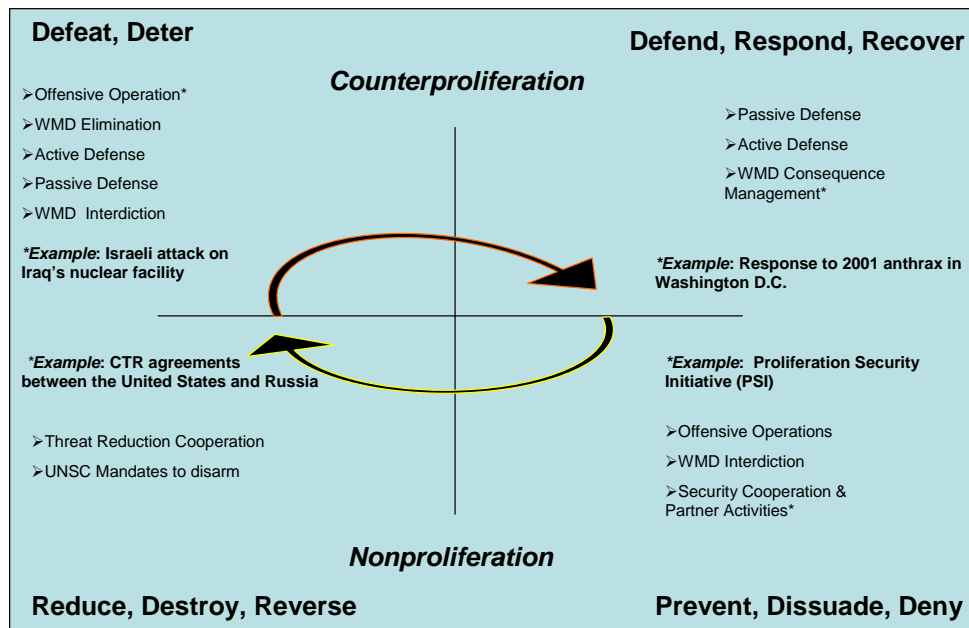


Figure 3: Military Mission Areas (After Ref. 8). The UN was not able to reach a consensus on escalating from nonproliferation operations (lower half of chart) to more aggressive counterproliferation operations (upper half of chart).

The United Nations verification was initially a nonproliferation cooperative endeavor, however, because of Iraq's unaccommodating stance, it eroded into a situation that required counterproliferation options to ensure compliance. The UNSC was unwilling to escalate towards counterproliferation options to force Iraq's compliance with

UN disarmament mandates. This may prove to be the case in future situations; therefore, the U.S. military must possess the capability to conduct WMD elimination missions in support of the national strategy to combat WMD.

#### **F. CONCLUSION: THE LIMITS OF COOPERATIVE DISARMAMENT**

While cooperative, nonproliferation approaches to disarmament are preferred, DoD must possess a standing capability to disarm adversaries. First, Iraq's initial denial and deception tactics tainted this cooperative approach to disarmament. Neither of the UN-led regimes was able to recover from this transgression enough to regain the trust of all the member-states. Secondly, it is difficult to reach a consensus about what level of disarmament is satisfactory. Security Council member-states seemingly had varying views about the threat Iraq posed. Nonetheless, against the backdrop of the September 11, 2001 terrorist attacks, in the U.S. perspective, only verifiably complete and total disarmament would suffice. The target state must acquiesce and provide unconditional cooperation or confidence is lost in the enterprise. Thirdly, the UN Security Council may not be willing to escalate past diplomatic nonproliferation methods. Although UN-led counterproliferation operations hold a lot of promise, multilateral efforts short of invasion may not be able to overcome the perceived threat from the radicalism–technology nexus. The United Nations initially employed an *ad hoc* approach in building its inspection program. The initial regime, UNSCOM, was composed primarily of Westerners and depended on Western states for equipment and augmentees.<sup>83</sup> After Iraq ceased cooperation with UNSCOM in 1997, the Security Council passed Resolution 1284, which incorporated many recommendations from the Amarin Panel and led to the creation of UNMOVIC.

There were many challenges to the UN-led verification process that proved insurmountable. Amongst them were gaining the trust of the target state as well as the member-states that perceived a security threat, leveraging sanctions to achieve counterproliferation objectives, the exploitation of biological agents, and intelligence integration. The inability of the United Nations to overcome these challenges contributed

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<sup>83</sup> Trevor Findlay, "The Lessons of UNSCOM and UNMOVIC," 70–76.

to Iraq's insecurities and the U.S. apprehension of the regimes ability to disarm the nation. One key question regarding the UN WMD elimination regimes is the amount of residual WMD that is acceptable. Domestic anxiety associated with the radicalism–technology nexus may require that the amount of residual WMD be far less than efforts short of a full-scale invasion can accomplish, thereby detracting from the prospective role of the UN nonproliferation model used in Iraq.

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### III. A CAPABILITY GAP EXPOSED: U.S. COUNTERPROLIFERATION IN IRAQ, 2003–2004

#### A. INTRODUCTION

In 2002, the Bush administration started to promulgate its case for invading Iraq and ending a decade plus of Saddam Hussein's WMD brinksmanship. On October 7, 2003, President Bush stated that UN inspections in Iraq had failed because of Iraq's successful deception program. He declared that Iraq's days of denying, deceiving, and delaying the destruction of its illegal weapons had ended. Bush suggested that the possibility of Iraq transferring WMD to terrorist organizations such as Al Qaeda was a reason for the U.S. to act with urgency.<sup>84</sup> Bush's position was very clear—his administration had the resolve to disarm Iraq.

The United States had not conducted any type of counterproliferation mission since the Second World War. Contemporary military planners considered WMD eliminations as a counterforce mission conducted in support of the warfight, but not as its primary objective. DoD had no plans for the comprehensive dismantlement of an adversary's WMD program. At the time of Bush's October 2003 speech, however, several organizations were preparing for the elimination challenge. They formed the first large-scale WMD exploitation force in the history of the United States. Their mission was to locate, identify, and eventually destroy Iraq's illegal weapons and missile systems—compelling Iraq to comply with UN Security Council Resolution 687.

In support of this thesis position, this chapter analyzes the challenges faced during OIF WMD elimination mission. Although the United States can dominate across the spectrum of conventional warfare, being improperly prepared to conduct a comprehensive WMD elimination campaign could jeopardize the safety of U.S. forces and undermine U.S. national security interests. Furthermore, considering that neither the 75<sup>th</sup> XTF nor the unprecedented effort of the ISG found any WMD, it is easy to shift blame to poor prewar intelligence. This gives undeserved credit to an *ad hoc* process that

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<sup>84</sup> President George W. Bush remarks on Iraq, October 7, 2003. <http://www.whitehouse.gov/news/releases/2002/10/20021007-8.html> (accessed February 27, 2006).



may or may not have been able to discover Iraq's WMD cache. Although the 75<sup>th</sup> XTF performed admirably under adverse conditions, there were numerous problems attributable to the novelty of the mission that a "pickup-game" approach only amplified.<sup>85</sup> This chapter starts with an overview of DoD's development of a weapons elimination concept for Iraq. It examines the conceptual development and implementation of the three-phased elimination plan devised by DOD. Secondly, it draws on existing literary works as well as the personal experience and observations of the author who participated in the weapons elimination in Iraq. The chapter then looks at the mid-course adjustment made when DoD transferred responsibility for the elimination mission to the Iraqi Survey Group.

## **B. VISIONS OF EXPLOITATION: THE 75<sup>TH</sup> XTF (JULY 2002–MARCH 2003)**

As the Bush administration solidified its case for invasion, DoD was making the initial plans for the total dismantlement of Iraq's WMD programs. Since it had, no standing capability to conduct WMD elimination, the mission would require an *ad hoc* organization to integrate the necessary capabilities to perform the mission. The following sections discuss the formation of the elimination concept and secondly, how DoD implemented the concept.

### **1. The Power Point Phase: Developing the Prototype of WMD Elimination**

To operationalize President Bush's intent to disarm Iraq, DoD formed a working group of 20–25 planners with the objective to formulate the WMD elimination plans.<sup>86</sup> Personnel from the Joint Chiefs of Staff (JCS), CENTCOM, National Defense University (NDU), Office of Reconstruction and Humanitarian Assistance (ORHA), Defense Intelligence Agency (DIA), and the Defense Threat Reduction Agency (DTRA) made up the diverse working group.

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<sup>85</sup> Deputy Secretary of State Wolfowitz comments regarding the *ad hoc* conduct of the WMD elimination mission in Iraq <http://www.defenselink.mil/speeches/2003/sp20030513-depsecdef0203.html> (accessed March 7, 2006).

<sup>86</sup> Cindy McGovern, "Combat Support cell is link to Combatant Commanders and war planning," *DTRA Connection* (VA), Aug/Sep 2003.

Rather than fight the war and then search for WMD, DoD planned to conduct the exploitation phase of the elimination mission during combat operations. Waiting until the end of hostilities to start the search for WMD would have allowed maneuver commanders to concentrate their focus on the warfight, provided additional time to create the right mix of experts, and provided a more permissive environment for civilian participation. Conversely, it would have increased Iraq's opportunity to conceal the weapons or potentially use them against Coalition forces. Conducting the search simultaneously with combat operations would facilitate gathering evidence against the regime, prevent the transfer of WMD to other states such as Syria, and otherwise obstruct the Iraqi option for using the weapons.<sup>87</sup> DoD produced a WMD elimination plan consisting of three phases—exploitation, destruction, and monitoring.<sup>88</sup> In phase I, the exploitation task force would search specified targets from a prioritized list identified by the U.S. intelligence community and referred to as the Iraq Master Site List (IMSL).<sup>89</sup> CFLCC's C5 Future Operations branch created the Sensitive Site Exploitation Cell, which was responsible for integrating the IMSL targets (15–20 sites) with the combat mission. The objective was to locate and identify any WMD related material at these locations. Site Survey Teams (SSTs) were responsible for this task.

If the survey team located any suspect material, equipment, or discovered suspicious activities, the 75<sup>th</sup> XTF would dispatch second team of specialist to the site to conduct a more detailed investigation. This team—referred to as a mobile exploitation team (MET)—would be responsible for verifying the SST's findings, conducting more extensive investigations, and evacuating samples of the materials. METs would also have the capability to retrieve computer files, examine documents, and interrogations.<sup>90</sup> The METs could also conduct exploitation mission based on field intelligence or

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<sup>87</sup> Colonel Raymond T. Van Pelt, "JTF-WMD Elimination, An Operational Architecture For Contingencies," <http://www.ndu.edu/library/ic6/2004IS1.pdf> (accessed June 25, 2006), 9.

<sup>88</sup> Rebecca K.C. Hersman, "Eliminating Adversary Weapons of Mass Destruction: What's at Stake?"

<sup>89</sup> LTC Randolph, email message to author, March 9, 2006.

<sup>90</sup> Ibid.

interviews with persons of interests.<sup>91</sup> Once the MET confirmed the presence of WMD and extracted samples, the site would supposedly be secured until the end of major combat operation when phase II of the elimination process would start. Phase II required an element capable of safely and verifiably destroying, dismantling, or otherwise disabling the identified material, production facility, or weapon systems.<sup>92</sup> Although the MET had a limited capability to conduct some of the tasks required of phase II, a follow-on element would conduct the bulk of the phase II mission.

Phase III (monitoring), requires continuous observation or periodic inspections of the site to ensure WMD materials and/or production capabilities are not reconstituted, transferred, or otherwise misused.<sup>93</sup> For example, consider a dual-purpose biological facility used to produce human vaccines. It would be in interest of public health to allow legitimate research and production to continue while monitoring to ensure that no agents associated with biological weapons were being developed. DOD did not designate responsibility for phase III; presumably, the Department of State would have assumed responsibility as part of the stabilization and reconstruction efforts.

With an elimination plan on the table, it was the responsibility of Coalition Forces Land Component Commander (CFLCC) to integrate the elimination mission into the CENTCOM's operational plans.

## **2. From Power Point to Reality**

There may have been doubts regarding the elimination plan, but DOD's working group had probably devised the best available solution to the WMD elimination task given that DoD had no standing capacity to conduct such a mission. Considering the compressed timeline produced by the political milieu, other options—such as allowing UNMOVIC participation or building a large multilateral elimination force—were not politically feasible given that the UN Security Council did not support the war.

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<sup>91</sup> The SAT could also be used for unplanned or “non-IMSL” targets. This increasingly occurred as the primary list was exhausted.

<sup>92</sup> Rabeca K.C., “Eliminating Adversary Weapons of Mass Destruction: What’s at Stake?”

<sup>93</sup> Ibid.

Staffing the task force would also be a challenge. DoD's forces are well suited for counterforce operations, but the weapons elimination mission fell outside the scope of U.S. forces. Because its everyday mission aligned so closely with WMD elimination, more so than any other activity in DoD, DTRA was one of the first elements tagged by DOD to participate in the elimination mission. DTRA routinely conducted permissive elimination-related inspection in support of such State Department's nonproliferation treaties as Strategic Arms Reduction Treaty (START), Chemical Warfare Convention (CWC), and the Plutonium Production Reactor Agreement (PPRA) with Russia. DTRA primarily used military personnel to conduct these inspections. Being well suited for the elimination mission, DOD tasked DTRA to provide CENTCOM with site assessment teams (SATs) to conduct the site surveys in support of phase I operations.<sup>94</sup>

DoD tasked the 75<sup>th</sup> Field Artillery Brigade to serve as the headquarters for the elimination mission and to provide command and control, logistical support, and transportation for the SAT and MET teams. Other key units designated to participate included the 87<sup>th</sup> Chemical Company from Fort Polk, Louisiana and the 787<sup>th</sup> Ordnance Company (EOD) from Moffett Field, California. The plan required the 75<sup>th</sup> XTF to provide CENTCOM with four survey teams that would maneuver with the combat force. These teams were composed of DTRA's SAT teams, a support element from the 75<sup>th</sup> Field Artillery Brigade Headquarter Company, an explosive ordnance disposal (EOD) team, and a chemical reconnaissance platoon—a total of 23 personnel .

The MET was composed of a Chemical Biological Intelligence Support teams (CBIS) from DIA, U.S. Army Technical Escorts Units (TEU), Explosive Ordnance Disposal Units, Criminal Investigation Division (CID), and Media Exploitation teams.<sup>95</sup> A typical MET team would have from 25–30 personnel assigned. Another DTRA

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<sup>94</sup> Although referred to as Site Assessment Teams (SAT), once support elements were attached the entity was referred to as a Site Survey Team (SST). Within the scope of this thesis, SAT will refer specifically to the 6-man teams designated to conduct the survey.

<sup>95</sup> Gregory Fontenot , *On Point, The United States Army in Operation Iraqi Freedom* , (Leavenworth, Kansas: U.S. Army Center for Lessons Learned, 2004), also available online at <http://call.army.mil/products/on-point/toc.asp> (accessed March 17, 2006).

element assigned to the 75<sup>th</sup> XTF was Task Force Disablement/Elimination (TF D/E).<sup>96</sup> TF D/E would conduct the bulk of the task associated with phase II of the operation. It would safely and verifiably destroy, dismantle, or otherwise disable the identified material, production facility, or weapons system. TF D/E also had members from the U.S. Army Nuclear and Chemical Agency (USANCA), a U.S. Army Technical Escort unit, and representatives from the Missile and Space Intelligence Center (MSIC). With limited exception, the 75<sup>th</sup> XTF, under the astute leadership of Colonel Richard McPhee, was responsible for all of CENTCOM's military units and civilian personnel designated to participate in the weapons elimination mission (see Annex A.). By 8 March 2003, the vision of a task force designed to conduct WMD elimination had come to fruition. The units assigned to the 75<sup>th</sup> XTF consolidated in the desert of northern Kuwait and started training for its mission.

The training mission ended with a “certification exercise” conducted to validate the tactics, techniques, and procedures (TTPs) that the teams were employing. The certification process provided the commander of the 75<sup>th</sup> XTF a degree of confidence that the teams were as prepared as possible to conduct this quaint mission (figure 3). It also served to increase the confidence of some of the team members that were unfamiliar with the mission. On March 8, SST-1 and SST-3 were certified and deemed ready for the elimination task. CFLCC attached them to the lead divisions of the invasion force—the Third Infantry Division and the First Marine Expeditionary Force respectively. CFLCC assigned the other two SAT teams to V Corps. The British were responsible for conducting the search for WMD in their area of responsibility in southern Iraq. If deemed necessary, the 75<sup>th</sup> XTF's MET teams would further exploit suspected sites.

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<sup>96</sup> Task Force Disablement/Elimination was a late addition to the WMD elimination plan. DTRA deployed it in late March in response to DOD concerns that the 75<sup>th</sup> XTF was not robust enough to destroy the amount of WMD that SST's would find. TF D/E also facilitated the transition between the 75<sup>th</sup> XTF and ISG. They continued to provide support to the ISG during its unsuccessful hunt for Iraqi WMD.



Figure 4: SST/MET Certification Training. SST-1 going through certification training in March 2003 in Northern Kuwait. The training was the first time the entire SST had worked together. (Photo taken by MSG Ray Drinkard, SST-1)

### C. THE SEARCH FOR THE SMOKING GUN (MARCH 20–JUNE 15, 2003)

On March 20, 2003, the lead elements of the U.S. Army's Third Infantry Division led the invasion of Iraq. For many soldiers, it was their first combat experience, while others were experienced combat veterans. All of them had trained hard; they were highly motivated and ready for the fight. On the morning of the invasion, however, there was an addition to their standard convoy lineup—SST 1. Some of the maneuver commanders had rehearsed this scenario many times at the National Training Center (NTC). These rehearsals, however, never included elimination operations.

SST-1 was the first survey team from the 75<sup>th</sup> XTF to conduct an exploitation mission. From the outset, there were concerns regarding this untested operation with commanders expressing concerns that it detracted from the warfight. The 75<sup>th</sup> XTF investigated over 300 sites across Iraq before being relieved by the ISG.<sup>97</sup> Its failure to discover any significant evidence of Iraq's weapons cache caused some skepticism of the novel concept of WMD elimination. This led in part to its replacement in June 2003 by

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<sup>97</sup> Stephen A. Combone, "Briefing on Iraq Survey Group," DefenseLink, May 30, 2003. <http://www.defenselink.mil/transcripts/2003/tr20030530-0231.html> (accessed June 26, 2006).

the ISG. The 75<sup>th</sup> XTF's WMD elimination mission in Iraq revealed some important lessons about capability gaps existing between DoD's concept of the elimination operation and its actual execution.

### **1. Integrating the Elimination Task with the Warfight**

For the soldiers of the Third Infantry Division, their mission was clear—get to Baghdad as quick as possible in order to sack the Baath party government headed by Saddam Hussein. The sooner they got it done; the sooner they could go home. The soldiers of SST 1 had a different focus—finding Iraq's WMD. The sooner they found them, the sooner they could go home. Although these objectives were symbiotic, the elimination task was understandably a collateral mission for field commanders focusing on the warfight. This would have a profound effect on the search for WMD.

For example, on 22 March, as the 3<sup>rd</sup> Infantry was starting its westward trek towards An Najef, V Corp tasked SST-1 to conduct a survey of Tallil Airbase—a possible storage site for chemical munitions. The airbase was void of enemy combatants and U.S. forces were securing the site. The problem was that SST-1 was assigned to a brigade that was preparing to attack another objective, therefore it could not afford the time required to conduct a thorough search. Although the site had numerous bunkers that could have stored chemical weapons or illegal missiles, SST-1 had less than one day to conduct the survey. Since the intelligence did not provide any specific search criteria, the team could only make a cursory inspection of the site.

If there were WMD located at the site, SST-1 could have missed them because of the hasty inspection. Hindsight being 20/20, the fact that SST-1 did not thoroughly survey the site mattered little. Adversaries that are more formidable may take advantage of such shortcomings. To be conducted properly, this mission required a lot more resources—multiple teams (or larger teams) over a longer period. Additionally, combat forces should have secured the site to prevent the possible recovery of munitions by Iraqi forces or looting by civilians.<sup>98</sup> This exemplifies the dilemma for maneuver commanders

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<sup>98</sup> *Third Infantry Division (Mechanized) After Action Report for Operation Iraqi Freedom*, <http://www.globalsecurity.org/military/library/report/2003/3id-aar-jul03.pdf> (accessed March 14, 2005).

early in the conflict. During OIF, the drive towards Baghdad was a synchronized effort; therefore, commanders were reluctant to detract forces from the warfight in support of the elimination mission.

## 2. Interpreter Support for the SST

The fact that the survey teams had no organic linguist support hindered the elimination mission more than team leaders had anticipated. For example, Iraqi labs generally used the standard international hazard symbols which team members were familiar with. The teams also easily understood the chemical containers in labs that used international standards. However, files, documents, and equipment were inscribed in Arabic, which stymied the exploitation process (see Figure 4).

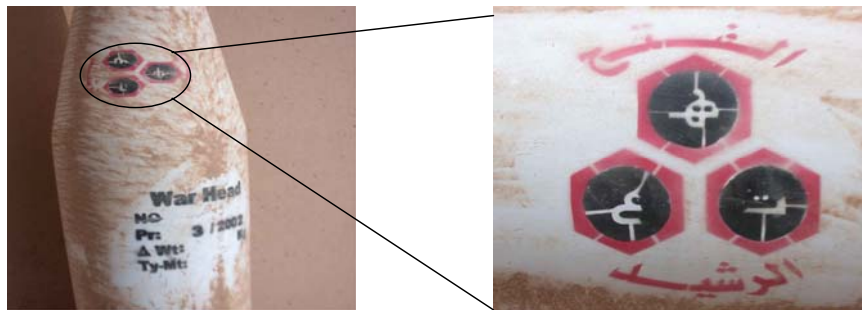


Figure 5: Arabic Inscriptions. Inert training missile found at the Rashid Missile Production Facility near Baghdad, Iraq on 19 April 2003. The top caption is “Al Fath.” The bottom caption is Rashid. The symbols in the middle are the Arabic letters F, T, and H for FataH, which means victory. Photo taken by SFC Tharien Graham (SST-1).

Although the MET team had interpreters assigned, the fact that the SSTs had no assigned interpreters increased the chances of missing critical information. If a survey team overlooked critical information, it is doubtful that the MET would ever get an opportunity to exploit it. The SSTs were functionally illiterate given that they organic interpreter support. The lack of an interpreter could also unnecessarily prolong survey missions. During an inspection at an underground bunker structure at Abu Ghraib, team members of SST-1 expended valuable time breaking down a door labeled “exit” in Arabic. If the team had an interpreter, the insignificance of the door could have been determined by simply walking to the back of the bunker facility and verifying that it actually exited the facility.





Figure 6: Looted labs at Baghdad University School of Veterinary Medicine. Dr. Hussein stated that he had pleaded with the looters not to take the lab equipment. He told them that such equipment as centrifuges would be of no use to them. His pleas were to no avail as the looters took everything they could carry. (Photo taken by SFC Joe Santiago, SST-1)

Once U.S. forces consolidated in Baghdad, interpreters become available to work with the survey teams. Their contribution made the survey process safer and more efficient. For example, on 17 April, SST-1 CFLCC tasked SST-1 to survey the veterinary labs at Baghdad University. While the team was preparing to enter, an Iraqi professor that worked at the university informed the team through an interpreter that looters had stolen equipment and destroyed the lab. In the process, they had compromised cultures of Brucellas, Salmonella, Staph, and Strep (see figure 6). The school also used the lab to research hoof and mouth disease. This information enabled the team take more precise precautionary measures to prevent the spread of these infectious diseases agents. DoD must integrate this invaluable asset at every level of the WMD elimination process—particularly during the exploitation phase.

### **3. Reachback Capability**

Each SAT team was equipped with satellite communication systems. This should have provided the team with secure reachback capabilities to the 75<sup>th</sup> XTF or, ideally, communications with subject matter experts anywhere in the world. Nonetheless, the communication equipment was unsecured and unreliable. The teams were never able to maintain secure connections; furthermore, even unsecured connectivity with the 75<sup>th</sup> XTF through the INMARSAT system was spotty at best. Better equipment could have greatly increased the SAT team effectiveness by enabling them to provide subject matter experts with photos, video clips, or faxes of documents.

In the future, it is imperative that the exploitation teams leverage communication technology to their advantage. An effective reachback capability is critical during nonpermissive and semi-permissive elimination operations; it expands the knowledge base on the battlefield without placing additional personnel at risk. In addition, it protects the teams from adversaries that are more sophisticated and may possess the capacity to intercept and exploit unsecured communications.

### **4. Lack of Integrated Training**

During initial hostilities, CFLCC's Sensitive Site Exploitation Cell (SSE) controlled the rate of SST inspections. As the maneuver elements moved north, the SSE cell would notify commanders on the ground of the location of sensitive sites they needed to survey for possible further exploitation. Brigade commanders were responsible for ensuring that the SSTs had the logistical and security support required to accomplish the survey mission. The security protocols varied between the brigades that SST were attached. CFLCC attached SST-1 and SST-3 to their respective maneuver elements in the beginning. Of the 30 plus survey SST-1 completed, the team never conducted a mission without security escorts, including the relative calm period that followed the end of hostilities. Conversely, other teams routinely conducted missions without escorts.<sup>99</sup> This is a clear indication of the lack of consistency that existed between elements with operational control of the SSTs. Army maneuver units—like the Marines—hone their skills in the training environment. To throw a new element into the equation without a

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<sup>99</sup> Joseph Clemons, interview with author, April 12, 2006.

“trial run” would understandably raise the concern of many commanders. DoD must integrate elimination scenarios into operational and tactical level training exercises and allow future elimination task forces an opportunity to train with maneuver forces if possible.

## **5. Securing High Priority Sites**

In addition to the erroneous pre-war intelligence, pillaged sites also fettered the search for WMD. No one anticipated the rapid breakdown of civil order in the form of looting that occurred in the wake of the Iraq war. Looters had stripped everything of value at most of the military and government sites that SST-1 surveyed. On several occasions, SST-1 arrived at sites while looting was taking place. The team often had to clear sites of looters before survey operations could begin. Looters would methodically strip a site of anything of value—right down to the doors and windows. Looters even pillaged Iraq’s nuclear research facility taking virtually everything. Local villagers were storing water and washing cloths in barrels once used to store yellowcake at the Tuwaitha Nuclear Research Center.<sup>100</sup> The IAEA reported that the vast majority of uranium and thorium remained on the site; however, there were several reports of radiation sickness. CFLCC only managed to secure 153 of the 370 sites thought to be associated with Iraq’s WMD program.<sup>101</sup>

Had any of these sites actually had WMD located on it, the looters would have likely compromised sites hindering the survey effort. Furthermore, if insurgents had obtained possession of the weapons the present day situation in Iraq may be a lot grimmer. Not only would it add an additional risk to coalition personnel, its use in the sectarian violence would have a devastating effect on the stabilization of the country. Future WMD elimination operations must not discount the use of counterforce in favor of evidence collecting.

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<sup>100</sup> “TF D/E Nuclear Disablement Team helps Recover Looted Material,” DTRA Connection, Aug/Sep 2003, 5, 8, 18.

<sup>101</sup> Ibid.

## **6. Free-for-All WMD Elimination**

Employing tactical units to search for WMD caused a pronounced drop in proficiency. As the 75<sup>th</sup> XTF's effort continued to produce nothing but dry holes in its search for WMD, the elimination plans started to morph. As more units consolidated in Baghdad and with President Bush declaring an end of hostilities, more units started getting involved in the search for WMD. In addition, there was growing pressure on the Bush administration to substantiate its claim that Iraq possessed WMD in violation of UN mandate. As it became painfully obvious that the original IMSL sites were not producing the expected results, CFLCC started conducting searches from what it referred to as an *ad hoc* or non-IMSL sites. It was also becoming clear that the 75<sup>th</sup> XTF did not have enough assets to conduct all the searches. To remedy this, CFLCC started employing tactical troops under the direction of battalion chemical officers to search for WMD.<sup>102</sup>

Granted, the 75<sup>th</sup> XTF's assets could have used more training before deployment; however, it was much better equipped and trained than the tactical units searching for WMD. These tactical units were equipped and train to conduct conventional chemical reconnaissance. The objective of conventional chemical reconnaissance is to locate WMD on the battlefield so that maneuver forces can avoid it or takes protective posture. It does not require assessments of site activity or WMD production or storage. The SATs were trained in this aspect and had developed, and refined a systemic approach to site assessment rather than just looking for a product. Had WMD actually existed in Iraq, this pronounced decline in proficiency may have delayed its discovery. Safety is also a concern since tactical units do not have a capability to detect toxic industrial chemicals and material (TIC/TIMs), as did the SSTs.<sup>103</sup>

## **7. Biological Expertise Integrated at Lowest Operating Level**

Because of the difficulty in detecting biological agents, each team should have biological experts assigned. The SSTs were trained to use bioassay kits for this purpose, but few team members mastered this equipment. Each of the MET teams had biological

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<sup>102</sup> Gregory Fontenot, On Point, The United States Army in Operation Iraqi Freedom.

<sup>103</sup> Third Infantry Division (Mechanized) After Action Report for Operation Iraqi Freedom, (undated), 246 <http://www.globalsecurity.org/military/library/report/2003/3id-aar-jul03.pdf> (accessed March 14, 2005)

experts assigned, but if the SSTs failed to identify or suspect any biological activity, the expert may not have an opportunity to assess the site. At Baghdad University's Veterinary labs, SST-1 encountered numerous cultures that raised suspicion. Because biological agent detection is so difficult and its effects so potentially devastating, future exploitation should ensure biological experts are assigned to each site survey team as well as the METs.



Figure 7: Inoculated Egg at Baghdad University Veterinary Lab. Considered a key indicator of biological weapons activity, researchers use egg to incubate virus cells before transferring them the larger containers.

### **8. Lack of a Robust Operational-level Intelligence Cell**

The 75<sup>th</sup> XTF's concept of operation focused on searching sites for WMD or WMD related material. As such, its intelligence assets were structured to direct and control the search effort. It did not have the capacity to process collected intelligence and produce actionable intelligence. This manifested an underdeveloped collection plans that were inconsistently employed by the survey teams.

Although the WMD operation in Iraq had problems, DoD should incorporate some aspects of the operation in future missions. Many of the TTPs and reporting procedures transcended the 75<sup>th</sup> XTF and were used during the ISG operations. The OIF WMD elimination operation demonstrated that of the three task comprising WMD elimination (exploitation, destruction, and monitoring), exploitation is probably the only

phase that can reasonably be done during hostilities. This phase is also the most challenging because of the inherent risk associated with WMD combined with combat related hazards. Security requirements impede the accomplishment of the other two phases.

**D. “FRUSTRATED, U.S. ARMY TEAM TO LEAVE IRAQ”: ISG TAKES OVER SEARCH (JUNE 2003–SEPTEMBER 2004)**

On 11 May 2003, the *Washington Post* published an article by Barton Gellman detailing the 75<sup>th</sup> XTF’s failure to discover any confirming evidence of Iraq’s WMD.<sup>104</sup> In doing so, Gellman not only described the frustration of the members of the 75<sup>th</sup> XTF, but probably those of the Bush administration as well. Realizing the shortcoming of the first *ad hoc* task force, DOD assembled the Iraq Survey Group, the largest weapons elimination organization in history. Dr. Stephen Cambone, Undersecretary of Defense for Intelligence was responsible for establishing the ISG.<sup>105</sup> Subsequently, the ownership of the search shifted from the Undersecretary for Counterproliferation Policy, the office that oversaw the creation of the ISG. Future exploitation operations must have the same level of intelligence support as the ISG.

The ISG was a large organization consisting of between 900–1,400 weapons experts and support personnel from the United States, Great Britain, and Australia. It operated in Iraq from June 2003–September 2004 and incorporated former members of UNSCOM. DoD structured the ISG to take a comprehensive approach for finding weapons in Iraq. While the 75<sup>th</sup> XTF primarily targeted sites, the ISG targeted programs in order to gain a full accounting of Iraq’s WMD. It was a balanced approach to eliminating WMD, integrating site exploitation, interrogations, and data/document exploitation to put the WMD jigsaw puzzle together.<sup>106</sup>

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<sup>104</sup> Barton Gellman, “Task Force Unable to Find Any Weapons,” (Washington D.C.) *Washington Post*, May 11, 2003 <http://www.vicpeace.org/stories/o8/1196.html> (accessed March 27, 2006).

<sup>105</sup> Marcus J. Wilson, Sr., “Anatomy of the Hunt for Weapons of Mass Destruction,” *DTRA Connection*, Aug/Sep 2003.

<sup>106</sup> “Comprehensive Report of the Special Advisor to the DCI on Iraq’s Weapons” September 30, 2004 [http://www.cia.gov/cia/reports/iraq\\_wmd\\_2004/scope.html](http://www.cia.gov/cia/reports/iraq_wmd_2004/scope.html) (accessed March 19, 2005). Also, Rebecca K.C. Hersman and Todd M. Koca, “Eliminating Adversary WMD: Lessons for Future Conflicts.”

The ISG was composed of decentralized analytical teams. These teams nominated targets to a targeting board for approval. Once approved, the analyst would integrate with what the ISG called mobile contact team (MCT) to conduct the mission.<sup>107</sup> This process integrated the analyst throughout the process rather than just at the beginning of the process. Unlike the 75<sup>th</sup> XTF's search, the ISG conducted its weapons search under semi-permissive conditions. Nevertheless, there were still challenges from the rising insurgency necessitating a security detail to protect ISG members during inspections. Moreover, like the 75<sup>th</sup> XTF, looted and destroyed sites hampered the ISG's search efforts. Key aspects of the "paper trail" were missing—destroyed by either the Baath party officials, coalition forces or the looters.

Through an immense effort, the ISG determined that although Saddam Hussein had a great appreciation for WMD, Iraq had no credible weapons program. On January 28, 2004, the DCI's special advisor, David Kay, stated that "we were almost all wrong" about the Iraqi weapons program. In September 2005, the ISG released its final report officially confirming Kay's words. The ISG's report closed the door on Iraq's weapons program, but the debate on a need for a permanent elimination capability remains open. Certainly, DOD's original weapons elimination concept had some degree of validity. While the ISG better addressed the requirements for WMD eliminations, forming such an organization cannot operate under non-permissive conditions. DoD must have the capacity to conduct weapons elimination operations across the spectrum of conflict. In order to do this, it must capture and apply the lessons learned from the 75<sup>th</sup> XTF's nonpermissive WMD elimination operation as well as those from the ISG's semi-permissive operation.

#### **E. CONCLUSION: THE PROBLEMS WITH *AD HOC* APPROACHES**

Although the United States can dominate across the spectrum of conventional warfare, being improperly prepared to conduct a comprehensive WMD elimination campaign could jeopardize the safety of U.S. forces and be detrimental to the U.S.

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<sup>107</sup> Marcus J. Wilson, Sr., "Anatomy of the Hunt for Weapons of Mass Destruction."

national security interests. Just like the UN's, the U.S. WMD elimination effort also experienced problems that are attributable to the novelty of compelling WMD compliance. DoD's initial concept produced by the Office of the Undersecretary for Counterproliferation—manifested as the 75<sup>th</sup> XTF—came under scrutiny when it did not discover any WMD in Iraq. After President Bush declared initial hostilities over, DoD fielded the ISG under the auspices of the Undersecretary for Intelligence.

The fact that the ISG also failed to disclose any WMD, give some validity to the 75<sup>th</sup> XTF and the concept of searching for WMD under nonpermissive conditions. Nonetheless, several factors that dilute the validity of the concept warrant close examination. Among them are the lack of interpreters, poor reachback capability, securing high priority sites, and challenges of detecting biological agents. The ISG was a much more balanced approach to the problem the 75<sup>th</sup> XTF was having in Iraq. Particularly, it had greater “hands-on” intelligence aspects that enabled it to systemically attach Iraq's WMD program, not just search locations for WMD.

This thesis proposes that in order to avoid a reliance on *ad hoc* approaches toward this counterproliferation mission in the future, DoD must develop a permanent WMD elimination capability that is both viable and sustainable. This can be accomplished by centralizing responsibility for conducting this mission; ensuring it is delineated in the deliberate planning process; and including the mission as part of the strategic planning guidance, contingency planning guidance, and the budget development process.<sup>108</sup> Towards this end, the 2006 Quadrennial Defense Review designated the 20<sup>th</sup> Support Command (CBRNE) as the designated Joint Task Force to provide command and control of the WMD elimination mission. While this appointment designates an element to lead the elimination mission, it may still leave U.S. forces unprepared if measures are not taken to ensure the capability is viable and sustainable.

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<sup>108</sup> Center for the Study of Weapons of Mass Destruction “Combating WMD: Challenges for the Next 10 Years,” Occasional Paper, National Defense University, February 2005, 35-40 <http://www.ndu.edu/WMDCenter/docUploaded//cswmd%202005-1.pdf> (accessed August 25, 2006).



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## **IV. ESTABLISHING A VIABLE AND SUSTAINABLE WMD ELIMINATION CAPABILITY**

### **A. INTRODUCTION**

The WMD elimination operation in Iraq demonstrated that the U.S. military was inadequately prepared for the operational-level arms control required to compel compliance with disarmament decisions. Subsequently, DoD has made significant progress in articulating the new operational-level mission requirements. In his 2006 Quadrennial Defense Review, Secretary of Defense, Donald Rumsfeld discussed plans to assign responsibility for providing command and control of future WMD elimination operations to the 20<sup>th</sup> Support Command (CBRNE). Additionally, he advocated expanding the capability of U.S. forces to render safe material related to WMD and tasked U.S. Strategic Command (STRATCOM) with the new mission of leading the effort to combat weapons of mass destruction.<sup>109</sup> Although, these initiatives promote the development of a standing capability to conduct WMD elimination, DoD must also treat the operational and tactical gaps identified in the aftermath of the OIF elimination mission. Identifying the 20<sup>th</sup> Support Command (CBRNE) to lead the WMD elimination operations solves only one piece of the elimination puzzle. In order to facilitate institutionalizing the WMD elimination mission, DoD requires not only a permanent task force for command and control, but a force structure with dedicated assets to conduct the most critical task of elimination—assessment/exploitation—across the spectrum of conflict.

This chapter delineates measures DoD must consider in its continual development, integration and institutionalization of the WMD elimination mission as a functional means of conducting operational-level arms control missions as a permanent military capability. It first looks at DoD's current efforts to develop a standing capability to lead the WMD elimination mission. Next, it looks at the strategic, operational, and tactical requirements for integrating the elimination mission within the mission scope of

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<sup>109</sup> Quadrennial Defense Review Report, February 6, 2006, 52.

the U.S. military. It then suggests and discusses specific roles and responsibilities of the U.S. Army and Doctrine Command in developing and integrating a core competency for WMD elimination. Finally, it examines some potential impediments to DoD's strategy to establish a standing WMD elimination capability.

## **B. TOWARDS DEVELOPING A STANDING WMD ELIMINATION CAPABILITY**

Two key undertakings towards developing a standing elimination capability have been the formalization of joint operational guidelines for combating WMD and the designation of the 20<sup>th</sup> Support Command (CBRNE) as the lead organization to command and control military assets during operations to combat WMD. These undertakings provide both the strategic scope and formal assignment for conducting counterproliferation mission to include WMD elimination operations.

### **1. Formalizing Joint Operational Concepts for Combating WMD**

Joint Publication 3-40, *Joint Doctrine for Combating Weapons of Mass Destruction*, set forth principle guidelines for planning and conducting operations to combat WMD and their delivery systems.<sup>110</sup> It was one of the first post-OIF documents to formally recognize and categorize WMD elimination as an important mission in support of counterproliferation operations. Building on the elimination concept used during OIF, it refined the concept of WMD elimination by delineating four steps: isolation, exploitation, destruction, and monitoring and redirection.

Joint Publications 3-40 circumscribes the strategic scope under which organizations tasked to combat WMD must be capable of operating. Joint Publication 3-40 also recognizes the deterrent effect of establishing and demonstrating a strong capability to conduct mission to combat WMD through joint, multinational, Service Component training exercises that will “serve as a visible reminder of U.S. capability.”<sup>111</sup> Additionally, the *National Military Strategy to Combating Weapons of Mass Destruction*

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<sup>110</sup> Chairman, Joint Chiefs of Staff, Joint Publication 3-40, *Joint Doctrine for Combating Weapons of Mass Destruction*, (July 8, 2004).

<sup>111</sup> *Ibid.*

released in February 2006 further refined the role of WMD elimination in regards to the nonproliferation/counterproliferation spectrum of missions. It clearly enounced the strategic military framework consisting of the “ends, ways, and means of addressing the challenges of combating WMD.”<sup>112</sup>

DoD added the mission of combating weapons of mass destruction to STRATCOM’s mission scope in 2005.<sup>113</sup> In collaboration with the Defense Threat Reduction Agency, STRATCOM has established the STRATCOM Center for Combating WMD (SCC-WMD) located at Fort Belvoir, Virginia. A key function of SCC-WMD is the integration and synchronization of DoD and interagency support of missions to combat WMD. SCC-WMD will “plan, advocate, and advise combatant commands on WMD-related matters, to include doctrine, organization, training, material, leadership, personnel, and facilities.”<sup>114</sup>

## **2. No More Pickup Games: The Development of the 20th Support Command**

The 2006 QDR announced that DoD would consolidate its specialized assets to combat WMD under one formal command designated as the 20<sup>th</sup> Support Command (CBRNE). This command was activated on October 16, 2005, and is located at Aberdeen Proving Grounds, Maryland. The 20<sup>th</sup> Support Command will provide oversight of the U.S. Army’s technical assets during operations to combat WMD. Another specific capability of the command includes offering reachback capabilities to interact with DoD and other federal agencies’ subject matter experts.<sup>115</sup> Once it reaches full operational capability, the command could provide forensic sampling to domestic law enforcement

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<sup>112</sup> DoD, *National Military Strategy to Combat Weapons of Mass Destruction*.

<sup>113</sup> Wade Boese and Miles A. Pomper, “Strategic Decisions: An Interview with STRATCOM Commander General James E. Cartwright,” *Arms Control Today* 36, no. 5 (June 2006), [http://www.armscontrol.org/act/2006\\_06/CartwrightInterview.asp](http://www.armscontrol.org/act/2006_06/CartwrightInterview.asp). (accessed July 13, 2006).

<sup>114</sup> Inside Defense.Com, “STRATCOM Statement on Opening of WMD Command Center,” [http://www.insidedefense.com/secure/defense\\_docnum.asp?f=defense\\_2002.ask&docnum=dplus2006\\_1635&q](http://www.insidedefense.com/secure/defense_docnum.asp?f=defense_2002.ask&docnum=dplus2006_1635&q). (accessed July 12, 2006).

<sup>115</sup> Brenk Bankus, “US Army Centralizes its Response to Terrorist Attacks,” *Janes*, May 2, 2006, [http://www.janes.com/defence/news/rusi/rjhm060502\\_1\\_n.shtml](http://www.janes.com/defence/news/rusi/rjhm060502_1_n.shtml). (accessed July 11, 2006).

responding to a WMD attack. The 20<sup>th</sup> Support Command (CBRNE) will develop a rapid deployment capacity to serve as a Joint Task Force (JTF) to control WMD elimination by 2007.<sup>116</sup>

The 20<sup>th</sup> Support Command's subordinate units include the 52nd Ordnance Group, Explosive Ordnance Disposal (EOD), 71st Ordnance Group, 48th Chemical Brigade, the 111th Ordnance Group (Army National Guard), and operational control of U.S. Army reserve units when activated for WMD consequence management support.<sup>117</sup> Additionally, the Department of the Army (DoA) has given the 20<sup>th</sup> Support Command interim training and readiness oversight (TRO) authority over all U.S. Army reserve EOD units when they are not on active status. TRO authority enables the 20<sup>th</sup> Support Command to influence all matters affecting the training and readiness of reserve component units in fulfilling its mission of providing or assisting in the training and readiness oversight of CBRNE assets (Active, Guard, and Reserve).

Regarding weapons elimination, the command will have the capacity to serve as a Joint Task Force capable of rapid deployment in order to provide command and control of WMD elimination and site exploitation missions—the role filled by the 75<sup>th</sup> XTF during OIF.<sup>118</sup> Besides the obvious benefits of not being an *ad hoc* organization, another advantage of the 20<sup>th</sup> Support Command's structure is that it has direct authority over organic Explosive Ordnance Disposal (EOD) assets. EOD assets are a critical part of the elimination operations because of their integral role of rendering-safe various munitions, unexploded ordnance (UXO), and improvised explosive devices (IED). As tactics, techniques, and procedures evolved during the OIF elimination operation, the role and responsibility of EOD personnel assigned to SAT/MET and the MCT emerged as the preeminent element for conducting searches.

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<sup>116</sup> DoD, Quadrennial Defense Review Report, February 6, 2006, 52.

<sup>117</sup> 20<sup>th</sup> Support Command, "Army Activates 20<sup>th</sup> Support Command," RDECOM *Magazine*, November 2004, [http://www.rdecom.army.mil/rdemagazine/200411/itf\\_20thsupport.html](http://www.rdecom.army.mil/rdemagazine/200411/itf_20thsupport.html) (accessed July 2, 2006).

<sup>118</sup> CBRNE refers to chemical, biological, radiological, nuclear, and high explosives, the response capabilities of the 20<sup>th</sup> Support Command.

### C. INTEGRATING WMD ELIMINATION INTO THE MISSION SCOPE OF U.S. FORCES

The U.S. military is currently undergoing a period of transformation in order to provide a “wider range of military options to discourage aggression any form of coercion against the United States, our allies, and our friends.”<sup>119</sup> The U.S. military is are a very obstinate institution; simple changes in the military are often met with staunch resistance. For example, when U.S. Army Chief of Staff General Eric Shinseki decided to change the U.S. Army headgear to the black beret as a symbol of transformation, he could not have anticipated the backlash of opposition. New operational requirements may also meet with resistance when they encroach on standard operations. Commanders were somewhat unsettled by the security requirements of the OIF elimination mission, may have been reluctant to divert assets from objectives seen as more important. Nonetheless, the post-911 conflicts have clearly demonstrated the need to transform the force structure. In order to integrate the WMD elimination mission into this new force structure, DOD must emphasize the mission at the strategic, operational, and tactical levels of operations.

#### 1. At the Strategic Level

At the strategic level, DoD must incorporate the elimination mission into its military transformation strategy. DoD’s Office of Military Transformation has identified four pillars of military transformation—strengthening joint operations; exploiting U.S. intelligence advantages; concept development and experimentation; and developing transformational capabilities.<sup>120</sup> DoD must carefully evaluate the new mission of WMD elimination through the prisms of each pillar of transformation to assure that the latest technological innovations are available to forces assigned to conduct elimination missions.<sup>121</sup>

JP 3-40, *Joint Doctrine for Combating Weapons of Mass Destruction* aptly states that many of the technical skill required to conduct an elimination mission are low

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<sup>119</sup> DoD Office of Military Transformation, *Military Transformation, A Strategic Approach*, Fall 2003, [http://www.oft.osd.mil/library/library\\_files/document\\_297\\_MT\\_StrategyDoc1.pdf](http://www.oft.osd.mil/library/library_files/document_297_MT_StrategyDoc1.pdf), (accessed 21 April 2006).

<sup>120</sup> Ibid.

<sup>121</sup> Rebecca K.C. Hersman, July 27, 2006 interview with author.

density and costly to establish and maintain.<sup>122</sup> Therefore, in order to facilitate combined operations, DoD should encourage allies and friends to also develop the expertise required for WMD elimination. Even if allied forces decline to participate in combat operations, they may be capable and willing to contribute to the destruction and/or monitoring phases of the elimination process.

Furthermore, the United States should also encourage the United Nations to maintain the verification capability it established to conduct verification inspections in Iraq. The UN possessed an experienced verification capability during its extensive operations in Iraq under the UNSCOM and UNMOVIC regimes. A standing UN verification capability would garner more credibility and respect from member-state than the *ad hoc* approaches employed by the UN verification programs used in Iraq. In addition, in support of U.S.-led elimination operation of an adversary's WMD, the UN verification capability could conduct the continuous monitoring and ongoing inspections in support of phase III of WMD elimination, relieving the United States of this responsibility.

DoD's weapons elimination capability may also assist in the consequence management of domestic WMD incidents in support of homeland security. Consequence management is one of the three pillars identified by the *National Military Strategy for Combating Weapons of Mass Destruction* in which U.S. forces may be called upon to conduct. There are numerous tasks associated with the pillar of consequence management which crosscut those associated with counterproliferation—particularly the tasks of assessment, rendering safe, and transportation of WMD. Because of the mutual benefits, DoD and the Department of Homeland Security could collaborate to develop and refine common tactics, techniques, and procedures associated with WMD elimination and consequence management. Finally, senior government officials must ensure that combating WMD remains a high priority for DoD and other government agencies and

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<sup>122</sup> Chairman, Joint Chiefs of Staff, Joint Publication 3-40, *Joint Doctrine for Combating Weapons of Mass Destruction*, III-11.

that adequate funding remain available. If senior level officials are not knowledgeable about the need for a WMD elimination mission, it is unlikely that it will continue to receive the sustained funding it requires.<sup>123</sup>

## **2. At the Operational Level**

DoD must ensure that the elimination mission is integrated into the deliberate planning process directing each Combatant Commander to assess their area of responsibility for likely contingency operations that may require a WMD elimination mission.<sup>124</sup> Strategic and contingency plans should also include WMD elimination as a standard annex for operational level planning. In addition, Combatant Commanders should include WMD elimination mission in operational exercises—such as Ulchi Focus Lens (UFL)—in order to flush out operational impact of the mission.<sup>125</sup> Combatant Commanders should also exercise their WMD elimination contingencies during exercises with allies and regional security partners in order for further familiarization with the concept of the mission.

Combatant Commander must ensure elimination plans have a balanced approach toward exploitation of sites, people, and data.<sup>126</sup> The 75<sup>th</sup> XTF-led elimination mission focused primarily on exploiting locations and sites in its search for WMD. It was not structured to capitalize and quickly adjust its search based on intelligence gathered during its searches. The ISG corrected this shortfall by focusing more on Iraq’s WMD programs and the personnel assigned to work on these programs.

Combatant Commander must also recognize the need to combine WMD counterforce and elimination operations when appropriate. Although potential adversaries are increasing their ability to work underground and therefore mitigating the effectiveness of conventional weaponry, commanders may still occasionally integrate

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<sup>123</sup> Center for the Study of Combating Weapons of Mass Destruction, “Combating WMD: Challenge for the Next 10 Years,” 47–51.

<sup>124</sup> Ibid.

<sup>125</sup> ULCHI FOCUS LENS (UFL) is a South Korean-US Combined Forces Command (CFC) simulation driven, OPLAN-oriented command post exercise (CPX) conducted annually.

<sup>126</sup> Rebecca K.C. Hersman and Todd M. Koca, “Eliminating Adversary WMD: Lessons for Future Conflicts,” 9.



counterforce options into the elimination mission in order to destroy an adversary's WMD program. Given that the use of unconventional targeting (nuclear weapons) is an unlikely scenario, incorporating counterforce strikes into the elimination mission can drastically increase the probability of success.

### **3. At the Tactical Level**

At the tactical level, unit level training represents the best avenue for integrating the WMD elimination mission. Although some commanders may consider it a distraction from warfighting, exercises in support of elimination mission should be integrated into training scenarios at the National Training Center (NTC) and the Joint Readiness Training Center (JRTC). The four phases of WMD elimination— isolation, exploitation, destruction, monitoring/inspections—are comprised of numerous critical collective task and individual tasks. Familiarization and exposure to the mission will increase both commander's and soldier's confidence in the mission and facilitate mission integration.

DoD must ensure that respective service training and indoctrination centers integrate training of the elimination mission at the appropriate service schools. It should instruct entry-level service members designated to serve in positions that may be involved in WMD elimination mission on the tactics, techniques, and procedures of WMD elimination. Exposing responsible service members to the elimination mission early and often will develop a generation of soldiers that are comfortable with the mission.

### **D. INSTITUTIONALIZING WMD ELIMINATION: EMBEDDING THE MISSION AS A CORE COMPETENCY**

“Victory starts here!” This is the motto of the United States Army Training and Doctrine Command (TRADOC) and the key to perpetuating a capability to conduct elimination operations. In addition to developing a designated command and integrating the WMD elimination into the mission scope of U.S. military forces through training and planning processes, DoD must also institutionalize the WMD elimination mission in order to perpetuate it as a functional task. TRADOC operates two schools that are

responsible for training several of the intricate tasks associated with the WMD elimination mission. These schools—the U.S. Army Chemical School (USACMLS) and the U.S. Army Ordnance Center and Schools (USAOCS)—are responsible for training soldiers on several critical tasks associated with WMD elimination including rendering safe munitions, detection, neutralization, and transportation, and destruction of hazardous material.

Embedding WMD elimination as a collective task within these branches will create a core competency for conducting the mission and propagate the tactics, techniques, and procedures amongst new service members entering the service and others as they rotate through professional development schools. These schools must also work closely with SSC-WMD as it continues to refine the operational aspects of WMD elimination. The synergistic effect resulting from embedding the elimination mission within these branches will facilitate the institutionalization of the WMD mission.

## **E. SIGNIFICANT CHALLENGES**

Given the nascence and unpredictability of the WMD elimination mission, DoD will face some significant challenges in establishing a viable and sustainable elimination capability. This section examines three challenges that DoD must address.

### **1. Locating WMD**

The purpose of the exploitation/assessment phase of the WMD elimination mission is to locate, characterize, secure, and render safe WMD material, weapons, equipment, personnel, and infrastructure.<sup>127</sup> Locating WMD material is undoubtedly the most demanding aspect of this phase and imposes significant challenges. Although detailed intelligence may mitigate this challenge to some extent, it does not discount the need for specialized training and equipment. Since each category of WMD—chemical, biological, radiological, nuclear, and high explosives—requires varying levels of expertise to locate, it is not feasible to rely solely on general-purpose forces to conduct phase I of the WMD elimination operation.

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<sup>127</sup> Chairman, Joint Chiefs of Staff, Joint Publication 3-40, *Joint Doctrine for Combating Weapons of Mass Destruction*, III-7.

During the OIF elimination operations, the 75<sup>th</sup> XTF primarily used its site assessment teams for the task of locating WMD. While these teams had received specialized training above the levels of “general-purpose” forces, they did not possess the depth of expertise that may be required for future elimination operations.<sup>128</sup> The post-conflict insurgency in Iraq accentuates the need for U.S. forces to expeditiously locate and secure an adversary’s weapons cache. Considering the interdiction learning curve (figure 1), the next WMD elimination mission will require greater involvement of subject matter expertise than was employed during OIF.

The 20<sup>th</sup> Support Command is not necessarily structured to field site assessment teams. It is composed of low-density/high demand assets that may augment search teams during operations, but is primarily responsible for technical assistance. It is not clear, what assets the 20<sup>th</sup> Support Command will use to conduct phase I of the elimination operation. If general-purpose forces are used, DoD must ensure that they receive specialized training catered to the specific category of WMD they are attempting to locate. Although the use of general-purpose forces does not necessarily prohibit success, the lack of specialized training to locate WMD material may degrade the thoroughness and expediency of searches.

This is especially the case regarding biological programs. Subject matter experts should augment search teams given the specialized knowledge and training that is required to ensure successful exploitation. Exploiting Iraq’s biological program proved problematic for both UNSCOM/UNMOVIC and for the United States during its WMD elimination operation in Iraq. Since biological weapons and its related material present such an insurmountable challenge, DoD must ensure that biological expertise is integrated into its elimination capability at the lowest levels.

The lack of specialized equipment may also thwart efforts to locate WMD and its related material. The 75<sup>th</sup> XTF’s survey teams were equipped with little more than standard issue military equipment to detect WMD material. For biological detection, the teams were equipped with cumbersome bioassay kits, which very few members could

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<sup>128</sup> Regarding WMD elimination, the term “general-purpose forces” refers forces not specifically trained to conduct the technical tasks associated with the elimination mission.

master. DoD must make a considerable investment to ensure that teams searching for WMD are well equipped with the best detection equipment available. Again, biological weapons present a particularly difficult detection challenge because of the number of potential agents, dual-use aspects, and their lack of standoff signatures. Although, several companies are currently working to develop a hand-held biological detection—most conducive for nonpermissive operations—this capability is still in the research and development stage.

## **2. Shifting Political Focus**

With the terrorist attack of September 11, 2001 as a backdrop, the Bush administration has made a concerted effort to account for the radicalism–technology nexus. This emphasis has contributed to the development of the most detailed strategy for combating WMD in the history of the United States. Nonetheless, future administrations may reprioritize DoD’s counterproliferation structure, shifting focus away from a standing WMD elimination capability. This is why it is critical that DoD institutionalize the WMD elimination mission so that soldiers are continually exposed to the task even if no formal force structure is designated to conduct the mission.

## **3. Intelligence Support for WMD Elimination**

Intelligence support is the Achilles hill of the WMD elimination operations.<sup>129</sup> During the Operation Iraqi Freedom, as search of selected sites continually failed to produce tangible results, the elimination effort started to loose focus. Once the Iraqi Survey Group took over the search, it focused on WMD programs and personnel. Timely processing of information collected during its exploitation built flexibility into the elimination process and facilitated more detailed and structured searches that were less “site-centric.”

Operational-level intelligence support for WMD elimination must reduce uncertainty by exploiting a variety of sources, facilitating information sharing, and improving situational awareness.<sup>130</sup> The intelligence cell of the standing elimination capability must be robust enough to produce actionable intelligence without being overly

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<sup>129</sup> Rebecca K.C. Hersman, Interview with Author. July 27, 2006.

<sup>130</sup> DoD, *National Strategy to Combat Weapons of Mass Destruction*, 19–22.

reliant on reachback sources to the point of stagnation. This will require plug-and-play augmentation from deployable subject matter experts from throughout the intelligence community. To facilitate this, DoD should routinely integrate intelligence production organizations such as the Missile and Space Intelligence Center (MSIC), the Armed Forces Medical Intelligence Center (AFMIC), National Ground Intelligence Center (NGIC), and other specialized elements within the Defense Intelligence Agency into WMD elimination training and simulation exercises. Establishing inveterate working relationships between the intelligence community and its standing WMD elimination capability will mitigate the piecemeal nature of intelligence support.

#### **4. Potential Mission Growth**

Mission expansion is another significant challenge to establishment of a viable and sustainable elimination capability. Given the costly investment DoD is making in its ability to combat WMD, future DoD leadership working with competitive defense budgets may seek to expand the capability's mission scope. Currently, DoD already expects the 20<sup>th</sup> Support Command (CBRNE) to provide support to other combating WMD missions such as consequence management and WMD interdiction.<sup>131</sup> While these secondary responsibilities are congenial to the command's capability, expanding its mission scope may detract from the original intent of the command.

One possible addition to the mission scope of the command may be ports-of-entry screening. Only a small percentage of the shipping containers entering through U.S. maritime ports-of-entry are subject to inspection. Additionally, each year more than 2.5 million railcars and 5.7 million cargo containers must be inspected at the border.<sup>132</sup> Current growth predictions indicate that these figures will quadruple in the next twenty years. DoD's role in homeland security has recently increased with the addition of the southern boarder patrol mission. As DoD's homeland security role continues to increase,

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<sup>131</sup> Quadrennial Defense Review Report, February 6, 2006, 52.

<sup>132</sup> Office of Management and Budget, "2003 Report to Congress on Combating Terrorism," [http://www.whitehouse.gov/omb/inforeg/2003\\_combat\\_terr.pdf#search=%22congressional%20investigators%20said%20only%2017.5%20percent%20of%20high-risk%20containers%20are%20checked.%22](http://www.whitehouse.gov/omb/inforeg/2003_combat_terr.pdf#search=%22congressional%20investigators%20said%20only%2017.5%20percent%20of%20high-risk%20containers%20are%20checked.%22). (accessed August 28, 2006).

the 20<sup>th</sup> Support Command (CBRNE) mission may be called upon to assist in pre-screening containers arriving U.S. ports-of-entry. Its use could be at random or based on intelligence assessments.

DoD could also call upon the command to augment stability operations by conducting the elimination of small arms and light weapons (SALW).<sup>133</sup> The targeted weapons include both small arms manufactured to military specification and other light weapons such as anti-aircraft ordnance, landmines, and rockets. In many areas of the world, the proliferation of SALW poses a much greater and immediate threat to peace and security than the proliferation of WMD. Although not a priority of the United States, as the weight and recognition of this issue increases, the shifting focus of the international community may lend credence to juxtaposing both SALW and WMD elimination onto the same spectrum of weapons elimination (see Figure 8).

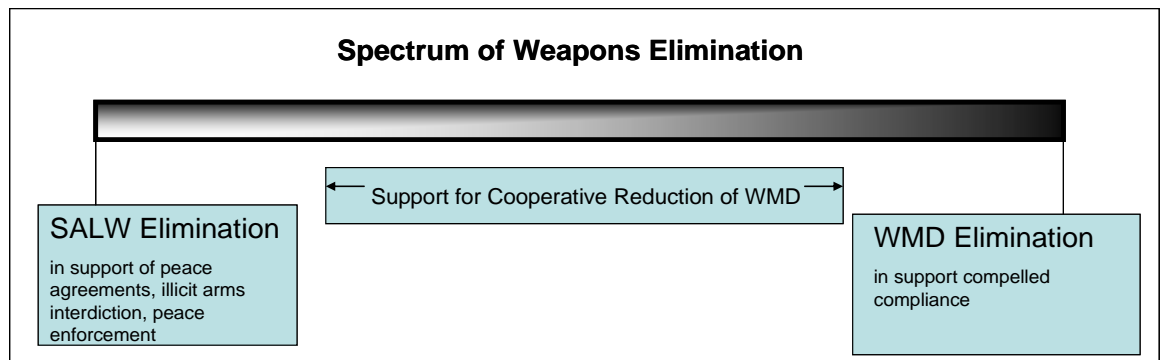


Figure 8 Spectrum of Weapons Elimination. DoD’s permanent elimination capability could provide support across the entire spectrum of weapons elimination.

<sup>133</sup> There is no internationally recognized definition for what is “small arms” or a “light weapons.” One that seems pervasive in UN communication and documents follows: a) small arms- those manufactured in military specifications for use as lethal instruments of war, b) Light weapons- those designed for use by several persons serving as a crew. This would include such systems as machine guns, portable anti-aircraft guns, and rocket systems. Within the definition for SALW, the UN also includes landmines, ammunition, and explosives. UN Document A/CONF.192/15, “United Nations Programme of Action to Prevent, Combat, and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects” <http://disarmament.un.org/cab/poa.html> (accessed June 5, 2006).

In many negotiated settlements, belligerents often make disarmament agreements as a condition of peace. Although frequently attempted, peace enforcers rarely conduct SALW disarmament properly. They fail to establish positive control over confiscated weapons and/or to eliminate excess weapons. Many of the weapons are illegally redistributed, serving only to undermine an already weakened security environment.

Given its projected assets and mission scope, the 20<sup>th</sup> Support Command could easily conduct the mission of SALW elimination into its mission scope during stability operations involving U.S. forces. Currently, the Defense Threat Reduction Agency (DTRA) provides technical support to the Department of State and geographical combatant commanders during SALW operations. DTRA advises foreign governments on practices for physical security and stockpile management of SALW.<sup>134</sup> The 20<sup>th</sup> Support Command could augment this effort by providing a deployable command structure prepared to conduct this mission under semi-permissive or nonpermissive conditions. During stability, support, transition and reconstruction (SSTR) operations involving U.S. forces, the expert capacity of an element trained and prepared to conduct SALW elimination would be a value-added asset for a task force commander.

## **F. CONCLUSION**

This chapter examines some of the issues DoD must consider to meet its objective of establishing a permanent WMD elimination capability. It asserts that in order to create a viable and sustainable capability, DoD must take a synergistic approach focusing not only on developing the capability, but also on integrating the mission into the mission scope of U.S. forces and institutionalizing the mission as a core competency within the proponents responsible for conducting its technical tasks.

DoD has established the 20<sup>th</sup> Support Command to provide command and control of WMD elimination mission and to provide technical support to other counterproliferation and nonproliferation missions as required. The 20<sup>th</sup> Support Command (CBRNE) has EOD and chemical support assets under its operational control.

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<sup>134</sup> Defense Threat Reduction Agency, "Small Arms and Light Weapons (SALW)" [http://www.dtra.mil/newsservices/fact\\_sheets/display.cfm?fs=salw](http://www.dtra.mil/newsservices/fact_sheets/display.cfm?fs=salw) (accessed July 12, 2006).

This will negate the “pick-up game” predilection that DoD too often displays towards low occurrence/high impact operations, but may fall short of long-term objectives if the WMD elimination mission is not integrated and institutionalized. Within the U.S. military, new operational requirements are often met with initial resistance. Incorporating elimination operations into strategic, operational, and tactical level planning will ensure the mission is integrated into the scope of U.S. military missions. Integrating the mission into operational and tactical level training exercises is also critical to the success of the mission. This exposure will increase the understanding of the mission amongst commanders and better enable them to allocate support for elimination operations.

TRADOC is responsible for recruiting and training new soldiers, developing adaptive leaders, and maximizing institutional learning and adaptation. It plays a key role in institutionalizing the WMD elimination mission within the force structure. In order to develop a core competency for conducting the elimination mission, TRADOC must formally embed the mission within the functional components responsible for conducting the intricate technical tasks associated with WMD elimination. Although the standing WMD elimination capability will endure many trials, four will be particularly significant. These are 1) locating WMD caches and related material, 2) enduring shifts in political focus, 3) integrating the necessary intelligence support, and 4) mission expansion. DoD must address each of these key challenges in order to establish a viable and sustainable WMD elimination capability.



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## V. CONCLUSION: PREPARING FOR THE NEXT WMD ELIMINATION MISSION

### A. INTRODUCTION

The disarmament terms imposed by the United Nations on Iraq at the end of the 1991 Persian Gulf War serves as the paradigm case for compelled compliance with disarmament mandates. Iraq unconditionally accepted the terms of the United Nations Security Council (UNSC) Resolution 687<sup>135</sup>. The stipulations of UNSC Resolution 687, section C required Iraq to “unconditionally accept the destruction, removal, or rendering harmless under international supervision of all chemical and biological weapons and stocks; all ballistic missiles with ranges greater than 150 kilometers.”<sup>136</sup> Furthermore, paragraph 9 (b) of the resolution authorize the establishment of UNSCOM to “carry out immediate on-site inspection of Iraq’s biological, chemical, and missile capabilities” based on Iraq’s declarations and any other locations designated by UNSCOM.<sup>137</sup>

As the UN/Iraq cooperative effort broke down, Iraq halted all inspection in October 1998. Inspections resumed under the auspices of UNMOVIC, but could not assuage the perception that the regime of Saddam Hussein was not being forthcoming with the truth about its WMD programs. The September 2001 terrorist attacks against the United States by Al Qaeda operatives provided the impetus for the U.S. President George W. Bush to invade Iraq in order to compel compliance with the UN’s disarmament mandate. In order to execute this disarmament mission, DoD had to form an *ad hoc* element designed to systematically locate, characterize, secure, disable, and/or destroy Iraq’s WMD stockpiles and related materials.

This thesis recommends that DoD establish a permanent WMD elimination capability that is both viable and sustainable. In previous chapters, it examined why the

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<sup>135</sup> United Nations Security Council Resolution 687 was adopted at the 2981<sup>st</sup> meeting on April 3, 1991. It declared a formal cease-fire at the end of the Gulf War and imposed peace terms on Iraq. It was passed by 12 votes to one (Cuba) with two abstentions (Ecuador and Yemen).

<sup>136</sup> United Nations Security Resolution 687, April 3, 1991, <http://www.ste.gov/p/nea/rls/01fs/14906.htm> (accessed December 15, 2005).

<sup>137</sup> Ibid.

United States cannot rely solely on cooperation-based models of disarmament such as UNSCOM and UNMOVIC for WMD elimination; but must also possess the capacity to conduct coercive disarmament of an adversary. It has also discussed the perils of relying on *ad hoc* approaches to accomplish this mission and recommended measures DoD should undertake in pursuit of establishing this capability. The following sections summarize the thesis discussions, findings and highlight its recommendations.

## **B. SUMMARY OF DISCUSSION AND FINDINGS**

### **1. The Significance of the WMD Elimination Issue**

DoD's *National Military Strategy to Combat Weapons of Mass Destruction* delineates eight missions that the U.S. military must have the capacity to conduct in order to dissuade, deter, defend, and defeat adversaries seeking to use WMD against U.S. interests. These missions are: conduct passives defense, cooperative threat reduction, security cooperation and partner activities, interdiction operations, active defense, consequence management, and WMD elimination.<sup>138</sup> These missions comprise the spectrum of nonproliferation/counterproliferation operations with WMD elimination being the ultimate counterproliferation mission. WMD elimination is defined as operations conducted to systematically locate, characterize, secure, disable, and/or destroy a State or non-State actor's WMD program and related capabilities in a hostile or uncertain environment.<sup>139</sup> Traditionally, many military strategists would have termed offensive operations such as Israel's 1981 counterforce strike against Iraq's Osirak nuclear reactor as an elimination mission. While elimination missions may include counterforce strikes, it entails a more comprehensive destruction, dismantlement, and in depth verification of an adversary's WMD capabilities.

Considering today's security environment, it is imperative to decrease the degree of uncertainty to the maximum extent possible. Proliferation of the technology and skills to construct hardened and deeply buried sites mitigates counterforce air strikes to the point that they may not obtain the degree of certainty required in today's security

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<sup>138</sup> DoD, *National Military Strategy to Combat Weapons of Mass Destruction*, 22–27.

<sup>139</sup> *Ibid.* 23–24.

environment. As determined adversaries employ the knowledge they have gained from previous preemptive counterforce operations, the difficulty of destroying these stockpiles using counterforce air strikes alone will only increase. Analysts suspect that both North Korea and Iran are currently employing hardened and deeply buried targets in anticipation of U.S. use of counterforce air strikes against their nuclear assets.<sup>140</sup>

## **2. The Limits of Cooperative Disarmament**

In retrospect, the UN-led disarmament verification regime was able to achieve the demands of UN Security Council Resolution 687. Nonetheless, it was unable to verify its achievements to the satisfaction of all the member-states. This thesis found that there are three key factors contributing to the failure of the UN-led cooperative disarmament of Iraq and underscore the need for DoD to possess a permanent capability to conduct WMD elimination. First, Iraq's early tactics of denial and deception irreparably tainted the UN-led cooperative process. Neither of the UN-led regimes was able to recover from this transgression enough to regain the trust of all the member-states. Secondly is the difficulty of reaching a consensus on what is a satisfactory level of disarmament. UN member-states had varying views on the threat that Iraq presented. After the terrorist attacks of September 11, 2001, the U.S. perspective was that Iraq disarmament had to be comprehensive and complete. Finally, even if a consensus were reached, the UN Security Council may not be willing to employ coercive disarmament. While cooperative, nonproliferation approaches to disarmament are preferred, DoD must possess a standing capability that would facilitate the coercive disarmament of U.S. adversaries.

## **3. The Problems with *Ad Hoc* Approaches**

This thesis has advocated that the U.S. military cannot rely on *ad hoc* approaches to conduct the WMD elimination mission. Preparing for the invasion of Iraq, DoD was forced to employ *ad hoc* means to develop its initial elimination task force responsible for directing the search for Iraq's weapons. This thesis has examined DoD's formulation of the WMD elimination plan for Operation Iraqi Freedom and looks at Central Command's (CENTCOM) strategy for conducting weapons exploitation in conjunction with the warfight. It looked at the transformation of the elimination strategy as the mission

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<sup>140</sup> Paul Kerr, "Reports Grow That U.S. Plots Strike Against Iran."

transitioned from the 75<sup>th</sup> XTF to the Iraqi Survey Group and proposed that the any new WMD elimination JTF must take a similar “balanced” approach to the elimination mission.

This thesis discussed several findings concerning the Operation Iraqi Freedom WMD elimination operation in Iraq. Many of the problems associated with the operation are attributable to the novelty and uniqueness of the mission of WMD elimination. Nonetheless, others are directly attributable to the *ad hoc* approach that DoD had to rely on to develop the capability. DOD’s permanent elimination capability should capture and address all the following issues:

- the lack of prioritization for the elimination mission
- the need for interpreter support at the lowest level of operation
- the lack of reliable reachback capability
- the lack of integrated training between the exploitation task force and maneuver elements
- securing high priority sites
- the loss of focus immediately following the end of initial hostilities,
- the need to integrate biological experts at the lowest levels
- the need for a robust intelligence cell

#### **4. Towards a Viable and Sustainable WMD Elimination Capability**

This thesis found that DoD is making remarkable strides towards addressing the capability gaps presented by challenges of combating weapons of mass destruction. The formalization of joint operational concept for combating WMD is a key development in addressing the capability shortfalls made evident after during the OIF elimination operation. Joint Publication 3-40, Joint Doctrine for Combating Weapons of Mass Destruction, establishes principle guidelines for planning and conducting operations to combat WMD and their delivery systems. Additionally, the *National Military Strategy to Combating Weapons of Mass Destruction* released in February 2006 further refined the role of WMD elimination in regards to the nonproliferation/counterproliferation spectrum of missions and offers overarching guidance to focus military efforts.<sup>141</sup> Another key

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<sup>141</sup> DoD, *National Military Strategy to Combat Weapons of Mass Destruction*, 22-23.

development has been the establishment of the 20<sup>th</sup> Support Command (CBRNE) as the responsible element for leading future WMD elimination operations. The command will provide oversight of the U.S. Army's technical assets during operations to combat WMD. Its organic assets include key proponents necessary to conduct the elimination missions.

Additionally, the 2006 QDR announced that DoD had assigned U.S. Strategic Command (STRATCOM) the mission of leading the effort to combat weapons of mass destruction. STRATCOM Center for Combating WMD (SCC-WMD) will integrate and synchronize DoD and interagency support of mission to combat WMD. It will “plan, advocate, and advise combatant commands on WMD-related matters to include doctrine, organization, training, material, leadership, personnel, and facilities.”<sup>142</sup> While these are a very important step towards establishing a permanent WMD elimination capability, they do not completely address all the challenges of establishing a viable and sustainable capability. Additionally, DoD must be cognizant of three significant challenges facing its standing WMD elimination capability. These three challenges are locating weapons of mass destruction, shifting political focus, intelligence support, and potential mission expansion.

### **C. SUMMARY OF KEY RECOMMENDATIONS**

The strategic goal of DoD in combating WMD is to ensure that the United States, its armed forces, allies, partners, and interests are neither coerced nor attacked by enemies using WMD.<sup>143</sup> Achieving this objective may ultimately require the employment of coercive means to compel uncooperative adversaries to comply with disarmament mandates from the international community or in the preemptive security interests of the United States. Although the Iraq Survey Group's final determination was that Iraq had no viable weapons program; Operation Iraqi Freedom validated the need for a permanent WMD elimination capability. This thesis discussed several initiatives that DoD has launched in the aftermath of the OIF elimination operation. These initiatives indicate that DoD has recognized its shortcomings and is taken the necessary measures to

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<sup>142</sup> Inside Defense.COM, “STRATCOM Statement on Opening of WMD Command Center.”

<sup>143</sup> DoD, *National Military Strategy to Combat Weapons of Mass Destruction*, 5–8.

account for the increasing threat that weapons of mass destruction present to the security interests of the United States. This thesis has forwarded numerous comments and suggestion on how and why DoD should continue its pursuit of these objectives. Some of the key recommendations offered are:

**1. Address the Challenges Presented by Biological Weapons.**

The search for biological agents is too critical and dangerous to be conducted by general-purpose forces with augmentation from subject matter experts. While each category of WMD—chemical, biological, radiological, nuclear, and high explosives—require varying levels of expertise and equipment to detect, biological agents present the greatest challenge. This was the case during both the UN-led cooperative disarmament and the OIF elimination operation. Since biological weapons and its related material present such an insurmountable challenge for exploitation teams, DoD must ensure that robust biological expertise is integrated into its elimination capability.

Biological experts augmenting the elimination capability will most likely come from outside organizations. This underscores the recommendation for integrating training scenarios that incorporates all the “plug and play” participants of the elimination capability.<sup>144</sup> Integrated training will allow biological experts the opportunity to train on and help develop the tactics, techniques, and procedures for conducting exploitation/assessment of biological sites. Biological experts can also provide advice during phase II and III—destruction and monitoring—of WMD elimination. Because of its dual-use capability, the input of biological experts will also facilitate targeted destruction of an adversary’s legitimate biological research assets. Their participation in on-going monitoring programs of biological sites will also ensure that an adversary’s biological program remains in compliance with imposed limits.

Additionally, the dearth of detection equipment to test for biological agents, compounds this problems. Currently, other there is no “point and shoot” biological detection equipment suitable for exploitation detection teams working under

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<sup>144</sup> Plug-and-play refers to the ability to add components to the standing elimination structure and having it function with a minimum amount of train-up time. It requires routine association and integrated training.

nonpermissive conditions. DoD should also consider increasing its investments in ongoing research and development of hand-held biological detection equipment. There are currently several companies working on this technology, but the capability is still in the development stage.

## **2. Address the Intelligence Requirements for WMD Elimination.**

This thesis recommends that DoD ensure that its permanent elimination capability has a robust intelligence capability structured for “plug and play” augmentation during deployments and exercises. Operational-level intelligence support for WMD elimination must reduce uncertainty by exploiting a variety of sources, facilitating information sharing, and improving situational awareness.<sup>145</sup> It should also have the capacity to produce actionable intelligence without being overly reliant on its reachback capability.

Nonetheless, when required, its reachback capability must be intrinsically affiliated with the appropriate assets within the intelligence community. Additionally, given that intelligence is the Achilles hill of WMD elimination, reachback must be exhaustedly exercised during training scenarios to include its plug and play augmentation and reachback capacity. Towards this end, DoD must fully integrate the applicable agencies into any training exercises that the permanent capability conducts or participates.

Although DoD has made significant progress towards establishing a permanent WMD elimination capability, much work remains. The *National Security Strategy for Combating Weapons of Mass Destruction*, *The National Military Strategy for Combating Weapons of Mass Destruction*, and *Joint Publication 3-40, Joint Doctrine for Combating Weapons of Mass Destruction*, all provide a sound strategic framework for combating WMD. Significant gaps, however, remain at the operational and tactical levels also. While these gaps may narrow as the SCC-WMD and the 20<sup>th</sup> Support Command (CBRNE) continue to refine the operational and tactical aspects of the mission, they currently serve as an impediment to the successful conduction of the elimination mission.

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<sup>145</sup> DoD, *National Strategy to Combat Weapons of Mass Destruction*, 19–21.



### **3. Integrate WMD Elimination at the Strategic, Operational, and Tactical Levels.**

In order to establish a viable WMD elimination capability, this thesis recommends that DoD integrate the mission at strategic, operational, and tactical levels. DoD must provide the appropriate focus for combatant commanders by integrating the elimination mission into the deliberate planning process and including it as part of the strategic and contingency planning guidance.<sup>146</sup> At the strategic level, DoD must incorporate the elimination mission into its military transformation strategy. Of the four transformation pillars, “concept development and experimentation” is particularly important given the novelty of the mission and high probability that future U.S. adversaries will possess WMD. It should also share concept development with allies, encouraging them to develop a similar capability to facilitate combined operations.

Furthermore, the United States should encourage the United Nations to maintain and expand its verification capability that was born out of United Nations Security Council Resolution 689. A standing UN capability to conduct compliance verification can increase the confidence of member-state in UN-led verification operations and avoid many of the problems that plagued UNSCOM. A permanent UN verification capability could also support phase III of WMD elimination by conducting continuous monitoring and ongoing inspections during phase III of WMD elimination.

At the operational level, DoD must ensure that WMD elimination scenarios are included in major operational-level command post exercises (CPX). Exercises such as Ulchi Focus Lens and various NATO exercises provide a two-fold opportunity. They allow DoD to exercise its contingency plans for conducting WMD elimination operations and also provide exposure of mission to allies participating in these combined forces exercises. Additionally, it is important that the elimination capability participate in combined arms exercises at the tactical level. This will increase awareness of the WMD elimination capability amongst maneuver commanders and provide them with a better understanding of the purpose of WMD elimination.

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<sup>146</sup> Center for the Study of Weapons of Mass Destruction, “Combating WMD: Challenges for the Next 10 Years,” 42–45.

**4. Do Not Underestimate the Importance of Interpreter Support.**

DoD must ensure that adequate interpreter support is allocated for the WMD elimination capability during elimination operation. It is particularly important during the exploitation phase of the operation when search teams must leverage every advantage possible. Interpreter support is critical to both a site-centric and program-centric approaches to WMD elimination. It serves to facilitate the production of actionable intelligence by screening documents, data, and material for collection during the exploitation phase. Considering that the next adversary that DoD conducts WMD elimination against will present a much more formidable challenge, interpreter support should be a part of the “plug-and-play” structure of the 20<sup>th</sup> Support Command (CBRNE) and integrated into exercise scenarios where applicable.

**5. Incorporate the SALW Elimination Mission into the Mission Scope of the Permanent WMD Elimination Capability.**

DoD should expand the mission scope of the 20th Support Command to include SALW elimination. The targeted weapons include both small arms manufactured to military specification and other light weapons such as antiaircraft ordnance, landmines, and rockets. Peace enforcers’ inability to carry out proper SALW elimination is detrimental to the peace process.

Currently the Defense Threat Reduction Agency (DTRA) conducts this mission. Nonetheless, considering its projected composition of explosive ordnance disposal assets and the crosscutting tasks involved in WMD and SALW elimination, the 20th Support Command could bolster DoD’s SALW elimination capability. While DTRA conducts SALW under permissive conditions, the 20th Support Command could cover semi-permissive or nonpermissive conditions. This capability would be a value added asset to task force commanders during SSTR operations by providing an additional tool to nurture fragile peace arrangements.

**D. CONCLUSION**

Many potential adversaries of the United States either possess weapons of mass destruction or have the capacity to produce them. When cooperative, nonproliferation

measures fail to rollback aggressor states' WMD programs, DoD must have the capacity to compel compliance if called upon. Even if WMD disarmament is not *casus belli* of a conflict, U.S. forces must still locate, establish positive control over, and/or destroy an adversary's weapons program and stockpiles. The intent of this thesis has been to substantiate the call for a permanent WMD elimination capability. The argument supported by this thesis is that the United States cannot rely solely on UN-led, cooperative approaches to eliminate a determined adversary's weapons program. Although non-coercive, cooperative approaches are preferred, the UN's twelve-year verification effort in Iraq is evident that the threat of force must accompany these approaches. To this end, a permanent WMD elimination capability may also serve as a deterrent to uncooperative aggressor states. Additionally, the experiences gained during the OIF elimination mission demonstrate that an *ad hoc* approach to conducting this mission can have counterproductive consequences. The lack of integrated training, inadequate prioritization resulting in unsecured sites, and misaligned intelligence assets are just a few of the problems that plagued the OIF search effort. Considering the number of unsecured sites, unexploited documents, inaccurate intelligence assessments, and adroit use of improvised explosive devices by Iraqi insurgents, had Iraq actually possessed any WMD, the consequences would be devastating.

The terrorist attacks of September 11, 2001, heightened fears of a nexus between radicalism and technology. Concerns that Iraq would transfer WMD material to terrorist organizations and the inability of the UN to verify that Iraq had complied with disarmament mandates contributed to the decision to invade Iraq. Another contributing factor was the relative superiority of the U.S. military. It became apparent, however, that although its forces were superior, WMD elimination was a new type of mission—one that no single organization in DoD's force structure was aligned to accomplish. To its credit, DoD has devised the most comprehensive strategy to combat weapons of mass destruction to date. Both the *National Strategy to Combat Weapons of Mass Destruction* and the *National Military Strategy to Combat Weapons of Mass Destruction* present the comprehensive construct required to address the shortfall manifested by the post-September 11 security era. Additionally, the 2006 Quadrennial Defense Review

announced that DoD would consolidate its specialized assets to combat WMD under one formal command designated as the 20<sup>th</sup> Support Command (CBRNE). The command will be responsible for leading future WMD elimination operations. While this adequately addresses the initial problems that arose during the initial planning phase leading up to the invasion of Iraq, it will fall short of DoD's strategic objectives. DoD must also integrate WMD elimination into its mission scope. It must make the mission a part of the deliberate planning cycle, include WMD elimination scenarios in major operational exercises, and incorporate it into the military transformation strategy. DoD must also institutionalize WMD elimination as a core competency within the proponents responsible for conducting the critical tasks associated with the mission. The U.S Army Chemical and Ordnance Corps must work closely with SSC-WMD as it continues to refine the operational aspects of WMD elimination.

DoD has made great strides in its efforts to address the capability gap exposed by the Iraq elimination operation, but numerous challenges remain. Employing the recommendations of this thesis to integrate and institutionalize the WMD elimination mission will create a synergistic effect and facilitate the establishment of a viable and sustainable WMD elimination capability.

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