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**NAVAL
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MONTEREY, CALIFORNIA

THESIS

**SHIFTING FOCUS: ASSESSING THE ROLE OF U.S.
ARMY SPECIAL FORCES IN THE
COUNTERPROLIFERATION OF WEAPONS OF MASS
DESTRUCTION**

by

Craig W. Milliron

June 2014

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IN THE COUNTERPROLIFERATION OF WEAPONS OF MASS
DESTRUCTION**

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Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN DEFENSE ANALYSIS

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**NAVAL POSTGRADUATE SCHOOL
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ABSTRACT

The role of U.S. Army Special Forces (SF) in the counterproliferation of weapons of mass destruction (WMD) has been minimal in recent years. As globalization leads to increased ability of both states and non-state actors to acquire WMDs, the efforts of Army SF should increase accordingly. Focusing on nuclear weapons, this thesis argues that Army SF elements are ideally positioned to contribute to the counterproliferation mission through the use of the global special operations forces (SOF) network. Utilizing the regional expertise of Army SF and its network of foreign military and government contacts achieved through years of sustained relationships, it serves as an ideal opportunity for strengthening counterproliferation capabilities across the world. Rather than focusing exclusively on the interdiction of WMDs by specialized SOF elements, this thesis recommends shifting to Phase Zero—before WMDs are present—with a focus on building partner capacity to combat WMDs. It examines the adaptation of existing Army SF programs and authorities in order to focus them on WMD and compares this to Army SF augmenting existing non-SOF counterproliferation programs. Finally, it explains how these missions can build relationships within the global SOF network for future operations against proliferators and lead to improved international security.

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LIST OF ACRONYMS AND ABBREVIATIONS

CBRN	chemical, biological, radiological, and nuclear
CIA	Central Intelligence Agency
CNT	counter narco-terrorism
COCOM	combatant commander
CP	counterproliferation
CTR	cooperative threat reduction
CWMD	combating weapons of mass destruction
DEA	Drug Enforcement Administration
DOD	Department of Defense
DTRA	Defense Threat Reduction Agency
EXBS	Export Control and Related Border Security Program
FBI	Federal Bureau of Investigation
FID	foreign internal defense
GCC	geographic combatant commander
IAEA	International Atomic Energy Agency
ICP	International Counterproliferation Program
JCET	Joint Combined Exchange Training
JCS	Joint Chiefs of Staff
JP	joint publication
MAD	mutually assured destruction
NATO	North Atlantic Treaty Organization
NDAA	National Defense Authorization Act
NP	nonproliferation
NPT	nonproliferation treaty
PPI	Proliferation Prevention Initiative
PSI	Proliferation Security Initiative
QDR	Quadrennial Defense Review
SF	Special Forces
SOF	Special Operations Forces
SOFREP	Special Operations Forces representative

SOLO	Special Operations liaison officer
TCP	theater campaign plan
UNSCR	United Nations Security Council Resolution
USSOCOM	United States Special Operations Command
WMD	weapons of mass destruction

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I. INTRODUCTION

A. INTRODUCTION

Since the United States tested its first nuclear weapon in 1945, many state and non-state actors throughout the world have attempted to produce or acquire their own nuclear weapons.¹ The mere possession of a nuclear weapon represents power and prestige unlike that of any other military tool. Despite the low number of nuclear weapons detonated in combat, non-nuclear states and terrorists recognize their potential and clearly have a demand for and the potential to acquire fissile materials.² To date, nine countries have succeeded in this endeavor, while at least one other country is suspected of attempting the feat.³ However, attempts are not limited to national programs. Former Central Intelligence Agency (CIA) Director George Tenet asserted that al-Qa'ida began a quest for nuclear weapons in the early 1990s.⁴ The Japanese cult Aum Shinrikyo desired a capability so much that they purchased a ranch in Western Australia in order to mine uranium and even attempted to buy a nuclear warhead from Russia.⁵ Although state and non-state actors arrive at the decision to develop and use nuclear weapons for different motivations and through different methods, the devastating results of either require our attention.

Recognizing the threat of not just nuclear weapons, but all weapons of mass destruction (WMD), the 2010 *Quadrennial Defense Review* (QDR) stated, “Preventing the proliferation and use of such weapons is therefore a top national priority for which

¹ Joseph Cirincione, Jon B. Wolfsthal and Miriam Rajkumar, *Deadly Arsenals: Nuclear, Biological, and Chemical Threats*, 2nd ed. (Washington, DC: Carnegie Endowment for International Peace, 2005), 203.

² Moises Naim, “The Five Wars of Globalization,” *Foreign Policy*, no. 134 (January–February 2003): 31, doi: 10.2307/3183519.

³ *Deadly Arsenals* lists China, France, India, Israel, Pakistan, Russia, South Africa, the United Kingdom, and the United States as countries known to have produced weapons while North Korea is suspected of attempting to produce them. Cirincione, Wolfsthal and Rajkumar, *Deadly Arsenals*, 45.

⁴ George J. Tenet and Bill Harlow, *At the Center of the Storm: My Years at the CIA*, 1st ed. (New York: Harper Collins, 2007), 261.

⁵ David E. Kaplan and Andrew Marshall, *The Cult at the End of the World: The Terrifying Story of the Aum Domsday Cult, from the Subways of Tokyo to the Nuclear Arsenals of Russia*, 1st American ed. (New York: Crown Publishers, 1996), 112, 127.

many federal agencies have important responsibilities.”⁶ This sentiment was echoed in the latest version of the QDR, which points to building partner capacity across the globe as vital to ensuring WMDs never reach U.S. territory.⁷ This thesis argues that the United States Army Special Forces could expand its participation in this effort in order to not only leverage existing relationships, but also to help synchronize broader security assistance programs in our partner nations. Although there is significant overlap in the CP efforts for chemical, biological, and radiological devices, this proposal focuses on the nuclear threat and the potential for its proliferation. A study by the RAND Corporation in 2009 points out that since the United States lacks worldwide access and knowledge of proliferation routes and networks, building the capacity of our partners across the world is the only way to counter this threat.⁸ This assumes, however, that our partners share an appreciation of the threat from nuclear weapons and will therefore accept our efforts to build their capacity. Although we recognize the threat of proliferation, are the military and civilian agencies working in the most effective manner, synchronizing efforts and placing the appropriate subject matter experts in the correct locations to stop the spread of these weapons and their components?

This problem is not merely one that can be solved by deploying U.S. government personnel worldwide, especially in an uncoordinated manner. Instead, we must consider the proliferation challenge from a whole-of-government approach and confront it as such. The aforementioned RAND study reaffirmed that, in addition to our military personnel, civilian agencies play a vital role in working through, by, and with security partners worldwide.⁹ Ensuring the appropriate subject matter experts gain access to the people and locations needed for mission success will require us to leverage available authorities and subordinate ourselves to the overall accomplishment of our goals, regardless of which organization claims bureaucratic turf or takes credit for success. Counterproliferation

⁶ United States Department of Defense, *Quadrennial Defense Review Report* (Washington DC: Government Printing Office, 2010), 34.

⁷ United States Department of Defense, *Quadrennial Defense Review 2014* (Washington DC: Government Printing Office, 2014), 13.

⁸ Jennifer D. P. Moroney and Joe Hogler, *Building Partner Capacity to Combat Weapons of Mass Destruction* (Santa Monica, CA: RAND, 2009), 1.

⁹ *Ibid.*, 4.

(CP) strategy must be tailored to fit the capabilities and needs of the specific locations and people where it is applied. It will require us to prioritize our efforts and conduct a thorough analysis to determine the appropriate ways and means to meet the desired ends within the theater campaign plans (TCP). Each situation must be unique and plans would be tailored to the specific circumstances facing partner nations. While some partners may require assistance with border control, other states may ask for nuclear facility security assistance or help with some other aspect of the overall CP mission. Allocating the appropriate resources to each situation will be essential to achieve success. For this reason, fully utilizing U.S. Army Special Forces' global network of partners will allow us to increase the footprint of our defensive posture, provided our efforts are aligned in a synchronized, coordinated strategy.

B. STATEMENT OF PROBLEM

While the United States government employs numerous methods to prevent the proliferation of WMDs, the complex and fragmented nature of many of these operations promotes what are commonly referred to as “stovepipes of excellence.”¹⁰ The specialized agencies and units tasked to conduct a portion of the WMD mission are very capable within their scope, but they are often limited because of a lack of awareness or a reluctance to incorporate outside elements, both within the United States government and from our partner nations. The solution should connect the relevant organizations within the government, which represent a range of legal and jurisdictional authorities. A 2011 product by Anya Loukianova of the James Martin Center for Nonproliferation Studies listed 181 U.S. government entities involved in nuclear policy making, with 50 of these in the Department of Defense alone.¹¹ Rather than creating new programs or units, our efforts will be better spent crafting efficient utilization strategies, leveraging existing capabilities and partnering with appropriate subject matter experts throughout the

¹⁰ Charles Faint and Michael Harris, “F3EAD: Ops/Intel Fusion “Feeds” the SOF Targeting Process,” *Small Wars Journal* (2012, January), accessed February 11, 2014, <http://smallwarsjournal.com/jrnl/art/f3ead-opsintel-fusion-%E2%80%9Cfeeds%E2%80%9D-the-sof-targeting-process>.

¹¹ Anya Loukianova, “Re-Charting U.S. Government Agencies Involved in Nuclear Policy,” December 1, 2011, http://cns.miis.edu/stories/pdfs/111111_chart_usg_wmd_anya_loukianova.pdf.

counterproliferation community in order to maximize the benefits of collaboration. The 2009 RAND study recommended additional external coordination in order to discover additional potential collaboration efforts.¹² As special operations forces (SOF) seek to further develop our relationships with partner nations, these collaboration efforts provide additional opportunities to maintain contact and expand our network. As Lieutenant Colonel (LTC) J. “Lumpy” Lumbaca argues in his article “Relationship Building: The Key Objective of U.S. SOF Phase Zero Engagement,” the relationships that SOF builds through frequent interactions with our partner nations allows us to maintain access and influence, leading to strategic success in addition to the tactical objectives.¹³ In describing its vision for the global SOF network of the future, the United States Special Operations Command (USSOCOM) points to building partner capacity through security force assistance as a way to strengthen our existing network and promote security.¹⁴ Our current engagement programs, such as the Joint Combined Exchange Training (JCET) program, provide sporadic exposure to our partner nations, requiring additional avenues for contact and influence.¹⁵ Army Special Forces’ (SF) augmentation of existing counterproliferation activities would therefore not only contribute to the individual program’s success, but also strengthen relationships and achieve our strategic goals. Since the goal of the TCPs is to maintain security and strengthen relationships within the respective regions, Army SF’s increased participation in the counterproliferation activities will lead to accomplishment of these broader objectives and make the best use of government resources.

¹² Moroney and Hogler, *Building Partner Capacity to Combat Weapons of Mass Destruction*, 86.

¹³ J. “Lumpy” Lumbaca, “Relationship Building: The Key Objective of U.S. SOF Phase Zero Engagement,” *Special Warfare* 27, no. 1 (2014): 29.

¹⁴ United States Special Operations Command, *Special Operations 2020: The Global SOF Network* (Tampa, FL: United States Special Operations Command, 2013), 9.

¹⁵ Brian S. Petit, *Going Big by Getting Small* (Denver, CO: Outskirts Press, 2013), 111.

C. RESEARCH QUESTIONS

The primary research question this thesis asks is: How can U.S. Army Special Forces contribute to the reduction of proliferation of nuclear weapons through leveraging the global SOF network? While attempting to answer this question, several nested research questions arose:

1. What advantages does this proposal provide over the existing units and efforts?
2. What programs and missions of U.S. Army Special Forces align best with counterproliferation?
3. What U.S. agencies and organizations could serve as the best partners and subject matter experts in the field of counterproliferation?
4. What type of partner forces could benefit most based upon the perceived regional threat and existing capabilities? Would they be solely military units?
5. What additional authorities could U.S. Army Special Forces leverage through partnerships in order to complete the mission?
6. How does U.S. Army Special Forces' participation in counterproliferation programs benefit the global SOF network and further develop our existing relationships?
7. How do we educate our international partners in order to multiply our efforts and develop capabilities in their military and law enforcement elements?
8. Although the thesis focuses on nuclear weapons, could these practices contribute to chemical, biological, and radiological CP efforts?

D. HYPOTHESIS

The stated hypothesis at the outset of this thesis was that the use of U.S. Army Special Forces in a joint, combined, and interagency approach to counter nuclear weapons proliferation will capitalize on existing relationships and lead to increased regional stability through foreign internal defense efforts. The intent of this use of Army SF is not to replace existing expertise, but rather to apply unique attributes and capabilities of Army SF to contribute to the completion of the mission. Rather than attempting to create an additional unilateral interdiction capability, this thesis will show that Army SF's participation in a joint, combined, and interagency approach to counterproliferation can contribute significantly to the Phase Zero operations in support

of the theater campaign plans.¹⁶ Through the careful analysis of applicable missions and partner selection (both domestic and international), Army SF can integrate to the existing mission and provide a force-multiplying capability missing in the current structure. Similar to DOD's administration of Department of State's Title 22 Security Cooperation efforts, augmentation of non-DOD programs can achieve common security objectives.¹⁷

E. LITERATURE REVIEW

The literature related to this thesis typically falls into three distinct categories: international relations theory, counterproliferation, and U.S. government and Department of Defense publications and policies regarding authorities and responsibilities.

1. International Relations Theory

In a report for the RAND Corporation, John Arquilla and Paul Davis analyzed the "demand" side of the proliferation equation vice the "supply" side and noted that, although not the only factor, increased stability in a region decreased the desire of states to acquire WMDs.¹⁸ This is consistent with the mission of Army SF to conduct foreign internal defense (FID), which leads to increased stability in the region. Applying Arquilla and Davis's analysis, we can see that through the conduct of foreign internal defense missions, Army SF is contributing to the reduction of proliferation of WMD. A more synchronized, focused FID approach aimed at improving border security and WMD detection capabilities would only further enhance this effect.

An article in *Foreign Policy* by Gareth Evans describes cooperative security as the theory that explains the transition of collective security from deterrence as used by the United Nations in the mid- to late-1900s to that of a preventive role. He further describes

¹⁶ Throughout his book, COL Petit refers to "Phase Zero" operations aimed at preventing war, as opposed to the more common "Phase 0" operations, which alludes to follow-on phases of war. This is an appropriate term for this thesis, as successful counterproliferation efforts could eliminate the need for subsequent phases aimed at reducing nuclear threats. Petit, *Going Big by Getting Small*, 3.

¹⁷ Defense Institute of Security Assistance Management, *Security Cooperation Programs Through Fiscal Year 2014*. Revision 14.5 (Washington, DC: Government Printing Office, 2014), 25. http://www.disam.dsca.mil/documents/pubs/security_cooperation_programs_20140502.pdf

¹⁸ John Arquilla and Paul Davis, *Modeling Decisionmaking of Potential Proliferators as Part of Developing Counterproliferation Strategies* (Santa Monica, CA: RAND, 1994), 37.

cooperative security as that of “prevention rather than correction” and promoting “interdependence rather than unilateralism.”¹⁹ In the case of WMDs, waiting until the “correction” phase and implementing our consequence management activities is too little, too late. Just as we have observed the integration of domestic law enforcement and intelligence capabilities since the 9/11 attacks, we should dedicate efforts to promoting interdependence among our domestic and international partners, with emphasis on counterproliferation. Similar to counter-insurgency operations, which the U.S. government is woefully aware of in the aftermath of the wars in Iraq and Afghanistan, this effort against proliferation will not be accomplished unilaterally. It will require reliance upon our allies across the world and should attempt to counter the threat as early in the weapons acquisition cycle as possible.

In his book *International Politics in the Atomic Age*, John Herz describes collective security, in which nations undertake actions against a threat even if their nation is not directly at risk from the aggression.²⁰ This theory is the backbone of programs such as the Proliferation Security Initiative (PSI), a cooperative, non-binding program in which states agree to assist based upon proximity of maritime vessels or flag-bearing status.²¹ Due to the international nature of proliferation and the cross-border operations prevalent in the illicit transfer of goods, this is a valid theory worthy of implementation. Especially noteworthy is the fact that the PSI is not a legally-binding membership, which could actually encourage more states to take part in operations.

The Proliferation Puzzle: Why Nuclear Weapons Spread and What Results, edited by Zachary S. Davis and Benjamin Frankel, provides a detailed analysis of the decision making process through which states decide to acquire nuclear weapons.²² Written in 1993, it looks at historical cases of nuclear weapons acquisition and attempts to link a

¹⁹ Gareth Evans, “Cooperative Security and Intrastate Conflict,” *Foreign Policy*, no. 96 (Autumn 1994): 7. doi: 10.2307/1149213

²⁰ John H. Herz, *International Politics in the Atomic Age* (New York: Columbia University Press, 1959), 84.

²¹ U.S. Department of State, “Proliferation Security Initiative,” accessed January 30, 2014, <http://www.state.gov/t/isn/c10390.htm>.

²² Zachary S. Davis and Benjamin Frankel, eds., *The Proliferation Puzzle: Why Nuclear Weapons Spread and what Results* (Portland, OR: Frank Cass, 1993).

state's decision to seek a device to international relations theory. This book departs from traditional arguments that focus solely on the states that chose to develop the capability and instead broadens the scope to include those states that have decided *not* to develop the capability.²³ As such, this implies that rather than being a regional problem, it actually points to a global threat. In his chapter, "The Brooding Shadow: Systemic Incentives and Nuclear Weapons Proliferation," Benjamin Frankel notes that a state's decision is based upon "its perception of the security equation."²⁴ From this statement, it stands to reason that by increasing a state's confidence in not only its own security, but also the commitment of the United States and its allies, we can reduce the number of states wishing to acquire a nuclear capability.

2. Counterproliferation

In his conclusion to *Globalization and WMD Proliferation*, James J. Wirtz posits that the Proliferation Security Initiative could be expanded outside the realm of maritime operations.²⁵ This is an excellent point that seeks to leverage the success of this program and apply the methodology to land and air transportation networks. Much of the success, however, is due to the skillful integration of intelligence and interdiction activities. Expanding the program is not as simple as merely dedicating more interdiction assets or more money. Rather, this requires the participation of the intelligence and law enforcement entities of participating states, fully dedicated to the mission. Due to the interdependence of intelligence and interdiction efforts, states must dedicate adequate resources if they wish to counter the threat. More important, however, may be the fact that the PSI maritime operations utilize international waters and existing maritime laws. In an expansion to ground operations, any effort by a third party state's ground forces to

²³ Benjamin Frankel and Zachary S. Davis, "Nuclear Weapons Proliferation: Theory and Policy," in *The Proliferation Puzzle: Why Nuclear Weapons Spread and what Results*, eds. Zachary S. Davis and Benjamin Frankel (Portland, OR: Frank Cass, 1993), 1.

²⁴ Benjamin Frankel, "The Brooding Shadow: Systemic Incentives and Nuclear Weapons Proliferation," in *The Proliferation Puzzle: Why Nuclear Weapons Spread and what Results*, eds. Zachary S. Davis and Benjamin Frankel (Portland, OR: Frank Cass, 1993), 45.

²⁵ James J. Wirtz, "Conclusion," in *Globalization and WMD Proliferation: Terrorism, Transnational Networks, and International Security*, eds. James A. Russell and James J. Wirtz (New York: Routledge, 2008), 164.

interdict suspected proliferation activities would meet great scrutiny by the host nation. It is therefore of utmost importance that the state in which the activities occur have capable interdiction forces as well as a robust intelligence network tied to the international effort, not to mention an appreciation for the threat and a willingness to intervene. As David Albright and Corey Hinderstein argue in “The A. Q. Khan Illicit Nuclear Trade Network and Implications for Non-proliferation Efforts,” A. Q. Khan’s proliferation network intentionally sought WMD components from states that had little WMD expertise among export authorities, exploiting a capability gap.²⁶ Relying upon these same states to detect and deter future proliferation without providing adequate resources and building their capabilities is a naïve proposition.

Gordon Corera’s *Shopping for Bombs* describes A. Q. Khan’s international proliferation network and explains how Khan promoted the spread of nuclear technology throughout the world. His analysis not only shows how globalization and the ambiguity of dual-use components complicated the counterproliferation problem, but it also gives examples of the interplay of international relations and military objectives.²⁷ In the case of A. Q. Khan’s network, he describes the hesitance of the U.S. government to interdict Dr. Khan due to the country’s relationship with Pakistan.²⁸ The balance of maintaining relationships while accomplishing the mission is very important for the premise of this thesis. Since many of our potential partners (both domestic and international) have differing objectives and desired end states that may not coincide with those of Army SF, we must account for these differences when approaching selection of partners as well as determining the conduct of the mission. Like all interagency and international relationships, this must be a symbiotic relationship with both partners feeling satisfied.

“Strategies for Combating Dark Networks,” a journal article written by Nancy Roberts and Sean Everton for the *Journal of Social Structure*, describes shortcomings of

²⁶ David Albright and Corey Hinderstein, “The A. Q. Khan Illicit Nuclear Trade Network and Implications for Non-Proliferation Efforts,” in *Globalization and WMD Proliferation: Terrorism, Transnational Networks, and International Security*, eds. James A. Russell and James J. Wirtz (New York: Routledge, 2008), 60.

²⁷ Gordon Corera, *Shopping for Bombs: Nuclear Proliferation, Global Insecurity, and the Rise and Fall of the A. Q. Khan Network* (New York: Oxford University Press, 2006), 28.

²⁸ *Ibid.*, 40.

the current network analysis specific to counterterrorism efforts. Although terrorist networks and proliferation networks can differ significantly, this article makes valid points that can apply to both types. They discuss the categories of targeting a person, group, or organization, with different strategies attributed to each.²⁹ This is important to note, as the partnerships and strategies recommended in this thesis must remain flexible and not be applied in a “cookie cutter” manner with little regard to the intended target. Rather, we should ensure we utilize the appropriate “approach” to building and implementing programs to combat the threat, as RAND analysts Jennifer Moroney and Joe Hogler suggest.³⁰ Roberts and Everton also explain the differing costs, both monetary and effort-wise, to be considered when choosing strategic options.³¹ Not all targets will require large sums of money or time. On the contrary, some network disruption efforts may be effective with smaller amounts of investment. What Roberts and Everton do not address to a large degree in this article, however, is the political costs of a strategic option. While they do mention the effects on the local populace of their approaches, they stop short of analyzing the long-term costs and benefits at the international level of analysis. This is a cost that must be carefully considered, as today’s activities can weigh heavily on future international relations, both for the positive and negative.

3. U.S. Congress and Department Of Defense Publications and Policies Regarding Authorities and Responsibilities

American leaders at all levels have publicly stated their dedication to the fight against weapons of mass destruction in recent years.³² While elements of the U.S. government define the various terms for combating WMD differently, the focus on prevention of the spread and use of the weapons remains the same throughout. Each of the guiding documents for our military’s operations correspondingly speaks to the

²⁹ Nancy Roberts and Sean F. Everton, “Strategies for Combating Dark Networks,” *Journal of Social Structure* 12, no. 2 (2011): 4–5.

³⁰ Moroney and Hogler, *Building Partner Capacity to Combat Weapons of Mass Destruction*, 17.

³¹ Roberts and Everton, “Strategies for Combating Dark Networks,” 2–3.

³² United States Department of Defense, *Quadrennial Defense Review Report* (Washington DC: Government Printing Office, 2010), 34; White House, *The National Security Strategy of the United States of America* (Washington, DC: Government Printing Office, 2010), 4.
http://www.whitehouse.gov/sites/default/files/rss_viewer/national_security_strategy.pdf.

importance of the counter WMD mission. The *National Security Strategy (NSS) of the United States of America* sets the stage as it describes the limitation of nuclear proliferation as a top priority, covering a broad spectrum and focusing on not only denying terrorists access to existing stockpiles, but also preventing non-nuclear states from developing capabilities.³³ While this document covers the entire CWMD spectrum, it pays particular attention to global cooperation in preventing the spread of nuclear weapons by focusing on securing nuclear material and technology.³⁴ More specific to WMDs, the *National Strategy to Combat Weapons of Mass Destruction* emphasizes the fact that proliferation is a global problem and threatens not only the United States, but many of our allies as well, requiring immense international cooperation towards this effort.³⁵

The *National Military Strategy to Combat Weapons of Mass Destruction* is intended to provide guidance and direction to Department of Defense (DOD) components in the counterproliferation realm.³⁶ The backbone of the strategy relies upon six guiding principles, of which the most relevant to this thesis is that of “Assurance” which seeks the cooperation of our international partners to combat WMD proliferation together.³⁷ It declares that one of the “ends” for combating WMD is ensuring that our allies and U.S. civilian agencies are partners in the effort as well.³⁸ As the title implies, this strategy document focuses on the entire counter WMD spectrum, not merely the counterproliferation element. As such, it provides guidance for active missile and air defense systems and consequence management in addition to interdiction and building partner capabilities.³⁹ Regarding the subject of building partner capabilities, it mentions the need to incorporate this strategy into each geographic combatant command’s theater

³³ White House, *The National Security Strategy of the United States of America*, 23–24.

³⁴ *Ibid.*, 24.

³⁵ White House, *National Strategy to Combat Weapons of Mass Destruction* (Washington, DC: Government Printing Office, 2002), 6. <http://purl.access.gpo.gov/GPO/LPS24899>.

³⁶ Joint Chiefs of Staff, *National Military Strategy to Combat Weapons of Mass Destruction* (Washington DC: Government Printing Office, 2006), 4.

³⁷ *Ibid.*, 15.

³⁸ *Ibid.*, 5.

³⁹ *Ibid.*, 7–8.

campaign plan (TCP), which would include Joint Combined Exchange Training and Security Assistance programs, consistent with this thesis' proposal.⁴⁰ For examples of security cooperation programs, however, it cites only the Proliferation Security Initiative, the North Atlantic Treaty Organization (NATO) Chemical, Biological, Radiological, and Nuclear (CBRN) battalion, and the NATO elimination efforts, which focus primarily on maritime interdiction, consequence management, and nuclear disarmament respectively.⁴¹ Lacking in this discussion is an effective Phase Zero counterproliferation effort aimed at reducing the flow across land borders or incorporation into existing international military exercises and interagency programs. This omission notwithstanding, the *National Military Strategy* provides a solid base from which subsequent, subordinate strategies focused on the subcomponents of the strategy can build.

Joint Publication (JP) 3-40: Combating Weapons of Mass Destruction provides the Department of Defense's joint doctrine for combating weapons of mass destruction. In doing so, it defines nonproliferation (NP) as "actions taken to prevent the proliferation of WMD by dissuading or impeding access to, or distribution of, sensitive technologies, material, and expertise."⁴² Counterproliferation (CP), on the other hand, is defined as "actions taken to defeat the threat and/or use of WMD against the United States, our forces, allies, and partners."⁴³ Traditionally, nonproliferation activities are seen as the purview of the State Department, while the Department of Defense maintains a larger responsibility for counterproliferation activities. The methods suggested in this thesis include reliance upon security cooperation and military-to-military engagements, which are typically considered nonproliferation activities by *JP 3-40*,⁴⁴ while the intended result of these methods is increased partner capacity to conduct WMD interdiction, elimination,

⁴⁰ Ibid., 21.

⁴¹ Ibid., 26.

⁴² Joint Chiefs of Staff, *Combating Weapons of Mass Destruction* (Joint Publication 3-40) (Washington, DC: Government Printing Office, 2009), I-7.

⁴³ Ibid.

⁴⁴ Ibid.

and WMD security cooperation, which are counterproliferation activities.⁴⁵ Interestingly, the *U.S. Army Field Manual 3-18: Special Forces Operations* refers only to counterproliferation, which it labels as a core activity of Army Special Operations Forces and a principle task of Army SF.⁴⁶ Unlike *JP 3-40*, it categorizes building partner capacity to combat WMD as a sub-task of the core activity of counterproliferation.⁴⁷ In order to avoid using multiple terms for the activities, the remainder of this thesis will refer to building partner capacity to combat WMD as counterproliferation activities, in accordance with Army SF doctrine. As stated in the beginning of this section, the U.S. government's various definitions of counterproliferation and nonproliferation may not match, but many elements of our efforts to curb the proliferation can alternate between the two missions. Although these definitions may seem restrictive in nature, the truth is that our efforts all work to the same end.

JP 3-40 also describes the “shaping” operations in Phase Zero, which serve to not only deter adversaries, but also to build and maintain relationships with our allies.⁴⁸ This is congruent with international relations theories with regards to the effects of conducting foreign internal defense as a deterrence tool and it also speaks to the importance of those long-lasting relationships and the benefits to U.S. strategy. Illustrating the flexible nature of CWMD activities, the manual also depicts the possible integration of the activities across the range of military operations and as a component of the diplomatic, informational, military, and economic options.⁴⁹

Army Field Manual 3-18: Special Forces Operations (FM 3-18) provides guidance for all U.S. Army Special Forces operations. It provides the doctrinal framework through which all operations are planned and executed. Noteworthy for this thesis are the discussions of principle tasks and participation in multi-national exercises. Providing a definition of counter proliferation of WMDs, which it labels as a principle

⁴⁵ Ibid., I-8.

⁴⁶ U.S. Army, *Special Forces Operations* (Field Manual 3-18) (Washington, DC: Government Printing Office, 2012), 2-3–2-4.

⁴⁷ Ibid., 2-16.

⁴⁸ Joint Chiefs of Staff, *Combating Weapons of Mass Destruction*, I-6–I-7.

⁴⁹ Ibid., IV-12, IV-14.

task of Army Special Forces as mentioned in the previous paragraph, it also describes capabilities provided by Army Special Forces in this mission.⁵⁰ Under the framework of foreign internal defense, this manual then describes Army Special Forces' participation in joint and multinational exercises categorized as Chairman Joint Chiefs of Staff (JCS) Exercises or Joint Combined Exchange Training (JCET), specifically authorized in Section 2011, Title 10, United States Code (10 USC 2011).⁵¹ An important benefit to the authorities granted under the JCET program that the manual points out is the access to countries around the world in which conventional forces do not operate.⁵² This access worldwide is a unique attribute to Army Special Forces and may be a key authority under which existing programs may gain access to additional areas of the world. Leveraging this authority and expanding the span of these programs will allow the appropriate subject matter experts to accomplish their respective missions more effectively.

The annual National Defense Authorization Act (NDAA) gives Department of Defense the authorities necessary to commit funds to programs and support of international partners. The NDAA for fiscal year 2005 gives two authorities relevant to this concept. The first is Section 1208: Support of Military Operations to Combat Terrorism. This section, which has been renewed as needed since 2005, provides support to individuals and groups supporting SOF efforts against terrorism.⁵³ This funding may be applicable under certain circumstances, although it requires approval of the Secretary of Defense. A limitation is that the intent for this funding is not for foreign internal defense missions and other long-term relationships, so it would be beneficial only in limited circumstances, which is counter to the desire for building and maintaining long-term relationships. The second section relevant to the concept is Section 1211: Defense International Counter Proliferation Programs. This section updates Section 1504(e)(3)(A) of the NDAA for fiscal year 1995, which allows the dedication of funds for specific counter proliferation activities and education for military personnel pertaining to counter

⁵⁰ U.S. Army, *Special Forces Operations*, 2-16.

⁵¹ *Ibid.*, 2-9.

⁵² *Ibid.*

⁵³ National Defense Authorization Act for Fiscal Year 2005 (2004), <http://thomas.loc.gov/cgi-bin/query/F?c108:7:./temp/~c108k8sMTg:e898332>.

proliferation.⁵⁴ This section authorizes funds for use in building partner-nation capability for countering proliferation of WMDs and may be useful as a method of obtaining funds for this concept. As mentioned previously, the solution may not require additional authorities granted to Army SF, but rather a coordinated patchwork of existing authorities.

F. BACKGROUND

Although *Joint Publication 3-40* identifies key mission areas that cover the spectrum of counter WMD efforts, in practice, our efforts are much narrower and disjointed.⁵⁵ Within SOF specifically, much of the traditional focus of counterproliferation of WMD is on the unilateral end-stage interdiction of weapons enroute to targets by select SOF elements, not by all forces. Although counterproliferation is a principal task of U.S. Army Special Forces, we fail to fully utilize our global special operations forces network to accomplish this mission through partner capacity building and instead focus primarily on unilateral interdiction efforts.⁵⁶ The majority of Operational Detachment-Alphas (ODA) receives little to no training on WMD. The *U.S. Army Field Manual 3-05.20* notes that only ODAs “designated in national and theater contingency plans to participate in CP may be specially task-organized, trained, and equipped” for this mission.⁵⁷ Although the specially designated units are fully capable of executing the mission, the limited availability of these forces implies limited capacity and a lower likelihood that they will be in position to execute a counterproliferation mission. *JP 3-40* provides examples of building partner capacity in order to support the WMD interdiction missions.⁵⁸

⁵⁴ National Defense Authorization Act for Fiscal Year 1995 (1994), <http://thomas.loc.gov/cgi-bin/bdquery/z?d103:SN02182::TOM:/bss/d103query.html>.

⁵⁵ Joint Chiefs of Staff, *Combating Weapons of Mass Destruction*, I-4.

⁵⁶ U.S. Army, *Special Forces Operations*, 2-4, 2-16.

⁵⁷ U.S. Army, *Special Forces Operations* (FM 3-05.20) (Washington, DC: Government Printing Office, 2001), 2-18.

⁵⁸ Joint Chiefs of Staff, *Combating Weapons of Mass Destruction*, IV-17–18.

Additionally, the end-stage interdiction of weapons is merely one portion of the CP mission, albeit the one with most tangible results. The global SOF network and our vast network of military and government allies are vital to the achievement of the detection of WMD programs, acquisition, and development. This suggests a shift to the Phase Zero component of contingency planning, which represents “setting the theater” and promoting the conditions for our international partners to augment our ongoing efforts.⁵⁹ With this in mind, how do we leverage this existing network for optimal mission accomplishment? Is this a complementary solution to the existing efforts or merely a duplication of these efforts?

As globalization makes international borders less relevant and illicit networks seek to exploit these security gaps, Army SF finds itself in a unique situation to assist in this effort. The problem is, however, that very few Army SF soldiers have experience with WMD, as noted above. This problem is therefore twofold. First, due to the finite amount of these specially designated ODAs, the likelihood that they will be in a position to either interdict a weapon or work with international partners to do so is correspondingly low. We must rely on the capabilities of our allies for this reason. Second, although they may be in a favorable location, if a non-CP designated ODA receives a mission related to WMD, the members have little experience specific to this mission and will be unable to operate at maximum capability. This leads us to a search for methods to not only increase Army SF capabilities, but also to leverage the global network of allies we have cultivated through many years of continued relationships.

Addressing the problem of proliferation is a long-term process with limited short-term tangible results. This thesis will discuss methods by which U.S. Army Special Forces can utilize existing authorities and partner with appropriate subject matter experts to counter the threat through an indirect approach. Through augmenting existing counterproliferation programs and activities, my hypothesis is that we can increase the level of proficiency of our international partners and expand their existing intelligence networks to detect and defeat both state actors as well as non-state actors with traditional

⁵⁹ Office of the Deputy Assistant Secretary of Defense for Plans, *Theater Campaign Planning: Planners' Handbook*, Version 1.0 ed. (Washington DC: Government Printing Office, 2012), 3.

weapons or improvised “dirty” bombs. Concurrently, we will accomplish both SOF and other U.S. government objectives and build long-lasting relationships with our global SOF network.

In addition to increasing the competency level in our partners, several other benefits arise through this proposal. Rather than only designated CP ODAs receiving any training on counter proliferation operations, these operations will allow the majority of ODAs (non-CP designees) to achieve a moderate level of competence in these skills through their interactions with the WMD subject matter experts during JCETs and JCS exercises. The result is a more versatile force capable of conducting a higher level of assistance to our partner nations.

G. METHODOLOGY

Due to the indirect method of conducting this mission and limited previous counterproliferation iterations, a methodology for effectively assessing the past success of this proposal is not readily available. Although past interagency efforts have achieved success, the integration of Army SF has not been applied in a coherent, long-term plan. Rather, a comparable program such as the cooperative counter narco-terrorism efforts with the U.S. Drug Enforcement Administration (DEA) serves as a starting point for testing the hypothesis. This comparison, in conjunction with a brief analysis of other potential U.S. government partners and applications, will serve as a test of the hypothesis.

Despite limited tangible results to prove the efficacy of this effort, the counter narcoterrorism (CNT) program improved host-nation capabilities as well as reducing the illicit drug trade that impacts national and international security. In testimony before the U.S. House of Representatives Domestic Policy Subcommittee of the Oversight and Government Reform Committee, Brookings Institution Fellow Vanda Felbab-Brown discussed the effects of supply-side policies on drug trafficking organizations and

attributes success to these programs.⁶⁰ The increased security in the region reduces conflict and limits the power and influence of illicit networks.

In addition to the non-SOF CP efforts, I will conduct an analysis of existing Army SF programs and missions as well as potential partners for future activities. Past JCETs and JCS exercises serve as historical references for the successful long-term partnerships Army SF has maintained with foreign military and governments throughout the world. Specially trained and regionally aligned, Army SF's continued relationships with these partners have led to increased stability and cultivated strategic alliances in the process.

In order to recommend potential partners for this program, the thesis will briefly analyze select military and interagency partners conducting counterproliferation activities to gauge suitability. The criteria for judging these partners include authorities and capabilities, regional alignment, and mission requirements. While not including an exhaustive list of potential partners and respective strengths, this will display the potential benefits that Army SF's augmentation of these programs provides and serves as a starting point for future analysis. Recognizing that the region of the world selected for the mission could also affect partnerships, this will determine the suitability of Army SF's integration. Additionally, the willingness and capability of our selected partner nations to participate in activities will vary greatly, dictating differing programs and types of activities.

H. LIMITS OF RESEARCH AND ASSUMPTIONS

Prior to this thesis research and throughout the process, I intentionally limited the scope of my research and made certain assumptions in order to focus my efforts. First, although the topic is combating WMD, I narrowed my topic to focus on the proliferation of nuclear weapons specifically. This is not related to any perceived notion of the threat levels associated with chemical, biological, radiological, or nuclear weapons, but rather it serves as a test subject for my research. An assumption of this thesis is that, although I

⁶⁰ *Testimony on the International Counternarcotics Policies: Do they Reduce Domestic Consumption or Advance Other Foreign Policy Goals?*, 111th Cong. 133–148 (2010) (statement of Vanda Felbab-Brown).

focus on nuclear weapons, the methods and activities suggested within could be tailored to the other types of WMD depending on the threat and the desires of the partner nations.

A second assumption that I made was that, as DOD's unconventional warfare and foreign internal defense specialists, Army SF is the appropriate military force to work through, by, and with our partner forces. This is not to say that U.S. Navy SEALs or Marine Special Operations Forces or even our Allied SOF could not accomplish the mission. On the contrary, partner nation situations may dictate that Army SF is not the appropriate force and that our fellow SOF could provide better training. It is also not limited to the typical 12-man Operational Detachment-Alpha through which Army SF typically operates. In order to maximize the potential for broad engagement, this concept is not limited to small teams. Again, this limitation to Army SF throughout the thesis was only done for simplicity's sake.

Third, my recommendation to focus on Phase Zero preventative measures says nothing of a lack of confidence in our specialized elements responsible for interdiction and consequence management activities. Instead, combating WMD is a multi-layered mission set, as recognized by *JP 3-40*.⁶¹ This method merely complements other efforts and provides a minimal amount of redundancy, which is a moderate overlap rather than unnecessary duplication of efforts.

A final assumption I made during my research was to assume that the United States had already selected partner nations with a shared understanding of the proliferation threat. Although the partner nations need not share the same level of threat perception, they simply need to recognize the value that the United States places on the threat and be willing to assist in the achievement of the ends. Comprehensive studies already assess the viability of partner nations and include metrics for determining partner nation willingness to participate.⁶² For the purposes of this thesis, we will assume that we have moved beyond this initial phase of partner selection and are now looking for appropriate ways and means.

⁶¹ Joint Chiefs of Staff, *Combating Weapons of Mass Destruction*, IV-17–18.

⁶² Moroney and Hogler, *Building Partner Capacity to Combat Weapons of Mass Destruction*, 39.

I. THESIS OUTLINE

Chapter II of this thesis will discuss the problem of nuclear proliferation, giving a brief history of nuclear weapons as appropriate to this discussion as well as a condensed overview of historical programs and regulations aimed at preventing the proliferation of WMDs. Chapter III will first review the role of Army SF and discuss the unique attributes and capabilities of Army SF that makes it a potential force to augment existing programs. It will then examine existing programs and authorities frequently utilized by Army SF and discuss augmentation of these activities by WMD subject matter experts. Chapter IV will take an alternative approach and provide an analysis of a select group of existing programs outside of USSOCOM that could serve as potential partners for Army SF, leveraging the capabilities of Army SF and its global SOF network. Chapters III and IV provide distinct, although potentially complementary, approaches to this problem. Finally, Chapter V provides a conclusion of the thesis.

II. THE PROBLEM OF NUCLEAR PROLIFERATION

A. INTRODUCTION

The fear of widespread use or possession of nuclear weapons is not a new phenomenon. In fact, President Harry Truman began suggesting control measures for the technology merely two months after the detonations in Hiroshima and Nagasaki.⁶³ Eight years later, President Dwight Eisenhower announced the Atoms for Peace program, intended to limit the use of nuclear technology for the good of mankind, rather than solely for its use as a weapon.⁶⁴ Sixty years later, despite additional legal restrictions, international efforts, and programs designed to curb proliferation of the technology and equipment, the threat of nuclear proliferation remains a problem. This is not to say we have made no progress but simply that the demand for nuclear weapons persists. This chapter will relate the problem of nuclear proliferation to our ongoing efforts and attempt to show areas for implementation of new strategies. To do so, it will begin with a brief history of nuclear weapons as it pertains to this thesis. While this is not intended to be a comprehensive history, it will examine the shift from large state-sponsored acquisition programs to that of rogue state actors and terrorist groups. Following this, we will look at the differences between the acquisition of WMDs by state and non-state actors. This chapter will conclude with a look at historical international efforts to stop the proliferation, with a limited amount of critique and praise for each program.

B. A BRIEF HISTORY OF NUCLEAR WEAPONS

The early efforts of Robert Oppenheimer's Manhattan Project paved the way for the creation of a weapon capable of unleashing the tremendous power of the atom. With the first atomic bomb's production in the spring of 1945, followed by its detonation a few months later in New Mexico, the United States was prepared to employ the new device.⁶⁵

⁶³ Joseph Cirincione, *Bomb Scare: The History and Future of Nuclear Weapons* (New York: Columbia University Press, 2007), 14.

⁶⁴ *Ibid.*, 23.

⁶⁵ Sarah J. Diehl and James Clay Moltz, *Nuclear Weapons and Nonproliferation: A Reference Handbook*, 2nd ed. (Santa Barbara, CA: ABC-CLIO, 2008), 5.

At the same time, the United States was deeply involved in World War II, engaged in combat in two theaters and searching for a way to end the conflict. Recognizing the implications of a nuclear weapon on military strategy and the role of deterrence in the future, Yale University political scientist Bernard Brodie remarked, “Everything that I have written is obsolete.”⁶⁶ Thus, began a long-standing debate about the value and necessity of nuclear weapons.

As the United States’ chief competitor at the time, the Soviet Union worked feverishly and tested its first nuclear weapon on August 29, 1949, ensuring that the coming years of the Cold War would be fraught with fears of nuclear war. The potential of either country to retaliate in overwhelming fashion deterred both countries from launching a first strike during the Cold War. Although we could measure to some extent the Soviet capabilities at the time, their *intentions* were much more difficult to gauge.⁶⁷ Thus, it became less a matter of balancing the symmetry of total number of weapons and more a mental challenge of determining whether the opposition was willing to risk total destruction by launching an attack. Herman Kahn’s strategy for deterrence in the nuclear age called for us to “emphasize the impact of our capabilities on the enemy’s mind rather than on his body.”⁶⁸ Soviet propaganda in the late 1950s sought to plant seeds of fear in the minds of the United States and its allies with regards to the Soviet willingness to retaliate.⁶⁹ During the period where only the United States and the U.S.S.R. possessed nuclear weapons, this fear of nuclear war produced a surprisingly stable security environment, albeit a tense one. While some argue that neither the American nor the Soviet planners adhered to a mutually assured destruction (MAD) philosophy, the

⁶⁶ Fred M. Kaplan, *The Wizards of Armageddon* (Stanford, CA: Stanford University Press, 1991), 10.

⁶⁷ John Lewis Gaddis, *Strategies of Containment: A Critical Appraisal of Postwar American National Security Policy* (New York: Oxford University Press, 1982), 84.

⁶⁸ Herman Kahn, *On Thermonuclear War* (Princeton, NJ: Princeton University Press, 1960), 126.

⁶⁹ Henry A. Kissinger, *Nuclear Weapons and Foreign Policy* (New York: Harper & Brothers, 1957), 391–392.

uncertainty regarding the opposition's true intentions likely contributed to a reluctance to resort to the use of nuclear weapons and direct attacks.⁷⁰

While many within the defense establishment saw the utility of nuclear weapons in future warfare, some that were heavily involved in the initial development began to have second thoughts about them. Both the Baruch plan and the Acheson-Lilienthal report of the mid-1940s recommended the proposed International Atomic Energy Authority maintain control of all dangerous nuclear activities, owing to their assessments that the widespread possession of nuclear weapons would increase not only the intensity, but also the probability of outbreak of war.⁷¹ Keenly aware of the potential for misuse of nuclear weapons, Robert Oppenheimer led efforts to “put the nuclear genie back into the bottle” and developed restrictions on future development of capabilities, eventually leading to Eisenhower's Atoms for Peace program.⁷² This program expanded in 1957 to include safeguards inspections conducted by what then became the International Atomic Energy Agency (IAEA), charged with promoting peaceful use of nuclear energy.⁷³ By this time, however, the power and prestige associated with possessing a nuclear weapon outweighed the simply peaceful applications, enticing other countries to develop their own weapons. By the introduction of the Nuclear Non-Proliferation Treaty (NPT) in 1968, five countries were recognized as nuclear weapon states, while many additional countries have developed capabilities after the institution of the NPT.⁷⁴

⁷⁰ Charles H. Fairbanks, Jr., “MAD and U.S. Strategy,” in *Getting MAD: A Nuclear Mutual Assured Destruction, its Origins and Practice*, ed. Henry D. Sokolski (Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, 2004), 137; Diehl and Moltz, *Nuclear Weapons and Nonproliferation*, 10.

⁷¹ Henry D. Sokolski, *Best of Intentions: America's Campaign against Strategic Weapons Proliferation* (Westport, CT: Praeger, 2001), 14–15.

⁷² Diehl and Moltz, *Nuclear Weapons and Nonproliferation*, 10.

⁷³ International Atomic Energy Agency, “About the IAEA,” accessed January 25, 2014, <http://www.iaea.org/About/about-iaea.html>.

⁷⁴ Russia, the United States, China, France, and the United Kingdom are the five recognized nuclear weapon states. India, Pakistan, and Israel are suspected of having nuclear weapons, while North Korea has aggressively sought a nuclear capability. Additionally, South Africa and several South American, Middle Eastern, and former Soviet Union states have given up their nuclear arsenals. Cirincione, Wolfsthal, and Rajkumar, *Deadly Arsenals*, 5, 8.

Two of the countries that did not sign the NPT, yet developed weapons subsequent to 1968, did so as the result of an arms race situation. Following its crushing defeat by India in 1971, Pakistan began efforts to develop a nuclear weapon, which only accelerated following India's nuclear test in 1974.⁷⁵ Chief among those involved in the development for Pakistan was Dr. Abdul Qadeer Khan, a metallurgist working in the Netherlands who offered his services on behalf of his beloved country as the head of Khan Research Laboratories.⁷⁶ Khan's rise to power among the Pakistani elite played an important role in the worldwide proliferation of nuclear technology. Leveraging his contacts across the globe, he developed a supply network capable of circumventing export controls and buying individual components that were more difficult to trace than entire systems.⁷⁷ If A. Q. Khan had stopped after Pakistan procured enough technology to develop its own weapon, we might face a different world than we do today. Instead, he used his network to proliferate nuclear weapons technology and knowledge to any country willing to pay. A. Q. Khan is credited with providing this technology to Iran, North Korea, and Libya, advancing the nuclear programs of each country substantially.⁷⁸ As reported by several sources, retired Pakistani scientists also met with Al Qaeda leaders in Afghanistan in 2001, showing that these proliferators were willing to provide assistance to both state and non-state actors alike.⁷⁹ Although the Pakistani government placed Khan under house arrest in February 2004, his past proliferation activities cannot be undone. As a result of networks like Khan's, the United Nations Security Council passed Resolution 1540 (UNSCR 1540) in 2004, which specifically prohibits states from providing any support to non-state actors in their quest to procure WMDs, as well as

⁷⁵ Corera, *Shopping for Bombs*, 8.

⁷⁶ Christopher Clary, "A. Q. Khan, Proliferation Networks, and the Nuclear Slippery Slope," in *Proliferation of Weapons of Mass Destruction in the Middle East: Directions and Policy Options in the New Century*, ed. James A. Russell (New York: Palgrave Macmillan, 2006), 94.

⁷⁷ Feroz Hassan Khan, *Eating Grass: The Making of the Pakistani Bomb* (Stanford, CA: Stanford University Press, 2012), 164.

⁷⁸ Diehl and Moltz, *Nuclear Weapons and Nonproliferation*, 29.

⁷⁹ Khan, *Eating Grass*, 361; Tenet and Harlow, *At the Center of the Storm*, 261.

directing them to adopt and enforce appropriate counterproliferation laws.⁸⁰ Due to the inclusion of all types of WMD in this resolution, it supports not only the Nuclear Non-Proliferation Treaty (NPT), but also the Chemical Weapons Convention and the Biological and Toxin Weapons Convention.

The history of nuclear weapons shows that what was once the domain of the world's superpowers in a bilateral standoff has now become a widespread problem. As the number of nuclear capable countries increases, the potential for a nuclear disaster increases as well. Whether it is an accidental deployment or a terrorist group's acquisition of a weapon, the results are the same. In an increasingly connected world, the ease of data transfer only serves to compound the issue. As Gordon Corera points out in *Shopping for Bombs*, A. Q. Khan's distribution of knowledge about nuclear weapons design is possibly more worrisome than the physical components he provided.⁸¹ Thanks to the same technology our legitimate business world relies upon to connect us, the illegitimate actors of the world can connect with the same ease. Many of our existing counterproliferation efforts are designed to counter the threats posed by networks like that of A. Q. Khan.

C. TYPES OF THREATS

Actors wishing to acquire nuclear weapons typically fall under two broad categories: state and non-state actors. Although similarities exist between them, we must consider differing motivations, likely uses of WMD, and methods of deterrence when crafting our national combating WMD (CWMD) strategies. Common between the groups is the weapon itself. While the size of the weapon (intercontinental ballistic missile versus tactical suitcase nuclear device, for example) that each group desires differs, the facilities and knowledge required for each is similar. Our efforts aimed at countering their development and use of the weapons will have some overlap as well as some significant distinctions.

⁸⁰ United Nations Office for Disarmament Affairs, "United Nations Security Council Resolution 1540," accessed January 25, 2014, <http://www.un.org/disarmament/WMD/1540/>.

⁸¹ Corera, *Shopping for Bombs*, 242.

From the perspective of the state actor, one must consider the barriers to producing a nuclear weapon today. Aside from the necessary technology and scientific knowledge required, legal restrictions such as UNSCR 1540 and a vast network of national and international export laws severely limit the ability of states to import the necessary components.⁸² This does not necessarily imply that it is impossible, as A. Q. Khan proved, but nevertheless it takes a dedicated network of suppliers with extensive knowledge of the gaps in export controls and identified suppliers of the various components. We must also understand the motivation behind a state's development program. Pakistan's nuclear weapons program, for example, was given further motivation and attention following the country's crushing defeat by India in 1971, combined with India's subsequent successful nuclear test in 1974 leading to a perception of asymmetry from the Pakistani view.⁸³ An arms race between two states is not the only motivation, however. Rather, it could be a feeling of political isolation, as David Albright argues was the case for South Africa's now defunct program.⁸⁴ As such, the likelihood of a state actor obtaining a weapon is dependent upon the state's capabilities as well as their intent, which can be difficult to properly estimate.

Non-state actors, in general, have a much different motivation as well as procurement strategy. Traditionally lacking a safe haven in which to produce their own weapons, they will be more likely to acquire a weapon or components that have already been produced. Without overlooking the possibility of a group building a gun-type weapon with stolen nuclear materials, this typically points to two options for acquiring a pre-built weapon: stealing an existing weapon or receiving a weapon from a sympathetic nuclear-capable state. While not necessarily impossible, the likelihood of either of these

⁸² Both the Nuclear Suppliers Group and the Zangger Committee work to ensure the transfer of nuclear technology will be used solely for peaceful purposes in support of UNSCR 1540. Nuclear Suppliers Group, "Nuclear Suppliers Group (NSG) History," accessed April 1, 2014, http://www.nuclearsuppliersgroup.org/A_test/01-eng/index.php; Zangger Committee, "Zangger Committee Mission," accessed April 1, 2014, <http://www.zanggercommittee.org/Mission/Seiten/default.aspx>.

⁸³ Devin T. Hagerty, "The Power of Suggestion: Opaque Proliferation, Existential Deterrence, and the South Asian Nuclear Arms Competition," in *The Proliferation Puzzle: Why Nuclear Weapons Spread and What Results*, eds. Zachary S. Davis and Benjamin Frankel (Portland, OR: Frank Cass, 1993), 260, 262.

⁸⁴ David Albright, "South Africa's Secret Nuclear Weapons," Institute for Science and International Studies, May 1, 1994, <http://isis-online.org/isis-reports/detail/south-africas-secret-nuclear-weapons/13>.

latter scenarios is quite low due to a myriad of factors.⁸⁵ Regarding the motivation for acquiring a weapon, a non-state actor's reasons could be as varied as the groups themselves. Aum Shinrikyo desired a nuclear weapon in order to "trigger the apocalypse,"⁸⁶ while Al Qaeda desired one out of religious duty to protect fellow Muslims.⁸⁷ In these cases, traditional deterrence theories prove much more difficult to enact and our efforts may be better spent on the supply side by preventing the proliferation versus the demand side. This not only refers to security of nuclear materials, but it also includes the intelligence network required to detect and defeat proliferators. If a non-state actor seeks to assemble a traditional nuclear weapon or even construct a nuclear "dirty bomb", we must be able to rely upon the integration of intelligence and interdiction capabilities worldwide in order to prevent catastrophe.

While we cannot assume that a common strategy will prevent both state and non-state actors from constructing or employing a nuclear weapon, the overlaps between the two suggest that both would benefit from an overarching CWMD strategy. While state actors may be more effectively deterred through the traditional DIMEFIL (diplomatic, information, military, economic, finance, intelligence, and law enforcement) model of elements of national power, we can still employ elements of it to prevent proliferation by non-state actors.⁸⁸ The variety of threats against our national interests suggests that we should rely upon an interwoven, layered approach rather than relying upon interdiction or deterrence alone, regardless of the type of threat.

⁸⁵ Edward E. Hoffer, "Weapons of Mass Destruction and Terrorism," in *Fighting Back: What Governments Can Do about Terrorism*, ed. Paul Shemella (Stanford, CA: Stanford University Press, 2011), 110; RAND Corporation, "Combating Nuclear Terrorism: Lessons from Aum Shinrikyo, Al Qaeda, and the Kinshasa Reactor," accessed February 3, 2014, http://www.rand.org/pubs/research_briefs/RB165/index1.html.

⁸⁶ Sara A. Daly, John Parachini, and William Rosenau, *Aum Shinrikyo, Al Qaeda, and the Kinshasa Reactor: Implications of Three Case Studies for Combating Nuclear Terrorism* (Santa Monica, CA: RAND, 2005), 5.

⁸⁷ *Ibid.*, 25.

⁸⁸ Zachary S. Davis, "Bombs Away," *The American Interest* IV, no. 3 (2009), <http://www.the-american-interest.com/articles/2009/01/01/bombs-away/>.

D. PAST INTERNATIONAL EFFORTS

In the years since the development of the nuclear weapon, efforts to curb its proliferation have evolved. Initially focused on developing treaties, such as the NPT and adherence to IAEA standards, the programs have become more active in countering the smuggling and development of technology. This could be a result of laws such as UNSCR 1540, or it could be due to the realization that globalization has interconnected countries across the world and that collective security is an increasingly important component of our overall approach.

While the NPT did not succeed in completely preventing the proliferation of WMDs, it serves as the basis for many of our existing programs. At its core, the NPT called for nuclear states to not proliferate WMD technology to non-nuclear states and prevented non-nuclear states from developing the capability.⁸⁹ In return, the signatory countries would have access to peaceful atomic energy technology.⁹⁰ However, what it lacked was a preventative measure for signatories to withdraw from the NPT upon receipt of the peaceful technology as well as an obligation for any state to become a signatory in the first place. Exploiting this lack of enforceability in 1974, non-NPT member India conducted an underground explosion of a 12-kiloton plutonium bomb, arguing that it was not compelled to adhere to NPT standards.⁹¹ North Korea, on the other hand, signed the NPT in 1985 yet chose to withdraw 15 years later, amid continued denials of entry for international inspectors.⁹²

The nuclear weapon states were also not immune to criticism of their apparent lack of adherence to NPT agreements. In 1990, 22 years after the initial signatures to the NPT, many raised the longstanding concern that the nuclear weapon states had not

⁸⁹ U.S. Department of State Office of the Historian, “The Nuclear Non-Proliferation Treaty (NPT), 1968,” accessed January 25, 2014, <http://history.state.gov/milestones/1961-1968/npt>.

⁹⁰ Ibid.

⁹¹ Diehl and Moltz, *Nuclear Weapons and Nonproliferation*, 123.

⁹² United States Department of State, “2012 Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments,” accessed January 29, 2014, <http://www.state.gov/t/avc/rls/rpt/197085.htm#nkorea2>.

sufficiently decreased their nuclear arsenals, in accordance with the NPT.⁹³ This led to the Strategic Arms Reduction Treaty (START) between the United States and the Soviet Union in 1991, in which they agreed to more stringent disarmament timelines and quantities.⁹⁴

While much of the initial emphasis on nuclear weapons controls focused on state actors, the past 12 years have shown expanded focus on terrorist and non-state actors. Although it has received less attention due to the unlikely possibility of use for a terrorist attack, the potential exists. Testimony from former bin Laden associate Jamal Ahmad al-Fadl and other analysis points out a trend of attempts by terrorist organizations to acquire WMDs.⁹⁵ Since they have shown the intent, we must limit the ability of these organizations to acquire devices.

As mentioned previously, the threat of non-state actors acquiring nuclear devices led the United Nations Security Council to adopt UNSCR 1540 in 2004. This resolution obligates states to enact legislature and regulations to prevent the proliferation of weapons of mass destruction.⁹⁶ While it also limits the ability of state actors from importing and exporting nuclear technology, its primary aim was to focus attention on the non-state actor and terrorist networks following the revelation of the A. Q. Khan proliferation network.⁹⁷ Although export controls existed prior to this resolution, the added emphasis and backing of the United Nations provided additional strength to the controls. In his book *Eating Grass: The Making of the Pakistani Bomb*, Brigadier (retired) Feroz Hassan Khan notes that Pakistan was especially adept at circumventing

⁹³ Diehl and Moltz, *Nuclear Weapons and Nonproliferation*, 135.

⁹⁴ *Ibid.*, 136.

⁹⁵ Kimberly McCloud and Matthew Osborne, *WMD Terrorism and Usama Bin Laden* (Monterey, CA: James Martin Center for Nonproliferation Studies, 2001); Sammy Salama and Lydia Hansell, "Does Intent Equal Capability?: Al-Qaeda and Weapons of Mass Destruction," *Nonproliferation Review* 12, no. 3 (November 2005), 618, <http://cns.miis.edu/npr/pdfs/123salama.pdf>; Rolf Mowatt-Larssen, "Al Qaeda Weapons of Mass Destruction Threat: Hype or Reality?" (paper, Belfer Center for Science and International Affairs, Cambridge, MA, 2010), 5, <http://belfercenter.ksg.harvard.edu/files/al-qaeda-wmd-threat.pdf>.

⁹⁶ United Nations 1540 Committee, "United Nations Security Council Resolution 1540 (2004)," accessed January 30, 2014, <http://www.un.org/en/sc/1540/>.

⁹⁷ Diehl and Moltz, *Nuclear Weapons and Nonproliferation*, 29–30.

existing export controls, adopting tactics such as buying smaller components versus entire units and masking the intended destination and purpose of the components.⁹⁸

As the United States and its allies recognized that unilateral efforts have limited value in the global fight against nuclear proliferation, they created several programs aimed at multinational participation in recent years. Two of these programs are the Proliferation Security Initiative (PSI) and the Cooperative Threat Reduction (CTR) Program. While the CTR focuses on the supply side of the equation, limiting the available means for production, the PSI is a cooperative interdiction program.

The Proliferation Security Initiative seeks to eliminate the transfer of WMD, delivery systems, and related parts through the cooperative efforts of participating states. Now claiming more than 100 member nations, this program began in 2003 and uses a simple document known as the “Statement of Interdiction Principles” to describe how the program utilizes existing legal authorities to target “states and non-state actors of proliferation concern.”⁹⁹ Traditionally, the PSI has focused solely on maritime targets, likely due to the ease of incorporating existing international maritime laws and avoiding sovereign territory disputes. Smugglers are smart, however, and as Andrew C. Winner points out, the focus on interdiction at sea will simply result in the increased use of aircraft as well as overland trafficking across borders to avoid the authorities.¹⁰⁰ While the expansion of PSI to incorporate ground and air interdiction seems to be a potential for future efforts, this may require a review of the existing “Statement of Interdiction Principles.”

Complementary to the PSI is the Cooperative Threat Reduction Program (CTR), which seeks to reduce the threat posed by the proliferation of WMD materials from the former Soviet Union.¹⁰¹ This program incorporates strategies to defeat the proliferation

⁹⁸ Khan, *Eating Grass*, 172–173.

⁹⁹ U.S. Department of State, “Proliferation Security Initiative,” accessed January 30, 2014, <http://www.state.gov/t/isn/c10390.htm>.

¹⁰⁰ Andrew C. Winner, “The Proliferation Security Initiative: The New Face of Interdiction,” *The Washington Quarterly* 28, no. 2 (Spring 2005), 140.

¹⁰¹ Defense Threat Reduction Agency, “Cooperative Threat Reduction Program,” accessed January 30, 2014, <http://www.dtra.mil/Missions/Nunn-Lugar/GlobalCooperationInitiative.aspx>.

of not only nuclear, but also chemical and biological materials and expertise. According to the Defense Threat Reduction Agency (DTRA), the CTR program has “deactivated more than 7,500 nuclear warheads,” making them unusable by potential proliferators.¹⁰² Reducing the supply of existing nuclear weapons infers that interested states and non-state actors will be limited to producing their own weapons. As Joseph A. Benkert, Principal Deputy Assistant Secretary of Defense for Global Security Affairs, reported to the U.S. Senate’s Subcommittee on Emerging Threats and Capabilities, the CTR has been “increasing foreign institutional capacity to address WMD threats,” rather than relying solely upon U.S. efforts.¹⁰³ Additionally, the CTR has evolved through the years and now includes programs outside the former Soviet Union. The CTR was instrumental in reducing the risk of chemical weapons in both Syria and Libya recently.¹⁰⁴ Chapter IV discusses this evolution of the CTR in more detail.

E. CONCLUSION

Through the years, the world has shifted from many supporting the procurement of nuclear weapons to not only questioning their value, but also suggesting we should eliminate them altogether. Few military weapons throughout history have evoked such a public outcry as nuclear weapons have. Unfortunately, although the general consensus may be that we should rid the world of nuclear weapons, followers of the realist theory would argue that nations or groups should still attempt to maintain this awesome power, serving as a deterrent to provocation by others. While our national strategy has acknowledged this fact, our CWMD efforts have been limited in scope. Our existing CWMD programs and missions have focused on a narrow set of capabilities, without

¹⁰² Ibid.

¹⁰³ *Statement for the Record to the Subcommittee on Emerging Threats and Capabilities, U.S. Senate: Cooperative Threat Reduction Program and the Proliferation Security Initiative*, 110th Cong. (2008) (statement of Joseph A. Benkert, Principal Deputy Assistant Secretary of Defense for Global Security Affairs), <http://www.gpo.gov/fdsys/pkg/CHRG-110shrg42633/html/CHRG-110shrg42633.htm>.

¹⁰⁴ *Statement for the Record to the Subcommittee on Intelligence, Emerging Threats and Capabilities, U.S. House of Representatives: The FY15 Budget Request for the Defense Threat Reduction Agency and the Chemical Biological Defense Program: Combating Weapons of Mass Destruction in a Changing Global Environment*, 113th Cong. 4 (2014) (statement of Rebecca K. C. Hersman, Deputy Assistant Secretary of Defense for Countering Weapons of Mass Destruction), <http://docs.house.gov/meetings/AS/AS26/20140408/102001/HHRG-113-AS26-Wstate-HersmanR-20140408.pdf>.

leveraging all of our available assets. Programs such as PSI and CTR, while effective, fail to leverage foreign military and law enforcement ground forces to a sufficient degree, and rely instead upon maritime interdiction assets and nuclear subject matter experts, therefore attacking only one aspect of the problem. In the future, we must recognize these limitations and adjust our programs accordingly in order to deter both state and non-state actors alike.

III. ARMY SF'S ROLE AND EXISTING PROGRAMS

A. INTRODUCTION

Recognizing that we face a unique threat in the form of nuclear weapons proliferation, the task now becomes selecting the forces best suited for countering the threat. While the United States could simply rely upon vast amounts of money and technology and choose to focus on unilateral interdiction operations, this option faces drawbacks. Not only does it assume that the United States will have the access and placement it requires to develop intelligence and detect proliferation attempts, but it also unintentionally reduces the margin of error. If we wait until a nuclear weapon is assembled and en route to its intended target, we face the possibility of catastrophe if we somehow miss an opportunity to intervene. The earlier in the weapon acquisition process we can take action, the less chance of error. The problem with this situation, however, is now we are searching for thousands of components for a nuclear device, many of which are dual-use items capable of peaceful applications as well. Considering the sourcing of these materials is worldwide, we must correspondingly increase our global footprint beyond the capacity of our designated counterproliferation forces. The ideal strategy is therefore to work through, by, and with partner nation forces to prevent this proliferation.

This chapter argues that the United States Army Special Forces should expand its role in this Phase Zero approach to countering proliferation, through partnership with not only partner nation elements, but other U.S. government agencies and programs as well. In doing so, the chapter will first discuss the unique capabilities that set Army SF apart from other Department of Defense elements, both in terms of skills and authorities as well as integration within the respective geographic combat commander's (GCC) theater campaign plans. This is not meant to appear as a sales pitch for Army SF, but rather a potential application of military forces that complements our instruments of national power. Next, it will analyze the two main programs through which Army SF conduct engagements with partner nation forces. The analysis of positive and negative aspects of these will show that a combination of programs is needed to meet our counterproliferation goals.

B. ARMY SPECIAL FORCES AS THE IDEAL CP FORCE

Within the U.S. Special Operations Forces (SOF), the Army Special Forces are unique in their ability to work through, by, and with foreign forces. Trained in foreign languages, cultural awareness, and experts in small unit tactics, they are ideally suited to partner with host nation forces to conduct foreign internal defense (FID) missions. Keenly aware of the power of partner forces as force multipliers, building partner capacity through persistent engagements is a primary goal of Army SF. *Army Field Manual 3-18: Special Forces Operations* notes that these engagements produce not only influence in the partner nations, but also help to prevent and deter unwanted enemy activities.¹⁰⁵ As a result, these activities attempt to dissuade adversaries from acting in the first place, but should they attempt to proliferate WMDs, our contacts in the country will be capable of intervening. Even if the partner nation is unwilling to conduct the interdiction themselves, our relationship may compel them to ask for assistance from the United States or its allies.

Although Army SF's persistent engagements have always contributed to increased security through building partner capacity for securing borders and other areas, the counterproliferation mission had not been elevated in status until the past 10 years. As recently as 2002, counterproliferation was not even listed as a mission of Army SF.¹⁰⁶ With the recognition that the threat of WMDs has increased, so too has our focus on the mission increased. Currently, counterproliferation is a core activity of Army SOF and a principle task of Army SF.¹⁰⁷ The question is: should we focus specifically on the counterproliferation threat or instead focus on an overall security goal? As an experienced Army Special Operations planner, Lieutenant Colonel Mike Kenny posits that we should focus on the latter, "establishing networks and infrastructure that serve multiple purposes," while specialized capabilities can be incorporated as needed to

¹⁰⁵ U.S. Army, *Special Forces Operations*, 1-7.

¹⁰⁶ Special Forces Association, *Special Forces: The First Fifty Years* (Tampa, FL: Faircount LLC, 2002), 42.

¹⁰⁷ U.S. Army, *Special Forces Operations*, 2-3-2-4.

counter specific threats.¹⁰⁸ While this is a valid approach that will maximize versatility and make good use of our finite troops and resources, for the sake of analysis, the following section will approach the problem from the alternative method, focusing on the threat itself.

C. JOINT COMBINED EXCHANGE TRAINING

The use of Army SF in security assistance missions is directed by the GCC's theater campaign plans. Typically conducted through Joint Combined Exchange Training events, the aim of these events is to train U.S. SOF in order to develop and maintain vital skills. As the predominant form of partner engagement by Army SF, over 50 percent of our efforts to build partner capacity take the form of JCETs.¹⁰⁹ Arguably, host nation forces also reap benefits from these events, but this is not the primary focus. As such, if we are to focus on building partner capacity to counter proliferation activities, JCET may not be the appropriate program. While it does provide DOD funding in accordance with 10 U.S.C. 2011, the restrictions placed upon the training and the lack of persistent engagement limit its value.¹¹⁰ In *Going Big by Getting Small*, Colonel Brian S. Petit explains that JCETs do have an effect on building relationships and improving host nation capabilities, but successful execution requires careful integration into the broader strategy with an eye to choosing the right partners.¹¹¹ They must be coordinated within the theater campaign plans as well as meet the needs of the host nation partner.

The major advantages of JCETs are the flexibility of the program and the overt SOF presence in a partner country. Due to the broad range of skills that Army SF must maintain, the authorities of a JCET allow the unit to tailor the JCET's mission in order to meet those needs. In other words, the intent of a JCET can be easily shaped in order to focus on the desired mission set, such as counterproliferation or border security operations. While this still requires the host nation to agree upon this proposed intent for

¹⁰⁸ Michael Kenny (Lieutenant Colonel), e-mail discussion with author, February 28, 2014.

¹⁰⁹ Petit, *Going Big by Getting Small*, 111.

¹¹⁰ Defense Institute of Security Assistance Management, *The Management of Security Cooperation (Greenbook)*, 31st ed. (Washington, DC: Government Printing Office, February 2012), 1–20.

¹¹¹ Petit, *Going Big by Getting Small*, 111–112.

a JCET, the framework supports it. The host nation may request to focus on a particular sub-set of counterproliferation skills, such as interdiction activities, but this can be coordinated and de-conflicted well in advance of the event. From a deterrence standpoint, the overt presence of special operations personnel in a partner nation provides irrefutable evidence of not only our nation's concern for security in the region, but also our desire to build a stronger relationship with that country.

While JCETs provide many advantages for the counterproliferation mission, they also possess inherent drawbacks. Ideally, a counterproliferation-focused JCET could incorporate subject matter experts from the Department of Energy, the Defense Threat Reduction Agency, or elsewhere in the WMD field in order to draw upon this expertise and build partner capacity. Unfortunately, 10 U.S.C. 2011 states that the funding and authorities only apply to special operations forces assigned to USSOCOM.¹¹² As most of these WMD subject matter experts are not subordinate to USSOCOM, this precludes their participation. In addition to this limitation, the short duration of JCETs limits the ability of SOF to cultivate long-term relationships with its counterparts. Although this appears to be a great limitation on the surface, if our intent is to increase the quantity of relationships across the world versus the quality of those relationships, this limitation is less important. From this viewpoint, multiple short-duration JCETs that expose our forces to greater numbers of partner nation forces actually increases the footprint of our global SOF network. Although these relationships may not be as strong as those resulting from longer contact periods, they at least introduce our forces to the world on a greater scale.

An often overlooked method is the use of Army National Guard Special Forces units for theater cooperation plan events. In response to critiques of the short-duration of JCETs, some suggest that the use of Army National Guard Special Forces elements is an ideal method to acquire longer contact periods through "super-JCETs" lasting up to 60

¹¹² *Title 10, United States Code, Armed Forces* (Washington DC: Government Printing Office, 2010), 1006, <http://www.gpo.gov/fdsys/pkg/USCODE-2010-title10/pdf/USCODE-2010-title10-subtitleA-partIII-chap101-sec2011.pdf>.

days.¹¹³ Additionally, the National Guard's State Sponsorship Program, which affiliates units with a specified partner nation's military, might offer better chances to cultivate long-term relationships.¹¹⁴ While these activities do not eliminate the perceived lack of consistent engagement and short-duration focus, they at least serve to mitigate the effects and can be aligned with the overall strategy.

D. JOINT CHIEFS OF STAFF EXERCISES

Conducted on a larger scale than JCETs, exercises sponsored by the Joint Staff (commonly known as JCS exercises) provide additional opportunities for engagement. Receiving authority from Title 10 U.S.C. 153, they are periodic events "to promote interoperability, evaluate readiness, and promote influence."¹¹⁵ The annual Key Resolve exercise executed by U.S. Forces Korea and Republic of Korea forces and the Flintlock exercise executed by African, Western, and U.S. forces are examples of exercises designed to not only improve interoperability but to provide a display of U.S. commitment to the security of a region.¹¹⁶ Unlike JCETs, the large scale of these operations typically requires them to be much less frequent (often once per year) and also limits the ability of the participating units to determine the scope of the training. As these are more often high-visibility events, the tendency is to incorporate operations that provide tangible results. Because of this, less attention is paid to the relationships and capabilities built, with more focus on the accomplishment of a desired end state, such as the interdiction of a WMD device or capture of a high-value target. However, Army SF often executes a JCET prior to a JCS exercise in order to promote interoperability during

¹¹³ John E. Peters, Brian Shannon, and Matthew E. Boyer, *National Guard Special Forces: Enhancing the Contributions of Reserve Component Army Special Operations Forces* (Santa Monica, CA: RAND, 2012), 38. http://www.rand.org/content/dam/rand/pubs/technical_reports/2012/RAND_TR1199.pdf.

¹¹⁴ National Guard Bureau, "The National Guard State Sponsorship Program," accessed March 4, 2014, <http://www.nationalguard.mil/features/spp/>.

¹¹⁵ Defense Institute of Security Assistance Management, *The Management of Security Cooperation (Greenbook)*, 1–19.

¹¹⁶ United States Forces Korea, "Exercise Key Resolve to Start Feb. 27," accessed March 4, 2014, <http://www.usfk.mil/usfk/press-release/exercise.key.resolve.to.start.feb.27.944?AspxAutoDetectCookieSupport=1>; United States Africa Command, "Exercise Flintlock," accessed March 4, 2014, <http://www.africom.mil/what-we-do/exercises/flintlock>.

the exercise, which only serves to strengthen the relationship and improve capabilities. In summary, JCS exercises can be a valuable tool through which we can build partner capacity, provided it is nested within the overall strategy and complemented by other programs and events.

E. CONCLUSION

Although we have been able to make the authorities work to meet our needs in recent years, the programs and authorities granted to Army SF currently are not optimal for use in a counterproliferation mission. While JCETs are great for ensuring our Army SF maintain necessary skills during peacetime, they are less ideal for building partner capacity due to their focus on U.S. requirements and episodic nature. This suggests that JCETs have been stretched beyond their original intent and we must look to other programs and authorities to meet our building partner capacity (BPC) needs, especially against the counterproliferation threat. With this in mind, however, the benefits of CP-focused JCETs will still contribute to the overall CP mission, with the understanding that they are not the sole solution to the problem.

Complementary to JCETs, but not without limitations themselves, JCS exercises provide avenues to build relationships and partner capacity. These provide a global platform to show U.S. concern and desire for interoperability as well. Their infrequent use and lack of flexibility, however, limit their usefulness as the sole program in the fight against proliferation of WMDs. As such, a combination of JCETs, JCS exercises, and participation in other programs may be required to meet the needs of the theater campaign plans. This combination will expose our forces to the greatest number of partner nation forces and it leverages various authorities and funding. Although this complicates the planning process and we must ensure alignment with the theater cooperation plans, the hybrid solution may provide the best way to accomplish our goals.

IV. POTENTIAL PARTNERS AND PROGRAMS

A. INTRODUCTION

Many agencies and departments within the U.S. government currently participate in programs aimed at preventing the proliferation of WMD. As depicted in the work of Anya Loukianova for the James Martin Center for Nonproliferation Studies, at least 181 entities focus efforts on nuclear proliferation alone.¹¹⁷ While the ways and means of these programs vary significantly, the desired ends of many programs align well with U.S. SOF's objectives. Each of these programs possesses unique authorities, funding and access to partner nations that could greatly benefit U.S. SOF in its effort to expand the global SOF network. With this in mind, this section will assess potential partner programs within the U.S. government, beginning with an example of an existing relationship between Army SF and the DEA. It will then briefly examine three programs aimed at curbing nuclear proliferation. Through the analysis of potential partners and their respective programs it will then recommend which relationships to pursue in combination with the existing Army SF programs mentioned in Chapter III.

B. AUGMENTATION OF DEA'S EFFORTS

Just as the DEA partners with local law enforcement agencies to conduct counter-drug operations in the United States, the DEA also requires partners to conduct its international efforts known as counter-narco terrorism (CNT) missions. In accordance with Section 1004 of the 1991 National Defense Authorization Act, DOD provides support to U.S. government agencies as well as foreign law enforcement agencies in counter-drug efforts.¹¹⁸ Although the perception of the success of the overarching War on Drugs is controversial, the ability of Army SF to assist in building partner capacity for counter-drug purposes is a separate issue. CNT missions are led by the DEA and funded through their programs and authorities, but Army SF provides additional capacity to train

¹¹⁷ Anya Loukianova, "Re-Charting U.S. Government Agencies Involved in Nuclear Policy."

¹¹⁸ Federation of American Scientists, "Counter-Narcotics Authorizations," accessed March 8, 2014, <http://www.fas.org/asmp/campaigns/training/Counter-narcotics.html>.

the host nation participants, creating a mutually beneficial relationship.¹¹⁹ While this assists the DEA's efforts to suppress illegal drug activities overseas, Army SF benefits by practicing its skills of working with host nation forces while also expanding its network of contacts. As the DEA provides the subject matter experts to train the forces on activities peculiar to counter-drug operations, the Army SF elements provide the host nation with security training and small-unit tactics. Both organizations leverage their capabilities to achieve the overall end state.

The relationship between the DEA and DOD forces does not always come without cost to the overall military mission. Due to the drug trade being an integral part of many societies, the U.S. military's participation in counterdrug efforts can often be detrimental to attempts at building rapport within the communities, such as the case of operations in Afghanistan.¹²⁰ With this in mind, it is vital to ensure the willingness of the host nation population and government to participate in these efforts, not unlike the counterproliferation mission.

C. THE INTERNATIONAL COUNTERPROLIFERATION PROGRAM

The Defense Threat Reduction Agency (DTRA) is the executive agent for the International Counterproliferation Program (ICP), providing training and equipment to over 10,000 participants in more than 30 nations.¹²¹ The program intends to improve host nations' capabilities to "prevent and counter the proliferation of WMD and related items across international borders," with the goal of a standing, professional border security and law enforcement capability in the country.¹²² Although this program initially focused on the former Soviet Union (FSU), it has the ability to expand as needed. Seven years after

¹¹⁹ Patrick J. Ferguson (Special Operations Command-Pacific Planner), discussion with author, December 16, 2013.

¹²⁰ Vanda Felbab-Brown, *Shooting Up: Counterinsurgency and the War on Drugs* (Washington, DC: Brookings Institution Press, 2010), 141–142.

¹²¹ Defense Threat Reduction Agency and USSTRATCOM Center for Combating WMD and Standing Joint Force Headquarters-Elimination, "International Counterproliferation Program," accessed March 8, 2014, <http://www.dtra.mil/missions/ArmsControlVerification/ICP.aspx>.

¹²² Jennifer D. P. Moroney et al., *Assessing the Effectiveness of the International Counterproliferation Program* (Santa Monica, CA: RAND, 2011), 3, http://www.rand.org/content/dam/rand/pubs/technical_reports/2011/RAND_TR981.pdf.

its inception, the FY2005 NDAA gave the DOD authorization to expand ICP globally if it decides a threat is worthy of inclusion to the program.¹²³ These flexible authorities can be valuable, as they provide the Secretary of Defense the authority to employ the program anywhere deemed necessary.

In order to leverage different capabilities, the ICP is operated in conjunction with multiple interagency partners. In testimony to members of Congress, Deputy Assistant Secretary of Defense for Combating Weapons of Mass Destruction and Negotiations Policy Jack David noted that the ICP involved the U.S. Customs and Border Protection, the FBI, and other agencies while encouraging multilateral efforts in order to depict the proliferation problem as a regional security threat.¹²⁴ The implications of this multi-agency, multi-country focus are great. Not only does it attempt to include other elements of our U.S. government, but by making this a regional challenge, it encourages greater participation by neighboring countries. This not only contributes to the deterrence of potential proliferators, but it also allows the participating countries to open dialogue on multiple issues, not just those related to WMD. The cooperation by two countries in a multilateral event through ICP could be a first step in building a stronger relationship between the countries.

The ICP is a flexible program, taking into account the needs and desires of the host nation participants. A study conducted by the RAND Corporation surveyed three countries involved in the program and noted vast differences among the program's implementation within each country.¹²⁵ Compared to the Cooperative Threat Reduction

¹²³ Ronald Reagan National Defense Authorization Act for Fiscal Year 2005 (2004): 277, <http://www.gpo.gov/fdsys/pkg/BILLS-108hr4200enr/pdf/BILLS-108hr4200enr.pdf>.

¹²⁴ *Testimony on the Status of the Defense Department's Cooperative Threat Reduction Program*, 109th Cong. 7 (2006) (statement of Jack David), http://www.dod.mil/dodgc/olc/testimony_old/109_second.html.

¹²⁵ The study concluded that the efforts in Kosovo provided an example of ICP's partner selection process, while Romania and Georgia have more substantial involvement in the program but differing levels of success. Moroney et al., *Assessing the Effectiveness of the International Counterproliferation Program*, 18–21.

Program, the ICP relies less upon large amounts of equipment and focuses instead on training of personnel.¹²⁶ Conveniently, this is an area in which Army SF can provide great input and assistance.

The incorporation of Army SF in the ICP could fill several gaps. As mentioned above, the training of partner-nation personnel is a key mission for Army SF; something these forces are specifically trained to do. In the RAND study, the assessment team also noted the high turnover of officials involved in the program led to a lack of continuity and decreased effectiveness.¹²⁷ An advantage to the inclusion of Army SF is the continuity achieved through the enduring relationships cultivated by Army SF, both within the ICP and through other engagements. If SOF determines that the ICP is a worthwhile program for Army SF's employment, this could lead to a commitment of its forces over a long period of time. While the faces within the Army SF elements may change, the continuous presence of U.S. SOF personnel provides a familiarity that breeds comfort and consistency. Additionally, since the partner nation forces involved in the ICP training are typically border security and law enforcement personnel, the chances are far greater that elements of Army SF have already worked with these units through JCETs, CNT missions, or other programs unrelated to counterproliferation. Again, this familiarity not only encourages "buy-in" from the involved forces, but it further strengthens their relationship with the Army SF community.

Due to the flexible nature of the ICP, to include partner selection, global application, and the multilateral focus, this appears to be an ideal partner program for Army SF's consideration. The focus on training of personnel versus purchasing of large amounts of equipment and infrastructure plays to Army SF's strengths. As noted above, the possibility of interaction with partner forces that Army SF has already worked with through other programs provides additional benefits, allowing us to further develop and deepen those relationships. As such, the ICP serves as an example of a potential program for Army SF involvement in the counterproliferation effort.

¹²⁶ *Testimony on the Status of the Defense Department's Cooperative Threat Reduction Program*, 109th Cong. 7 (2006) (statement of Jack David), http://www.dod.mil/dodgc/olc/testimony_old/109_second.html.

¹²⁷ Moroney et al., *Assessing the Effectiveness of the International Counterproliferation Program*, 26.

D. EXPORT CONTROL AND RELATED BORDER SECURITY

Whereas the ICP is focused on flexible application of partner-nation training to prevent cross-border smuggling, the Export Control and Related Border Security (EXBS) Program's primary focus is on enhancing "strategic trade control systems" in countries that either possess WMD materials or likely transit countries.¹²⁸ As a State Department program, it is aimed at preventing proliferation through education and assistance with export control measures, with less emphasis placed on border security. Although the program does not focus on training of border security personnel primarily, this is not to say that both EXBS and Army SF could not benefit from a partnership.

Executed by the State Department in over 60 countries worldwide, the EXBS receives funding from the annual Foreign Operations Appropriations Act, which allots approximately \$55 million per year to the program.¹²⁹ Originally focused on the former Soviet Union and surrounding countries, this program has since expanded and includes participation from multiple U.S. government agencies involved in security and commerce.¹³⁰ Although these engagements typically focus on export controls, the provision of equipment and training provides an opportunity for Army SF engagement.

While Army SF soldiers are not necessarily experts regarding the employment of the technical border surveillance equipment, the border security personnel can benefit from Army SF's training abilities. Leveraging their skills at working with partner nation forces, these soldiers can augment the technical trainers and work with the partner nation forces to develop tactics, techniques, and procedures for the integration of the technical equipment, ensuring it is incorporated as part of the overall border security plan. Much as in the ICP, the personnel responsible for securing the borders of our partner nations will likely be involved in other programs with U.S. government as well. While contributing to the programs, Army SF could serve as the bridge to connect them, providing a familiar

¹²⁸ U.S. Department of State, "The EXBS Program," accessed March 8, 2014, <http://www.state.gov/t/isn/ecc/c27911.htm>.

¹²⁹ Ibid.

¹³⁰ U.S. Customs and Border Protection, "Export Control and Related Border Security (EXBS) Program Overview," accessed March 8, 2014, http://www.cbp.gov/xp/cgov/border_security/international_operations/international_training/exbs.xml.

face and uniform for the partner nation forces. Additionally, Army SF already works with many partner nations' counter-terrorism and interdiction units through other programs. When security personnel need to call upon these interdiction units to assist during operations, Army SF's participation with both elements can lead to increased interoperability.

Occasionally, the ICP and EXBS programs work together with partner nation forces in order to provide complementary efforts.¹³¹ In such cases, Army SF could again provide continuity for the partner nation forces. Rather than simply seeing a myriad of U.S. representatives providing seemingly disjointed efforts, the partner nation would instead see a familiar entity in the form of Army SF personnel. For this reason, Army SF could serve as an integral partner to the EXBS program.

E. COOPERATIVE THREAT REDUCTION PROGRAM

The Cooperative Threat Reduction (CTR) Program, as executed by the Department of Defense since 1992, aims primarily to eliminate the threat of WMDs in the former Soviet Union by destroying, transporting, or securing the weapons.¹³² Although this is a very technically-oriented program, it does include security facets that Army SF could assist. In testimony to Congress, Deputy Assistant Secretary of Defense for Combating Weapons of Mass Destruction and Negotiations Policy Jack David reported that much of the CTR's efforts were originally focused on securing Russia's weapons in their existing storage facilities.¹³³ This is a slightly different mission than that of the ICP or the EXBS, both of which are focused on preventing the smuggling of WMD materials at the borders. While the CTR does include a goal of preventing proliferation across borders, the reduction of existing stockpiles receives the most attention. It is, however, more limited geographically than the other programs. Without prior approval of

¹³¹ Moroney and Hogler, *Building Partner Capacity to Combat Weapons of Mass Destruction*, 62.

¹³² Office of the Inspector General, Department of Defense, *Audit Report: Cooperative Threat Reduction Program* (Arlington, VA: Department of Defense, 2001), <http://www.dodig.mil/Audit/reports/fy01/01-074.pdf>.

¹³³ *Testimony on the Status of the Defense Department's Cooperative Threat Reduction Program*, 109th Cong. 5 (2006) (statement of Jack David), http://www.dod.mil/dodgc/olc/testimony_old/109_second.html.

the President of the United States, CTR is limited to operations in the FSU. As mentioned in Chapter II, however, the CTR has featured prominently in recent efforts to rid Libya and Syria of chemical weapons, exhibiting the willingness of our government to expand the geographical reach of the CTR, especially as goals are reached in the FSU and the program is able to look elsewhere.

A benefit of the CTR program is that it attacks the problem from a different angle than the ICP or EXBS. While the other programs look to interdict proliferation once the material is on the move, the CTR looks to the original source of the proliferation. CTR does contain an element focused on material in transit, the CTR Proliferation Prevention Initiative (PPI), which assists non-Russian FSU states in strengthening their border crossing points.¹³⁴ Mr. David reported to Congress that his office was working with the combatant commanders to align COCOM personnel to train host nation partners in the PPI-provided equipment, which is an ideal application of Army SF.¹³⁵

As with other programs, the ability of the United States to effect change and incorporate the CTR in other countries is dependent upon the relationship of our governments. Although the relationship with Russia has been strained at times since the program's beginnings, Russia initially accepted the help of the United States, as in was in our collective best interest. Other countries may not be as willing to cooperate with the United States, which may require us to adopt different strategies. As Rose Gottemoeller describes in her chapter in *Proliferation of Weapons of Mass Destruction in the Middle East*, North Korea would likely be more willing to work with Russia and Kazakhstan rather than the United States, just as Iran would be hesitant to coordinate directly with our government, creating an opportunity for us to work through a surrogate country versus directly with these countries of concern.¹³⁶ This is another opportunity for Army SF to leverage existing relationships in order to reduce threats in a different country altogether, following an indirect approach to counterproliferation.

¹³⁴ Ibid.

¹³⁵ Ibid., 7.

¹³⁶ Rose Gottemoeller, "Cooperative Threat Reduction" in *Proliferation of Weapons of Mass Destruction in the Middle East*, ed. James A. Russell (New York: Palgrave Macmillan, 2006), 229.

Due to the focus on destruction of existing stockpiles and security of nuclear, biological, and chemical storage facilities in a very specific geographic location, this program has somewhat limited potential for Army SF involvement. Arguably, the Army SF members can provide expert trainers on general security operations to the facilities, but it would be simply adding capacity to the experts already involved in the program. This does not rule out the possibility of Army SF's augmentation in the CTR, but the limited opportunities suggest that it would not likely be a recurring requirement for Army SF. While this could assist in building the number of contacts in these countries, it is also a very select group of host nation security guards at WMD storage facilities with whom other elements of DOD have existing relationships.

Depending on the security situation in the target country, however, CTR could benefit from the established relationships that Army SF maintains. In countries such as Syria or Nigeria, where the security situation is less ideal for the presence of lightly defended WMD experts yet the CTR could arguably prove beneficial, Army SF can call upon its existing relationships or build new ones with the security forces in the country. Unlike relatively stable countries such as the former Soviet Union states, implementation of CTR in less permissive environments would require a vast security network. It would also require knowledge of the country's transportation and logistics capabilities, which Army SF's network could facilitate. Reliance upon Army SF to provide secure working conditions would enable the WMD experts to focus on their primary task of reducing the proliferation threat.

F. CONSIDERATIONS FOR SF INVOLVEMENT

Each of the above-mentioned programs could benefit from SF augmentation, but we must carefully analyze the application of forces each time. Due to the dynamic nature of these programs, we cannot employ Army SF in a cookie-cutter fashion. Not only do the requirements and desires of the host nation change over time, but so do the requirements of the program's executive agent. At times, the overt presence of U.S. special operations forces may not be appropriate in the host nation. We must also acknowledge the crawl-walk-run nature of these programs and suggest proper use of our

troops accordingly. As each of our potential partner nations' willingness and capability grows, the need for trainers varies as well. Most programs begin at the senior levels, involving high-level discussions and engagement at multilateral or bilateral conferences. At these initial discussions, SOF representatives should advocate for and determine proper use of SF equities. As these conferences transition to host nation personnel on the ground receiving equipment and/or training, the employment of Army SF becomes optimal. It is important to note the "optimal," versus the "necessary" employment of Army SF during this phase. We must always observe and respect the needs of the host nation in order to ensure our participation helps, rather than hinders, the program.

G. CONCLUSION

Through the analysis of a small sampling of the various U.S. government-sponsored counterproliferation programs, we see a viable implementation of Army SF into the programs, as well as overlaps between the programs. Overlap and redundancy are not always negative aspects, as a gap in coverage would arguably be more detrimental. Minimizing this overlap and leveraging the commonalities among the programs, however, could be valuable. The example of Army SF and DEA cooperation in the counter-drug efforts provides evidence that Army SF has successfully augmented other U.S. government agencies in the past with benefits for both the United States as well as the partner nations.

Since many of the above mentioned programs focus on border security, Army SF provides a valuable link between not only these programs themselves, but also between the border security and military forces with which Army SF currently has relationships. Should the need arise for the border security personnel to interact with their own country's interdiction or counter-terrorism elements, the prior training with Army SF could ensure better interoperability between the forces. With a common trainer in Army SF, we can provide an additional measure to ensure these forces share common tactics for interdicting smugglers, as well as ensuring they each understand the other's capabilities and limitations.

Since these programs are often conducted outside the purview of DOD elements, they are likely not considered for inclusion to the Joint Chiefs of Staff exercises in the partner nations. Inclusion of Army SF, as a DOD entity, can expand the possibility for participation of these forces and programs into the exercises. An example of this possibility is a scenario in which smugglers attempt to cross a border at an unofficial border crossing site, thereby testing the border security element's detection capabilities as well as their incorporation of the country's interdiction assets in order to seize the material and personnel. This encourages dialogue among the various elements of a partner nation's security forces and tests the equipment and training provided by the programs.

As this chapter has shown, not all of the aforementioned programs directly suit the capabilities of Army SF. Because of this, I am not suggesting that Army SF personnel accompany every visit to a partner nation. Many of these program events don't involve border security personnel, but rather high-level government officials and those responsible for export control regulations. Rather, I am suggesting that, where appropriate, Army SF should be utilized to provide not only continuity between the U.S. led programs, but also as a link between elements of the partner nation. This not only encourages interoperability for the partner nation, but it takes advantage of Army SF's existing relationships and exposure to these elements through other programs, thereby strengthening our relationships with our global SOF network. SOF representation early in the engagement process will ensure the proper use and consideration of the capabilities of Army SF.

Once again, the augmentation of these programs by Army SF will not be a panacea. Rather, it is an element of the overall counterproliferation and security strategy. Our participation in these programs will simply take advantage of different authorities and funding and allow us to further our relationships across the world. This will likely require a patchwork of programs, to include JCETs, JCS exercises, and other programs and authorities. With proper planning and integration, it will deter future proliferation activities.

V. CONCLUSION

A. INTRODUCTION

In this thesis, I aimed to outline a method by which U.S. Army Special Forces might contribute to nuclear counterproliferation efforts worldwide. To do so, I first showed the problem of nuclear proliferation and how it affects security, and particularly how it threatens U.S. interests at home and abroad. Following this, I examined the role of Army SF and how its existing programs and missions contribute to the counterproliferation effort. Next, I briefly described counterproliferation programs conducted by other U.S. government agencies and departments to determine if any complemented Army SF's capabilities and authorities. Each of these sections aimed to answer the primary research question: How can U.S. Army Special Forces contribute to reducing proliferation of weapons of mass destruction through leveraging the global SOF network? While the first manner of solving this problem includes an inward-looking solution through the use of existing JCET and other Army SF-specific authorities, the second manner is an outward-looking solution, involving Army SF support to other agencies and departments. In this conclusion chapter, I will first summarize the findings from my research, explaining how Army SF could best contribute to the ongoing efforts. Next, I will point out our "way-ahead," with emphasis on determining where and how to employ Army SF for counterproliferation. Finally, I will briefly address areas for future research.

B. SUMMARY OF FINDINGS

In Chapter III, I discussed the role of Army SF and the existing programs that are best suited to address counterproliferation. I concluded that although we have succeeded in adapting our existing authorities to accomplish our missions, these authorities and our implementation are not designed for optimal results. The episodic nature of JCETs and the focus on training of U.S. personnel, as well as the prohibition of including non-SOF U.S. personnel, limit the potential success of CP JCETs. As such, I believe creating authorities specifically for CP provides one alternative. While we leverage 1208 and

1206 authorities to accomplish our mission in certain circumstances, 1208 authorities hinge upon the ties to counter-terrorism concerns. As Chapter II pointed out, part of the problem of proliferation includes state actors and non-terrorist threats, thereby limiting the use of 1208 authority. As an alternative, a similar authority with funding aimed at counterproliferation that does not restrict it to counter-terrorism missions could achieve our goal. Although this is by no means the simplest solution, it may provide better long-term sustainability than continuing to adapt existing authorities and funding. This does not come without drawbacks, however. Part of the problem we face in countering the WMD threat is the abundance of existing programs and authorities, many of which are overlapping and cause unnecessary redundancies. Before creating new authorities and dedicating funding, we must first ensure no alternative authorities exist that could suit our needs. Only after we have determined a gap should we attempt to create new authorities for this purpose.

Part of this research for existing authorities includes the findings in Chapter IV, which examined potential partners and programs. Since so many U.S. government agencies and departments conduct counterproliferation programs, this should be our first resource for expanding the role and integrating Army SF. Through identifying the countries susceptible to proliferation attempts in each theater, we can determine what U.S. and other allied efforts are ongoing or in developmental stages. Should we identify a potential role for Army SF, we can then approach the proponent of the program and determine the feasibility of Army SF's incorporation. As noted above, not all U.S. agencies and not all foreign partners will accept Army SF involvement in their programs. Determining which programs best suit our capabilities will narrow our focus and allow us to tailor our efforts.

As suspected at the outset of this research, the optimal use of Army SF may not be as simple as choosing the inward- versus outward-looking approach and focusing our efforts on this method. Rather, I believe a skillfully crafted plan that incorporates both methods best suits our needs. To assume that Army SF has the resident expertise and can rely upon its authorities with minimal augmentation by WMD subject matter experts is short-sighted. On the other hand, to assume that those programs with the inherent WMD

expertise (such as those listed in Chapter IV) cannot use Army SF's capabilities and relationships is also missing the mark. Instead, through incorporating Army SF representatives at the initial phases of CP planning efforts with our partner nations as well as with other U.S. government entities, we can not only ensure that all our efforts are mutually supporting, but we can also fully utilize the global SOF network that we have developed through years of cooperation. In some instances, this may require Army SF's support to other programs, such as the EXBS program, in order to provide unique capabilities and add capacity to their efforts. Other times, we may be able to minimize the focus on WMDs and simply augment JCETs with appropriate subject matter experts, thereby achieving a more secure environment. Only through a careful planning process will we be able to determine the appropriate level of engagement. As an added benefit, this cooperation with other U.S. government entities will increase the likelihood that our overall security efforts complement one another, building upon the work of past events.

This approach is not new, but instead builds on longstanding SOF practices. We already leverage multiple authorities and programs in order to build the capacity of our partners in other areas. As evidenced by mutually supporting programs to equip and train our partners for general mission sets, leveraging 1206, JCET, and foreign military sales authorities, this patchwork of efforts can be successful.¹³⁷ Additionally, SOF and other DOD elements often operate under Title 22 Department of State authorities in order to conduct security cooperation programs in order to achieve our national security objectives.¹³⁸ Through this thesis, I propose we simply narrow our focus and concentrate this same patchwork methodology to a specific threat, namely counterproliferation. Although our overall security efforts arguably produce results that affect proliferation attempts, narrowing our scope can only serve to further deny potential proliferators. I do not argue that this mission is more important than all other missions, but rather, it deserves individual attention.

¹³⁷ Patrick J. Ferguson (Special Operations Command-Pacific Planner), e-mail discussion with author, January 3, 2014.

¹³⁸ Defense Institute of Security Assistance Management, *Security Cooperation Programs through Fiscal Year 2014*, 25.

C. THE WAY AHEAD

As mentioned above, the first step in our process is for the GCC staffs to determine specific locations of concern for proliferation. Once we have narrowed this focus to certain countries and transportation lanes, we can then look at existing programs and assess their effectiveness. An educated staff with adaptive, flexible minds can greatly affect our potential for success in this realm. Simple awareness of existing programs outside of DOD and knowledge of the program's intent and capabilities could prove beneficial. If we understand what others are doing and what they lack, we can then determine how DOD and Army SF specifically can assist. We must understand, however, that not all partner countries and not all programs will be receptive to Army SF involvement. While this does not necessarily rule out Army SF's participation, it may require planners to tailor and scale our participation accordingly. Rather than immediately deploying an ODA to a partner country, we may wish to begin our involvement at the initial planning phases, attending initial senior-level conferences in order to best gauge Army SF's involvement and serve as a proponent for its inclusion. Our initial assessment will also inform us to the level of CP activity in a given country. If a country does not have a program tied to it, why not? Is it due to a lack of threat or some other reason that could be overcome through leveraging the global SOF network? If a country does have CP activity ongoing, is it working optimally? How could Army SF assist the program proponents in order to benefit their programs? Are our other efforts in the country (unrelated to CP) helping or hindering the programs? Each of these questions can help shape our CP efforts in any given country.

Regardless of the method by which we choose to incorporate Army SF in CP activities, we must ensure that the efforts are nested within the GCC's TCP. If they are not, we are simply expending time and resources in an uncoordinated method, achieving suboptimal results. Since nothing happens in a vacuum in the security world, we must examine our efforts to ensure they complement each other and balance threat versus effort.

Although this seems like it could require a shift in priority for Army SF, in reality it could be implemented through the existing practices of the planning staffs. For the

Army SF members on the ground, very little will change. They will still deploy to partner nations in order to conduct training with host nation forces. Their knowledge of WMD-specific information is of minimal importance. Instead, rather than training an infantry unit in small-unit tactics, for example, they could train border security personnel, with the goal of enabling local forces to take the lead in stifling proliferation attempts on their own territory. It is incumbent upon the planners to be aware of the various programs and authorizations extant throughout the U.S. government and make the contacts on behalf of the subordinate elements. This level of situational awareness can be achieved through joint assignments, service on joint staffs or in the appropriate intelligence entities, and through academic training available through the military education system.

D. AREAS FOR FUTURE RESEARCH

While this thesis offers a potential solution for the CP problem, it is by no means all-inclusive. A comprehensive analysis of the CP mission of Army SF requires additional time and resources. In order to further develop this model, planners could easily focus their efforts on specific programs and countries. Further research could identify additional partner programs, and could also determine specific capability gaps that could be explored with planners in the respective programs. Insights gained from this could lead to discussions on potential Army SF involvement and incorporation into the GCC TCPs. As the CP effort will differ greatly between COCOMs, further research will determine potential partner countries within the COCOM as well. As mentioned previously, each country will provide varying levels of interest in combatting WMD efforts. Planners can determine which countries will be receptive to Army SF involvement. This is another area in which our global SOF network can provide assistance. Programs such as USSOCOM's Special Operations liaison officer (SOLO) and SOF representative (SOFREP) provide USSOCOM and the GCCs input from the partner nation's perspective and their relationship with the host nation personnel will provide an excellent starting point to promote CP efforts.¹³⁹

¹³⁹ United States Special Operations Command, *Special Operations Forces 2020: The Global SOF Network*, 9.

Finally, this thesis has focused solely on U.S. sponsored programs and authorities to combat WMD. Obviously, as this is a worldwide threat, our allies will likely have existing programs and may express interest in participation with Army SF personnel. Awareness of foreign nation equities will help to address possible hesitation by partner nation personnel in allowing Army SF participation. If the selected country does not express interest in receiving assistance from the United States in particular, we can determine which countries they *would* be willing to work with and approach it from a different angle. In the end, our goal is to limit WMD proliferation. Regardless of which country or organization claims credit, we all benefit from the effort.

E. CONCLUSION

This study provides a template for integrating U.S. counterproliferation objectives into Army SF operations. As a broad overview of the issues, it identifies several areas deserving of further study prior to implementation. As I have demonstrated, the optimal solution will be dependent upon a myriad of factors, to include analysis of existing programs, their authorities and constituencies, host nation acceptance of assistance, and the specific needs of the host nation. Each situation will be vastly different. While some countries may benefit from a low-key approach leveraging JCETs with WMD experts augmenting them, other countries may already be involved in a much broader long-term approach to combating WMD. For the latter situation, it is necessary for SOF to recognize the gaps that Army SF could fill and then understand the best way to approach the program proponents and the host nation. Both situations will benefit from a flexible, educated planning staff and a dedication by staffs at all levels to incorporate Army SF representatives as early in the planning process as possible. While this by no means is a guarantee for success, it provides us a great starting point for our efforts against the proliferators of the world.

LIST OF REFERENCES

- Albright, David. "South Africa's Secret Nuclear Weapons." Institute for Science and International Studies. May 1, 1994. <http://isis-online.org/isis-reports/detail/south-africas-secret-nuclear-weapons/13>.
- Albright, David and Corey Hinderstein. "The A. Q. Khan Illicit Nuclear Trade Network and Implications for Non-Proliferation Efforts." In *Globalization and WMD Proliferation: Terrorism, Transnational Networks, and International Security*, edited by James A. Russell and James J. Wirtz, 49–62. New York: Routledge, 2008.
- Arquilla, John, and Paul K. Davis. *Modeling Decisionmaking of Potential Proliferators as Part of Developing Counterproliferation Strategies*. Santa Monica, CA: RAND, 1994. http://www.rand.org/pubs/monograph_reports/MR467.html.
- Cirincione, Joseph. *Bomb Scare: The History and Future of Nuclear Weapons*. New York: Columbia University Press, 2007.
- Cirincione, Joseph, Jon B. Wolfsthal, and Miriam Rajkumar. *Deadly Arsenals: Nuclear, Biological, and Chemical Threats*. 2nd ed. Washington, DC: Carnegie Endowment for International Peace, 2005.
- Clary, Christopher. "A. Q. Khan, Proliferation Networks, and the Nuclear Slippery Slope." In *Proliferation of Weapons of Mass Destruction in the Middle East: Directions and Policy Options in the New Century*, edited by James A. Russell, 93–113. New York: Palgrave Macmillan, 2006.
- Corera, Gordon. *Shopping for Bombs: Nuclear Proliferation, Global Insecurity, and the Rise and Fall of the A. Q. Khan Network*. New York: Oxford University Press, 2006.
- Daly, Sara A., John Parachini, and William Rosenau. *Aum Shinrikyo, Al Qaeda, and the Kinshasa Reactor: Implications of Three Case Studies for Combating Nuclear Terrorism*. (DB-458-AF). Santa Monica, CA: RAND, 2005. <http://www.rand.org/publications/DB/DB458/>.
- Davis, Zachary S. "Bombs Away." *The American Interest* IV, no 3 (2009). <http://www.the-american-interest.com/articles/2009/01/01/bombs-away/>.
- Davis, Zachary S. and Benjamin Frankel, eds. *The Proliferation Puzzle: Why Nuclear Weapons Spread and What Results*. Portland, OR: Frank Cass, 1993.

- Defense Institute of Security Assistance Management. *The Management of Security Cooperation (Greenbook)*. 31st ed. Washington, DC: Government Printing Office, 2012.
- . *Security Cooperation Programs Through Fiscal Year 2014*. Revision 14.5. Washington, DC: Government Printing Office, 2014.
http://www.disam.dsca.mil/documents/pubs/security_cooperation_programs_20140502.pdf.
- Defense Threat Reduction Agency. “Cooperative Threat Reduction Program.” Accessed January 30, 2014. <http://www.dtra.mil/Missions/Nunn-Lugar/GlobalCooperationInitiative.aspx>.
- Defense Threat Reduction Agency and USSTRATCOM Center for Combating WMD and Standing Joint Force Headquarters-Elimination. “International Counterproliferation Program.” Accessed March 8, 2014.
<http://www.dtra.mil/missions/ArmsControlVerification/ICP.aspx>.
- Diehl, Sarah J. and James Clay Moltz. *Nuclear Weapons and Nonproliferation: A Reference Handbook*. Contemporary World Issues. 2nd ed. Santa Barbara, CA: ABC-CLIO, 2008.
- Evans, Gareth. “Cooperative Security and Intrastate Conflict.” *Foreign Policy*, no. 96 (Autumn 1994): 3–20.
- Faint, Charles and Michael Harris. “F3EAD: Ops/Intel Fusion “Feeds” the SOF Targeting Process.” *Small Wars Journal* (2012, January).
<http://smallwarsjournal.com/jrnl/art/f3ead-opsintel-fusion-%E2%80%9Cfeeds%E2%80%9D-the-sof-targeting-process>.
- Fairbanks, Charles H., Jr. “MAD and U.S. Strategy.” In *Getting MAD: A Nuclear Mutual Assured Destruction, its Origins and Practice*, edited by Henry D. Sokolski, 137–147. Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, 2004.
- Federation of American Scientists. “Counter-Narcotics Authorizations.” Accessed March 8, 2014. <http://www.fas.org/asmp/campaigns/training/Counter-narcotics.html>.
- Felbab-Brown, Vanda. *Shooting Up: Counterinsurgency and the War on Drugs*. Washington, DC: Brookings Institution Press, 2010.
- Frankel, Benjamin. “The Brooding Shadow: Systemic Incentives and Nuclear Weapons Proliferation.” In *The Proliferation Puzzle: Why Nuclear Weapons Spread and What Results*, edited by Zachary S. Davis and Benjamin Frankel, 37–78. Portland, OR: Frank Cass, 1993.

- Frankel, Benjamin and Zachary S. Davis. "Nuclear Weapons Proliferation: Theory and Policy." In *The Proliferation Puzzle: Why Nuclear Weapons Spread and What Results*, edited by Zachary S. Davis and Benjamin Frankel, 1–3. Portland, OR: Frank Cass, 1993.
- Gaddis, John Lewis. *Strategies of Containment: A Critical Appraisal of Postwar American National Security Policy*. New York: Oxford University Press, 1982.
- Gottemoeller, Rose. "Cooperative Threat Reduction." In *Proliferation of Weapons of Mass Destruction in the Middle East*, edited by James A. Russell, 223–232. New York: Palgrave Macmillan, 2006.
- Hagerty, Devin T. "The Power of Suggestion: Opaque Proliferation, Existential Deterrence, and the South Asian Nuclear Arms Competition." In *The Proliferation Puzzle: Why Nuclear Weapons Spread and What Results*, edited by Zachary S. Davis and Benjamin Frankel, 256–283. Portland, OR: Frank Cass, 1993.
- Herz, John H. *International Politics in the Atomic Age*. New York: Columbia University Press, 1959.
- Hoffer, Edward E. "Weapons of Mass Destruction and Terrorism." In *Fighting Back: What Governments can do about Terrorism*, edited by Paul Shemella, 99–113. Stanford, CA: Stanford University Press, 2011.
- International Atomic Energy Agency. "About the IAEA." Accessed January 25, 2014. <http://www.iaea.org/About/about-iaea.html>.
- Joint Chiefs of Staff. *Combating Weapons of Mass Destruction* (Joint Publication 3-40). Washington, DC: Government Printing Office, 2009.
- . *National Military Strategy to Combat Weapons of Mass Destruction*. Washington DC: Government Printing Office, 2006.
- Kahn, Herman. *On Thermonuclear War*. Princeton, NJ: Princeton University Press, 1960.
- Kaplan, Fred M. *The Wizards of Armageddon*. Stanford, CA: Stanford University Press, 1991.
- Kaplan, David E. and Andrew Marshall. *The Cult at the End of the World: The Terrifying Story of the Aum Doomsday Cult, from the Subways of Tokyo to the Nuclear Arsenals of Russia*. 1st American ed. New York: Crown Publishers, 1996.
- Khan, Feroz Hassan. *Eating Grass: The Making of the Pakistani Bomb*. Stanford, CA: Stanford University Press, 2012.

- Kissinger, Henry A. *Nuclear Weapons and Foreign Policy*. New York: Harper & Brothers, 1957.
- Loukianova, Anya. "Re-Charting U.S. Government Agencies Involved in Nuclear Policy." Accessed January 7, 2014. http://cns.miis.edu/stories/pdfs/111111_chart_usg_wmd_anya_loukianova.pdf.
- Lumbaca, J. "Lumpy." "Relationship Building: The Key Objective of U.S. SOF Phase Zero Engagement." *Special Warfare* 27, no. 1 (2014): 26–29.
- McCloud, Kimberly and Matthew Osborne. *WMD Terrorism and Usama Bin Laden*. Monterey, CA: James Martin Center for Nonproliferation Studies, 2001. <http://cns.miis.edu/reports/binladen.htm>.
- Moroney, Jennifer D. P. and Joe Hogler. *Building Partner Capacity to Combat Weapons of Mass Destruction*. Santa Monica, CA: RAND, 2009.
- Moroney, Jennifer D. P., Aidan Kirby Winn, Jeffrey G. Engstrom, Joe Hogler, Thomas-Durell Young, and Michelle Spencer. *Assessing the Effectiveness of the International Counterproliferation Program (TR-981-DTRA)*. Santa Monica, CA: RAND, 2011. http://www.rand.org/pubs/technical_reports/TR981.html.
- Mowatt-Larssen, Rolf. "Al Qaeda Weapons of Mass Destruction Threat: Hype or Reality?" Paper, Belfer Center for Science and International Affairs, Cambridge, MA, 2010.
- Naim, Moises. "The Five Wars of Globalization." *Foreign Policy*, no. 134 (January–February 2003): 28–36. doi: 10.2307/3183519.
- National Guard Bureau. "The National Guard State Sponsorship Program." Accessed March 4, 2014. <http://www.nationalguard.mil/features/spp/>.
- Nuclear Suppliers Group. "Nuclear Suppliers Group (NSG) History." Accessed April 1, 2014. http://www.nuclearsuppliersgroup.org/A_test/01-eng/index.php.
- Office of the Deputy Assistant Secretary of Defense for Plans. *Theater Campaign Planning: Planners' Handbook*. Version 1.0. Washington DC: Government Printing Office, 2012.
- Office of the Inspector General, Department of Defense. *Audit Report: Cooperative Threat Reduction Program*. Arlington, VA: Department of Defense, 2001. <http://www.dodig.mil/Audit/reports/fy01/01-074.pdf>.
- Peters, John E., Brian Shannon, and Matthew E. Boyer. *Enhancing the Contributions of Reserve Component Army Special Operations Forces (TR1199)*. Santa Monica, CA: RAND, 2012. http://www.rand.org/pubs/technical_reports/TR1199.html.

- Petit, Brian S. *Going Big by Getting Small*. Denver, CO: Outskirts Press, 2013.
- RAND Corporation. "Combating Nuclear Terrorism: Lessons from Aum Shinrikyo, Al Qaeda, and the Kinshasa Reactor." Accessed February 3, 2014. http://www.rand.org/pubs/research_briefs/RB165/index1.html.
- Roberts, Nancy and Sean F. Everton. "Strategies for Combating Dark Networks." *Journal of Social Structure* 12 (2011). <http://www.cmu.edu/joss/content/articles/volume12/RobertsEverton.pdf>
- Salama, Sammy and Lydia Hansell. "Does Intent Equal Capability?: Al-Qaeda and Weapons of Mass Destruction." *Nonproliferation Review* 12, no. 3 (November 2005): 615-653. <http://cns.miis.edu/npr/pdfs/123salama.pdf>.
- Sokolski, Henry D. *Best of Intentions: America's Campaign against Strategic Weapons Proliferation*. Westport, CT: Praeger, 2001.
- Special Forces Association. *Special Forces: The First Fifty Years*. Tampa, FL: Faircount LLC, 2002.
- Tenet, George J., and Bill Harlow. *At the Center of the Storm: My Years at the CIA*. 1st ed. New York: HarperCollins, 2007.
- United Nations 1540 Committee. "United Nations Security Council Resolution 1540 (2004)." Accessed January 30, 2014. <http://www.un.org/en/sc/1540/>.
- United Nations Office for Disarmament Affairs. "United Nations Security Council Resolution 1540." Accessed January 25, 2014. <http://www.un.org/disarmament/WMD/1540/>.
- United States Africa Command. "Exercise Flintlock." Accessed March 4, 2014. <http://www.africom.mil/what-we-do/exercises/flintlock>.
- United States Army. *Special Forces Operations* (Field Manual 3-18). Washington, DC: Government Printing Office, 2012.
- . *Special Forces Operations* (FM 3-05.20). Washington, DC: Government Printing Office, 2001.
- United States Customs and Border Protection. "Export Control and Related Border Security (EXBS) Program Overview." Accessed March 8, 2014. http://www.cbp.gov/xp/cgov/border_security/international_operations/international_training/exbs.xml.
- United States Department of Defense. *Quadrennial Defense Review 2014*. Washington DC: Government Printing Office, 2014. http://www.defense.gov/pubs/2014_Quadrennial_Defense_Review.pdf.

- . *Quadrennial Defense Review Report*. Washington DC: Government Printing Office, 2010.
http://www.defense.gov/qdr/images/QDR_as_of_12Feb10_1000.pdf.
- United States Department of State. “2012 Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments.” Accessed January 29, 2014.
<http://www.state.gov/t/avc/rls/rpt/197085.htm#nkorea2>.
- . “The EXBS Program.” Accessed March 8, 2014.
<http://www.state.gov/t/isn/ecc/c27911.htm>.
- . “Proliferation Security Initiative.” Accessed January 30, 2014.
<http://www.state.gov/t/isn/c10390.htm>.
- United States Department of State Office of the Historian. “The Nuclear Non-Proliferation Treaty (NPT), 1968.” Accessed January 25, 2014.
<http://history.state.gov/milestones/1961-1968/npt>.
- United States Forces Korea. “Exercise Key Resolve to Start Feb. 27.” Accessed March 4, 2014. <http://www.usfk.mil/usfk/press-release/exercise.key.resolve.to.start.feb.27.944?AspxAutoDetectCookieSupport=1>
- United States Special Operations Command. *Special Operations 2020: The Global SOF Network*. Tampa, FL: United States Special Operations Command, 2013.
- White House. *The National Security Strategy of the United States of America*. Washington, DC: Government Printing Office, 2010.
http://www.whitehouse.gov/sites/default/files/rss_viewer/national_security_strategy.pdf.
- . *National Strategy to Combat Weapons of Mass Destruction*. Washington, DC: Government Printing Office, 2002. <http://purl.access.gpo.gov/GPO/LPS24899>.
- Winner, Andrew C. “The Proliferation Security Initiative: The New Face of Interdiction.” *The Washington Quarterly* 28, no. 2 (Spring 2005): 129-143.
- Wirtz, James J. “Conclusion.” In *Globalization and WMD Proliferation: Terrorism, Transnational Networks, and International Security*, edited by James A. Russell and James J. Wirtz, 158-165. New York: Routledge, 2008.
- Zangger Committee. “Zangger Committee Mission.” Accessed April 1, 2014.
<http://www.zanggercommittee.org/Mission/Seiten/default.aspx>.

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