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THEATER SPECIAL OPERATIONS COMMAND'S ROLE IN NUCLEAR COUNTERPROLIFERATION

by

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In the two years since the Unified Command Plan (UCP) was changed to designate U.S. Special Operations Command (SOCOM) as the lead Department of Defense (DoD) synchronizer for all countering weapons of mass destruction (CWMD) plans, tangible progress has been slow. Organizations such as the Pentagon's Unity of Effort Council and SOCOM's CWMD Fusion Center are billed on paper as entities that can assist SOCOM in understanding the nuclear counterproliferation problem and help SOCOM plan responses to a WMD event. However, few people within these organizations understand the problem, are connected with the relevant agencies within the U.S. government (USG), and have a clear sense of what needs to occur. Even fewer members of the CWMD community across the interagency (IA) are aware of SOCOM's efforts. This study analyzes SOCOM's contribution to the USG nuclear counterproliferation mission and arrives at four conclusions. First, Theater Special Operation Commands (TSOCs) are the best postured in the DoD to contribute to a nuclear CP mission. Second, TSOCs can leverage the experience of Theater Special Operations forces. Third, TSOCs must ensure that their personnel receive basic knowledge of nuclear technologies, proliferation networks, and USG strategy and policy related to nuclear non-proliferation and counterproliferation. Finally, SOCOM must properly integrate personnel within the interagency to properly contribute to ongoing counterproliferation efforts.

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ABSTRACT

In the two years since the Unified Command Plan (UCP) was changed to designate U.S. Special Operations Command (SOCOM) as the lead Department of Defense (DoD) synchronizer for all countering weapons of mass destruction (CWMD) plans, tangible progress has been slow. Organizations such as the Pentagon's Unity of Effort Council and SOCOM's CWMD Fusion Center are billed on paper as entities that can assist SOCOM in understanding the nuclear counterproliferation problem and help SOCOM plan responses to a WMD event. However, few people within these organizations understand the problem, are connected with the relevant agencies within the U.S. government (USG), and have a clear sense of what needs to occur. Even fewer members of the CWMD community across the interagency (IA) are aware of SOCOM's efforts. This study analyzes SOCOM's contribution to the USG nuclear counterproliferation mission and arrives at four conclusions. First, Theater Special Operation Commands (TSOCs) are the best postured in the DoD to contribute to a nuclear CP mission. Second, TSOCs can leverage the experience of Theater Special Operations forces. Third, TSOCs must ensure that their personnel receive basic knowledge of nuclear technologies, proliferation networks, and USG strategy and policy related to nuclear non-proliferation and counterproliferation. Finally, SOCOM must properly integrate personnel within the interagency to properly contribute to ongoing counterproliferation efforts.

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LIST OF ACRONYMS AND ABBREVIATIONS

AOR	Area of Responsibility
AQI	Al-Qaeda in Iraq
BPC	Building Partner Capacity
C2	Command and Control
CBRN	Chemical, Biological, Radiological, Nuclear
CONOP	Concept of Operation
CP	Counter Proliferation
CWMD	Countering Weapons of Mass Destruction
DA	Direct Action
DHS	Department for Homeland Security
DOC	Department of Commerce
DoD	Department of Defense
DOE	Department of Energy
DOJ	Department of Justice
DOS	Department of State
DOT	Department of Treasury
DNI	Director National Intelligence
DTAAC	Declared Theater of Active Armed Conflict
DTRA	Defense Threat Reduction Agency
EXORD	Execution Order
FBI	Federal Bureau of Investigation
FID	Foreign Internal Defense
GCC	Geographic Combatant Command
GPF	General Purpose Force
HN	Host Nation
HQ	Headquarters
IA	Interagency
IC	Intelligence Community
JCPOA	Joint Comprehensive Plan of Action
JMD	Joint Manning Document
JP	Joint Publication
JOM	Joint Operation Model
JSOU	Joint Special Operations University

JTF	Joint Task Force
LNO	Liaison Officers
MCPI	Maritime Counterproliferation Interdiction
MDMP	Military Decision-Making Process
NAR	Nonconventional Assisted Recovery
NDAA	National Defense Authorization Act
NDU	National Defense University
NMF	National Mission Force
NPS	Naval Postgraduate School
NPT	Nuclear Nonproliferation Treaty
ODTAAC	Outside Declared Theater of Active Armed Conflict
OPE	Operational Preparation of the Environment
OPLAN	Operation Plan
PE EXORD	Preparation of the Environment Execution Order
PF	Partner Force
PN	Partner Nation
RSO&I	Reception, Staging and Onward Integration
SIG	Strategic Interdiction Group
SME	Subject Matter Expert
SOCCENT	Special Operations Command Central
SOCFWD	Special Operations Command Forward
SOCOM	Special Operations Command
SOF	Special Operations Forces
SOTF	Special Operations Task Force
SR	Special Reconnaissance
STRATCOM	Strategic Command
TSOC	Theater Special Operations Command
UCP	Unified Command Plan
USC	United States Code
USG	United States Government
USSOCOM	United States Special Operations Command
UW	Unconventional Warfare
WMD	Weapons of Mass Destruction

LIST OF DEFINITIONS

Counter Proliferation: "Efforts to combat the spread or growth of weapons—conventional weapons, weapons of mass destruction, and related technology—that threaten the United States."[1]

Covert Action: "An activity or activities of the United States Government to influence political, economic, or military conditions abroad, where it is intended that the role of the United States Government will not be apparent or acknowledged publicly."[2]

Counter Weapons of Mass Destruction: "Efforts against actors of concern to curtail the conceptualization, development, possession, proliferation, use and effects of weapons of mass destruction, related expertise, materials, technologies, and means of delivery."[3]

Direct Action: "Short-duration strike and other small-scale offensive actions conducted as a special operation in hostile, denied, or diplomatically sensitive environments and which employ specialized military capabilities to seize, destroy, capture, exploit, recover, or damage designated targets."[4]

Foreign Internal Defense: "Participation by civilian and military agencies of a government in any of the action programs taken by another government or other designated organization to free and protect its society from subversion, lawlessness, insurgency, terrorism, and other threats to it security."[5]

Intelligence: 1. "The product resulting from the collection, processing, integration, evaluation, analysis, and interpretation of available information concerning foreign nations, hostile or potentially hostile forces or elements, or areas of actual or potential operations. 2. The activities that result in products. 3. The organizations engage in such activities."[6]

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[1] "FBI Counterproliferation Center," FBI, accessed October 25, 2018, https://www.fbi.gov/about/leadership-and-structure/national-security-branch/fbi-counterproliferation-center.

[2] Presidential approval and reporting of covert actions, 50 U.S. Code § 3093, (2014), https://www.law.cornell.edu/uscode/text/50/3093.

[3] Joint Chiefs of Staff, *Countering Weapons of Mass Destruction,* JP 3–40 (Washington, DC: Joint Chiefs of Staff, 2014), http://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_40.pdf, GL-5.

[4] Joint Chiefs of Staff, *Special Operations,* JP 3–05 (Washington, DC: Joints Chiefs of Staff, 2014), http://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_05.pdf, x.

[5] Joint Chiefs of Staff, *Foreign Internal Defense,* JP 3–22 (Washington, DC: Joints Chiefs of Staff, 2018), https://fas.org/irp/doddir/dod/jp3_22.pdf, ix.

[6] Joint Chiefs of Staff, *Joint Intelligence,* JP 2–0 (Washington, DC: Joint Chiefs of Staff, 2013), http://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp2_0.pdf, GL-8.

Interagency: "Of or pertaining to United States Government agencies and departments, including the Department of Defense. See also interagency coordination. The interagency is comprised of CIA, Commerce, DHS, DoD, DOE, HHS, DOI, DOJ, DOS, DOT, Treasury, FBI."[7]

NAR: "Personnel Recovery conducted by indigenous/surrogate personnel that are trained, supported, and led by special operations forces, unconventional warfare ground and maritime forces, or other government agencies' personnel that have been specifically trained and directed to establish and operate indigenous or surrogate infrastructures."[8]

Non-Proliferation: "The prevention of an increase or spread of something, especially the number of countries possessing nuclear weapons."[9]

Nuclear Weapon: "A weapon in which the explosion results from the energy released by a reaction involving atomic nuclei, either by fission—of uranium or plutonium; or, fusion—of a heavier nucleus with two lighter hydrogen ones."[10]

Operation: "A sequence of tactical actions with common purpose or unifying theme."[11] "A military action or the carrying out of a strategic, operational, tactical, service, training, or administrative military mission."[12]

OPE: "The conduct of activities in likely or potential areas of operations to prepare and shape the operational environment."[13]

Oversight: "Knowledgeable, responsible scrutiny; careful management; advice and assistance provided to assigned subordinate organizations to ensure compliance with applicable laws, regulations, directives, and policies while assuring mission readiness."[14]

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[7] Joint Chiefs of Staff, *Interorganizational Cooperation,* JP 3–08 (Washington, DC: Joint Chiefs of Staff, 2016), https://fas.org/irp/doddir/dod/jp3_08.pdf, GL-8.

[8] Joint Chiefs of Staff, *Personnel Recovery,* JP 3–50 (Washington, DC: Joint Chiefs of Staff, 2011), https://fas.org/irp/doddir/dod/jp3_50.pdf, GL-12.

[9] Joint Chiefs of Staff, *Countering Weapons of Mass Destruction,* JP 3–40 (Washington, DC: Joint Chiefs of Staff, 2014), http://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_40.pdf, GL-5.

[10] James N. Yamazaki, "What Is an Atomic or Nuclear Bomb?" accessed on October 24, 2018, http://www.aasc.ucla.edu/cab/200708230002.html.

[11] Joint Chiefs of Staff, *Doctrine for the Armed Forces of the United States,* JP-1 (Washington, DC: Joint Chiefs of Staff, 2013), http://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp1_ch1.pdf, GL-10.

[12] Joint Chiefs of Staff, *Joint Operations,* JP-3-0 (Washington, DC: Joint Chiefs of Staff, 2017), http://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_0_20170117.pdf, GL-13.

[13] Joint Chiefs of Staff, *Special Operations,* JP 3–05 (Washington, DC: Joints Chiefs of Staff, 2014), http://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_05.pdf, GL-9.

[14] Department of Defense, *Implementation of DoD Cover and Cover Support Activities (U),* DoD Instruction DoDI S-5105.63 (Washington, DC: Department of Defense, 2013).

PE: "An umbrella term for operations and activities conducted by selectively trained special operations forces to develop an environment for potential future special operations."[15]

Proliferation: "Rapid increase in the number or amount of something."[16]

Unconventional Warfare: "Operations and activities that are conducted to enable a resistance movement or insurgency to coerce, disrupt, or overthrow a government or occupying power by operating through or with an underground, auxiliary, and guerrilla force in a denied area."[17]

Weapon of Mass Destruction: "Chemical, biological, radiological, or nuclear weapons capable of a high order of destruction or causing mass casualties, and excluding the means of transporting or propelling the weapon where such means is a separable and divisible part from the weapon."[18]

WMD Pathway: "Networks or links among individuals, groups, organizations, governmental entities, etc., that promote or enable the development, possession, and/or proliferation of WMD and related capabilities. Monitoring and controlling WMD pathways is essential in denying actors of concern access to WMD technology, knowledge, materials, expertise, and weapons."[19]

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[15] Joint Chiefs of Staff, *Special Operations,* JP 3–05 (Washington, DC: Joints Chiefs of Staff, 2014), http://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_05.pdf, GL-9.

[16] Oxford Dictionaries, "Proliferation," accessed October 25, 2018, https://en.oxforddictionaries.com/definition/proliferation.

[17] Joint Chiefs of Staff, *Special Operations,* JP 3–05 (Washington, DC: Joints Chiefs of Staff, 2014), http://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_05.pdf, GL-12.

[18] Joint Chiefs of Staff, *Countering Weapons of Mass Destruction,* JP 3–40 (Washington, DC: Joint Chiefs of Staff, 2014), http://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_40.pdf, GL-5.

[19] Joint Chiefs of Staff, *Countering Weapons of Mass Destruction,* JP 3–40 (Washington, DC: Joint Chiefs of Staff, 2014), http://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_40.pdf, ix.

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———. *Joint Operations.* JP-3-0. Washington, DC: Joint Chiefs of Staff, 2017. http://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_0_20170117.pdf.

————. *Personnel Recovery.* JP 3–50. Washington, DC: Joint Chiefs of Staff, 2011. https://fas.org/irp/doddir/dod/jp3_50.pdf.

———. *Special Operations.* JP 3–05. Washington, DC: Joints Chiefs of Staff, 2014. http://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_05.pdf.

Yamazaki, James. "What Is an Atomic or Nuclear Bomb?" Accessed on October 24, 2018. http://www.aasc.ucla.edu/cab/200708230002.html.

EXECUTIVE SUMMARY

In the two years that have passed since the Unified Command Plan (UCP) was changed to designate U.S. Special Operations Command (SOCOM) as the lead Department of Defense (DoD) synchronizer for all countering weapons of mass destruction (CWMD) plans, tangible progress has been slow. The DoD CWMD campaign plan has yet to be completed, little collaboration with the interagency (IA) has transpired, and tangible effects in the mission space have yet to be realized. Meanwhile, the threat of nuclear proliferation continues to metastasize. This research examines potential ways Theater Special Operations Commands (TSOCs) can contribute to SOCOMs and the United States government's (USG) nuclear counterproliferation (CP) efforts against an adversarial state actor.

TSOCs, given their unique authorities, regional focus, permanent structure, and command culture, are ideally positioned to contribute to the USG counterproliferation mission. However, as currently constructed, TSOCs possess gaps that will inhibit their performance. These gaps include organizational structure; limited command and control capabilities; lack of IA collaboration; and no organic WMD subject matter expertise (SME). The way to rectify these gaps is to adopt a mission-oriented, target-focused mindset; receive additional personnel and resources to more effectively command and control tactical elements; improve IA collaboration through a more extensive liaison network; utilize the SOCOM CWMD Fusion Center as a single point of contact for DoD and the IA; ensure attendance of counterproliferation courses for required personnel; develop internal counterproliferation expertise; and establish relationships with IA SMEs.

To understand how a TSOC could function in this space, we projected their present-day capabilities to a near-future, steady-state, counterproliferation mission. We examined how a TSOC could participate in a USG effort to prevent Iran from acquiring or proliferating a nuclear weapon. This scenario demonstrates what the efforts of a TSOC would center around: Incorporate a coordination hub for information, personnel, and equipment; ensure TSOC personnel and Theater SOF have access to nuclear weapon subject matter expertise during operations; integrate/deconflict with DoD and USG

counterproliferation efforts; work with Theater SOF to set conditions for the Reception, Staging and Onward Integration (RSO&I) of other units; and ensure Theater SOF and Theater assets are meeting collection requirements.

As a result of the research, the authors present four recommendations:

- *Restructure the organization*. To be effective in counterproliferation activities, TSOCs must be willing to restructure into mission-oriented configurations where proliferation issues are treated as separate missions sets.

- *Collaborate with the IA*. A TSOC's success in the counterproliferation space will be heavily predicated on their collaborative efforts with the IA. Two starting points to improve these efforts are to: make the SOCOM CWMD Fusion Center the IA and DoD single point of contact for all things CWMD related; and establish more SOCOM liaison billets in key counterproliferation IA organizations.

- *Leverage the skills*. Over the past 17 years, Theater SOF has developed, refined and employed unique skills covering intelligence collection, special activities, information operation, and partner force employment. These skills complement ongoing IA nuclear counterproliferation efforts while recognizing Theater SOF's limitations in nuclear-specific skill sets.

- *Educate the Force*. While most TSOCs have a counterproliferation cell of sorts, the personnel assigned to staff these positions are insufficiently educated on nuclear devices, networks, and policy guidance. To fill this gap, the DoD should develop an internal WMD educational plan which combines the nuclear counterproliferation (as well as chemical, biological and radiological) resources of education programs within DoD into a unified counterproliferation "base-line of knowledge."

Throughout the course of this research, prominent questions emerged that went outside the scope of this thesis but warrant further exploration:

1. As DoD's planning model seems more of a hindrance when applied to the counterproliferation effort, is there a viable planning model that would be more conducive for integrating counterproliferation missions with the IA?

2. How does a TSOC restructure itself to be mission-oriented and integrate subject matter experts (SME) with its forces?

3. What are the policy implications of permitting Theater SOF to enter an adversarial country in a WMD capacity?

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I. INTRODUCTION

> We are facing increased global disorder, characterized by decline in the long-standing rules-based international order creating a security environment more complex and volatile than any we have experienced in recent memory.
>
> —Summary of the 2018 National Defense Strategy[1]

A. BACKGROUND

Since the introduction of atomic weapons in 1945, the United States has developed three general options for addressing the security risks associated with the spread of this strategic capability to other nations: (1) nonproliferation regimes (preventing the development of a capability via treaties and other arms control mechanisms); (2) counterproliferation (preventing the spread of a capability, i.e., interdiction, direct action); and (3) consequence management (actions taken after nuclear detonation). As the technology needed to produce nuclear weapons started to spread widely in the 1960s, the United States pioneered strategies of nonproliferation and specific counterproliferation operations to inhibit nations from developing nuclear latency (the technical capacity to quickly produce and weaponize the fissile material at the heart of a nuclear weapon). To enable those efforts, the U.S. government developed an interagency (IA) process to formulate and execute policy and operational options to curtail this occurrence. Today, the key governmental agencies occupying this nonproliferation and counterproliferation space are The Department of Defense (DoD), Department of State (DOS), Department of Energy (DOE), the Intelligence Community (IC), the Department of the Treasury (DOTR), and Department of Commerce (DOC).

This proliferation ecosystem is robust, complex, and a space where the interagency—organizations outside DoD—holds and has historically held primacy with respect to executing U.S. nonproliferation and counterproliferation policy. Despite the

[1] Jim Mattis, *Summary of the 2018 National Defense Strategy of The United States of America* (Washington, DC: Pentagon, 2018), https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf, 1.

numerous stakeholders, this IA conglomerate, overtime, has led the U.S. effort to curb the spread of nuclear weapons, technology, and material across the globe through various actions. Some of the actions to accomplish this feat include the imposition of sanctions, international import/export law enforcement, coercive diplomacy, granting security assurances, demarches, and covert action, to name a few. Largely driven by intelligence collection, analysis, and the interagency process, there are two poignant examples that illustrate the success of this system. In Nicolas Miller's journal article, "The Secret Success of Nonproliferation Sanctions," Miller discusses how coercive diplomacy and the threat of sanctions stymied South Korea's attempt to establish a nuclear weapons program in the 1970s.[2] Separately, William Tobey, in "Cooperation in the Libya WMD Disarmament Case" describes how the combination of U.S. intelligence and sanctions dismantled the Libyan nuclear program in 2004.[3] Though these examples display the U.S. non/counterproliferation community's effectiveness over time, gaps remain in the current system that can be exploited by an evolving proliferation threat. Of particular concern is how proliferation is increasingly trans-regional and intersects legal business dealings with illicit proliferation activity, challenging the traditional functional and geographical oriented structure of many USG organizations. It is forcing several departments within the non/counterproliferation community to reevaluate their organizational structure and practices.

DoD is one of the departments currently examining its organizations' involvement in non and counterproliferation, with the ultimate aim of optimizing its contribution to the overall USG effort. Since becoming more involved in the national counterproliferation effort in the 1990s, DoD's primary focus has been missile defense, preparing for offensive operations against WMD production facilities and storage sites, and establishing defensive

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[2] Nicholas L. Miller, "The Secret Success of Nonproliferation Sanctions," *International Organization* 68, no. 4 (October 2014), http://web.a.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=4&sid=e027e92b-987a-40ea-b173-9728d70fe7ee%40sessionmgr4007.

[3] William Tobey, "Cooperation in the Libya WMD Disarmament Case," *Studies in Intelligence* 61, no. 4 (December 2017), https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/csi-studies/studies/vol-61-no-4/pdfs/libya-nuclear-deal.pdf.

countermeasures for military forces.[4] Additionally, each of its services has been and remains responsible for training and equipping itself for combat operations in a contaminated environment.[5] Seemingly easy, there are several sub-organizations, much like the IA departments, within the DoD responsible for one or more of these facets. Given the number of organizations and their disparate nature, a better understanding of their duties as well as better coordination is required. U.S. Special Operations Command (SOCOM) is now the lead for coordinating DoD's CWMD effort and synchronizing it with the IA. Similar to its counterterrorism (CT) effort, SOCOM is actively reaching out to the IA to educate itself on the broader community's responsibilities, so that it can ultimately find areas that it can add value, all the while minimizing duplicative efforts. A byproduct of SOCOM assuming this coordination role is that it can better leverage its internally subordinate, operational level commands and forward deployed elements to enable this newly synchronized CWMD effort in ways yet to be seen.

B. THE ROLE OF SOCOM IN COUNTERPROLIFERATION

In August 2016, Secretary of Defense Ashton Carter notified SOCOM that an upcoming change in the Unified Command Plan (UCP)—the document that "establishes the missions and geographic responsibilities among the combatant commanders,"[6]—would shift the responsibility of DoD synchronizer for CWMD from the United States Strategic Command (STRATCOM) to SOCOM. Traditionally, the role of forces assigned to SOCOM to counter WMD, e.g., SOF, has been

> primarily in nonproliferation and counterproliferation by providing expertise, materiel, and teams to support [combatant commands] to locate, tag, and track WMD; conduct interdiction and other offensive operations in limited areas as required; build partnership capacity for conducting counterproliferation activities; conduct military information support operations to dissuade adversary reliance on WMD; and other specialized technical capabilities, including technical reach back capabilities. Although SOF [has] a unique role in CWMD and operating in a [chemical,

[4] Al Mauroni, "Improving Our CWMD Capabilities." *PRISM 7*, no. 3 (2018), 43.

[5] Mauroni, 43.

[6] "Unified Combatant Commands," Department of Defense, October 28, 2011, https://archive.defense.gov/ucc/.

> biological, radiological, nuclear] (CBRN) environment, they cannot fully operate under CBRN threat conditions or conduct SOF-specific CWMD missions without the assistance of conventional forces. For example, while SOF [has] limited organic CBRN decontamination, reconnaissance, and sensitive site exploitation capability, they lack the capacity to conduct long-term sustainment and reconstitution operations without large-scale logistical resupply.[7]

This role was defined in 2013, prior to the UCP change and in the context of renewed tensions about the North Korean, Iranian, and Syrian WMD programs.[8] Since the UCP change, SOCOM has undertaken several initiatives that are as of this writing still underdevelopment to best posture itself and the DoD to counter WMD and the networks that proliferate them. One of the more promising initiatives is the infusion of personnel, resources, and expertise into the seven TSOC as part of SOCOM's ongoing effort to "empower the TSOC."[9] Therefore, our research will focus on **what specific capabilities the TSOCs can bring to bear to execute a nuclear counterproliferation mission—in particular, delaying or disrupting an adversarial actor's acquisition of a nuclear weapon capability in a steady state environment**.

C. LITERATURE REVIEW

Our question requires the researching CWMD, the USG counterproliferation effort, and the role of SOCOM in counterproliferation. Below is a review of some of the prominent academic research on these topics.

Students at the Naval Postgraduate School have analyzed the USG CWMD enterprise and suggested ways to improve the effectiveness of counterproliferation policy. In one such thesis, "Too Big to Fail," the authors argued that "designating a CWMD lead-

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[7] Joint Chiefs of Staff, *Operations in Chemical, Biological, Radiological, and Nuclear Environments,* JP 3–11, (Washington, DC: Joint Chiefs of Staff, 2013), http://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_11.pdf, F-3.

[8] James R. Clapper, *Worldwide Threat Assessment of the U.S. Intelligence Community* (Washington, DC: Office of the Director of National Defense, 2013), https://www.dni.gov/files/documents/Intelligence%20Reports/2013%20ATA%20SFR%20for%20SSCI%2012%20Mar%202013.pdf; "Iran," Nuclear Threat Initiative, May 2018, https://www.nti.org/learn/countries/iran/; "Syria," Nuclear Threat Initiative, April 2018, https://www.nti.org/learn/countries/syria/.

[9] Linda Robinson et al., *Improving the Understanding of Special Operations*, RR-2026 (Santa Monica, CA: RAND, 2018), https://www.rand.org/pubs/research_reports/RR2026.html, 136–140.

proponent agency for the CWMD community would align the authorities, funding, and resources required at the policy level and provide an organization accountable for executing the national CWMD strategy."[10] At face value, this recommendation appears to carry merit. All USG efforts aligned under one organization, single point of contact for anything CWMD related, and defined accountability for everything that goes right as well as wrong with regard to this problem set. Where the authors may fall short in their assessment is that, in a problem set that is beleaguered by multiple competing organizations, just creating a "WMD tzar" would do little more than add another layer of bureaucracy. Short of reorganizing the entire USG toward functional areas such as counterterrorism or CWMD, this proposal would likely cause more issues than it solves. An alternative approach is to create permanent, mission-focused teams that cut across the bureaucracy through the inclusion of all WMD oriented IA organizations at the working/O-6 and below level to effectively counter WMD.

In a recent examination of SOCOM's role in preventing the development, acquisition, spread and use of WMD, Erik Stanfield argued that learning the CWMD terms and specialized language(s) already in use throughout the various expert communities and utilizing target-focused collaboration around WMD threat pathways[11] are two of the most effective courses of action that SOCOM can employ in order to positively contribute to the overall USG WMD fight. He explains that:

> The majority of the international community and U.S. interagency describe their organizational roles along the three "proliferation pillars" (nonproliferation, counterproliferation, and consequence management), while DoD uses the construct CWMD. These two dialects share many commonalities, but a lack of mutual understanding has led to confusion and friction in CWMD interagency working groups. Education – within SOCOM and among partners—is the first step in diffusing misunderstandings.[12]

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[10] William T. Cunningham, Brian J. Dowd, Samuel Kim, Tad Tsuneyoshi, and Adam Woytowich, "Too Big To Fail: The U.S. Government Counter Weapons of Mass Destruction Enterprise," 89.

[11] Erik J. Stanfield, "Lost in Translation: Lessons from Counterterrorism for a More Proactive Weapons of Mass Destruction Strategy," (master's thesis, Naval Postgraduate School, 2017), 10, https://calhoun.nps.edu/handle/10945/55539, 58.

[12] Stanfield, 58.

He goes on to say that

> consensus on CWMD language must start with a shared understanding of a clear objective. WMD threat pathways represent concrete, limited-scope objects around which agencies can collaborate effectively. Analysis of WMD pathway choke points and networks nodes provides a common point of discussion along these lines (i.e., target-focused collaboration).[13]

Though Stanfield makes several well-founded points throughout his thesis, his focus on commonality of language and target-focused collaboration are not the fundamental concerns for DoD's role within CWMD. The salient point that his findings drive toward is that DoD has not prioritized CWMD strategy and operations despite several high-level policy documents saying otherwise (reference the 2017 National Security Strategy, National Strategy to Combat Weapons of Mass Destruction, and Joint Publication 3–40). This lack of prioritization, as seen through the defense budget, resources, authorities and personnel allocated to the counterterrorism fight over the CWMD fight for the past 17+ years, is pervasive throughout DoD.[14] This lack of prioritization of CWMD in DoD has crippled DoD and SOCOM's ability to effectively contribute to USG counterproliferation efforts.

Stanfield uses the targeting of Al-Qaeda in Iraq (AQI) as his primary example of how SOCOM effectively contributed to IA counterterrorism efforts. He champions this example as a model for how SOCOM can affect CWMD operations. Though he admits counterterrorism operations are not analogous to CWMD operations, he does not go far enough in illustrating the differences between the two. The counterterrorism operations of the early 2000s, especially those conducted against AQI, were against a non-state actor in a Declared Theater of Active Armed Conflict (DTAAC). These two variables alter the USG's response against a given adversary. Operating in a DTAAC environment where the U.S. military has Title 10 authority to act against an enemy (such as a non-state actor) and where international law lends legitimacy to the targeting and dismantling of a

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[13] Stanfield, 58.

[14] Timothy M. Bonds et al., *Strategy-Policy Mismatch: How the U.S. Army Can Help Close Gaps in Countering Weapons of Mass Destruction,* (Santa Monica, CA: RAND, 2014), https://www.jstor.org/stable/pdf/10.7249/j.ctt14bs2zp.10.pdf, 13.

designated terrorist organization stand in sharp contrast to CWMD. In CWMD operations, the USG often has to operate in an Outside Declared Theater of Active Armed Conflict (ODTAAC) environment in which state actors are frequently involved, but the use of force is seldom considered and the support of the international community can be lacking or fickle. Instead of altering its vernacular and adopting a target-focused approach to go after WMD, SOCOM should instead focus its efforts on finding ways to complement ongoing USG counterproliferation initiatives, such as leveraging its intelligence collection capabilities to help answer WMD-specific national intelligence priorities.

Colonel Lonnie Carlson and Dr. Margaret Kosal expanded on Stanfield's thesis in a follow-on article, concluding that:

> The USG and DoD must build and leverage the global SOF network through CWMD Operational Preparation of the Environment (OPE) and building partner capacity (BPC) activities to provide the early warning needed to mitigate fleeting opportunities to eliminate catastrophic WMD risks.[15]

While utilizing Theater SOF's organic OPE capabilities in support of CWMD objectives is a potentially worthwhile endeavor, SOCOM should be mindful of CWMD BPC focused efforts. Utilizing Theater SOF's requisite skills, training, equipment, experience and access and placement to conduct OPE in support of answering national intelligence priorities, particularly of the WMD variety, could be a valuable application of deployed personnel and resources. The current limitation in utilizing Theater SOF for WMD-related OPE is that TSOCs and Theater SOF often do not possess the requisite knowledge required to contend with the technical and nuanced nature of the threat. Therefore, any OPE that is conducted needs to be focused on objectives that do not require advanced technical knowledge of WMD, WMD-related infrastructure, WMD-related components or Theater SOF elements requiring subject matter expert (SME) support.

Though "effective BPC efforts can help [to] overcome" a lack of partner participation in CWMD efforts and thus help to lift the USG burden to act unilaterally,

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[15] Lonnie Carlson and Margaret Kosal, "Preventing Weapons of Mass Destruction Proliferation: Leveraging Special Operations Forces to Shape the Environment," (occasional paper, Center for Special Operations Studies and Research, JSOU Press, 2017), 18, https://www.hsdl.org/?view&did=798283.

DoD and by extension SOCOM, is not always the best positioned to engage with Partner Nations (PN) on CWMD BPC.[16] This is due to three main reasons: Theater SOF often only works with other militaries that have very little to do with a PN's CWMD efforts (if those efforts exist to begin with), PNs are often only focused on counterterrorism missions, and Theater SOF are often not trained themselves on the technical skill sets required to counter WMD. What Theater SOF can and should focus CWMD BPC efforts on are skill sets that are firmly within Theater SOF's bailiwick: Direct Action (DA) and Special Reconnaissance (SR). These skill sets should be focused on because they can be easily applied to both counterterrorism and nuclear counterproliferation efforts and do not require any additional investment by SOCOM. By ensuring Partner Force (PF) competency and proficiency in these areas, the PF will be better postured to execute both counterterrorism and WMD missions.

D. SCOPE OF RESEARCH AND ASSUMPTIONS

DoD typically uses "CWMD" to cover the spectrum of efforts that could be applied toward dissuading, preventing, countering, or dealing with the consequences of proliferation. We have focused our study on the spectrum of activities that constitute counterproliferation, in particular nuclear counterproliferation. We acknowledge that in certain instances, what applies to nuclear counterproliferation could also apply to chemical, biological, and radiological counterproliferation. Our research involved non-attributable interviews and primary government documents from across the IA. All of the information presented in this thesis is done so at the unclassified level to ensure the widest possible readership. We further acknowledge the plethora of ongoing efforts across the IA and within DoD to prevent nuclear proliferation. Given the enormous contributions that exist, we have refrained from summarizing most of them and direct the reader to Annex A as well as the other academic works that cover these contributions.[17]

[16] Carlson and Margaret, 12.

[17] Cunningham et al., "Too Big To Fail: The U.S. Government Counter Weapons of Mass Destruction Enterprise."

To further focus this project, we made the following assumptions:

1. There is a role for SOCOM, TSOCs and Theater SOF to play in nuclear counterproliferation.

2. SOCOM and the TSOCs recognize that they do not have primacy in any nuclear counterproliferation efforts at this time.

3. DoD wants SOCOM to be more active operationally in nuclear counterproliferation.

4. TSOCs and Theater SOF will be asked to perform the majority (greater than 50%) of the nuclear counterproliferation missions for DoD.

5. TSOCs and Theater SOF will not duplicate the efforts of the National Mission Force (NMF).

6. TSOCs will be supported with the appropriate funding, manning, resources, training, equipment, authorities and permissions to execute nuclear counterproliferation missions.

7. Not all TSOCs are created equally or operate in the same way.

8. TSOCs are heavily influenced by how they are resourced, manned, the region in which they operate, as well as the bureaucratic constraints placed on them by their respective geographic combatant command (GCC).

E. METHODOLOGY

With this topic being inductive in nature, our research led us to gain an understanding of the current policies, plans, doctrine, and capabilities of the USG counterproliferation efforts. This knowledge enabled us to achieve our primary effort, the conceptualization of the future role a TSOC may have in the USG's counterproliferation efforts against an adversarial state actor in a steady-state environment. Chapter II provides an overview of a TSOC's roles and responsibilities, their suitability for nuclear

counterproliferation operations, gaps and limitations, and how SOCOM can potentially assist TSOCs in addressing those gaps and limitations. Official USG documents and academic papers were relied on to complete the chapter. Chapter III explores how a TSOC, with present day capabilities, could be used to bolster USG counterproliferation efforts in a scenario where an adversarial state actor has signaled to the USG that they intend to acquire weapons grade, fissile material. Iran was selected to fill the role of the adversarial state actor for two reasons. The first was to illustrate some of the complexities that a TSOC would face in the context of a real-world actor. Second, based on of their actions over the last 30 years, Iran could pursue a nuclear weapon in a post Joint Comprehensive Plan of Action (JCPOA) world.[18] The purpose of Chapter III is not to provide a comprehensive plan for how a TSOC should assist the USG in a counterproliferation scenario. Rather, it is to inform the reader of the challenges and opportunities a TSOC could face. The basis of knowledge for Chapter III is rooted in numerous non-attributable interviews within the DoD, IA, IC, as well as the authors' almost 40 years of combined SOF experience. Finally, Chapter IV offers our recommendations to improve TSOCs ability to contribute to the USG's nuclear counterproliferation efforts. These recommendations are based on the numerous non-attributable interviews we conducted with individuals from across the IA. Our project concludes with recommendations for future areas of exploration based off of questions that arose during our research.

[18] "Iran," Nuclear Threat Initiative, May 2018, https://www.nti.org/learn/countries/iran/.

II. THE ROLE OF A THEATER SPECIAL OPERATIONS COMMAND IN NUCLEAR COUNTERPROLIFERATION

To explore the role TSOCs will have in counter nuclear operations, one must understand a TSOC's purpose, its gaps and limitations. This chapter will introduce TSOCs, explain why they are suitable for counter nuclear operations, highlight their gaps and limitations, and finally, propose how SOCOM and its subordinate TSOCs can fill those gaps.

A. DESCRIPTION OF A TSOC

A TSOC is "a subordinate unified command established by a combatant commander to plan, coordinate, conduct, and support joint special operations."[19] In layman's terms, a TSOC oversees and interfaces with all Theater SOF within its area of responsibility (AOR) to ensure that those forces are acting in accordance with the GCC commander's guidance and intent. Doctrinally, TSOCs have five required capabilities:

1. "Possess an optimized centralized organizational structure to support core, theater, and mission-specific operations that supports GCC requirements as envisioned in the Chairman's Global SOF Campaign Plan."[20]

2. "Possess the ability to form the core of a Joint Task Force (JTF) Headquarters (HQ)."[21]

3. "Possess the ability to command and control (C2) distributed SOF and integrate with partners and General Purpose Force (GPF) from the TSOC proper or a Special Operations Command Forward (SOCFWD)."[22]

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[19] Joint Chiefs of Staff, *Special Operations*, JP 3–05, (Washington, DC: Joint Chiefs of Staff, 2014), http://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_05.pdf, GL-12.

[20] Michael Tisdel et al., *Theater Special Operations Commands Realignment,* ADA607289 (MacDill AFB, FL: SOCOM, 2014), http://www.dtic.mil/dtic/tr/fulltext/u2/a607289.pdf, 7.

[21] Tisdel et al., 7.

[22] Tisdel et al., 7.

4. "Possess the ability to develop and maintain shared situational awareness and understanding."[23]

5. "Possess the ability to coordinate and collaborate with interagency and mission partners."[24]

If these five capabilities truly exist, then TSOCs should have the ability to shift part of their focus from counterterrorism to nuclear counterproliferation operations and have immediate impact.

B. TSOC SUITABILITY FOR NUCLEAR COUNTERPROLIFERATION OPERATIONS

TSOCs can be defined by three key attributes: a permanent command structure, regional expertise, and a command culture that is oriented toward addressing amorphous problems.[25] These attributes, coupled with unique authorities, permissions, and a broad geographic force distribution, make TSOCs ideally positioned within DoD to contribute to the USG nuclear counterproliferation mission.

Permanent command structures are permanent because they are codified by law. In the case of a TSOC, their existence is codified by 10 USC § 167.[26] This codification ensures funding and personnel are allocated to them on an annual basis which enables planning and resource allocation for future needs.[27] Conversely, a non-permanent command structure, such as a task force, is limited by the specific, often temporary, mission it was established for making it unsuitable to contend with evolving complexities and enduring nature of difficult problems such as nuclear counterproliferation.[28] Additionally, non-permanent commands are subject to disbandment when newly elected policy makers no longer consider the reasons for its establishment to be valid. Therefore,

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[23] Tisdel et al., 7.

[24] Tisdel et al., 7.

[25] Joint Chiefs of Staff, JP 3–05, I-8, III-5-12.

[26] Unified Combatant Command for Special Operations Forces, 10 USC § 167 (2016), https://www.law.cornell.edu/uscode/text/10/167.

[27] Unified Combatant Command for Special Operations Forces.

[28] Joint Chiefs of Staff, JP 3–05, II-1.

a permanent command, like a TSOC, provides the stability and long-term focus necessary to effectively address the threat posed by nuclear proliferation.

As was seen with the A.Q. Khan nuclear proliferation network, nuclear proliferation is often a problem set that is characterized by its ability to be trans-regional and can cross several domains (technology, information, people, finances, networks, etc.).[29] TSOCs are designed and empowered to oversee entire AORs, which span multiple borders, time zones, and cultures. This ability to hold a "wide-angle" view is essential to countering nuclear threats due to the propensity for people, knowledge, and resources to transcend traditional borders.

Beyond looking across entire AORs, TSOCs offer a unique level of regional awareness because of their geographic focus. Daily interactions with theater and partner forces avail TSOCs with unfiltered information. This first-hand knowledge contributes to TSOCs' unique understanding of regional dynamics, players, and tactics. Though Theater SOF are often not located within the countries of greatest nuclear proliferation concern, they are frequently in the surrounding countries. Through this access and placement, TSOCs, via Theater SOF, may be able to obtain information that may yield results in the form of intelligence collection, situational awareness, and strategic indicators and warnings of nuclear proliferation activities.

A trait that is often attributed to SOF is their ability to think along abstract, non-linear pathways that aid in the resolving of complex, ill-defined problems. The value of this type of thinking is captured in Joint Publication 3–05, "SOF can be formed into versatile, self-contained teams that provide a [Joint Force Commander] with a flexible force capable of operating in ambiguous and swiftly changing scenarios."[30] Furthermore, SOF can "provide unconventional options for addressing ambiguous situations."[31] Looking at nuclear proliferation, one would find a problem set that is often beleaguered

[29] David Albright, *Peddling Peril: How the Secret Nuclear Trade Arms America's Enemies*, (New York, NY: Free Press, 2010), 35–43.

[30] Joint Chiefs of Staff, JP 3–05, x.

[31] Joint Chiefs of Staff, JP 3–05, II-3.

by compounding complexities and technical nuances. Leveraging a SOF command like a TSOC, one would find a central repository of individuals oriented toward solving ambiguous problems, bolstered by real world counterterrorism experience that can cross over to nuclear counterproliferation. This experience encompasses:

- Intelligence Collection
- Information Mapping
- Special Activities
- Employment of a PF
- Employment of Theater Assets and Platforms

An existing authority that enables Intelligence Collection, Information Mapping, and Special Activities for counterterrorism operations is the Counterterrorism Execution Order (CT EXORD). Traditionally, this EXORD has been applied to the counterterrorism problem set; however, as currently written, it could be applied in the nuclear counterproliferation domain. The CT EXORD outlines the following Preparation of the Environment (PE) activities that TSOCs can direct Theater SOF to conduct in both counterterrorism and counterproliferation operations:

- Passive observation
- Area Familiarization
- Site survey
- Mapping the information environment
- Military Source Operations
- Development of Non-conventional Assisted Recovery (NAR) capabilities
- Development of courier networks
- Development of safe houses and assembly areas

- Preposition transportation assets
- Cache emplacement and recovery
- Close-target reconnaissance
- Tagging
- Tracking
- Locating
- Reception, Staging, and Onward Integration (RSO&I)
- Terminal Guidance[32]

All of the aforementioned mission sets TSOCs and Theater SOF currently trains to; is equipped for; and possess real world experience due to 17+ years of combat operations. Lastly, it is important to note where the real value in the information that is garnered from these authorities lies. It lies with the intelligence specialists that reside at the TSOCs and other intelligence organizations that are able turn this raw information into useable intelligence.

An authority that could enable TSOCs and Theater SOF in this realm is 10 USC § 1208. 1208, as it is commonly referred to, is derived from section 1208 of the FY 2005–2015 National Defense Authorization Act (NDAA). This provision of the NDAA authorizes SOF to train, equip, and employ a PF in support of counterterrorism objectives. Unlike the PE EXORD, there is no language in the authority that would enable a TSOC to utilize this authority for counterproliferation outright. The key with using this authority to achieve counterproliferation effects is to find opportunities that can satisfy both counterterrorism and counterproliferation objectives.[33] Similar to the CT EXORD is the

[32] Joint Chiefs of Staff, Special Operations *PE EXORD,* (Washington, DC: Joint Chiefs of Staff, 2012). (S)

[33] Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005, Pub. L. No. 108–375, 118 Stat. 2086 (2005). https://www.gpo.gov/fdsys/pkg/PLAW-108publ375/pdf/PLAW-108publ375.pdf.

CWMD Preparation of the Environment EXORD. The CWMD PE EXORD enables may of the same activities as the CT EXORD, but does so in a WMD context. Other examples of current authorities that can be leveraged by TSOCs and Theater SOF to immediately contribute to the USG's nuclear counterproliferation efforts are the Maritime Counterproliferation Interdiction EXORD (MCPI) and the WMD Maritime Interdiction EXORD. TSOCs and Theater SOF will eventually need more specific counterproliferation authorities if the USG wants SOF to have major impacts in nuclear counterproliferation efforts. However, until that occurs, there are plenty of authorities that SOF currently possess that can be repurposed for nuclear counterproliferation effects.

C. TSOCS GAPS AND LIMITATIONS

Despite TSOCs possessing the potential to contend with the nuclear counterproliferation problem, they are not currently optimized to contribute effectively to USG nuclear counterproliferation efforts. Below are the TSOCs' most significant gaps:

1. "Current organizational structure limits their ability to support GCC requirements as envisioned in the Chairman's Global SOF Campaign Plan."[34]

2. "Do not possess or have limited ability to form the core of a JTF Headquarters."[35]

3. "Do not possess or only have a limited ability to execute C2 over distributed SOF and/or integrate with partners and GPF to effectively influence the GCCs battle space."[36]

4. "Do not possess or only have a limited ability to develop and maintain shared situational awareness to support the planning and executions of GCCs foundational activities."[37]

[34] Tisdel et al., 8.

[35] Tisdel et al., 9.

[36] Tisdel et al., 9.

[37] Tisdel et al., 11.

5. "Do not possess or only have a limited ability to coordinate and collaborate with IA and mission partners to accomplish regional objectives."[38]

6. Limited to no organic WMD expertise and possess only limited reach back to WMD expertise within the IA.

It is noteworthy that these gaps overlap with the required capabilities TSOCs are supposed to possess. Effectively saying, TSOCs in their current state are deficient in their ability to execute their required tasks. In nuclear counterproliferation, this is particularly troubling given that the ability to organize around a problem set, command and control distributed forces, coordinate with mission partners, and utilize relevant subject matter expertise are vital to conducting effective nuclear counterproliferation operations. These deficiencies are due, in part, to the TSOCs being neglected over the last 17 years:

> Since 9/11, U.S Special Operations [SOCOM] has experienced staggering growth and operations tempo—nearly doubling in manpower, tripling in budget, and quadrupling in deployments—while TSOCs were largely ignored... As a result, the SOCOM enterprise grew, while at the regional level the ability to C2 SOF and collaborate with the IA in steady-state environments remained static.[39]

The configuration of a TSOC (refer to Annex C) could be characterized as a rigid hierarchy that is not well postured to affect amorphous problems, such as those found in nuclear counterproliferation. Given that all "TSOCs have different organizational structures, capabilities, and capacities, SOCOM does not intend to standardize the TSOCs, but rather intends to ensure each one possesses the requisite core capabilities to plan and execute the full spectrum of special operations and activities commensurate with GCC's SOF requirements."[40] If SOCOM's end-state for TSOCs is to possess the essential capabilities to engage in nuclear counterproliferation, then TSOCs must evolve from their current organizational structure that is "egregiously short of sufficient quantity and quality

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[38] Tisdel et al., 11.

[39] Richard S. Woolshlager and Fredrick J. Wright, "Force of Choice: Optimizing Theater Special Operations Commands to Achieve Synchronized Effects," (master's thesis, Naval Postgraduate School, 2012), https://calhoun.nps.edu/handle/10945/27922, 7.

[40] Tisdel et al., 8.

of staff and intelligence, analytical, and planning resources"[41] and underneath several layers of bureaucracy, to one that is better suited to adapt to the evolving nature of the threat.

Command and control, the application "of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission" is essential for a command to oversee disaggregate forces.[42] The security environment today "often precludes the employment of large JTFs. In order to effectively employ flexible, low signature, or small footprint capabilities, TSOCs require the ability to manage distributed operations." Globally integrated operations, such as those found in nuclear counterproliferation operations, "require a forward based and agile C2 structure [that] quickly combine[s] capabilities with service components, the interagency, and [PF]."[43] Simply put, TSOCs need a more effective means in which to command and control Theater SOF.

Interagency collaboration is imperative if TSOCs are to effectively contribute to the nuclear counterproliferation effort. Leaders often pay lip service to the importance of IA-DoD collaboration, but as Dr. Robyn Klein explains:

> Each department or agency at the federal level has unique roles, responsibilities, authorities, and processes that shapes its perspective, equities, and operations. Unity of command resides with the President and typically not with a single department or agency lead, which means our system requires that departments and agencies support a "unity of effort" model, both in steady state and during crisis. This is not unique to CWMD, but means that CWMD efforts across departments and agencies will always benefit from shared understanding of problems and close collaboration on the integrated sets of options to address them.[44]

The utility of the TSOCs collaborating with the interagency is that it expedites the exchange of ideas, people, and resources, particularly in crisis. However, two obstacles

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[41] Linda Robinson, *The future of U.S. special operations forces,* Council on Foreign Relations report no. 66 *(*New York, NY, 2013), https://www.cfr.org/report/future-us-special-operations-forces.

[42] Joint Chiefs of Staff, *DoD Dictionary of Military and Associated Terms*, (Washington, DC: Joint Chiefs of Staff, 2018), http://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/dictionary.pdf, 43.

[43] Tisdel et al., 9.

[44] Tisdel et al., 54.

prohibit this partnership from fulfilling its potential. First, TSOCs position in the military hierarchy limits its ability to go outside of the chain of command and forge formal, direct relationships (at the working/O-6 and below level) with other governmental agencies.[45] Second, TSOCs lack the authority and resources to embed personnel directly in those governmental organizations to foster the collaborative working relationships that could pay dividends in nuclear counterproliferation operations. Should these two primary obstacles be overcome, it could chart a path to TSOC relevance in the aforementioned mission space.

Another area of concern is the TSOCs use of formalized military planning documents, processes, and models such as Operation Plans (OPLAN), Campaign Plans, Military Decision Making Process (MDMP) and the Joint Operation Model. These plans, processes and models are the foundational methodologies that DoD and by extension the TSOCs, use to identify, plan for, resource, and leverage action against potential and imminent threats. The issue that has developed over the years of employing these plans, processes, and models is that they have stifled asymmetric thinking and encouraged one-dimensional, linear thought - the antithesis of SOF values. For example, the MDMP "was developed for conventional warfare scenarios whereby contact with the enemy is made upon commencement of the operation, and the timing of that contact can be more-or-less calculate[d]. More modern operations [such as nuclear counterproliferation] on the other hand do not afford planners this planning time before commencement of an" operation.[46] Even in doctrine, there are allowances for the shortcomings of these processes. Joint Publication 5–0 states that "the actual [Joint Operation Model] phases used will vary (compressed, expanded, or omitted entirely) with the joint campaign or operation and be determined by the [Joint Force Commander].' Thus, the six phases (Shape, Deter, Seize Initiative, Dominate, Stabilize, Enable Civil Authority) may not even apply for a given campaign."[47] These are two salient examples of why traditional military planning

[45] Robinson, *The future of U.S. special operations forces*, 15–16.

[46] David Walker, "Refining the MDMP for Operational Adaptability." *Small Wars Journal,* October 15, 2011, http://smallwarsjournal.com/jrnl/art/refining-the-mdmp-for-operational-adaptability.

[47] Kevin Shi and Paul Scharre, "Phases of War and the Iraq Experience," *War on the Rocks,* November 22, 2016, https://warontherocks.com/2016/11/phases-of-war-and-the-iraq-experience/.

processes are often not the preferred constructs in which to solve problems, especially one as complex as nuclear proliferation. Rather than exclusively planning, TSOCs should apply their understanding of the operational environment and proliferation threat to an action-oriented counterproliferation effort in collaboration with relevant IA partners. The inherent challenge with such an effort is recognizing that nuclear counterproliferation is not a single mission, but rather multiple, interconnected complex missions. As such, each facet of the mission will require different strategies, policy considerations, legal frameworks, resources and will be addressed by different USG agencies. Given these considerations, if TSOCs expect to be effective, they must be prepared to provide support and complement ongoing efforts, whenever and wherever needed throughout the entire spectrum of nuclear proliferation—from knowledge/technology proliferation to acquisition of a nuclear weapon.

D. OPTIMIZING THE TSOC

If SOCOM and TSOCs, intend on contributing to the USG effort to curb the proliferation of nuclear weapons, knowledge, and technologies, they must evolve their *modus operandi* to minimize and overcome the bureaucratic hurdles and organizational frictions inherent in the USG. An initial step toward this change would be to adopt an alternate planning methodology, as the current operational plan phases and MDMP templates are insufficient.

Adopting a mission-oriented, target-focused framework and applying it to the nuclear proliferation problem would better prepare a TSOC to contend with the complexities and ever-changing nature of the threat. With a reframed mindset and structure, TSOCs could begin to understand the multiple dimensions of nuclear counterproliferation—key actors, supply chain networks, and nuclear weapons technology, to name a few. With a more holistic understanding of the nuclear proliferation threat, TSOCs would be better able to optimize themselves by restructuring and staffing the command as AOR-specific nuclear proliferation issues dictate. One way of doing so would be to adopt the mission center construct, where organizations structure themselves around target issues rather than an organizational function, resulting in uninterrupted

access to every capability within an organization and limited bureaucratic obstacles. In the case of TSOCs, they could organize into nodes, bearing all the capabilities of the TSOC (human resources, intelligence, operations, logistics, operational planning, and communications), that represent key points in the nuclear weapons acquisition process—nuclear fuel cycle, delivery systems, and weapons development. This method does not replace or duplicate the current J-code construct, but rather augments it. In order to achieve this alignment, administrative constraints such as the Joint Manning Document (JMD) would need to be reassessed to ensure compatibility with alternative structures better suited to the mission. This would necessitate that the personnel being brought in to fill these billets possess the requisite knowledge to work nuclear counterproliferation issues or would be allowed the time to attend recognized courses (see Annex F) that could provide them the fundamental knowledge to effectively understand the problem and contribute to solutions. Furthermore, since "most special operations require non-SOF assistance,"[48] the personnel that fill these billets do not need to be SOF-qualified, but should be able to learn/understand how SOF functions and contributes to the counterproliferation space.

In the same vein, TSOCs must be afforded sufficient personnel to fill the Command and Staff billets at SOCFWDs. These long-term, forward commands are the practitioners of persistent engagement and are likely the commands that would be most familiar with the issues of the area.[49] They should not be subject to the same augmentation as short-term, Special Operations Task Forces (SOTFs), but should instead have dedicated staff in longer-term billets to provide the depth of experience and continuity needed to effectively conduct operations in support of counterproliferation. Additionally, these elements should be provided the requisite technical equipment that would facilitate rapid communications between the SOCFWD, its subordinate ground units, and the TSOC. The totality of these measures would greatly aid the TSOC in commanding and controlling

[48] "SOF Truths," SOCOM, accessed October 16, 2018, https://www.socom.mil/about/sof-truths.

[49] Joint Chiefs of Staff, JP 3–05, III-5.

Theater SOF units more effectively, enabling TSOCs to be more responsive, situationally aware, and postured for action in the counterproliferation space.

As interagency collaboration is imperative in the counterproliferation mission space, TSOCs must build direct relationships with interagency partners at the working/O-6 and below level. Possible starting points include:

- Embedding Liaison Officers (LNOs) in key nuclear counterproliferation-focused IA organizations.
- Utilizing the SOCOM CWMD Fusion Center as a central DoD point of contact for the IA.
- Utilizing the existing IA education network to properly train TSOC personnel on nuclear counterproliferation matters.
- Developing reach back capabilities to subject matter experts (SMEs) throughout the IA.

Lastly, in order to be a relevant participant in the nuclear counterproliferation mission space, a premium must be placed on developing, acquiring, and having access to pertinent subject matter expertise both internal and external to the TSOC. Access to interagency subject matter expertise does reside within select DoD entities, but such expertise often does not percolate to SOCOM, let alone the TSOCs. By prioritizing training, information-sharing, and networking the IA, DoD, SOCOM, and TSOCs all stand to benefit from enhanced professional development and relationships that can be later leveraged to strengthen USG nuclear counterproliferation efforts.

III. POTENTIAL TSOC ROLE IN USG COUNTERPROLIFERATION EFFORTS AGAINST A STATE ACTOR

A. INTRODUCTION

Iran presents a unique opportunity in that it is an adversarial nation that has a known interest in pursuing a nuclear weapon but has yet to do so, making it the perfect template for proposing new, potentially applicable ideas. This chapter presents a plausible, near-future scenario where an active USG counterproliferation effort is ongoing. Provided a good understanding of the situation, a TSOC, if leveraged properly, could add value to the ongoing counterproliferation efforts vis-á-vis Iran.

B. SCENARIO

In August 2021, the United States received all-source reporting indicating Iran intends to begin the construction of a covert uranium enrichment facility outside the terms of the JCPOA, and beyond the purview of the IAEA. Ostensibly, Iran has continued to abide by the terms of the JCPOA, despite the United States' withdrawal from the agreement. As a result of the United States re-imposing the pre-JCPOA sanctions in November 2018,[50] European, allied, and partner countries have refrained from conducting business in Iran, out of fear of being sanctioned themselves by the USG. In spite of these sanctions, Iran's economy has limped along through trade with the China and Russia. However, those transactions have not been able to prevent Iran's economy from spiraling downward, creating greater internal pressure on the Iranian regime from their young population, which has grown weary of the traditional life offered by conservative Shi'a Islam, a lack of employment opportunities, and limited interaction with the rest of the world. Emboldened by the actions of the Democratic People's Republic of Korea

[50] Matthew Lee, "US Reimposes all Iran Sanctions Filed Under Nuclear Deal," *The Washington Post,* November 2, 2018, https://www.washingtonpost.com/world/national-security/us-reimposes-all-iran-sanctions-lifted-under-nuclear-deal/2018/11/02/a331c300-dead-11e8-8bac-bfe01fcdc3a6_story.html?utm_term=.d23363c8a0ef.

(DPRK)[51] and fearful of a Libya-like scenario playing out in Iran, Tehran has made the strategic decision to pursue a nuclear weapon.[52]

Though the USG was hopeful that the re-imposition of pre-JCPOA sanctions would bring Iran back to the negotiating table, it appears those efforts have failed. While the USG is, for the moment, committed to avoiding in another war in the Middle East, the all-source reporting is very concerning. The current strategy is to delay and disrupt Iranian efforts to acquire enough highly enriched uranium to produce a nuclear weapon. Despite diplomatic efforts to renegotiate a new, more comprehensive nuclear agreement having stalled, the USG has not yet disclosed its awareness of Iran's covert actions to construct a new enrichment facility.

Due to the early warning of Iran's intent to begin construction of a covert enrichment facility, the USG is able to consider a greater array of options to prevent the construction and use of this facility. As such, the National Security Council tasks the IA, namely DOS, DOC, DOTR, and DoD to develop options for preventing Iran from covertly acquiring fissile material. Per the 2017 Unified Command Plan change that made SOCOM the lead CWMD coordinating authority for DoD, SOCOM begins planning and coordinating DoD's response. Part of that planning includes tasking Special Operations Command Central (SOCCENT) to assist the IC in intelligence collection operations that would help inform USG policymakers. SOCCENT is not authorized to operate within sovereign Iranian territory, but has freedom of movement in the areas and countries surrounding Iran.

C. ASSUMPTIONS

This scenario is presented with certain assumptions and constraints. We assume that SOCOM's Fusion Center would be serving as the central DoD point of contact for internal DoD coordination and integration with the IA. We also assume that SOCOM and

[51] "North Korea," Nuclear Threat Initiative, May 2018, https://www.nti.org/learn/countries/north-korea/nuclear/.

[52] "Chronology of Libya's Disarmament and Relations with the United States," Arms Control Association, https://www.armscontrol.org/factsheets/LibyaChronology.

CENTCOM would leverage the resident capability of SOCCENT. Likewise, it is assumed that although the IC assess its reporting on Iran as high-confidence, there has been no significant change in SOF authorities. More specifically, SOF are not authorized to operate in Iranian territory, given the absence of diplomatic and mil-to-mil relationships. However, they do have authority to work with and in the neighboring countries.

D. THE TASK

Conducting Iran-targeted, nuclear counterproliferation presents an enormous challenge given the hostile relationship with the U.S. and the United States' subsequent restrictions on military forces. The efficacy of SOF, let alone a TSOC, is called into question because of these limiting factors. It is therefore incumbent upon a TSOC to focus its efforts on areas that complement the broader USG. Of the several questions that arise from this tasking, many of which are strategic intelligence requirements, the TSOC should focus on operational level efforts that may aid strategic efforts and/or provide context to some of those strategic national intelligence priorities. Some of those focused questions are

1. Where are the locations of key nuclear-related infrastructure in Iran?
2. From where, to where, and how does Iran export/import nuclear weapons-related material and equipment?
3. Where are the known proliferation locations within and around Iran?
4. What intelligence gaps and limitations does the IA have with respect to Iran nuclear counterproliferation?
5. What support does the IA require from DoD and vice versa?

For this scenario, those questions could best be answered if the TSOC focused its contribution along four lines of effort: deploy the SOCFWDs, prepare the environment, identify and employ a partner force, and adjust its structure.

E. DEPLOY SOCFWDS

SOCFWDs present a customizable, rapidly deployable capability that can be used for a host of reasons, including intelligence collection. As a direct link to the TSOC, this element could serve as an initial sensor for intelligence or as a conduit for future SOF to partner with what the SOCFWD considers to be the unit of most value, with respect to the Iranian nuclear proliferation threat. These tailorable commands, should it be determined necessary, could be the hub for SOF special activities in one or more of those countries surrounding Iran. In more practical terms, this would entail establishing a SOCFWD in Turkmenistan, Pakistan, and/or Azerbaijan, ostensibly to strengthen the U.S.—partner nation mil-to-mil relationship. However, in a more clandestine fashion, the SOCFWD, with the appropriate staff and reach back to the IA, could develop the operational and tactical intelligence picture. This approach may allow the IC to focus on more strategic elements of Iran's nuclear program, while also offering some context to the IC.

F. PREPARE THE ENVIRONMENT

With access to Iran's peripheral countries and bodies of water, TSOCs must leverage existing authorities to characterize specific areas and routes to the target country and to prepare and maintain infrastructure and equipment that could be used in future escalated actions. These TSOC-driven actions serve two purposes. They signal the United States' resolve to Iran, and that the United States is taking the necessary steps to escalate this counterproliferation effort should it be required. Additionally, they provide preparatory and staging infrastructure for those U.S. forces selected to conduct action against Iran, should it be required. These preparation activities have paid dividends in the past, a notable example in recent history being the infrastructure in Jalalabad, Pakistan used by SOF in the 2001 invasion of Afghanistan. This platform allowed SOF to stage and respond to al-Qaeda and the Taliban within one month of the 9/11 attacks. In this Iran scenario, establishing infrastructure would alleviate great pressure for the IC to take on such efforts and leave it to establishing the most sensitive of sites, if the IC deems that necessary.

G. EMPLOY A PARTNER FORCE

A TSOC must employ SOF in as many capacities as possible in a steady-state environment. The TSOC must also task assigned subordinate units to partner with, train, and deploy partner forces on behalf of U.S. interests. There are multitudes of instances in which SOF can partner with a force and not all partners must be state sponsored. For this scenario, a TSOC must first understand the ground dynamic as described by the common intelligence picture, and then it should seek those individuals who possess a high degree of aptitude, but also have unique access and placement, to could provide area of interest confirmation, verify select Iranian targets, and facilitate the emplacement of select devices/tools in denied areas. Though these personnel would operate as surrogates of sorts, they could pay dividends with minimal risk to U.S. forces.

H. ADJUST TSOC STRUCTURE

As shown in Annex D, TSOCs are currently organized based on the J- code model. Given that counterproliferation is not an inherently military operation, perhaps a better way of organizing SOCCENT to degrade or prevent Iran's acquisition or development of a nuclear weapon capability is to first identify key aspects of Iran's nuclear programs and create teams drawn from across the relevant J-codes that focus on those critical aspects. For example, a TSOC could be comprised of teams that focus on key actors, supply chain and logistics networks, intelligence-collection, WMD delivery systems, and nuclear weapons development. No TSOC is able nor should be expected to address all of these areas independently or comprehensively; rather, it is essential to draw upon the vast subject matter expertise that resides in the IA. This is achieved by having the relevant IA members (IC, DOS, DOE, DOTR, DOC, etc.) connected with each of these teams. By doing so, the IA is able to provide critical technical expertise, facilitate information-sharing, and manage deconfliction with participating agencies/departments. These specialized teams can then feed back into one of the J-codes (most likely J3/operations or J5/planning) to ensure that the TSOC's overall planning and operations efforts for Theater SOF are informed by and synthesized with the findings of the specialized teams.

I. SUM OF EFFECTS

This combination of activities could collect meaningful intelligence while also preparing the environment for follow-on operations, indirectly deterring Iranian nuclear activities, and ultimately contributing to the greater USG Iranian nuclear counterproliferation effort. Uniquely challenging, the steady state environment forces the TSOC to balance the overt presence and application of SOF, ensuring proper signaling while not completely denying its forces ability to collect intelligence. Initially establishing a SOCFWD is a critical first step, and becomes a conduit for all other activities. Under the SOCFWD(s), intelligence is collected, potential partner forces are identified, and infrastructure is established. An effort along these lines, replicated in select countries surrounding Iran, would give pause to Iran and its nuclear weapons pursuit. Knowing that the U.S. is training forces, actively collecting intelligence, and developing infrastructure to potentially use on Iran, is a signal worth pause, and in this scenario, could prove to curb Iran's nuclear activities.

J. CONCLUSION

This examination of a TSOC's role in nuclear counterproliferation scenario offers a few possibilities for how a TSOC could be utilized against an adversarial state actor should that state signal a desire to pursue a nuclear weapon. This proposed utilization of a TSOC is not meant to be used for advanced force operations but rather as a guide to enable TSOCs to undertake preparatory actions that would further enable the USG to prevent the development or acquisition of a nuclear weapon by a state actor. These preparations assume a USG directive to do so and are reflective of a TSOC's current capabilities and authorities.

IV. RECOMMENDATIONS

In order for TSOCs to properly contribute to USG counterproliferation efforts, steps need to be taken to get the TSOCs properly organized, collaborating with the IA, and ensure DoD, SOCOM, and TSOC personnel receive proper counterproliferation education. We conclude our research by proposing areas for further exploration based off the areas our research was not able to address.

A. ORGANIZATIONAL STRUCTURE

If TSOCs are to be effective in the global fight against nuclear proliferation, they need to be able to do two essential tasks:

1. View nuclear counterproliferation through the lens of multiple mission sets instead of the singular global CWMD mission, and

2. Continuously work with other TSOCs and the IA to characterize and defend against this threat. TSOCs will at a minimum require:

- In-house expertise on nuclear threats; reliable and unencumbered access to USG technical expertise.

- The ability to dedicate TSOC personnel to focus solely on nuclear threats in an operational—vice planning—manner.

- Dedicated funding, permissive authorities, and enduring concept of operations (CONOPs) to enable TSOCs to employ Theater SOF against time-sensitive target(s), unburdened by the bureaucracy and decision-making procedures that normally inhibits DoD involvement in counterproliferation operations.

- Less focus on strategic objectives, end states, and campaign plans, and more focus on operational goals, developing options, gaining approvals, and concurrent planning with the threat space's evolution.

Though some of these recommendations will be easier to implement than others, the key takeaway is if DoD, SOCOM, and the TSOCs want to be effective and proficient in counterproliferation operations, then they must put aside the traditional military mindset of doctrine, MDMP, and "six phases of war." In their place, TSOCs should adopt a mission-oriented structure that is backed by a thorough understanding of the problem, as well as, their intended effects and the personnel and resources necessary to achieve those effects.

B. MORE EFFECTIVE COLLABORATION WITH THE IA

The IA, namely the IC and the DOC, DOE, DOS, and DOTR have been working proliferation issues for decades. This level of expertise and institutional knowledge is a resource that DoD, SOCOM, and the TSOCs should leverage as much as possible given their collective lack of knowledge of nuclear weapons and experience in contending with proliferation threats. This collaboration can take on multiple forms but two stand out from the rest:

1. Assign more SOCOM personnel to collaborate, counterproliferation focused working groups within the IA, and

2. Establish one point of contact for all DoD proliferation matters, internally and externally.

One of the counterproliferation-focused working groups is the Strategic Interdiction Group (SIG). The SIG is arguably one of the most effective tools the USG possesses to counter proliferation threats at the tactical and operational levels. The current level of SOCOM representation is insufficient to effectively advocate and represent SOCOM interests at the SIG. For SOCOM to effectively integrate with the SIG, or any of the other IA counterproliferation focused working groups, SOCOM representatives must to be able to do the following:

- Work at the SIG long enough so that the in-processing requirements do not consume upwards of half their allocated time at the SIG;

- Possess first-hand working knowledge of how SOF operates;

- Be empowered by SOCOM to make decisions and reach out to the necessary subordinate commands/units as needed;
- Possess a working knowledge of nuclear devices and proliferation issues prior to their assignment;
- Possesses an ability to think along asymmetric, non-linear pathways; and
- Read into appropriate DoD/SOCOM programs to prevent knowledge gaps.
- To fulfill these requirements, more than one SOCOM representative should be selected for duty at the SIG.

With respect to a singular point of contact for all proliferation matters concerning DoD, we recommend the use of the SOCOM CWMD Fusion Center. The SOCOM CWMD Fusion Center was established to be the action arm of SOCOM as SOCOM took over the CWMD coordinating authority role for DoD. If they are to be effective, then it is in the best interest of DoD, SOCOM and the Fusion Center for the Fusion Center to be the single point of contact for all DoD commands, to include TSOCs, contending with nuclear (as well as chemical, biological, and radiological) proliferation issues. This could facilitate maintaining an accurate departmental common operating picture. The Fusion Center should also serve as the single voice and point of contact for DoD when engaging with the IA at the working/O-6 and below level. This would most likely entail the commitment of significant funding, personnel, and resources so that the Fusion Center can recruit, develop, and employ the subject matter experts needed to effectively and routinely engage with the entire USG on nuclear proliferation issues.

C. WHERE THE CONTRIBUTIONS OF TSOCS LIE

Success for TSOCs and Theater SOF would constitute bolstering ongoing IA nuclear counterproliferation efforts. Theater SOF's contribution to nuclear counterproliferation efforts will most likely fall within the realm of: Special Activities, Intelligence Collection, Information/Cyber Operations, the use of Theater Platforms, and

the employment of HN Partners. These skill sets have been honed over 17 years of sustained counterterrorism operations; however, they are limited in scope and Theater SOF is not suitably trained for every aspect of nuclear counterproliferation operations. In particular, when these operations deal with the technical aspects of nuclear weapons, TSOCs and Theater SOF will require IA SME support. Relying on IA SME support lessens the burden on TSOCs and Theater SOF by not forcing them to develop, train to, and sustain another skillset in addition to the litany of skills they are already required to maintain. The effectiveness of TSOCs and Theater SOF's contribution will rest in skillfully adapting and applying what they currently do in counterterrorism operations to nuclear counterproliferation efforts.

D. EDUCATING THE FORCE

In addition to the TSOCs taking a more intelligence-collection-based approach to the counterproliferation fight, the other area where significant attention is needed is education. For several reasons, including longstanding focus on counterterrorism, operational tempo, lack of prioritization of the counterproliferation fight within DoD, TSOCs often lack the institutional knowledge and subject matter expertise that is required to effectively participate in nuclear counterproliferation efforts. Though some TSOCs have a nuclear counterproliferation cell of sorts, the personnel assigned to staff these positions are often under-resourced and insufficiently educated on nuclear devices, networks, and policy. Conducting nuclear counterproliferation operations not only requires the skill sets of planning and tactics, but also demands a fundamental understanding of how these weapon systems work, what components they consist of, where the material and expertise can come from, as well as the variety of methods for employment.

Within DoD, there are several institutions that offer nuclear counterproliferation education, such as the National Defense University (NDU), the Naval Postgraduate School (NPS) and the Joint Special Operations University (JSOU). To ensure that TSOCs, SOCOM, and the DoD as a whole are receiving the same education, we recommend the development of an internal DoD WMD educational plan which combines the nuclear

counterproliferation (as well as chemical, biological and radiological) resources of NDU, NPS, JSOU and the other education programs within DoD into a unified counterproliferation "base-line of knowledge" available at each of the institutions. This unified program, in conjunction with IA counterproliferation educational resources, could then work to establish a base-line knowledge and understanding of the issues surrounding proliferation. Furthermore, this base-line knowledge, along with prioritizing DoD personnel participation in ongoing IA counterproliferation courses, will enable DoD personnel to gain understanding and expertise on these topics. This will enable the development of relationships between counterproliferation professionals.

E. AREAS FOR FUTURE RESEARCH

Two years after assuming the role as DoD synchronizer for CWMD, SOCOM continues to fully define its role in the CWMD mission space. There remains plenty of exploration with regard to their new mission, and more broadly, the entire USG counterproliferation enterprise. This research project conceptually yielded how TSOCs and their assigned Theater SOF can better contribute to the USG's nuclear counterproliferation effort, specifically against an adversarial state actor. Throughout the course of this research, there were several prominent questions that went beyond the scope of this project and are worth further exploration:

As DoD's planning model is more of a hindrance when applied to the counterproliferation effort, is there a viable planning model that would be more conducive for integrating counterproliferation missions with the IA?

This research identified that DoD planning as it is today is incompatible with the IA model. While DoD uses an antiquated model, based on moving large formations and making deliberate contact with a defined enemy force, the IA's planning model is less formal but oriented toward the speed in which action can be taken against a target—not necessarily a defined enemy. While this model is predicated on speed of action, commander approval is central to DoD's model. While both models have their merit, DoD's is not suitable for counterproliferation operations. Developing a practical planning

model that blends speed of action with approval requirements may benefit SOCOM as it becomes more involved with counterproliferation and the IA.

How does a TSOC restructure itself to be mission-oriented and integrate SMEs with its forces?

This research suggests that TSOCs, in their current functional organizational structure, are not optimized nor educationally equipped to solve complex issues like counterproliferation. TSOCs must therefore change organizationally. Proposing a viable, mission center-structured TSOC and a methodology for integrating SME support could prepare TSOCs to better contend with WMD proliferation and other amorphous problems.

If granted approval to enter Iran in a CWMD capacity, how would Theater SOF be best employed in a steady state nuclear proliferation scenario?

Theater SOF offers a range of capabilities to devote to the USG CWMD effort, but absent the authorization to enter Iran, it can only do so much. However, should political and senior military leaders determine that the situation in Iran warrants approving Theater SOF to enter the country, it would be prudent to explore the exact capacity in which Theater SOF would best be employed.

APPENDIX A. DESCRIPTION OF MAJOR USG ORGANIZATIONS THAT ARE INVOLVED IN COUNTERPROLIFERATION

The following government entities, primarily taken from Who's Who in the Zoo by Shawn Powers, have distinct responsibilities within the USG counterproliferation effort. The descriptions from Shawn Powers are not from official USG documents.

A. INTELLIGENCE COMMUNITY

Counterproliferation Mission Center (CPMC). "Combines operational and analytic specialists that are dedicated to combating the spread of dangerous weapons and technology. The Counterproliferation Mission Center is led by an undercover NCS officer, with deputies for operations and analysis."[53]

Interdiction & Counterproliferation Facilitation (ICPF). "Develops, facilitates and coordinates IC efforts to advance a strategic approach to interdiction, primarily oriented through the SIG. ICPF is also engaged in activities pertinent to proliferation networks, how they operate, and how critical chokepoints and vulnerabilities might be identified."[54]

National Counterterrorism Center (NCTC). "The WMD-CT leads NCTC's approach to terrorist threats involving WMD by integrating intelligence analysis, collection management, information sharing, and policy planning across the Center. The WMD-CT office consolidates functions previously divided between the Directorate of Strategic Operational Planning, Directorate of Intelligence, and the Office of National Intelligence Management for Counterterrorism. It also builds on the WMD-Terrorism Integration Office, which was established to strengthen NCTC's relationship with the NCPC on WMD issues."[55]

National Intelligence Manager (NIM). "NIMS serve as the single focal point within the ODNI for all activities related to their portfolios. They are the DNI's principal advisors for community oversight and coordination of their respective mission area and are responsible for the development and implementation of one or more Unifying Intelligence Strategies. NIMs are categorized as regional, country or functionally. They integrate the ICs collection and analytic efforts; are responsible for intelligence mission management within their area of responsibility, and maintain senior-level contacts

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[53] "CIA Launches New Counterproliferation Center," *Central Intelligence Agency,* April 29, 2013, https://www.cia.gov/news-information/press-releases-statements/press-release-2010/cia-launches-new-counterproliferation-center.html.

[54] Shawn Powers, *Who's Who in the Zoo* (Fayetteville, NC: USASOC, 2016), 7. (S)

[55] Powers, 7.

within the intelligence, policymaking, and warfighting communities to ensure the full range of informational needs related to their mission area are met."[56]

B. COMMERCE

Bureau of Industry and Security (BIS). "The mission of BIS export enforcement is to protect U.S. national security, homeland security, foreign policy, and economic interests through law enforcement programs focused on: sensitive exports to hostile entities or those that engage in onward proliferation; prohibited foreign boycotts; and related public safety laws."[57]

C. DEPARTMENT OF HOMELAND SECURITY

Customs and Border Protection (CBP). "The Customs and Border Protection (CBP) is responsible for border security, including counterterrorism, customs, immigration, trade, and agriculture."[58] "CBP participates in commodity identification and interdiction methodologies. The DHS goal with the EXBS program is to prevent the proliferation of WMD and destabilizing accumulations and irresponsible transfers of conventional weapons by helping to build effective national strategic trade control systems in countries that possess, produce, or supply strategic items, as well as in countries through which such items are most likely to transit."[59]

Export Enforcement Coordination Center (E2C2). "The E2C2 serves as the primary forum within the federal government for executive departments and agencies to coordinate and enhance their export control enforcement efforts. The Center maximizes information sharing, consistent with national security and applicable laws. This helps partner agencies detect, prevent, disrupt, investigate and prosecute violations of U.S. export control laws. HSI, as part of the Department of Homeland Security (DHS), manages and operates the Export Enforcement Coordination Center."[60]

Homeland Security Investigations (HSI). "U.S. Immigration and Customs Enforcement's (ICE), Homeland Security Investigations (HSI), Counter-Proliferation Investigations (CPI) program prevents sensitive U.S. technologies and weapons from reaching terrorists, criminal organizations and foreign adversaries. The CPI program combats the trafficking and illegal export of commodities and services."[61]

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[56] Powers, 7.

[57] Powers, 5.

[58] "What We Do," U.S. Customs and Border Protection, accessed October 31, 2018, https://www.cbp.gov/careers/cbpo-what-we-do.

[59] Powers, 5.

[60] Powers, 5.

[61] Powers, 5.

D. DEPARTMENT OF DEFENSE

Defense Threat Reduction Agency (DTRA). "Works with rest of the U.S. government, allies and partner countries, and international organizations to counter WMD and improvised threats. As the DoD's research and development leader focused on WMD and improvised threats, DTRA facilitates innovation as we combine traditional research with unconventional means to develop and quickly field solutions to the most complex, deadly and urgent threats facing the U.S. and the rest of the world."[62]

SOCOM CWMD Fusion Center. "A relative newcomer to the interagency, SOCOMs CWMD Fusion Center is the nexus A nexus of CWMD awareness, active planning, and operational advocacy across functional and geographic missions."[63]

E. DEPARTMENT OF ENERGY

The Office of Nonproliferation (NNSA). "Established by Congress in 2000, NNSA is a semi-autonomous agency within the U.S. Department of Energy responsible for enhancing national security through the military application of nuclear science. NNSA maintains and enhances the safety, security, and effectiveness of the U.S. nuclear weapons stockpile without nuclear explosive testing; works to reduce the global danger from weapons of mass destruction; provides the U.S. Navy with safe and effective nuclear propulsion; and responds to nuclear and radiological emergencies in the U.S. and abroad."[64]

The Office of Nuclear Smuggling Detection and Deterrence (NSDD). "Works with international partners to strengthen capabilities to deter, detect, and investigate the smuggling of nuclear and radiological materials by providing the expertise and tools needed to respond to smuggling events."[65]

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[62] "Who We Are," Defense Threat Reduction Agency, accessed October 27, 2018, http://www.dtra.mil/About/Who-We-Are/.

[63] *Reviewing Department of Defense Strategy, Policy, and Programs for Countering Weapons of Mass Destruction (CWMD) for Fiscal Year 2019*, U.S. Congress, House Emerging Threats and Capabilities Subcommittee Committee on Armed Services, (2018) (Statement of Vayl Oxford), https://docs.house.gov/meetings/AS/AS26/20180322/108018/HHRG-115-AS26-Wstate-OxfordV-20180322.pdf.

[64] "About NNSA," Department of Energy, accessed October 27, 2018, https://www.energy.gov/nnsa/about-nnsa.

[65] "NNSA and Nuclear Smuggling Detection and Deterrence," Department of Energy, accessed August 25, 2018, https://www.energy.gov/nnsa/nnsa-and-nuclear-smuggling-detection-and-deterrence.

F. FEDERAL BUREAU OF INVESTIGATION (FBI)

FBI Counterproliferation Center. "The CPC combines the counterproliferation expertise of our Counterintelligence Division, WMD Directorate, and Directorate of Intelligence. All FBI counterproliferation investigations are managed by the CPC, which leverages law enforcement and intelligence techniques to prevent the acquisition of WMD and critical controlled technologies."[66]

G. DEPARTMENT OF STATE

Bureau of International Security & Non-Proliferation (ISN). "Combating WMD through bilateral and multilateral diplomacy is one of the highest priorities of the Department of State. The ISN Bureau leads State's efforts to prevent the spread of WMD — whether nuclear, biological, chemical, or radiological — and their delivery systems."[67] "ISN is responsible for managing a broad range of U.S. nonproliferation policies, programs, agreements, and initiatives,"[68] including the Export Control and Related Border Security (EXBS) Program.

H. DEPARTMENT OF THE TREASURY

Financial Crimes Enforcement Network (FinCEN). "FinCEN's mission is to safeguard the U.S. financial system from illicit use, combat money laundering, and promote national security through the collection, analysis, dissemination of financial intelligence, and the strategic use of financial authorities."[69]

Office of Foreign Assets Control (OFAC). "The OFAC administers and enforces economic and trade sanctions based on U.S. foreign policy and national security goals against targeted foreign countries and regimes, terrorists, international narcotics traffickers, those engaged in activities related to the proliferation of WMD, and other threats to the national security, foreign policy or economy of the United States. OFAC acts under presidential national emergency powers, as well as authority granted by specific legislation, to impose controls on transactions and freeze assets under U.S. jurisdiction. Many sanctions are based on UN and other international mandates, are multilateral in scope, and involve close cooperation with allied governments."[70]

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[66] "FBI Counterproliferation Center," Federal Bureau of Investigation, accessed August 25, 2018, https://www.fbi.gov/about/leadership-and-structure/national-security-branch/fbi-counterproliferation-center.

[67] Powers, 5.

[68] "Weapons of Mass Destruction Threat," U.S. Department of State, n.d., https://www.state.gov/t/isn/wmd/.

[69] Powers, 5

[70] Powers, 5

APPENDIX B. WHAT EACH USG ORGANIZATION OFFERS TO THE COUNTERPROLIFERATION FIGHT

	Sanctions	Diplomacy	Interdiction	Kinetic Strike	Intelligence Collection	Investigation
DOS	X	X				
DoD			X	X	X	
IC			X	X	X	
DOJ					X	X
DOE					X	X
DOT	X					X
DOC	X					X

Figure 1. USG Entities and Their Capabilities

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APPENDIX C. NOTIONAL THEATER COMMAND ORGANIZATION

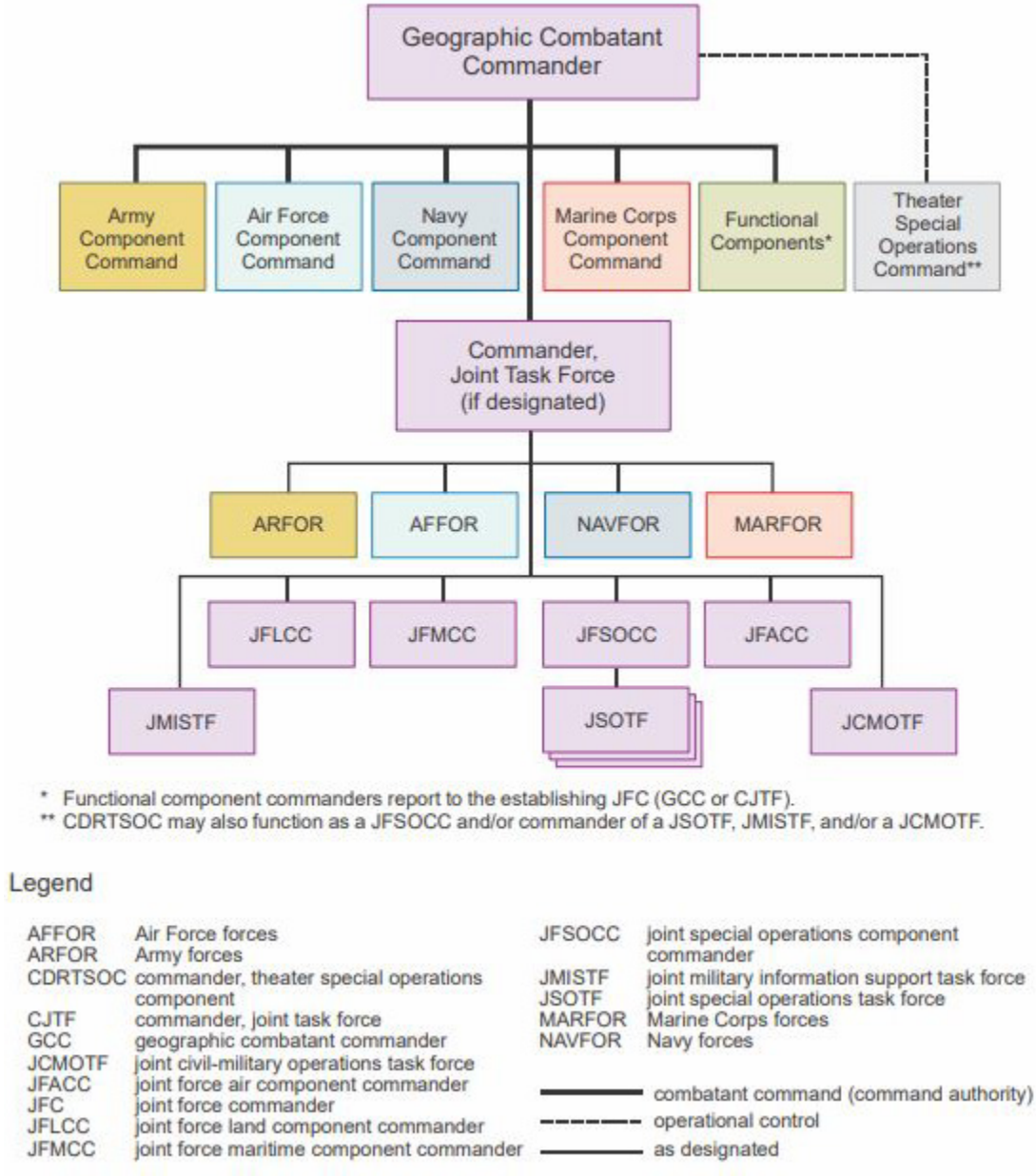

Figure 2. Notional Theater Command Organization[71]

[71] Joint Chiefs of Staff, JP 3–05, III-8.

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APPENDIX D. NOTIONAL THEATER SPECIAL OPERATIONS COMMAND ORGANIZATION

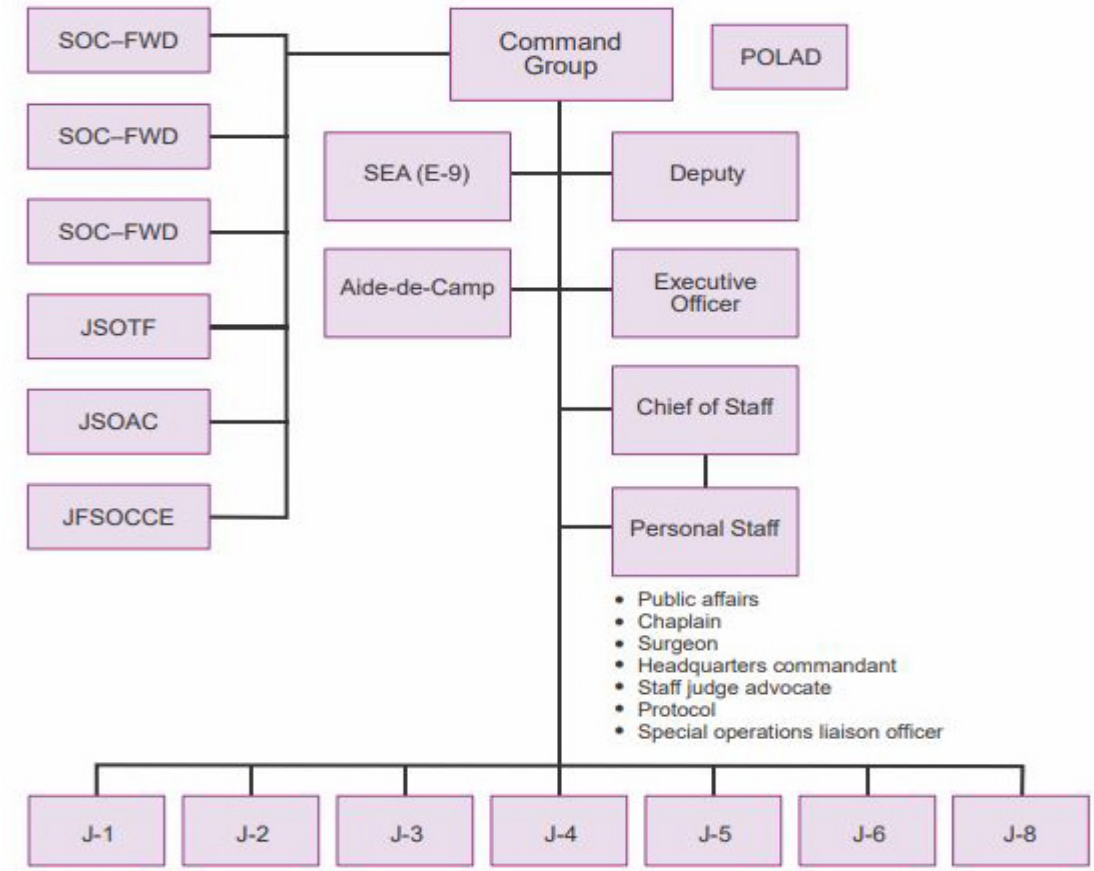

Figure 3. Notional Theater Special Operations Command Organization[72]

[72] Joint Chiefs of Staff, JP 3–05, III-6.

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APPENDIX E. SPECIAL OPERATIONS NOTIONAL COMMAND AND CONTROL OPTIONS

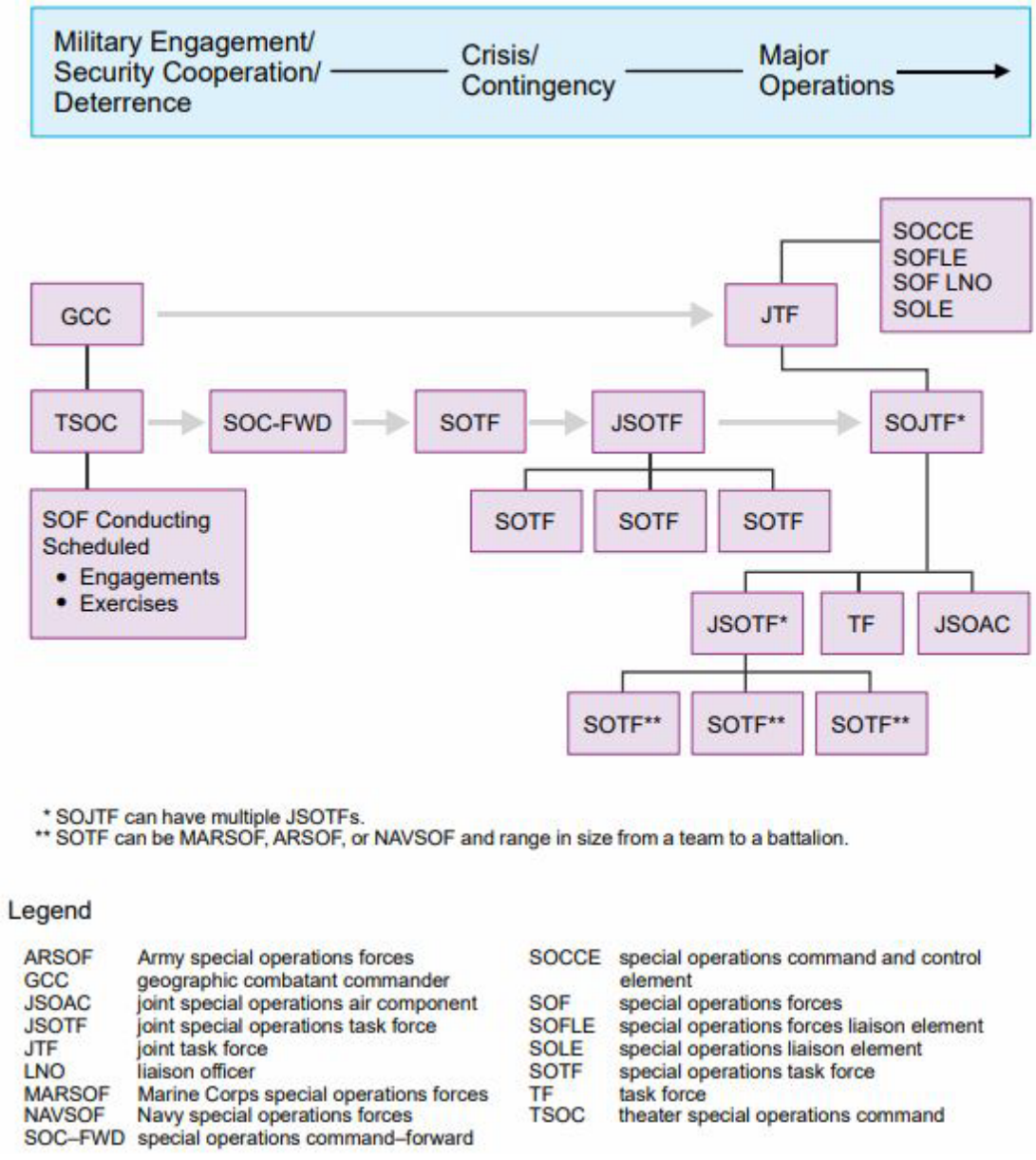

Figure 4. Special Operations Notional Command and Control Options[73]

[73] Joint Chiefs of Staff, JP 3–05, III-13.

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APPENDIX F. PARTIAL LIST OF CURRENT IA NONPROLIFERATION AND COUNTERPROLIFERATION COURSES

- Advanced Missile Technology Course
- Chemical and Biological Weapons Nonproliferation Seminar
- Fuel Fabrication Course
- Fundamentals of Missile System Design Technology Relevant to Dual-Use Export Controls
- Gas Centrifuge Technology
- Heavy Water Production, Reactors, and Tritium Production
- Introduction to Missile Production Technology Relevant to Dual-Use Export Controls
- Introduction to Nuclear Material Security, Transportation, and Material Process Flow
- Nonproliferation for High Risk Property and Export Controlled Technology Workshop
- Nuclear Device Proliferation Intelligence Course
- Nuclear Energy Proliferation Intelligence Overview
- Nuclear Fuel Cycle Operations
- Nuclear Nonproliferation Seminar

- Nuclear Nonproliferation Seminar: Reactors and the Commercial Nuclear Industry
- Nuclear Weapons School Kirtland, AFB

APPENDIX G. THEATER SOF SKILL SETS THAT COULD BE LEVERAGED AGAINST A STATE ACTOR

Leveraging Theater SOF skill sets in a steady-state environment:

- Aide in characterizing, illuminating, and if necessary, interdicting activities of proliferation concern taking place on maritime smuggling routes. Theater maritime assets cannot affect interior or coastal nuclear sites.
- Monitor border areas in order to observe and/or interdict potential smuggling routes.
- Set conditions to RSO&I and infiltrate NMF if needed.
- Provide initial infrastructure and C2 capabilities.
- Map cyber/cellular/radio networks.
- Passive observation of roads, infrastructure, people, businesses, and vehicles.
- Area Familiarization.
- Site Survey of roads and infrastructure.
- Mapping the information environment.
- Military Source Operations.
- Development of NAR capabilities.
- Development of courier networks.
- Development of safe houses and assembly areas.
- Preposition transportation assets.
- Cache emplacement and recovery of Theater platforms and assets.
- Close-target reconnaissance.
- Interdict nuclear components, scientists, other forms of support that are entering or leaving sovereign territory.

Leveraging organic Theater SOF skill sets in a conflict environment:

This assumes that Theater SOF is authorized to enter into sovereign territory.

- Aide in characterizing, illuminating, and if necessary, interdicting maritime smuggling activities. (Note: Theater maritime assets cannot affect interior nuclear sites, but could potentially affect coastal- based nuclear infrastructure and support networks.)
- Monitor border areas in order to observe potential smuggling routes and/or interdict transfers of proliferation concern.
- Set conditions to RSO&I and infiltrate NMF if needed.
- Provide initial infrastructure and C2 capabilities.
- Map cyber/cellular/radio networks (time permitting).
- Conduct passive observation of roads, infrastructure, people, businesses, and vehicles.

- Map the information environment.
- Conduct Military Source Operations.
- Emplace caches and recover Theater platforms and assets.
- Conduct close-target reconnaissance.
- Conduct Terminal Guidance.
- Interdict shipments or movements of proliferation concern that are entering or leaving Iran.
- Cordon off key areas.
- Provide transportation and protection to SMEs to and from designated areas.
- Conduct Area Familiarization of key sites (limited).
- Conduct Site Survey of key sites (limited).
- Develop NAR capabilities (limited).
- Develop courier networks (limited).
- Develop safe houses and assembly areas (limited).
- Identify key elements of Iranian nuclear weapons-related infrastructure (limited ability independent of outside SME assistance).

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