MARSOC FUTURE CAPABILITY REQUIREMENTS FOR 2035

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by

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The purpose of this study is to understand capabilities required by a Marine Special Operations Company to be successful in the 2035 operating environment. The research will examine the special operations force role in the 2035 operating environment, MARSOCs current organization, and recommend future MARSOC capability developments for the Marine Special Operations Company and team. This paper will explain the potential future adversaries and operating environment while identifying the capabilities that will be instrumental for success against those adversaries.

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

ABSTRACT

MARSOC FUTURE CAPABILITY REQUIREMENTS FOR 2035, by Maj Christopher John Stark, 99 pages.

The purpose of this study is to understand capabilities required by a Marine Special Operations Company to be successful in the 2035 operating environment. The research will examine the special operations force role in the 2035 operating environment, MARSOCs current organization, and recommend future MARSOC capability developments for the Marine Special Operations Company and team. This paper will explain the potential future adversaries and operating environment while identifying the capabilities that will be instrumental for success against those adversaries.

ACKNOWLEDGMENTS

The genesis of this thesis was formed from the authors decade of experience in Marine Special Operations Command (MARSOC) conducting deployments to Afghanistan and United States Central Command as a team commander, company executive officer, and company commander. During my time as the G-7 exercise operations officer and battalion operations officer within the command I was able to gain an appreciation for MARSOC as an organization and an increased understanding of the complexities and challenges that face the command. On combat deployments I developed an appreciation for the strategic impacts that small teams of mission dedicated individuals can have. I also formed an appreciation for the operational impacts that new capabilities can have on the battlefield, significantly increasing the operational effects, lethality, understanding, and survivability of small teams. I am thankful for my previous commanders, Lieutenant Colonel Craig Wolfenbarger and Lieutenant Colonel Andrew Nelson for providing sound leadership, mentorship, and instilling a sense of continuous organizational improvement through introspection. I am thankful to MARSOC, specifically the G-5, Mr. Anthony Marro, for providing assistance and documentation for MARSOC's way ahead and the willingness to fund any trips required in conjunction with the development of this thesis. I am thankful to Lieutenant Colonel John Lynch, Joint Staff J-37, for his strategic perspective on the operational insight and focus of the Department of Defense and for connecting me with the organizations that are working future capability developments for United States Special Operations Command (USSOCOM). I am also thankful to my committee, Mr. Steve Brown, Dr. Gates Brown,

and Lieutenant Colonel Bryant Love for their guidance, mentorship, and dedication in assisting me through this research.

TABLE OF CONTENTS

Page

ACRONYMS

ACERM	Advanced Capability Extended Range Mortar
ARSOF	Army Special Operations Forces
BLOS	Beyond Line of Site
CA	Civil Affairs
COIN	Counterinsurgency
CT	Counter Terrorism
DOD	Department of Defense
DOTMLPF	Doctrine, Organization, Training, Material, Leadership and Education, Personnel, and Facilities
ISR	Intelligence, Surveillance, and Reconnaissance
JCIC	Joint Concept for Integrated Campaigning
JOE	Joint Operating Environment
LMAMS	Lethal Miniature Aerial Missile System
MARSOC	Marine Special Operations Command
MARSOF	Marine Corps Special Operations Forces
MISO	Military Information Support Operations
MRB	Marine Raider Battalion
MRR	Marine Raider Regiment
MRSG	Marine Raider Support Group
MSOC	Marine Special Operations Company
MSOT	Marine Special Operations Team
NLOS	Non-Lines of Site
NSS	National Security Strategy

PNF	Partner Nation Force
SOCFWD	Special Operations Command-Forward
SOCOM	Special Operations Command
SOF	Special Operations Forces
TSOC	Theater Special Operations Command
US	United States
USASOC	United States Army Special Operations Command
USMC	United States Marine Corps
USSOCOM	United States Special Operations Command

ILLUSTRATIONS

Page

CHAPTER 1

INTRODUCTION

The researcher served in Marine Special Operations Command (MARSOC) for a majority of his career since 2006, minus professional military education schools and company command time in the infantry, to present. This has afforded the researcher unique insights into the command and the opportunity to observe changes that reflected in increased capabilities for the command. The researcher observed organizational change and force modernization that enabled MARSOC to be more efficient on the battlefield and provide unique capabilities missing in other peer Special Operation Forces (SOF) organizations. During this period, the force restructured from three companies with two platoons in a battalion, to four companies with four teams in each battalion, adding in a regimental headquarters between the battalions and component headquarters. This provided the battalions with a regimental headquarters enabling the component headquarters to focus external rather than internally handling battalion level issues.

There were numerous other re-organizations within the command to streamline enabler support to the Marine Raider Battalions (MRBs) from the Marine Raider Support Group (MRSG). The researcher has witnessed positive and negative results from the restructuring both in a garrison environment and combat environment enabling the researcher to draw conclusions beneficial for the force in the future operating environment. There is a limited scholarly material available on MARSOC, and even less in regards to future capabilities, the researcher hopes to identify future capability requirements and proposed methods to inform decision-makers and provide an agile and responsive force capable of winning in the future operating environment.

The Research Question

The primary research question asks according to the JOE 2035, what capabilities does a Marine Special Operations Company (MSOC) require? Secondary questions that enabled the researcher to answer the primary question were: What are the primary predicted threats for 2035? What missions does the JOE 2035 require of SOF, specifically MARSOC? Are there employment concepts for the future operating environment that require structural changes to MARSOC? What are the capability gaps that exist between MARSOC's current capabilities and what the JOE 2035 states are necessary?

Context of the Problem

The first significant challenge is that MARSOC is the smallest and newest component of Special Operations Command (SOCOM) risks elimination if SOCOM or the United States Marine Corps (USMC) downsizes or realigns forces. See figure 1 for component contributions to SOCOM. Therefore, MARSOC must innovate, be agile, be responsive, and do more with less, while filling a relevant capability gap to provide a meaningful contribution to the joint special operations force. The second significant problem is correctly identifying the future operating environment’s threats and successfully adapting the force to meet those threats with a fiscally constrained budget. Lastly, there will be capabilities that inherently reside with organizations outside of MARSOC, so how does the command link into, acquire, or gain relationships for those capabilities.

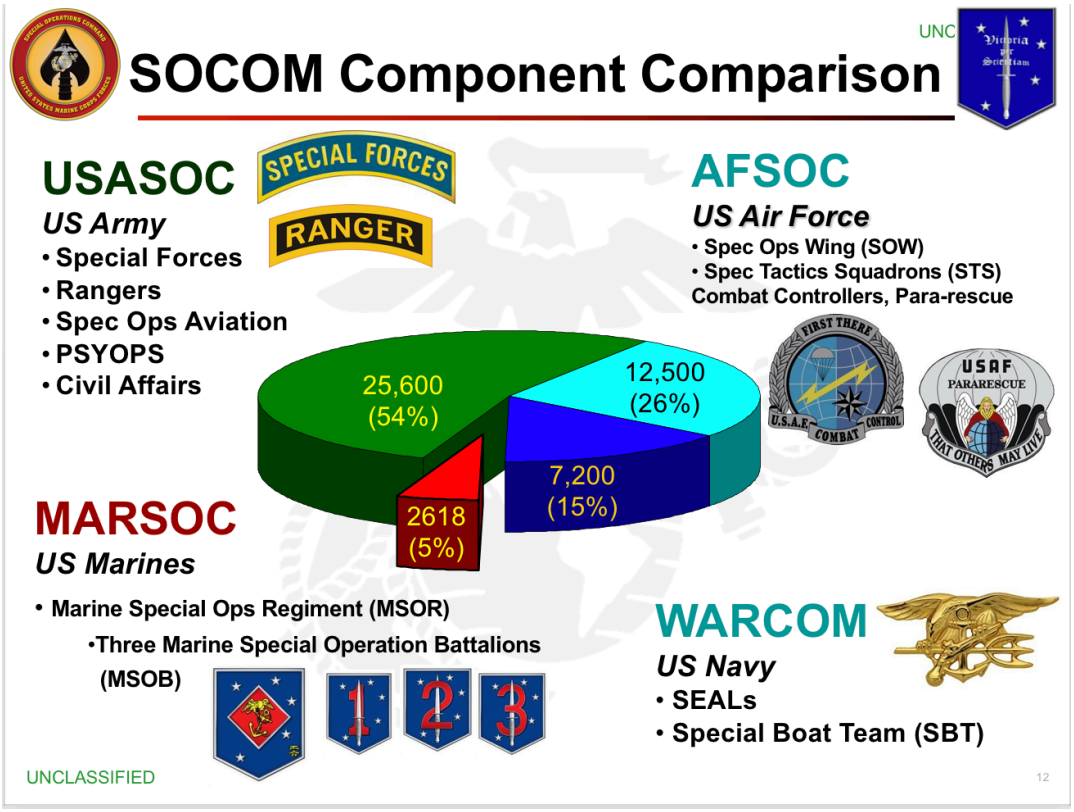

Figure 1. SOCOM Component Comparison

Source: Marine Special Operations Command, "SOCOM and MARSOC Organization and Missions" (Brief, Camp Lejeune, NC, May 2017), Slide 12.

Assumptions

(1) MARSOC will continue to be a component of SOCOM. (2) The operating environment is always evolving requiring MARSOC to innovate more quickly than sister services or die. (3) Cyber will be one of the most essential capabilities to develop. Currently, cyber authorities exist primarily at the strategic level and in this future operating environment tactical units will require and have access to more significant cyber capabilities, authorities, and permissions that exist in the current state. (4). The future operating environment will be like present day, in that it will be fiscally and

resource constrained forcing the services to remain similar in size. (5) The enemy outlined in the *2017 National Security Strategy, JOE 2035*, and by numerous other experts identifies three main threats to the United States (US), which are near peers such as China, Russia, North Korea, and Iran; transnational jihadist terror organizations and transnational criminal organizations; and regional instability that threatens US national interests. For this paper when referring to the enemy a holistic approach will be taken to include transnational jihadist terrorist organizations, peer threats, enemies that possess antiaccess aerial-denial capabilities, and transnational criminals. The primary threats, as stated in the *2017 National Security Strategy*, to the US that the military is concerned with Russian, China, North Korea, Iran, transnational threat groups, jihadist terrorist organizations, and transnational criminal organizations. These organizations challenge American power, security interests, seek weapons of mass destruction, destabilize regions, and operate in indirect methods through proxies across multiple domains to avoid direct confrontation.[1] SOF conduct operations across the range of military operations to support the US strategy to counter these adversaries.

The final assumption is that MARSOC must acquire new capabilities, develop and integrate current capabilities in new ways, divest of less significant personnel and equipment, and challenge the parochial paradigms of the other SOF services to address the future operating environment. MARSOC will have to innovate in order to remain relevant in the future. History has demonstrated that those militaries who fail to study

[1] U.S. President, *National Security Strategy of the United States of America* (Washington, DC: The White House, December 2017), 2-3, accessed February 1, 2018, https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf.

past adversaries and develop capabilities and doctrine based upon lessons learned fail to achieve success in future conflicts. The military institutions that successfully innovated between 1919 and 1940 during the interwar periods, without exception, studied recent military events in a thoroughly in realistic fashion.[2] An example is the American victory during the first Gulf War which was a result of careful doctrinal conceptual evolution, investment in training and experimentation, and identification of discrete problems that had surfaced during the Vietnam War.[3] The identified problems of precision bombing, defeating enemy air defenses, improving ground combat operational concepts, and employing helicopters to extend the battlespace were overcome to create much more lethal force during the first Gulf War.[4]

History also demonstrates that you cannot base capability developments only on the past but must be forward looking and analyze the potential adversaries of the future. Significant to the Marine Corps survival during the interwar period of 1919 to 1940 was developing an amphibious doctrine to overcome the British disaster at Gallipoli in 1915 that had led many experts to write off amphibious landings as impractical.[5] During the interwar period the Marine Corps understood the necessity of developing an amphibious doctrine to distinctly separate themselves from the Army and ensure their survival as a

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[2] Williamson Murray and Macgregor Knox, "The Future is Behind Us," in *The Dynamics of Military Revolution, 1300-2050*, ed. Macgregor Knox and Williamson Murray (Cambridge, UK: Cambridge University Press, 2001), 188

[3] Ibid., 189.

[4] Ibid.

[5] Ibid., 182.

service. Based upon the Marine Corps' future threat in the Pacific, the Japanese and War Plan Orange the Marine Corps developed an amphibious operational concept that was successfully executed during WWII.[6] The Marine Corps correctly identified the future Japanese threat, used their existing mission of seizing advanced naval bases, and developed an amphibious doctrine manual called the *Tentative Manual for Landing Operations* to develop an operational concept to address their future threats during World War II.[7]

Essential to the above historical examples was the services historical reflections on past lessons learned and their assessment of future requirements centered on future potential enemies. The key to success during both of these periods was the simple honesty and the free flow of ideas between superiors and subordinates that fostered a creative learning environment conducive to the development of future requirements.[8] The services during both periods conducted extensive war gaming and experimentation. During the interwar period the Naval War College made its exercise a grand production including Navy and Marine faculty and students and incorporated the personnel from other service schools to increase the depth of knowledge, development, and understanding of amphibious operations.[9] From 1973 to the mid-1980s the services

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[6] Allan R. Millett, "Assault from the Sea: The Development of Amphibious Warfare between the Wars—the American, British, and Japanese Experiences," in *Military Innovation in the Interwar Period,* ed. Williamson Murray and Allan R. Millett (Cambridge, UK: Cambridge University Press, 1996), 71 Kindle Edition.

[7] Ibid., 56.

[8] Murray and Knox, "The Future is Behind Us," 188.

[9] Millett, "Assault from the Sea," 73 Kindle Edition.

developed new war games and experimentations through the development of training centers such as the Army's National Training Center, the Navy and Marine Corps Top Gun for aviators, and the Air Force's Red Flag for fighter pilots and all fundamentally changed their doctrine and preparations for war during this period leading to the many successes in recent conflicts.[10]

While this research topic is addressing the future operating environment, it does not imply that the lessons learned from current and past conflicts are any less important. Assumptions should be made from historical references and overlaid on the agreed upon future threats. MARSOC should review and pursue creating an environment internal to its organization similar to how the Marine Corps was successful during the interwar period of 1919 to 1940 and from 1973 to the mid-1980s. MARSOC routinely looks to its junior operators for battlefield innovation to create future requirements. The command currently lacks a formal mechanism and capability where these ideas are shared between subordinates and superiors with appropriate candor to develop future requirements to allow the force to successfully innovate. The past can serve as a strong foundation for future beginnings. However, due to radical changes in technology predicted for the future operating environment, there may not be a historical example that effectively represents the type of technological change and response required. One example of his is operations in the information domain particularly cyberspace. There are examples from the past where technology has dramatically impacted the future force however cyberspace is unique and its full capabilities and impacts cannot fully be understood currently. Colin

[10] Murray and Knox, "The Future is Behind Us," 189.

Gray in *Making Strategic Sense of Cyber Power: Why the Sky is Not Falling* states, "It is my contention that we do not know enough now, with sufficient confidence, to make strategic sense of cyber."[11] However, Colin Gray also deduces that cyber experts should look upon history at innovations of strategic importance that linked and networked society such as the railroad and telephone.[12] Making assumptions in an ambiguous environment are critical for analysis and development of future capabilities. MARSOC must continue to make informed assumptions about the future operating environment like the Marine Corps in the interwar periods to remain a relevant force in the future.

Definitions

The future operating environment described in this research paper is from the Joint Chiefs of Staff *Joint Operating Environment 2035 (JOE 2035)*. The *JOE 2035* derived its future operating environment from other Department of Defense (DOD) organizations to includes schools, inter-agency intelligence analysis, and multinational allies and partners to develop a holistic approach for the Joint Force.[13] The environment described in the *JOE 2035* is the basis for assumptions and conclusions on the future operating environment developed by the researcher.

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[11] Colin S. Gray, *Making Strategic Sense of Cyber Power: Why the Sky Is Not Falling* (Fort Belvoir, VA: Defense Technical Information Center, April 2013), 4, accessed March 29, 2018, http://www.dtic.mil/docs/citations/ADA584060.

[12] Ibid., 31.

[13] Joint Chiefs of Staff, *Joint Operating Environment, JOE 2035, The Joint Force in a Contested and Disordered World* (Washington, DC: Government Printing Office, July 2016), 2.

A MSOC is the base deploying unit that MARSOC, as a Title 10 organization, provides to the Theater Special Operations Command (TSOC) and will be the basis for this research. The following unit descriptions will be discussed as well since the sourcing of the personnel and equipment is provided by the MARSOC, the Marine Raider Regiment and Marine Raider Support Group. The mission of MARSOC

> is to recruit, organize, train, equip, educate, sustain, maintain combat readiness, and deploy task organized, scaleable, and responsive Marine Corps Special Operations Forces (MARSOF) worldwide to accomplish special operations (SO) missions assigned by CDRUSSOCOM and/or Geographic Combatant Commanders (GCC) employing SOF.[14]

The SOF core activities that MARSOC is directly tasked with in the USSOCOM Directive 10-1 are Direct Action, Special Reconnaissance, Counterterrorism (CT), Hostage Rescue and Recovery, Foreign Internal Defense, Security Force Assistance, Counterinsurgency (COIN), and support to Unconventional Warfare.[15] MARSOC is to provide support to Combatant Command/Joint Task Force/SOF Headquarters executing Civil Affair Operations, Psychological Operations, Counter Proliferation, and Information Operations core tasks as assigned by Commander USSOCOM.[16] MARSOC is comprised of three regimental level subordinate units each commanded by a Colonel: (1) The Marine Special Operations School as depicted below has recently changed their

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[14] United States Special Operations Command, *USSOCOM Directive 10-1cc* (MacDill Air Force Base, FL: US Army Special Operations Command, December 2009), D-1, accessed February 2, 2018, https://jsou.blackboard.com/bbcswebdav/library/Library%20Content/JSOU%20References/JSOU-ISOF/ISOF%20References/USSOCOM%20Directive%2010-1%2015%20Dec%2009.pdf.

[15] Ibid., D-2.

[16] Ibid.

name to Marine Raider Training Center, (2) Marine Raider Regiment (MRR), and (3) the Marine Raider Support Group (MRSG).

MARSOC and its subordinate units are comprised purely of Marines except for the Navy personnel that provide the medical capability and Army veterinarians that provide care for the canines.

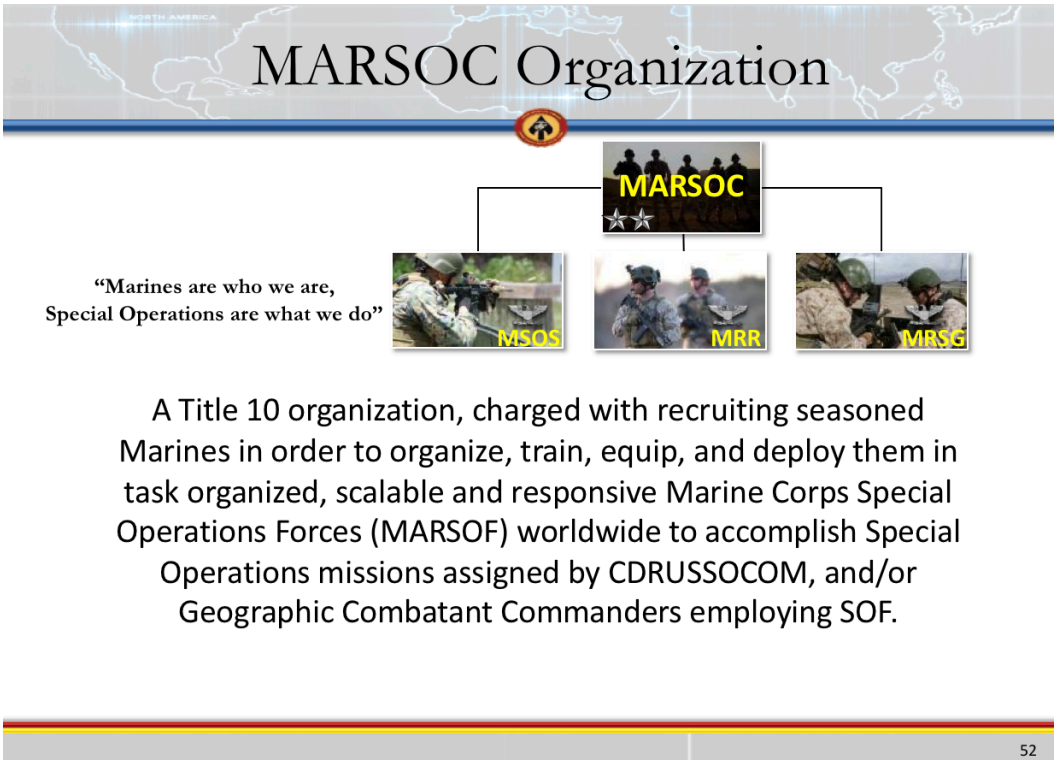

Figure 2. MARSOC Organization

Source: Marine Special Operations Command, "MARSOC Command Brief" (Camp Lejeune, NC. May 2017), Slide 52.

The MRR is comprised completely of Marines from across the numerous military occupational specialties drawn from the United States Marine Corps. To attend assessment and selection to be an operator in MARSOC an enlisted Marine must have

completed a successful 4-year enlistment in a previous unit and an officer must have completed a successful tour as a Lieutenant. The MRSG enablers do not have this requirement nor do the other support Marines that serve in the component headquarters, the MRR, or the Marine Raider Battalions (MRBs).

In the MRR resides the three MRBs commanded by Lieutenant Colonels. The MRR serves as the components maneuver forces with each of its battalions regionally aligned to a TSOC. 1st MRB is regionally aligned to Special Operations Command Pacific, 2d MRB is regionally aligned to Special Operations Command Central, 3d Marine Raider Battalion is regionally aligned to Special Operations Command Africa. The MRBs, while regionally aligned, fulfill SOCOM commitments in other theaters as well typically in the form of a Marine Special Operations Team (MSOT). The MRBs also have permanently assigned Explosive Ordnance Disposal personnel and can provide each deploying MSOC with four Explosive Ordnance Disposal technicians. Figure 3 displays how the regiment, battalions, and companies are organized.

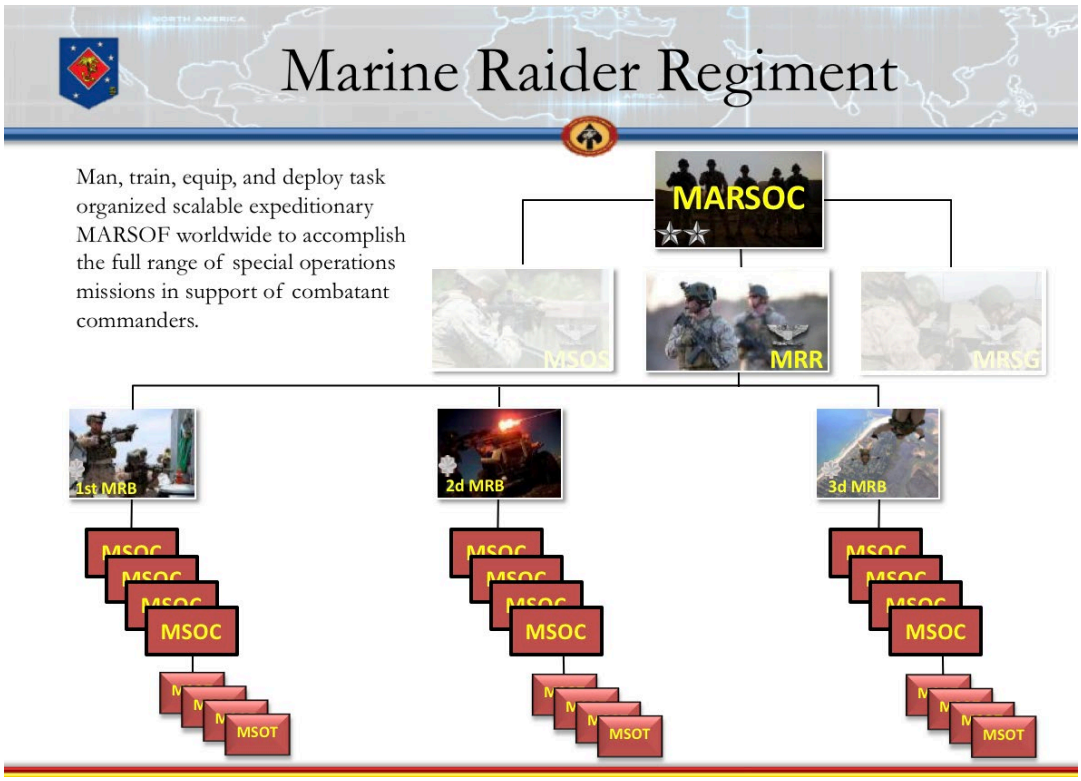

Figure 3. Marine Raider Regiment Organization

Source: Marine Special Operations Command, "MARSOC Command Brief," (Camp Lejeune, NC, May, 2017), Slide 14.

The MSOC has four MSOTs. Each MSOC receives an enabler support package from the MRSG consisting of an intelligence direct support team, Joint Terminal Attack Controllers, multi-purpose canine team; command, control, communications, computers support team, and logistics support team. These capabilities attached to each MSOC can be task organized to the MSOTs or retained at the MSOC headquarters and may be re-organized internally throughout the deployment. The reinforced MSOC does not have to match the task organization as pictured below rather it is task organized based on TSOC requirements and the mission. The MSOC is tailorable and scalable to meet theater

requirements. See figure 4 below for detailed task organizations. Some details are not displayed to keep this paper unclassified.

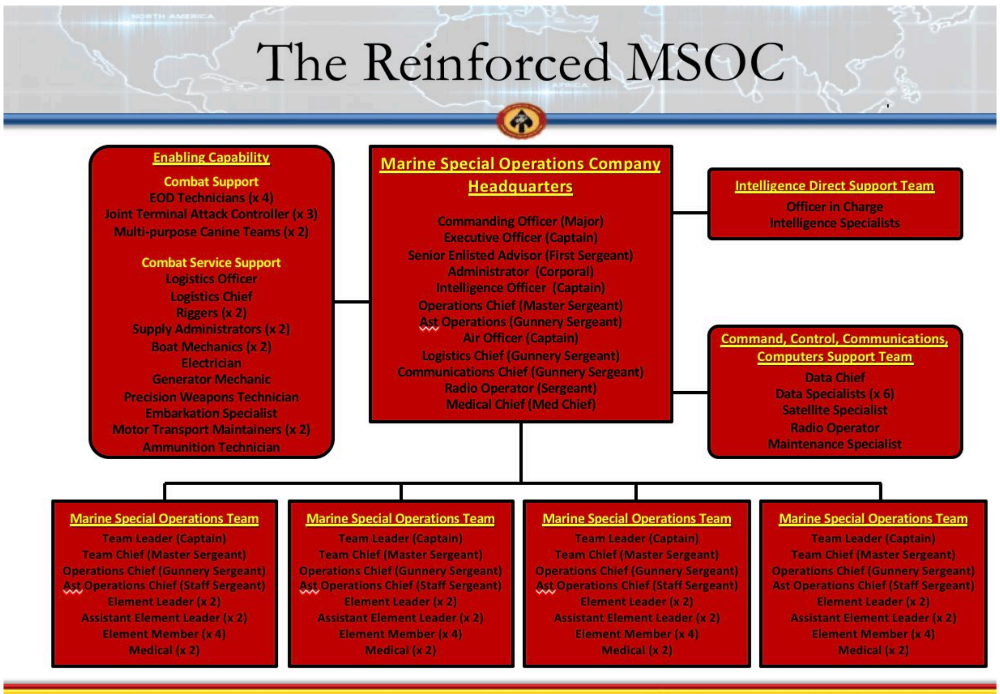

Figure 4. The Reinforced MSOC

Source: Marine Special Operations Command, "MARSOC Command Brief" (Camp Lejeune, NC, May 2017), Slide 17.

The MRSG is designed to provide enablers and capabilities to the deploying forces of the Raider Regiment. The MRSG is organized in similar fashion to the Raider Regiment with three Marine Raider Support Battalions. The MRSG is comprised of three support battalions each commanded by Lieutenant Colonels regionally aligned with its sister Raider Battalion to ensure continuity. See figure 5 for graphical depiction.

The MRSG companies are organized differently than the Raider Battalions as they have unique personnel and equipment requirements. They are comprised of a

Communications Company, Logistics Company, and Intelligence Company. Two capabilities that reside at the MRSG level are Multi-Purpose Canines and Joint Terminal Attack Controllers because of their small size and the oversight that is required to effectively manage the two high demand capabilities. Where the Multi-Purpose Canines and Joint Terminal Attack Controller capabilities are depicted in Figure 5 is for ease of display.

The Marines in this unit undergo a separate and different screening process than the operators. It is comprised of a thorough records analysis and a five-day screener where the Marines participate in occupational field assessments, physical performance and resiliency, and their mental performance and mental fitness for training are assessed. Once selected for MARSOC as an enabler the Marines attend a three-week training package called Special Operations Capabilities Specialist Training Course. Upon completion the Marines receive the 8071 identifier Special Operations Capabilities Specialist and special duty assignment pay. In the Specialist Training Course package, the Marines are taught basic skills in land navigation, close quarter battle drills, advanced marksmanship, and introduced to more rigorous physical training. Upon completion of Specialist Training Course, the communication Marines attend Marine Special Operations Force Network Operators Course, intelligence Marines attend Multi-Discipline Intelligence Operator Course, and Explosive Ordnance Disposal Marines attend special operations level one training. Each of these courses are designed to make the Marines multi-disciplined so they can serve on an MSOT as an individual providing expertise across the range of their occupational specialty. Their duration in the command is limited to 3-5 years depending on the enablers specific military occupation. On a case

by case basis individuals are able to extend past the 3 or 5 year mark depending on their occupational specialty and the Marine Corps assignment office. The MRSG Marines are given an additions skill identifier that can be tracked in the Marine Corps administrative system so their service can be sought out again once they have returned back the Marine Corps. This limitation has been placed upon MARSOC to ensure the unique skill sets gained by the enablers can contribute meaningfully to the broader Marine Corps enterprise.

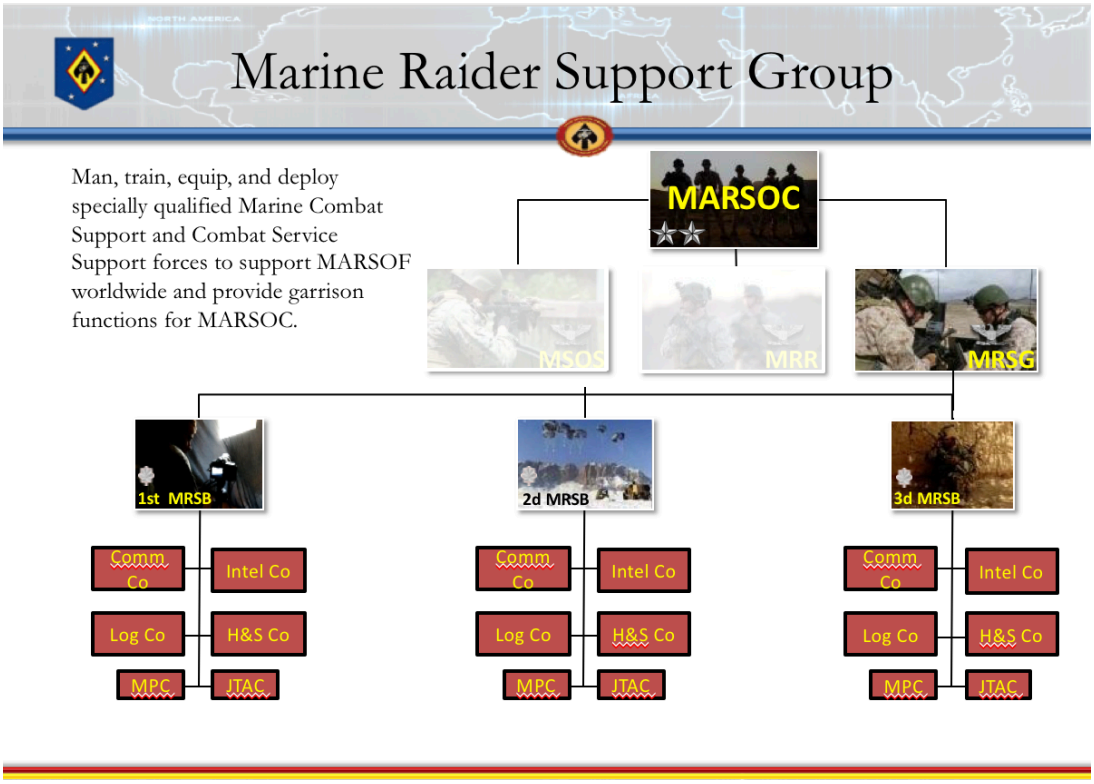

Figure 5. Marine Raider Support Group Task Organization

Source: Marine Special Operations Command, "MARSOC Command Brief" (Camp Lejeune, NC, May 2017), Slide 15.

Scope and Delimitations

The researcher will limit the scope of the topic to MARSOC and its ability to meet requirements outlined in *JOE 2035*, the *National Security Strategy*, *National Defense Strategy*, and not address other subordinate forces under SOCOM. However, references to capabilities of other SOF services will be used to compare and contrast capabilities of MARSOC. Other SOF or DOD organizations will be discussed to reference capabilities, authorities, and permissions. Capability gaps about other SOF or DOD entities is not within the scope of this research. The timeframe discussed will focus on the future operating environment out to 2035 and address past historical changes within MARSOC from 2006 forward that lend clarification or enhance the readers understanding of the proposed changes identified by the researcher.

This study acknowledges that there are classified capabilities that reside within other military formations in DOD, multinational partners, and MARSOC; however, those capabilities will not be discussed and or replaced with conceptual ideas of future methods. The capability discussion centers around the Marine Special Operations Company, four Marine Special Operations Teams, and enabler support package from the MRSG. The researcher recognizes that MARSOC deploys battalion level Special Operations Task Forces and regimental level Combined Joint Special Operations Task Forces, however, this thesis will focus on the MSOC and its attachments as the base deploying unit from MARSOC.

Limitations

This paper uses unclassified information only. “For Official Use Only” materials were not used in the development of this topic. This enables increased distribution but

provides constraints on the types and depth of information analyzed, cited, and concluded. The researcher recognized that some capabilities required for present and future SOF missions are not authorized for discussion due to classification. The researcher will attempt to fill the gap with proposed capabilities that do not require classification. The researcher's bias should be recognized as a current Marine Special Operations Officer who has been a part of the command for 11 years.

Significance of the Study

This study will describe MSOC capability gaps, relevancy of current capabilities, organizational change, and personnel required for an MSOC to meet the future demands described in the *JOE 2035*. Through this understanding commanders, staff officers, and future leaders will have a better understanding of future requirements and the gaps that exist between the current force and desired force. As the smallest element of SOCOM, MARSOC must retain its ability to remain agile and flexible to meet future requirements and fill critical gaps. Due to the lack of scholarly material written about MARSOC, and even less written about future capability requirements of MARSOC, this study should provide the basis for future research and propose topics to decisions makers within the command and SOCOM. This study should provide relevant conclusions that can formulate the basis for capability development, organizational change, and requirements to remain a relevant and competitive force for the future.

Summary and Conclusions

Understanding how the future operating environment will drive requirements and capabilities development within MARSOC is significant for the development of the

force. This study will attempt to broaden the reader's aperture in regards to the critical gaps MARSOC requires to provide capable forces able to operate across the future SOF spectrum. As there is currently minimal research that has been conducted on MARSOC this paper will serve as base line document for others to use to initiate their research. Finally, this will offer assumptions that should be questioned, developed, and enhanced to develop the future force.

CHAPTER 2

LITERATURE REVIEW

Introduction

The purpose of this study is to identify the MSOC capabilities required for the future operating environment as defined in *JOE 2035* and other strategic documents to assist commanders, staff officers, and future leaders of MARSOC in further defining and building the organization towards those capabilities. Upon researching the available information on the topic, the majority of information can be classified into three main categories, first strategic level documents, second service level documents, and third independent research. All of the documents describe the environment or capabilities required in a strategic or at a minimum operational level framework and do not discuss specifics of how organizations are going to solve the doctrine, organization, training, material, leadership, and education, personnel, and facilities (DOTMLPF) solutions required to build the capabilities within the tactical force.

Relevant Writings

Future force requirements are developed from national and joint strategic guidance to the services whereupon the services develop future capabilities and concepts that nest within the strategic guidance. These guiding documents form the basis for which the services prioritize and align resources to develop the future force to meet the demands outlined in the strategic guidance. The purpose of the *JOE 2035* is to describe the future security environment in 2035 and project implications of changes for the Joint Force, so it can anticipate and prepare for potential conflicts to build an enduring foundation upon

which the United State (US) maintains its military advantages.[17] The *JOE 2035* is the basis for the services to develop their future capabilities and detailed in three sections.

The first section explains the future security environment, the second section explains the contexts of future conflict, and the third section explains the implications for the Joint Force.[18] This document was valuable as it is a compilation of others research such as the National Intelligence's Council's *Global Trends* project, the Joint Staff J-5's *Joint Strategic Review*, the Defense Intelligence Agency's *Joint Strategic Assessment*, and the Joint Staff J-3's *Strategic Multilayer Assessment*.[19] Other collaboration included partners such as the services war colleges, services deep-futures efforts, the North Atlantic Treaty Organization's *Strategic Foresight Analysis*, the United Kingdom's *Global Strategic Tends* and *Future Operating Environment* and several other significant foreign partners.[20] This document was useful in that it compiles numerous studies to develop a trends analysis to predict the future operating environment. Although the document was written in July 2016 it nests with the new National Security Strategy published in December 2017 and the 2018 National Defense Strategy.

The document describes the future operating environment as a competitive world marked by state and powerful non-state actors that will challenge the rules that support the current global order, while fragile states will become increasing unstable, and

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[17] Joint Chiefs of Staff, *JOE 2035*, 1, 52.

[18] Ibid., 3.

[19] Ibid., 2.

[20] Ibid.

technical advances will lead to greater parity among international actors allowing adversaries to more effectively challenge US interests abroad.[21] These factors form a hybrid threat to US national interests that fall between peace and war short of conventional conflict. The Rand Corporation research report *Conflict Trends and Conflict Drivers, an Empirical Assessment of Historical Conflict Patters and Future Conflict,* also coincides with the *JOE 2035* predicting potentially one peer on peer conflict between 2015-2040.[22] United States Army Special Operations Command (USASOC) *Strategy-2035* also coincides with the above documentation predictions on the future operating environment emphasizing conflicts as being short of conventional war.

Other strategic level writings significant to this study were the *2017 National Security Strategy (NSS)* and 2018 *National Defense Strategy (NDS).* These documents provide guidance, direction, and purpose to the Joint Force, which enables the Joint Force to develop capabilities, prioritize resources, and focus operations to achieve the President's desired end state. Both documents describe the future threats as China, Russia, North Korea, Iran, and jihadist terrorist organizations with emphasis on China, Russia, and jihadist terrorist organizations being the primary concern. These documents were important as they enabled the researcher to compare and contrast threats, future requirements, and provided direction that enabled the researcher to draw conclusions.

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[21] Joint Chiefs of Staff, *JOE 2035*, 52.

[22] Thomas S. Szayna et al., *Conflict Trends and Conflict Drivers, an Empirical Assessment of Historical Conflict Patters and Future Conflict* (Santa Monica, CA: RAND Corporation, 2017), 126.

Other relevant writings include documents developed by the services such as the *USASOC Strategy-2035*, campaign plan, and narrative; the USMCs *Marine Corps Operating Concept (MOC)*, and the United States Special Operations Command's (USSOCOM) white paper titled the "Gray Zone." These documents derived their analysis from the previously discussed strategic documents. These documents further describe the transnational terrorist groups as the primary enemy that SOF will conduct future operations against. These documents echo the future operating environment predicted in the *JOE 2035*. They also identify the commands' strategies to achieve the force capabilities and preparedness as required to meet the desired end state of the President in the National Security Strategy.

Another significant document produced during the development of this study was the *United States Marine Corps and United States Special Operations Command Concept for Integration, Interdependence, and Interoperability*. This document adds further credence to point of view of the hybrid nature of future warfare that will remain short of conventional conflict and the requirement between the two services to become more interoperable to meet the demands outlined in the *JOE 2035*. It provides several examples where the USMC and SOF could improve each other's capabilities. This document is not directive in nature but identifies a way ahead with specific achievable goals that can be met in the next 2 to 3 years without increasing force size and a focus of warfare that is short of conventional war.

MARSOC, in the G-5 Future Operations Section of the command, developed a document titled *MARSOF 2030*-Draft. This document, while still in draft form, provided

the researcher with results of MARSOC's war gaming, trends analysis, and future requirements efforts. In the development of this document MARSOC's

> effort involved a series of wargames to explore the technological, social, and emerging threat trends we expect to face over the coming decade. These efforts resulted in the creation of four capability concepts that will drive our success in future special operations: the Cognitive Operator; MARSOF as a Connector; Combined Arms for the Connected Arena; and Enterprise Level Agility.[23]

This draft document currently lacks sufficient detail to provide the reader with an operational approach as to how the command intends on achieving its concepts. However, at present it provides the analytical framework to identify the MARSOC's way ahead. Hopefully, this paper will aid the *MARSOC 2030* authors in their efforts to further develop this document.

One significant author, Linda Robinson, wrote a report on *The Future of U.S. Special Operations Forces.* Linda Robinson is a senior international policy analyst and defense researcher at the RAND Corporation who focuses on national security strategy, strategy to counter Islamic State of Iraq and Syria, and political warfare between state and non-state actors, and special operations forces.[24] In 2011-2012 she served as adjunct senior fellow for US national security and foreign policy at the Council on Foreign Relations.[25] In the report, she attempts to define SOF's current role, she identifies areas where SOCOM and the services need to improve, and she identifies critical areas that she

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[23] Headquarters, Marine Special Operations Command, *MARSOF 2030* Draft, (Camp Lejeune, NC), 1. Documented provided in email to author from MARSOC G-5.

[24] Linda Robinson, Council Special Report No. 66, *The Future of US Special Operations Forces* (New York: Council on Foreign Relations, 2013), 33.

[25] Ibid.

believes SOF must develop to meet current and emerging threats. Her report, written in 2013, identified the same critical requirement for SOF interoperability with conventional forces as identified in the recently signed and published *United States Marine Corps and United States Special Operations Command Concept for Integration, Interdependence, and Interoperability*.

The enemy described within her report is the same enemy as utilized in this paper from which to draw assumptions from to develop capabilities. In her analysis, she concludes that SOF will play a more prevalent role in the future for two reasons first, budgetary constraints and the continuing prevalence of irregular threats.[26] Although her research was published in April 2013 it is still significant to this study as it identifies the projected enemy to be very similar to the strategic documents identified previously and provides thoughtful critiques and areas of improvement for Special Operations Command and the Department of Defense. Linda Robinson was also one of the authors of the Rand study, *Conflict Trends and Conflict Drivers, an Empirical Assessment of Historical Conflict Patters and Future Conflict.* The conclusions of US engagements short of conventional war in the Rand Study shaped her other writings.

Robert Martinage a senior fellow at the Center for Strategic and Budgetary Analysis, expert on defense strategy, military modernization, special operations, military revolutions, and advance technology and future warfare authored *Special Operations Force: Future Challenges and Opportunities* in 2008.[27] He provides analysis on the

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[26] Robinson, *The Future of US Special Operations Forces*, 5-6.

[27] Robert Martinage, *Special Operations Forces: Future Challenges and Opportunities* (Washington, DC: Center for Strategic and Budgetary Assessments, 2008),

current SOF capabilities compared to the future SOF capabilities he believes will be required. His 2008 predictions of the future operating environment are in line with the predictions of the *JOE 2035*. In Martinage's report he discusses the operational implications of the future security environment and preparing SOF for future challenges and opportunities.[28] His research enabled this author to draw conclusions describing the necessity to develop a Civil Affairs (CA) and Military Information Support Operations (MISO) organic capability in MARSOC. Martinage addresses the necessity for SOF units to holistically address the root causes of instability through a whole of government approach vice focusing on tactical solutions that do not address the political and strategic problems.

Field Manual (FM) 3-12 *Cyberspace and Electronic Warfare* provided an excellent starting point for identifying capabilities that are conducted in cyberspace. This FM enabled the author identify three general areas that command should initially focus on for developing a cyberspace capability; cyberspace defense; cyberspace operational preparation of the environment; and cyberspace intelligence, surveillance, and reconnaissance (ISR). However, the manual fails to provide sufficient detail on how these activities are conducted in cyberspace and only provides generalizations. The generalizations are not sufficient to identify the number of cyber operators, equipment, training, and authorities required to conduct the previously listed cyber activities. Other available unclassified information also lacks the sufficient detail to develop precise

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2, accessed April 1, 2018, http://csbaonline.org/research/publications/special-operation-forces-future-challenges-and-opportunities.

[28] Ibid., 7.

recommendations thereby forcing the researcher to generalize future cyberspace capabilities for MARSOC in chapter 4.

In researching this topic very few documents found identified any substantial critiques of the current theories and future operating environment proposed. The majority of research nested well with the *JOE 2035* and other national strategies. Each describing the future operating environment as a competition between state and non-state actors challenging US national security interests through efforts short of conventional war, seeking competitive advantages in ungoverned spaces, growing regional instability, and technology that challenges the US military advantage becoming increasing available to adversaries at lower costs.

Contributions of this Work

There exists numerous documents and studies describing the future roles of the US military and the potential adversaries of the future, however there is little information describing the tactical capabilities tactical forces need to develop to meet the demands of the future operating environment. So how does this study contribute to the already existing body of knowledge? The simple answer is the analysis previously conducted focuses primarily on the strategic and operational levels and does not delve into the specific capabilities, manning, and organizational structures that will be required for future forces to be successful. The major gap existing in research for this topic, is any information pertaining to Marine Special Operations Command. This is most likely a result of MARSOC being relatively new having formed in 2006, the size of the command being less than 3,000 personnel, and the lack of continuity in the command till recent years with a Military Occupational Specialty assigned to the officers.

This study will be one of the first, if not the first document, specifically focused on the capabilities development required for the future MARSOC forces. This study will focus on the capabilities development, the identified capabilities manning requirements, and organizational changes, if required. It will not address other SOF services, however other SOF services were researched to identify potential gaps that could be exploited by Marine Special Operations Forces (MARSOF) to ensure MARSOC is developing and agile and competent force for the future. Lastly, the research should provide a starting point for other researchers in the future and hopefully aid the leaders of MARSOC in developing the right capabilities to fight and win future conflicts.

CHAPTER 3

RESEARCH METHODOLOGY

Introduction

The purpose of this study to identify the MSOC capabilities required for the future operating environment as defined in *JOE 2035* and assist commanders, staff officers, and future leaders of MARSOC in further defining and building the organization towards those capabilities. The primary research question asked according to the *JOE 2035*, what capabilities does a Marine Special Operations Company (MSOC) require? Secondary questions ask: What are the primary predicted threats for 2035? What missions does the *JOE 2035* require of SOF, specifically MARSOC? Are there employment concepts for the future operating environment that require structural changes to MARSOC? What are the capability gaps that exist between MARSOC's current capabilities and what the *JOE 2035* states are necessary? Next, the research methodology explains the framework used to analyze and present the information. The final section of the chapter will explain how the methodology facilitated the researcher's analysis in chapter 4.

Information Collection for Research Questions

To understand and address the current capabilities of an MSOC the researcher used observations gained from experience in commanding at the MSOT and MSOC level, serving as a Battalion Operations Officer, and serving G-7 exercise branch operations officer of the MARSOC Headquarters for an eleven-year period. The observations from the garrison environment include organizational structure changes,

capability gains and divestitures, personnel training and education, multiple changes of mission and regional focus, exercise environment, and finally, lessons learned. Observations were made while participating in MSOT and MSOC operations in Afghanistan on two combat deployments; one deployment under the original structure of an MSOC with a headquarters, two platoons, and minimal enablers; and a deployment under the current structure of an MSOC with a headquarters, four MSOTs, and enabler package from MRSG. The final deployed observation was serving as an MSOC commander conducting MARSOC's first regional alignment deployment of a company to Special Operations Command Central where the company conducted multiple missions across seven different countries during a six-month deployment.

The researcher also worked with the MARSOC G-3, G-5, G-7, and the Foreign Disclosure Officer to gather relevant documents pertaining to the command. Examples include Tables of Organizations, MARSOC Campaign Plan, MARSOC's most important priorities for investing in for 2030, and related doctrine. The researcher was also able to gather the same or similar material for Army Special Operations Forces (ARSOF) to compare and contrast future gaps in capability developments.

The Combined Arms Research Library executed research on the author's behalf. Their efforts produced multiple documents ranging from documents prepared for Congress, to articles, and Rand studies. The researcher also requested support from a member of the Joint Staff, J-37, who provided points of contact with organizations developing future capabilities for the SOF enterprise. These points of contact provided unclassified and classified documentation to the researcher. However, for the purposes of this paper the classified information was excluded, but the classified information

provided the author with areas of research that could be conducted through unclassified means.

Methodology

This study employs a causal comparison methodology to identify capability gaps that exist between the current Marine Special Operations Company and the desired force to meet the requirements of the future operating environment. The first step was research, information gathering, review of the literature, and identifying the significance of the material to this study in chapter 2. The literature review in chapter 2 identifies sources to include strategic guidance documents, service documents, and lastly independent research conducted on the subject. The second step was to identify the future threats to determine how they will differ from present day threats. The third step was to identify the capabilities, manning, and organizational changes required by MARSOC to produce MSOCs with the desired capabilities to fight and win on the future battlefields. The analysis draws out capabilities that currently reside in the forces that need further enhancement, capabilities that do not reside in the present-day force, changes to manning, both of which will ultimately cause organizational change to some degree. The last step presents the findings, conclusions, and recommendations for the future in chapter five.

Summary and Conclusions

This thesis will enable the reader to understand the capabilities required for an MSOC to successfully defeat its adversaries in the future operating environment. This paper will explain the potential future adversaries and operating environment while identifying the capabilities that will be instrumental for an MSOC to be successful.

Through this understanding the reader can develop a plan to mitigate the gaps identified and begin to develop requirements now for the future. Lastly, the reader will understand how MARSOC should change to meet future requirements and this document should provide a base line for which further research can be conducted.

CHAPTER 4

ANALYSIS

Introduction, Purpose, and Organization

The purpose of this study is to identify the future capabilities, manning, and organization requirements for a Marine Special Operations Company to be successful in future operating environment of 2035. The primary research question asked according to the *JOE 2035*, what capabilities does a Marine Special Operations Company (MSOC) require? Secondary questions that enabled the researcher to answer the primary question were: What are the primary predicted threats for 2035? What missions does the *JOE 2035* require of Special Operations Forces (SOF), specifically MARSOC? Are there employment concepts for the future operating environment that require structural changes to MARSOC? What are the capability gaps that exist between MARSOC's current capabilities and what the *JOE 2035* states are necessary? Chapter 4 will describe the future operating environment and threats followed by capabilities MARSOC should develop to meet those requirements.

Future Operating Environment

To identify the future capabilities an MSOC requires to be successful the potential range of adversaries must be explained for the reader to understand the conclusions developed by the researcher. In *Toward Operational Art in Special Warfare* it states,

> In the face of adversaries exploiting social cleavages through the use of special operations forces and intelligence services, coupled with a dwindling appetite for

> intervention, the US needs to employ a more sophisticated form of special warfare to secures its interest.[29]

The strategic threats for 2020 and beyond, will stem from a dangerous combination a great power geopolitical rivalry and an accelerating global environmental crisis.[30] These threats can then be distilled down into more specific threats for SOF. The three main threats facing SOF in the future are near peer threats such as Russia, China, North Korea, and Iran; jihadist terrorist organizations ranging from violent extremist organizations to state sponsored terrorist organizations, transnational criminal networks; and regional instability that provides the catalyst in the operating environment for our enemies to thrive. Each of these threats are currently present but expected to intensify in the future operating environment, according to the *JOE 2035*, due to the rapid spread and lowering costs of technology, interconnectedness of what once were disparate populations, and challenges arising to international norms by regional powers.[31]

Today, due to media attention, politics, and to some degree the services and their rhetoric, many have concluded that peer threats are the most preeminent threat to the US. While they cannot be discounted, the US's main peer threats Russia, China, North Korea, and Iran must conduct themselves with some degree of consideration of the international laws, treaties, and popular opinion. *JOE 2035* states,

> It is likely that Russia will continue to use the threat of military power to secure regional interests and promoted perceptions that is still a great power. Iran will

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[29] Dan Madden et al., *Toward Operational Art in Special Warfare* (Santa Monica, CA: RAND Corporation, 2016), 1.

[30] Colin S Gray, "How Has War Changed Since the End of the Cold War?" *Parameters* (Spring 2005): 23.

[31] Joint Chiefs of Staff, *JOE 2035*, 1.

> continue to develop and leverage regional proxies and partners. China might develop a more dynamic and adaptive maritime stratagem in an attempt to impose irreversible outcomes for island disputes in the East and South China Seas."[32]

Russia, China, North Korea, and Iran as peer threats will most likely seek to avoid direct confrontation with the US and instead employ an indirect approach through proxies across the warfare domains especially cyber. Russian, China, North Korea, and Iran are employing coercive methods and operations characterized by uncertainty to accomplish objectives in the space between peace and war aiming to change international norms.[33] This serves the best interests of their country and ensures their actions remain below the threshold to cause undue international scrutiny thus maintaining their operational freedom.

Russian, China, North Korea, and Iran are conducting operations across all dimensions of national power.[34] The *2018 National Defense Strategy* states Russian, China, North Korea, Iran, and non-state actors "have increased efforts short of armed conflict by expanding coercion to new fronts, violating principles of sovereignty, exploiting ambiguity, and deliberately blurring the lines between civil and military goals."[35] These adversaries' activities are primarily occurring in phase zero of the continuum of military operations and in certain circumstances have reached phase three

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[32] Joint Chiefs of Staff, *JOE 2035,* 7.

[33] Joint Chiefs of Staff, *Joint Concept for Integrated Campaigning* (Washington, DC: Government Printing Office, March 2018), 2.

[34] Department of Defense, *Summary of the 2018 National Defense Strategy of the United States of America: Sharpening the American Military's Competitive Edge* (Washington, DC: Government Printing Office, January 2018), 2.

[35] Ibid.

like in the Middle East or Ukraine. These activities are intentionally designed to remain below a threshold that draws international scrutiny and are often conducted through proxies to maintain a reasonable level of deniability. In a Rand Corporation research report *Conflict Trends and Conflict Drivers, an Empirical Assessment of Historical Conflict Patters and Future Conflict,* the study's baseline conflict projections for 2014–2040 interstate conflicts show a continued decline from an already low starting point to just over one conflict by 2040.[36] It can be concluded from the research that interstate conflict, peer versus peer conflict, will not be the prevalent type of warfare faced by the US in the future, and the US will seek to mitigate peers through methods that reduce costly effects of conventional war.

As history has shown in conflicts such as Vietnam, Afghanistan, Iraq, and Syria state sponsorship of proxies played a significant role. Andrew Mumford in *Proxy Warfare* states,

> Proxy wars occur when states or non-state actors, based on perception of interest, ideology and risk accept that direct intervention in a conflict would be either unjustifiable, too costly (politically, financially or materially), avoidable, illegitimate or unfeasible.[37]

This trend, will continue in the future operating environment. The enemies of the US have studied our military operations over the past 100 years and understand that waging a force on force conflict with the US is often unsuccessful and resource intensive. *The Joint Concept for Integrated Campaigning (JCIC)* reaffirms this stating, "In fact, revisionist

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[36] Szayna et al., *Conflict Trends and Conflict Drivers*, 126.

[37] Andrew Mumford, *Proxy Warfare* (Cambridge, UK: Polity Press, 2013), 30 Kindle Edition.

powers seek to achieve all of their policy objectives, while avoiding and escalation to armed conflict."[38] The US's enemies will employ techniques that do not test US strengths.[39] Enemies have sought to mitigate our strengths through engaging the US in conflicts short of war ensuring their actions remain below conventional war. The *2018 JCIC* states, for the foreseeable future, adversaries will continue to creatively combine conventional and non-conventional methods to operate below a threshold that invokes a direct military response from the US.[40] This potentially means an increased role for SOF in the future operating environment.

These conflicts have taken many forms but are often characterized as enemy states sponsoring proxy forces with funding, weapons, and resources to wage conflicts against the US, draining US resources, occupying its military force for extended periods of time, and eroding the moral of the US population. State sponsorship of proxies will continue for political advantages such as minimizing the risk of escalation, providing plausible deniability, and avoiding the cost of direct involvement.[41] The author Andrew Mumford in *Proxy Warfare,* further explains that due to global financial downturn, the value of the life put on servicemen and women, military recruitment shrinking, increased costs of US technology, and unwillingness to be involved in protracted counterinsurgency

[38] Joint Chiefs of Staff, *Joint Concept for Integrated Campaigning*, 4.

[39] Gray, "How Has War Changed Since the End of the Cold War?," 21.

[40] Joint Chiefs of Staff, *Joint Concept for Integrated Campaigning*, V.

[41] Joint Chiefs of Staff, *JOE 2035*, 6.

conflicts gives credence to states using proxy wars to ensure strategic objective.[42] Our adversaries seek to optimize their targeting of our concepts through information warfare, denied proxy operations, and subversion, which all challenge our ability to deter aggression.[43]

These proxy wars will continue to be our enemies' first choice rather than risking a costly force on force scenario, international upheaval, and possibly the dissolution of their state. In a limited war or a conventional force on force peer war, special operations forces will play a pivotal role. In recent years, SOF has operationally focused on CT, COIN, and Direct Action to address terrorist activities conducted by the enemy, but to be successful tomorrow SOF will need to focus on unconventional warfare, special reconnaissance, and preparation of the environment to identify instability factors, identify potential friendly forces to counter hostile and rogue elements, and build forces that have the potential and motivation to carry the fight to the enemy.[44] Focusing on these skill sets will enable SOF to identify the threat indicators, locate, and use proxy forces to subvert and defeat the enemy before reaching a level that requires conventional military force. This will require an adjustment by MARSOC to train and resource these skill sets while also shifting the operators' mindset from combat operations to phase zero. The mindset shift is not a drastic change required within MARSOC as all battalions currently deploy teams and companies in support of phase zero operations. The doctrine and majority of

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[42] Mumford, *Proxy Warfare*, 76 Kindle Edition.

[43] Department of Defense, *Summary of the 2018 National Defense Strategy*, 3.

[44] David Broyles and Brody Blackenship, *The Role of Special Operations in Global Competition* (Arlington, VA: Center for Naval Analyses, 2016), IV.

the capabilities already reside in the organization, but the focus of training and resourcing, due to recent conflicts, has been on ensuring forces are prepared for combat operations vice preparation of the environment. Addressed later in this paper are three capabilities gaps that will need to be solved to better prepare the future force.

The second significant current and future threat facing the US is jihadist terrorist organizations. In the *2017 National Security Strategy* "Jihadist terrorist organizations present the most dangerous terrorist threat to the nation.[45]

> The defense strategic guidance and intelligence assessments forecast ongoing irregular threats by non-state actors such as terrorists, insurgents, and transnational criminal networks that are increasingly empowered by technology and other forces of globalization.[46]

The assessment provided by author Linda Robinson matches what is documented in the *JOE 2035* and recently publicized NSS. As populations become more interconnected through technology, and advance capabilities become easier to access, spread, and develop the ease of access to technology will provide our enemies an increased ability to challenge the US across multiple domains. The traditional technology overmatch the US has become accustomed to is being eroded by state and non-state actor's ability to access new technological developments at accelerating speeds with lower barriers of entry and costs.[47]

Technology provides the enemy a rapid ability to communicate their ideology to a vast audience. The enemy's ability to exploit technologies ease of communication to

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[45] U.S. President, *National Security Strategy of the United States of America*, 10.

[46] Robinson, *The Future of US Special Operations Forces*, 6

[47] Department of Defense, *Summary of the 2018 National Defense Strategy*, 3.

pursue political objectives through organized violence is steadily increasing.[48] The *2018 National Defense Strategy* states, "Terrorist, transnational criminal organizations, cyber hackers and other malicious non-state actors have transformed global affairs with increased capabilities of mass disruption."[49] Colin Grey in his article, "How Has War Changed Since the End of the Cold War?" states that US strengths are being undercut by the processes of diffusion which spread technology and ideas to those with limited access previously.[50] The enemies greater access to technology shortens the time it takes to organize movements, obscures the true purpose or ideology of their movement, and enables the enemy to establish a support network and population base for their hostile actions.

Jihadist terrorist groups do not abide by any political conventions similar to a peer threat. Rather they seek disorder thriving in unstable regions with the promise that their methods will provide order rectifying the populations problems. These organizations have demonstrated resiliency in the face of the US and its allies over nearly two decades of war. Their persistence and ability to manifest in multiple regions drawing global support have created an enemy that is difficult to defeat and have demonstrated the ability to continue operations and increase recruiting despite overwhelming opposition.

The third largest threat to America can be classified as regional instability. Regional instability disrupts international norms and provides an environment for

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[48] Joint Chiefs of Staff, *JOE 2035*, 1.

[49] Department of Defense, *Summary of the 2018 National Defense Strategy*, 3.

[50] Gray. "How Has War Changed Since the End of the Cold War?," 21.

enemies of the US to flourish. These unstable regions also provide peer threats such as Russia, China, North Korea, and Iran with opportunities to gain economic resources, military clout, and influence multiple populations. Unstable countries are classified into two categories fragile and failing states. In fragile and failing states internal authority is challenged and begins to erode, consequently resulting in violence in the form of sectarian strife, insurgency, or civil war.[51] SOF conducts a significant amount of its missions in these environments trying to identify and prevent instability through operations such as CNT, Foreign Internal Defense, COIN, and numerous other SOF missions.

In Nick Turse's article, "The Year of the Commando U.S. Special operations forces deploy to 138 nations, 70% of the World's Countries," he describes the increasing amount of deployments conducted by SOF around the world. He reports that SOF deployed to 138 countries of which SOCOM was willing to confirm 129 of the countries.[52] These areas are commonly referred to as the gray zone. USSOCOM's gray zone is defined as "competitive interactions among and within state and non-state actors that fall between the traditional war and peace duality."[53] The gray zone is significant

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[51] Joint Chiefs of Staff, *JOE 2035*, 8.

[52] Nick Turse, "The Year of the Commando: U.S. Special Operations Forces Deploy to 138 Nations, 70% of the World's Countries," TomDispatch.com, January 5, 2017, accessed February 14, 2018, http://www.tomdispatch.com/blog/176227 /tomgram%3A_nick_turse,_special_ops,_shadow_wars,_and_the_golden_age_of_the_gray_zone/.

[53] United State Special Operations Command, "The Gray Zone" (White Paper, September 2015), 1, accessed February 14, 2018, https://publicintelligence.net /ussocom-gray-zones/.

because these areas are countries with unstable governments where transnational jihadist, state actors, and criminal networks are taking advantage of the lack of security infrastructure contributing to instability that can have cascading effects across a region. The *United States Army Special Operations Command (USASOC) Strategy-2035* begins by stating the future operating environment will be a contest of state and non-state adversaries that employ hybrid forms of conflict to challenge the US internationally through indirect means in the gray zone between peace and overt war.[54] Figure 6 depicts the arc of instability commonly referred to as the gray zone.

The large numbers of countries that SOF deploys to in the arc of instability or gray zone signifies the importance of these regions in the US's ability to identify and stem critical instability factors before they become unmanageable, while also training partner nation forces to conduct security operations to increase stability in their countries. In these regions transnational jihadists access to technology and resources are enabling them to have far reaching impacts, significantly greater than in the past. Non-state actors, terrorists, transnational criminal organization, cyber hackers, and other malicious non-state actors have transformed have disrupted global affairs with increased capabilities of mass disruption.[55] The fight against transnational jihadist organizations and transnational criminal networks will increasingly be fought outside of Iraq and Afghanistan in

[54] United States Army Special Operations Command, *USASOC-Strategy 2035* (Fort Bragg, NC: US Army Special Operations Command, April 2016), 2, accessed November 14, 2017, http://www.soc.mil/AssortedPages/ USASOC Strategy2035.pdf.

[55] Department of Defense *Summary of the 2018 National Defense Strategy*, 3.

countries the US is not at war with and the dominant modes of operation will be indirect and covert.[56]

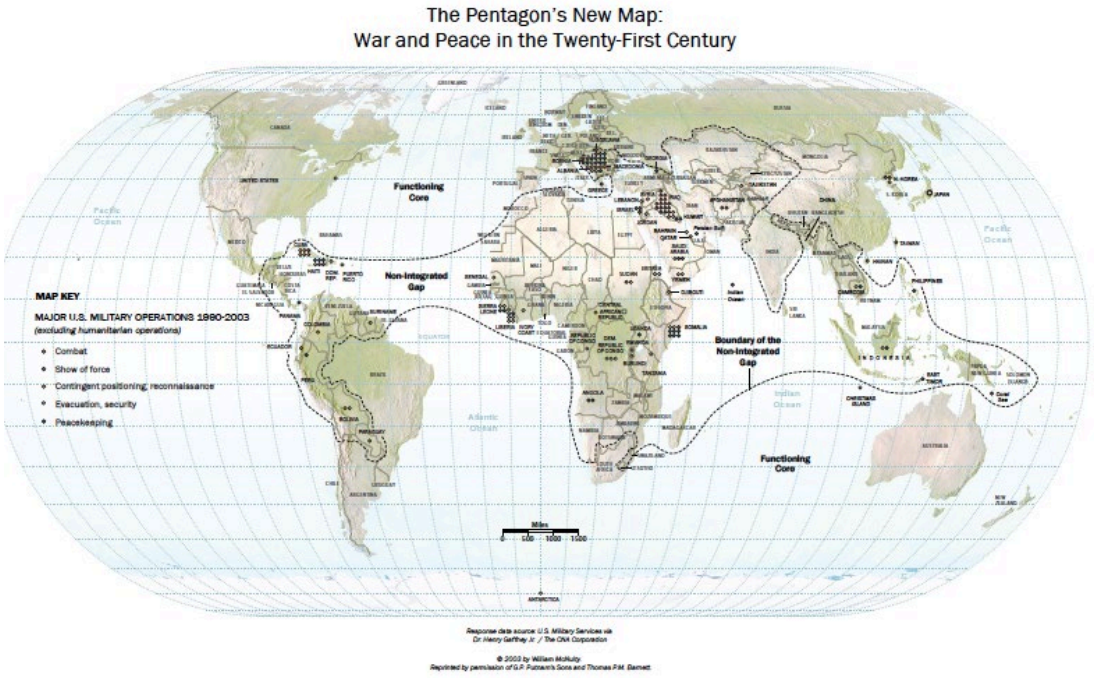

Figure 6. Arc of Instability referenced as the Gray Zone

Source: Thomas P.M. Barnett, "The 'Pentagon's New Map' Recast as USMC's 'Arc of Instability.'" *Thomas P.M. Barnett Blog*, accessed March 30, 2018, http://thomaspmbarnett.com/globlogization /2015/2/11/the-pentagons-new-map-recast-as-usmcs-arc-of-instability.html.

In the *2017 National Security Strategy* echoes the previous classifications of threats to the United States and details further economic, energy, biological, technological, and political threats. In the *NSS* it states that the US will pursue threats to

[56] Martinage, *Special Operations Forces*, 41.

their source so they are dealt with prior to reaching our borders.[57] It further elaborates stating the US will "preserve peace through strength" by building a strong military to deter adversaries and fight and win when required.[58] These statements add credence to the employment of SOF in the gray zone and explain the importance of conducting SOF operations in 130 different countries in a single year.

The primary threats to US national interests are conventional peer threats, transnational jihadist organizations, and regional instability. These threats offer common trends amongst them that speak to the SOF's future capability development requirements to be successful in contesting these threats. The threats to the US are not separate and distinct and should not be treated in stove-piped categories. Some threats contain obvious relationships while some are very disparate and nebulous. They all share the difficulty of identification and understanding of their intentions; and they share a technological means to rapidly communicate, coordinate, and disseminate information. They also share a common objective to mitigate US strengths to gain operational freedom and support to achieve their goals. SOF, specifically an MSOC, can have a substantial impact in these areas and therefore should look to capabilities that will enable the force to identify and mitigate threats before they are able to significantly disrupt a region.

Future MSOC Capabilities

The future MSOC must identify the required capabilities from past lessons learned while recognizing the emergence of threats identified in the paper. In recent

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[57] U.S. President, *National Security Strategy of the United States of America*, 4.

[58] Ibid.

strategy documents requirements are levied on the Joint Force and its partners to be able to establish access to critical areas, forward position units, establish appropriate and timely presence, organize exercises, share intelligence, employ unconventional measures, and conduct information operations.[59] MARSOC answers some of these through its forward deployed presence in the three different TSOCs and being able to respond to emerging crisis with already deployed forces, conducting preparation of the environment, and partnering with host nation forces. However, MARSOC forces need the ability to conduct information and psychological operations, formal training in coordinating with non-military actors, and new or enhanced organic capabilities to better support partner forces.

MARSOC should not be constrained in its analysis amongst subordinates and superiors and candor should dominate the conversations on future required capabilities. This author proposes that MARSOC should look at the following areas as starting points for discussions and a proposed way ahead. First, an MSOC needs an organic strike capability that matches its ability to identify targets commensurate with its ISR assets. Second, MARSOC should identify individuals within current structure of an MSOT to attend CA and MISO schools to build a capability in the force to identify instability factors and influence capability to increase its operational and intelligence cycles to create a holistic force package reducing the number of required SOF enablers. Third, MARSOC needs to identify and begin the training of cyber professionals, procurement of

[59] Joint Chiefs of Staff, *Joint Concept for Integrated Campaigning*, 21.

equipment, and target the authorities and permissions to operate within the information domain to locate, track, and counter adversaries.

Significant new factors in the future operating environment require the future MSOC to increase its capabilities to be effective. For instance, in a peer threat conventional war resources that SOF have become accustom to will be reduced and prioritized to conventional forces. Some of these critical capabilities are air and fire support assets, unconstrained logistical resources, uncontested communications, and numerous other support mechanisms. This will place a significant burden on SOF operating in a conventional fight as well as operating in countries outside of the conventional conflict where relationships and security must be maintained. It should be assumed that these resources will not be as readily available as they have been in past conflicts forcing the MSOC develop a capability to strike an enemy without external fire support assets.

Long-Range Precision Fire Weapons

There exists a long-range precision fire weapon system capability gap currently in the MSOC that will be essential for the force to rectify whether fighting a near peer threat or advising a partner nation force (PNF) fighting jihadist terrorist organizations. In a conventional war against a peer threat the ability to strike the enemy before he can see and range the friendly force is critical and with current organic weapon systems this is not achievable. In a conventional peer fight an MSOT will have a difficulty receiving the number of close air support sorties that it has grown accustom to recent conflicts. The author was not able to find unclassified information to provide the number of close air support sorties provided to SOF in Iraq and Afghanistan for comparison.

In the current conflicts MSOTs, conventional forces, and other SOF have been restricted from accompanying their PNF on combat operations. All of these units are tasked and expected to support their PNF with fires from various platforms such as fixed and rotary wing aircraft; ISR aircraft; mortars, and artillery. The MSOTs must compete and share these critical resources with all other SOF and conventional forces in theater often hindering their ability to support PNFs at critical times often straining already tenuous relationships. Authorities and approval levels also hinder their ability to employ ordnance from a fixed and rotary wing aircraft or armed ISR platforms. Having to compete for scarce resources and seeking high levels of approval to employ non-organic fire support capabilities limits the MSOTs operational reach and significantly slows down the targeting cycle. The MSOTs have multiple variations of organic unmanned aircraft systems with a wide range of capabilities. Some are designed for short duration and range while others can go beyond 20-kilometers. Specific unmanned aircraft system names and capabilities cannot be discussed due to classification but MSOTs currently have the ability and will have a greater ability in the future to identify targets beyond the capabilities of any organic weapons systems. The MSOCs furthest ranging organic weapon system is the 81millimeter mortar with a range of 5,700 meters. The ability to identify targets at beyond 20 kilometers with no ability to strike creates a critical gap in the force.

The solution is to develop or procure a long-range precision ground based direct fire weapon system with a minimum range of 20 kilometers. The Marine Corps is

currently investing in long-range fire systems to prepare itself for future conflicts.[60] A weapon system with that capability will fill a critical gap in the MSOT. First, direct fire weapon systems rarely require additional levels of approval beyond the ground force commander. This will dramatically reduce the time required to strike targets that an MSOT can identify with organic assets. It will also mitigate the requirement to conduct extensive target development packages required for fixed wing or armed ISR strikes. Since the weapon system is a direct fire weapon it would also eliminate the post-strike requirements of ISR surveillance or ground forces to conduct a post-strike reconnaissance of the target. Second, it enables the MSOT to engage targets identified through organic unmanned aircraft system capabilities rather than requesting an external strike capability from supporting aircraft or artillery units, while simultaneously reducing external resources required for support. Third, it mitigates risk to the force by creating a greater standoff from the target with a long-range precision direct fire weapon system that is outside most indirect and direct fire capabilities of the enemy.

Competing for resources can often leave MSOTs unsupported. In the future, as in the past, MSOTs will operate in denied areas outside the range of friendly supporting fires required to be dependent upon external fire support assets to target enemies outside of direct fire weapon system. An organic long-range precision strike capability will enable the MSOT to operate at further distances independent of supporting fires platforms.

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[60] Hope Hodge Seck, "Marines in the Hunt for a Mortar Round That Can Fire Up to 12 Miles," Military.Com, last modified April 18, 2018, accessed April 19, 2018, https://www.military.com /kitup /2018/04/18/marines-hunt- mortar-round-can-fire-12-miles.html.

There are currently several systems near development completion for infantry type units that meet this requirement. One such prototype is the 81-millimeter Advanced Capability Extended Range Mortar (ACERM). The ACERM round is a global positioning system guided munition that was successfully tested out to 19.1 kilometers with a forecasted range of 20 kilometers.[61] The round would be compatible with current Marine Corps and MARSOC 81-millimeter mortar systems.[62] The ACERM is currently still in development at the time of this publication. The ACERM round would fill a current gap in the near term offering MARSOC increased lethality with no changes to manning or equipment. However, another capability already fielded in other countries that exceeds the ACERM capabilities is the Spike Non-Line of Site (NLOS) missile.

The Spike NLOS manufactured by Rafael Advanced Defense Systems Ltd meets the requirement to provide precision long-range fires. The weapons system has a range of 25 kilometers, with mid-course navigation abilities, fire and forget mode, and has multiple warhead types for anti-armor, anti-personnel, penetration blast fragmentation, and weighs 71 kilograms.[63] The Spike missile can be fired from a vehicular platform or dismounted platform. The Spike family of missiles are currently operating in several

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[61] National Defense Industrial Agency, "Enhance Expeditionary Engagement Capability-Guided Projectiles for an Enhanced Engagement Capability" (PowerPoint brief, Arlington, VA, May 1, 2017), 2, accessed February 2, 2018, https://ndiastorage.blob.core.usgovcloudapi.net/ndia/.2017/armament/Steelman19271.pdf.

[62] Seck, "Marines in the Hunt for a Mortar Round That Can Fire Up to 12 Miles."

[63] Rafael Advanced Defense Systems, "Spike NLOS-Multi-Purpose, Multi-Platform Electro-Optical Missile System" (Brochure, Haifa, Israel), 2, accessed February 4, 2018, http://www.rafael.co.il/5752-2415-en/Marketing.aspx.

countries including Israel, Spain, Poland, Italy, Romania, and Czech Republic.[64] Although outside the scope of this paper, research should be conducted on the countries previously listed to analyze the successes or failures while employing the Spike family of missiles. Also, no unclassified information was available on the flight characteristics of the missile when employed by ground forces, which depending on the altitude the missile flies may require ground forces to conduct air coordination for clearances of fires.

The next generation of long-range precision guided weapon systems are loitering munitions with the capability to fly and hover over a target while providing intelligence on the enemy, providing positive identification through sophisticated camera systems, and striking targets with precision accuracy when directed by the controller at ranges beyond 20 kilometers. Loitering munitions provide a sensor to gather information, embedded lethal capability, and significantly a units targeting ability. A current model is being employed by SOF in Afghanistan and Iraq with great effectiveness, called the Switchblade. The switchblade is a man portable global positioning system guided or controller guided miniature missile that can be carried in a backpack and launched from a variety of tube mounted configurations. The current system has a range of 10 kilometers and loiter time of 15+ minutes.[65] Current systems do not meet the previously identified threshold of operating beyond 20 kilometers. However, new models currently in

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[64] Admin, "Rafael Unveils 'Non Line of Sight' Spike Missile Operating at 24 km Range," Defense Update, November 30, 2009, accessed February 4, 2018, http://defense-update.com/features/2009/november/spike_nlos_301109.html.

[65] AeroVironment, "Switchblade-Tactical Missile System," accessed February 2, 2018, https://www.avinc.com/images/uploads/product_docs /SB_Datasheet_2017_Web_rv1.1.pdf.

development will far exceed current ranges and loiter times providing a long-range precision strike munition at the team level. Loitering munitions that can strike targets beyond the line of site are already in development. MARSOC should continue to pursue this capability and field this cutting-edge technology to its units to provide a beyond the line of site organic strike capability that can be employed to fill a critical gap.

MARSOC should pursue the Spike NLOS and ACERM in the near term, continue to field current Switchblade models, and pursue future loitering munitions to increase the MSOTs strike capabilities to fill a critical gap in their direct fire weapon systems. This type of capability will increase the speed at which MSOTs can employ the find, fix, finish, exploitation, analyze, and disseminate (F3EAD) process giving the unit greater operational reach. This will enable the MSOT and MSOC to further leverage its already significant intelligence capacity extending the range an MSOC can influence on the battlefield. From the unclassified research conducted in this area the Spike NLOS and loitering munitions; if procured by MARSOC, would provide MARSOC with a unique capability exceeding the other services. This would also provide the MSOT a significant targeting capability in a resource constrained operating environment such as fighting a peer threat where air and traditional fire support assets are going to subsumed by conventional forces. This capability would work well in antiaccess aerial-denial environment where receiving traditional air and fire support assets are restricted. Should conventional war break out SOF will still operate outside the conventional war zone in the gray zone, which will become even more resource restricted than present. Spike NLOS, ACERM, and loitering munitions will provide an MSOT with the necessary tools

to target in a resource constrained environment, increase lethality and survivability, and lengthen the MSOT's operational reach.

In May 2016, the Army's Maneuver Center of Excellence conducted a series of tests with an infantry rifle company commanded by Captain, with company command experience, employing Lethal Miniature Aerial Missile Systems (LMAMs) similar to the switchblade. The tests resulted in the company being 129 percent more lethal against targets at ranges in excess of organic direct fire small arms and missile ranges beyond the line of site targets, fleeting targets, and high value precision targets.[66] In all cases the LMAMs enabled the commander to strike targets across the depth of the enemy formations forcing them to deploy early and displace from protective positions.[67] The company employed organic ISR capabilities and the LMAM to locate and destroy covered and concealed enemy forces reducing exposure to enemy fire and increasing small unit survivability by 24.3 percent.[68] The range, endurance, and loitering capability of LMAMs improved the units ability to interdict moving targets between units increasing the units effectiveness by 54.7 percent.[69] Finally, the LMAMs precision and low collateral damage estimate increased the units ability minimize collateral damage and

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[66] Headquarters Department of the Army, Maneuver Center of Excellence, "Lethal Miniature Aerial Missile System (LMAMS) Operations and Organization Experiment 2-20 May 2016-Maneuver Battle Lap Project 0357" (Maneuver Center of Excellence, Fort Benning, GA, July 18, 2016), 3

[67] Ibid.

[68] Ibid.

[69] Ibid., 3.

engage 41 percent more targets otherwise constrained by rules of engagement.[70] These significant enhancements achieved by infantry rifle company would be similar to results when employed by an MSOT.

These weapon systems will increase the MSOTs ability to conduct advise and assist operations with PNF when MSOTs do not have the authority to accompany the PNF on combat operations. Currently, MSOTs do not have the ability to support a PNF with organic weapon systems once the PNF have exceeded the range of organic weapon systems. The MSOTs are reliant on air, armed ISR, and artillery to support their PNF during operations exceeding the range of organic weapon systems. The ACERM, Spike NLOS, and new versions of the Switchblade address this capability gap. These systems will speed up the process by which the MSOT can strike a target in support of their PNF solving an often-difficult problem of providing the necessary detail to the higher headquarters approving authority required to strike with non-organic fire support systems. This will inevitably increase trust between the PNF and the MSOT building a greater partnership between the forces and ease tensions that arise from delayed or non-existent fire support.

Neither ACERM, Spike NLOS, or loitering munitions require any changes to the current task organization of the MSOT, only an addition to the table of equipment. The Spike NLOS weapon system would require MSOT members to cross train on a new weapon system during already existing weapons training packages. The training required

[70] Headquarters Department of the Army, Maneuver Center of Excellence, "Lethal Miniature Aerial Missile System (LMAMS) Operations and Organization Experiment 2-20 May 2016-Maneuver Battle Lap Project 0357," 4.

would be similar to current training that occurs on all anti-tank and mortar systems present in MARSOC. The cost of firing live missiles during training may exceed budgets and present range availability issues, however this is a problem the Marine Corps already addressed with the Javelin anti-tank weapon system and other cost prohibitive weapon systems. The recommendation is to model training after Javelin training where simulations are utilized to reduce costs. In addition, MARSOC should ensure the statement of requirements for these systems includes simulation rounds and simulation programs as a requirement to mitigate training costs. The requirement is one per MSOT with one additional Spike NLOS at the MSOC headquarters.

The varying types of loitering munitions offer the MSOT multiple ranges with multiple warheads, target dependent. Multiple variants of this system should be fielded to offer a wide range of capabilities with the cheaper short-range ones in greater quantity then the long range more expensive versions. The loitering munitions will require training similar to what is already conducted for the Switchblade model in current use, which is a week-long train the trainer course individuals from the MSOT attend and return to train the remainder of the team. The researcher was unable to get quotes on the cost of procuring these technologies and it should be noted that they are most likely expensive, however they mitigate the hurdle of having to increase MSOT manpower structure to field these systems. It should also be noted that air space restrictions will impact the employment of loitering munitions and the Spike NLOS, however approval times will ultimately still be reduced as the MSOT will not be reliant upon external assets to be sourced. Unclassified information was unavailable to be obtained in regards to the

air space coordination measures that would be required for the Switchblade and Spike NLOS.

Civil Affairs and Military Information Support Operations

A second critical capability gap to address is the MSOT's ability to identify critical instability factors and conduct information operations. MARSOC should develop CA and MISO Marines in the MSOT to conduct these operations. SOF operations often require intensive interagency coordination and SOF often finds itself supporting either conventional forces, the Department of State, or the Central Intelligence Agency.[71] CA units are critical for winning hearts and minds of the population and for building support for partner governments and US policies around the world.[72] The JCIC states that psychological element is a requirement for integrated campaigns to have an advantageous psychological impact on friendly, neutral, adversaries to align military and non-military activities to overtime to exhaust or persuade the adversary, competitor, or population.[73] Military information support operations are critical for combating terrorist organizations because they can create and exploit divisions within them, discredit their ideology and promote credible, alternative voices and isolating extremists from the majority population.[74] Military and especially SOF should continuously seek positional advantage

[71] Madden et al., *Toward Operational Art in Special Warfare*, 26.

[72] Martinage, "Special Operations Forces," 53.

[73] Joint Chiefs of Staff, *Joint Concept for Integrated Campaigning*, 17.

[74] Martinage, "Special Operations Forces," 53.

in the physical and human terrain in support of non-military operations to exploit a positional advantage.[75]

The capabilities required to maintain this positional advantage currently do not reside in the table of organization within MARSOC. However, they do reside within SOCOM under ARSOF and also reside within the USMC. The Marines in the USMC that are CA and MISO qualified attend the same qualification schools as their ARSOF counterparts at the John F. Kennedy Special Warfare Center and School at Fort Bragg, North Carolina. Not having these capabilities requires MARSOC forces to submit a request for support each time these capabilities are required for operations. Not having these organic capabilities within MARSOC impedes integration and stifles operational success when they are attached, due to a lack of MSOT training and education on CA and MISO capabilities and employment. CA and MISO forces often become an afterthought of an operations vice sometimes being the main effort. CA and MISO units should accompany ground forces involved in partner capacity building missions, which is the predominant type of missions MARSOC employs its forces.[76] History has shown that Foreign Internal Defense mission success is generally low for two reasons; first an inability to transform the host nation force into an effective counterinsurgent force and secondly, that US forces provide few capabilities with which to significantly improve governance; which highlights the importance of applying a whole of government

[75] Joint Chiefs of Staff, *Joint Concept for Integrated Campaigning*, 18.

[76] Martinage, "Special Operations Forces," 54.

approach.[77] CA and MISO capabilities could increase MARSOC's capability to improve the chances of operational success.

SOF have deployed to over a hundred countries in recent years conducting multiple mission sets during their deployments. SOF in the gray zone often operate in countries with boots on the ground (BOG) caps that require a minimal footprint, requiring personnel to be versed in a wide range of specialties, and SOF conduct operations independent of other SOF and conventional forces. Therefore, a justification exists to have a wide range of skills organic to the smallest team possible so they can offer the SOF commander a diverse set of capabilities across the range of military operations with the smallest footprint. MSOTs are often deployed into unstable regions to identify PNF to train, identify causes of instability, identify impediments to host nation governmental processes, identify successes or failures of US programs in a region, and to conduct preparation of the environment activities. Many of these areas are outside the expertise or training of the MSOT and require MSOT members to conduct self-education in an attempt to grasp the collective problem set in a given country.

To fill this critical gap the author proposes selectively screening and identifying MSOT members that demonstrate a propensity in these areas to attend the CA and MISO qualification course. Currently MSOT members, mostly team and company leadership, on deployments around the world, routinely meet with host nation officials, aid organizations, and numerous other US civilian and host nation led organizations while lacking the required training and education to integrate and synchronize civil and military

[77] Madden et al., *Toward Operational Art in Special Warfare*, 27.

operations. The military instrument alone can rarely achieve sustainable strategic outcomes and must be applied with non-military instruments to pursue political objectives.[78] In recent conflicts MSOCs have received CA and MISO forces, however lack of pre-deployment training and understanding of one another's capabilities limited operational effectiveness. MARSOC must address this capability gap to meet the demands of the future operating environment.

One member from each MSOT with a minimum rank of E-6 and one MARSOC deployment should attend the eight week CA Specialist Course and three week Sluss-Tiller Cumulative Exercise Phase IV.[79] This would provide the MSOT with an expert in civil operations and enable the team to better understand civil considerations and how they contribute to the mission. Field Manual (FM) 3-57, *Civil Affairs Operations* states:

> the mission of CA forces is to mitigate or defeat threats to civil society and conduct responsibilities normally performed by civil governments across the range of military operations engaging and influencing the civil populace and authorities through the planning and conducting of Civil Affair Operations (CAO) or to enable Civil Military Operations (CMO), to shaped the civil environment and set the conditions for military operations.[80]

Individuals trained in CA have opportunities to meet with numerous organizations working in a host nation that could provide access and placement for the MSOT for intelligence collections and increase the holistic understanding of factors contributing to

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[78] Madden et al., *Toward Operational Art in Special Warfare*, 18.

[79] United States Army John F. Kennedy Special Warfare Center and School, *FY 2017 Academic Handbook* (Ft Bragg NC: Government Printing Office, [2016]), 11, accessed March 2, 2018, http://www.soc.mil/swcs/_pdf/FY17_AcademicHandbook.pdf.

[80] Headquarters, Department of the Army, Field Manual (FM) 3-57, *Civil Affairs Operations* (Washington, DC: Government Printing Office, October 2011), 1-1.

instability in the country. This would also aid the MSOT or MSOC in identifying and synchronizing with a higher headquarters host nation support programs or US based programs to enhance stability in a region.

MISO trained individuals provide the force with an influencing and informing capability that currently does not reside within MARSOC. This capability in a technology linked future operating environment where adversaries can rapidly discredit US operations through social media driven information operations is an essential tool for tactical SOF. MISO forces support military and interagency objectives through informing and influencing foreign audiences to maintain stability, deter aggression, and prevent escalation of armed conflict by state and non- state actors.[81]

The MSOT member's requirement for rank and operational experience should mirror the recommendation by the author for an individual to attend the CA course. The MSOT member should attend a total of sixteen weeks of training specifically the eight week Phase 3- Psychological Operations Core training, four week Phase 4-Regional Analysis, and four week Phase 5- Psychological Operations support to Interagency.[82] In a force lacking this capability and with no formal instruction during the MARSOC curriculum, this capability would significantly enhance the team and allow integration and synchronization of messaging operations from the strategic to the tactical level of operations.

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[81] Headquarters, Department of the Army, Field Manual (FM) 3-53, *Military Information Support Operations* (Washington, DC: Government Printing Office, January 2013), 1-1.

[82] US Army John F. Kennedy Special Warfare Center and School, *FY 2017 Academic Handbook*, 16-17.

The author does not propose making these separate and distinct organizations under MARSOC similar to ARSOF, because the true benefit will come from the collective integration of these skill sets at the team level to provide that bottom up operations and intelligence fusion to create a holistic operational picture for the commander. Also having a specially qualified and selected operator from an MSOT attend the training will increase the integration of these capabilities into the team's mission. Prior to 2006 when the Army established the 95th CA Brigade to meet demands of supporting conventional and other service forces, CA candidates were selected from the Green Berets and returned to their teams to serve in a CA capacity. This is the model MARSOC should follow for CA and MISO personnel. CA and MISO teams are designed to be employed at the lowest tactical level to enhance the teams understanding, provide a greater range of capabilities to address the adversary, and provide additional resources and mechanisms to solve problems. By MARSOC sending select individuals to CA and MISO training it could improve the internal security situation in partner states and shrink ungoverned areas that can be exploited by transnational jihadists and transnational criminal networks.[83]

Unfortunately, in the gray zone, CA forces are often employed independent of MSOTs or operational detachment alphas teams. When CA forces are employed independent of the teams, fusion between these elements does not occur and often there are redundancies in efforts by teams working the same lines of effort. When this occurs, the requirement is placed upon the higher headquarters to ensure the CA and MISO

[83] Martinage, "Special Operations Forces," 53.

team's information and operations are fused. In gray zone countries that burden is placed on the Special Operations Command-Forward (SOCFWD) who is then charged with the collection and dissemination of the information and operations.

The majority of SOCFWDs are commanded by a Colonel, sometimes Lieutenant Colonel (LtCol) and have a very small staff to support the command. For instance, a SOCFWD in Special Operations Command Central may consist of the commander, Sergeant Major (SgtMaj), a major operations officer, and one other staff officer such as Intelligence Officer. Other than the commander and SgtMaj the remainder of the billets at the SOCFWD are independently assigned personnel, such as the operations officer, rotated every 6 months. The individuals filling these staff billets may or may not have regional operational experience and often lack the depth of cultural knowledge to truly be effective. The SOCFWDs are insufficiently staffed to conduct the operations and intelligence fusion required and rely on subordinate company headquarters and teams for the preponderance of their products. Therefore, when CA and MISO teams are employed independent of other SOF teams there are redundancies in efforts coupled with information not being properly aggregated to build the holistic package for the commander. This creates disjointed efforts and conflicting communications lacking unity of effort and unified action that delays operational effects with a host nation government that is already struggling itself to communicate and govern. SOF's actions in gray zone countries must set the model of unity of effort and unified action.

This problem can be partially solved with MARSOC pursuing the ability to send operators to CA and MISO formal training schools. This would greatly increase the MSOTs capabilities both in a conventional war environment such as Afghanistan or Iraq

and increase the MSOTs effectiveness in the gray zone. In both the conventional war zone and the gray zone MSOTs are always working with representatives of the host nation to increase stability through civil operations and messaging to inform the PNF, host nation entities, and the civilian population of ongoing efforts to support and improve the host nation government. Currently without attached CA and MISO forces, MSOTs conduct these operations at a less than optimum level. By training operators in these critical skill sets MARSOC, as a force provider, would increase the desirability of the force by having a greater capability with a smaller footprint. This force when combined with its already significant intelligence capacity could have even greater effects through its operations and intelligence fusion with increased access and placement, greater depth of understanding of the factors leading to instability, and influence in an operational area.

These organic capabilities could improve contextual understanding and ground truth, increasing the ability to engage the right stakeholders, assessments of compatibility with US interests, and better augmentation of selected capabilities within the partner nation.[84] With warfare becoming increasingly indirect, CA and MISO capabilities at the team and company level will be essential for maintaining host nation relationships for effective, long-term CT and COIN operations.[85] Building these capabilities can improve the forces tactical focus on the PNF to achieving a political-military effect whole of government approach significantly increasing results.[86] Building a CA and MISO force

[84] Madden et al., *Toward Operational Art in Special Warfare*, 28.

[85] Martinage, "Special Operations Forces," 54.

[86] Robinson, *The Future of US Special Operations Forces*, 4.

within MARSOC is significant to address the human domain which will always be present in conflict.

Cyber

The third capability MARSOC should begin to invest in is cyber. In 2005 the DOD recognized cyber as the fifth operational domain, in 2017 recognized information as a seventh joint function and recognized United States Cyber Command as a combatant command. In the DOD memorandum to the joint force it states, "The elevation of Information to a joint function impacts all operations across doctrine, organization, training, material, leadership, education, personnel, facilities, and policy that must be identified in the months ahead."[87] The cyber domain now, and increasingly in the future, is integral to the infrastructure of the US and larger global economy so much that actions to deny, degrade, or destroy parts of it have the potential to create intolerable security threats.[88]

The increasing significance and influence of cyber warfare requires MARSOC to address the capability gap to identify the required capabilities, training, education, and procurement of systems to conduct operations in this domain. Beyond the strategic necessity for creating a cyber capability, the cyber operational environment can serve as source of information and intelligence activities for MARSOC personnel conducting

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[87] Department of Defense, *Information as a Joint Function* (Washington, DC: Government Printing Office, September 2017), accessed April 03, 2018, https://www.rmda.army.mil/records-management/docs/SECDEF-Endorsement_Information_Joint%20Function_Clean.pdf.

[88] Joint Chiefs of Staff, *JOE 2035*, 34.

preparation of the environment activities. One of the most essential, and difficult steps, due to the classification of the majority of cyber operations, will be identifying the authorities and permissions required to conduct cyberspace operations, which is beyond the scope of this paper. Colin Gray, in *Making Strategic Sense of Cyber Power,* asserts cyber despite being a new capability should be viewed in historical context and that cyber is but the latest in a long line of innovations.[89] For MARSOC signal intelligence has been a critical capability and conducting the same capabilities in cyberspace will be essential for the future.

The Army wrote FM 3-12 *Cyberspace and Electronic Warfare Operations* to provide overarching doctrinal guidance and direction for conducting cyberspace and electronic warfare (EW) using cyberspace electromagnetic activities in unified land operations.[90] This manual is one of the first cyberspace manuals to provide guidance to the services on cyber operations and should serve as a starting point for defining capability requirements for MARSOF. However, specific cyber capabilities are not discussed in this manual due to classification. In researching this topic difficulties were encountered because cyber literature is generally limited in treatment both of prospective strategic benefit and its limited grasps of necessary contextualization in war and

[89] Gray, *Making Strategic Sense of Cyber Power*, 31.

[90] Headquarters, Department of the Army, Field Manual (FM) 3-12, *Cyberspace and Electronic Warfare Operations* (Washington, DC: Government Printing Office, April 2017), V.

warfare.[91] Without clearly defined capabilities it forces the author discuss capabilities in broad generalities.

This paper will focus on three cyberspace capabilities discuss in FM-3-12. FM 3-12 states cyberspace actions are: "cyberspace defense; cyberspace ISR; cyberspace operational preparation of the environment; cyberspace attack; and cyberspace security."[92] The author proposes MARSOC should initially focus on developing the following capabilities: cyberspace defense, cyberspace ISR, and cyberspace operational preparation of the environment and then eventually expand when capable or necessary. These three areas, similar to other intelligence activities conducted by MARSOC, would be the most beneficial to the force in understanding and influencing their operational environment for immediate effects on operations.

The crux of the issue when discussing the above mentioned three capabilities is there is no unclassified material the researcher was able to discover that describes cyberspace activities in sufficient detail to allow the author to describe the personnel, equipment, and training requirements to conduct cyberspace activities. FM 3-12 is not written in a similar fashion to FM 3-90-1 Offense and Defense where an individual can look up how to conduct a specific offensive maneuver and find a detailed description, planning considerations, terrain analysis, and so forth. Rather, FM 3-12 describes cyberspace ISR activities in a short paragraph, as activities in cyberspace conducted to gather intelligence to support offensive and defensive cyberspace operations focusing on

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[91] Gray, *Making Strategic Sense of Cyber Power*, 33.

[92] Headquarters, Department of the Army, FM 3-12, *Cyberspace and Electronic Warfare Operations*, 1-6.

tactical and operational intelligence and mapping enemy and adversary cyberspace support to military planning.[93] This vagueness leaves the reader asking the who, when, where, and why as to the employment of these capabilities. This author contends this vagueness is why authors, such as Colin Gray, recommend referencing similar historical examples from the past to understand cyber and why this author recommends a comparison between cyber and signals intelligence can lead to an increased understanding of cyber.

For MARSOC to begin developing this capability it must begin to identify and understand the capabilities that already exist within DOD, equipment requirements, training and education, and manpower required to execute cyberspace capabilities. MARSOC should establish liaisons within SOCOM and United States Cyber Command, specifically Marine Forces Cyber Command. This network and liaison should replicate the already pre-established relationship with the Marine Corps Cryptologic Support Battalion within the National Security Agency. MARSOC maintains a relationship with this USMC office in the National Security Agency to increase support, training, education, and effectiveness of our signals intelligence Marines. The author recommends creating the same relationship with Marine Forces Cyber Command to develop the required cyber capabilities.

Once the relationship is established MARSOC should begin to identify number of Marines and equipment required to execute the desired capabilities. There are a couple of options available to address the manpower issue. The first option is for MARSOC to

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[93] Headquarters, Department of the Army, FM 3-12, *Cyberspace and Electronic Warfare Operations*, 1-9.

require the direct support team intelligence Marines to be cross trained in cyberspace activities, most likely signals intelligence personnel, since there is some overlap between the two. Signals intelligence Marines have an understanding of authorities and permissions that accompany these types of intelligence activities and are used to operating within prescribed signals intelligence operational tasking authorities, which the author assumes a similar tasking authority exists for cyberspace activities. Secondly, MARSOC could request additional force authorizations to increase the size of the direct support team, which will be slow and unlikely to occur quickly, as the Marine Corps is already establishing a similar capability at the Marine Expeditionary Forces (MEFs). Third, MARSOC could employ intelligence personnel from the MRSG not on deployment to stand up a reach back support center at Camp Lejeune that provides deployed forces operational support in cyberspace. Lastly, MARSOC potentially could develop a memorandum of agreement with Marine Forces Cyber Command for support to deployed forces. With any course of action there will positives and negatives, but the critical aspect for MARSOC is to officially establish a working group that is networked with the appropriate cyber offices to develop an understanding and forecast requirement to develop a roadmap to create cyber trained Marines within MARSOC.

The final and significant hurdle to clear is establishing the appropriate authorities to conduct cyberspace activities form MARSOC personnel. The author's recommendation is to review signals intelligence authorities and where applicable create similar authorities for cyberspace operations. FM 3-12 describes cyberspace code-based authorities such as Title 10 DOD where it states: man, train, and equip US forces to

conduct military operations in cyberspace.[94] Obviously, this is insufficient to provide the detail required to create a capability and can only be used for a general understanding. The authorities challenge will be dependent upon the personnel conducting the activity, location from which the operation is being conducted- US versus in a TSOC or Geographic Combatant Command; the cyberspace activity, mission, enemy, and as well as the second and third order effects of the cyberspace activity. However, similar coordination must be conducted to execute signals intelligence operations and there are precedents established that can be useful in understanding the obstacles to overcome. MARSOC should pursue this challenge to create the required capability in the force to meet the demands of the technology linked future operating environment. Colin Gray in *Making Strategic Sense of Cyber* states our troubles in understanding what cyber power means strategically are no different than the challenges posed by past revolutions in military affairs (RMAs), cyber is different in character, but not in nature, when approached from a strategic context.[95]

Conclusion

State and powerful non-state actors will challenge the rules that support the current global order, while fragile states will become increasing unstable, and technical advances will lead to greater parity among international actors allowing adversaries to

[94] Headquarters, Department of the Army, FM 3-12, *Cyberspace and Electronic Warfare Operations*, 1-24.

[95] Gray, *Making Strategic Sense of Cyber Power,* 54.

more effectively challenge US interests abroad.[96] MARSOC must continually evolve to meet the demands of the future operating environment. MARSOC must develop or procure an organic weapon system capable of matching current ISR capabilities reducing dependency on external support while increasing the lethality of its units. It should develop CA and MISO organic team capabilities to address the partner nation civilian population and host nation government entities, to inform and influence those same entities, and to better synchronize MARSOCs operations in a region with other government entities. Lastly, MARSOC should develop a plan to create cyber qualified Marines within its organization to address the information joint function. Relevancy of the organization will be as dependent on its ability to evolve with the future operating environment as it is dependent on the steadfastness of its Marines.

[96] Joint Chiefs of Staff, *JOE 2035*, 52.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Introduction, Purpose, and Organization

The purpose of this paper was to understand the future operating environment defined by strategic documents that guide the Joint Force employment and capabilities development to identify the required future capabilities MARSOC must develop. The primary research question asked according to the *JOE 2035*, what capabilities does a Marine Special Operations Company (MSOC) require? Secondary questions that enabled the researcher to answer the primary question were: What are the primary predicted threats for 2035? What missions does the *JOE 2035* require of Special Operations Forces (SOF), specifically MARSOC? Are there employment concepts for the future operating environment that require structural changes to MARSOC? What are the capability gaps that exist between MARSOC's current capabilities and what the JOE 2035 states are necessary? The analysis of the future operating environment revealed three areas for MARSOC to develop new capabilities. First, develop an organic precision long-range weapon that matches current ISR capabilities to reduce dependency on external fire support assets and increase the MSOT's lethality and survivability. Second, develop a CA and MISO capability organic to the MSOC to provide a civil-military and influence approach in unstable regions. Lastly, developing a cyberspace capability for defensive, intelligence, and offensive operations in the information domain.

Summary, Interpretation and Implications of Findings

The Joint Chiefs of Staff *JOE 2035* summarized the future operating environment as contested norms and persistent disorder shaped by adversaries use of political will, economic capacity, military capabilities to compel change; challenged by human geography creating economic, environmental, and political pressures causing international problems; and technology and engineering reduced costs providing new capabilities at lower entry rates to adversaries to create parity with the US and challenge US interests.[97] Many of the documents researched led to an increased employment of SOF due to the fiscally constrained US current operating environment. Linda Robinson states, "two principal features of the domestic and international environment forecast the likelihood of ongoing high demand for special operations forces to achieve US national security objectives: US budgetary pressures and the continued prevalence of irregular threats."[98] With the future operating environment identified the researcher developed the following conclusions.

The capabilities identified in this paper for MARSOC attempted to minimize manpower increases and organizational changes based on the assumption of minimal force structure increase authorizations and the forecasted fiscally constrained environment. The analysis pointed toward developing an organic long-range precision guided weapon to match current ISR capabilities for the following reasons. First it reduces the MSOTs or MSOCs dependency on external fire support assets, provides a

[97] Joint Chiefs of Staff, *JOE 2035,* ii.

[98] Robinson, *The Future of US Special Operations Forces*, 5.

capability in regions where MSOT do not receive external fire support assets, increases lethality and survivability, and provides a greater ability to support the PNF.

The CA and MISO capability addressed the future operating environments prediction of continued and increased regional instability threatening US national interests. MARSOC does not have an organic CA and MISO capability and is reliant upon requests for support to higher headquarters for augmentation. MARSOC receives CA and MISO support in an ad hoc fashion and has no formal relationship, training, and education dedicated to the employment of these forces. Developing an internal capability derived from selectively chosen operators who have previously deployed with an MSOT will increase the team's capabilities, understanding, and better integrate the team's efforts with the political-military strategy in a region.

Since the DOD formally recognized information as the seventh joint function and all strategic documents pertaining to the future operating environment address the importance of cyberspace, the final recommendation was to develop an organic cyberspace capability. An MSOT or MSOC with a cyberspace capability could increase its understanding of an operational area, identify drivers of instability, verify intentions of relevant actors, defend, and conduct offensive cyberspace operations. The extent of the cyber Marines capabilities will be limited by the authorities and permissions for the given mission like that of signals intelligence missions.

The previously mentioned capabilities address key issues identified in the future operating environment while minimizing manpower and equipment growth. The recommended changes will increase the operational effectiveness of the MSOT and

MSOC, provide an even more unique SOF capability within SOCOM, and all will be areas that can be expanded if they are successful.

Unexpected Findings

During researching the future operating environment, the researcher expected to find substantial information regarding the US conducting conventional warfare against a peer threat. However, the researcher found the preponderance of information described the future operating environment as characteristic of limited war where adversaries seek to gain advantages without drawing international scrutiny on their actions. Russian, China, North Korea, and Iran are employing coercive methods and operations to accomplish objectives in the space between peace and war aiming to change international norms.[99] The *2018 Joint Concept for Integrated Campaigning (JCIC)* reaffirms this stating, "In fact, revisionist powers seek to achieve all of their policy objectives, while avoiding and escalation to armed conflict."[100] The research further described the future operating environment as disorderly coupled with regional instability being a driver of US national security interests.

This focus appears to be in line with the USMC and their approach to the future operating environment which diverges from the Army's focus on a peer threat and development of capabilities for division size operations in conventional warfare. The USMC has shifted its focus to operating across the contested domains which aligns with the *JOE 2035* and is further evidenced by their signing of the *United States Marine Corps*

[99] Joint Chiefs of Staff, *Joint Concept for Integrated Campaigning*, 2.

[100] Ibid., 4.

and United States Special Operations Command Concept for Integration, Interdependence, and Interoperability.[101] The divergence between the Army and USMC was unexpected.

The descriptions of the future operating environment when combined with SOF deploying to over 129 countries around the world shapes the capabilities that SOF must develop to meet the strategic end state.[102] The researcher focused recommendations for MARSOC's capabilities on an environment that is expected to below conventional warfare contesting adversaries in the unstable regions of the world.

Recommendations

MARSOC must reinforce its ability to analyze the future operating environment through development of an internal ability to study recent military events thoroughly in a realistic fashion.[103] MARSOC should review and pursue creating an environment internal to its organization similar to the Marine Corps during the interwar period of 1919 to 1940 and from 1973 to the mid-1980s where the Marine Corps innovated well. Senior officers and enlisted in the command must prioritize the working group, which should be comprised of a core group of dedicated personnel representative of subordinate units working for the MARSOC G-5 in concert with the G-3, G-8, and G-9. It should not be an ad hoc gathering of personnel but a regular working group comprised of personnel from

[101] Headquarters United States Marine Corps, *The Marine Corps Operating Concept* (Washington DC: Government Printing Office, September 2016), 5.

[102] Turse, "The Year of the Commando."

[103] Murray and Knox, "The Future is Behind Us," 188.

across the organization with a long-term focus that reviews after actions reports from re-deploying companies, who understands strategic guidance, and integrates with SOCOM's and USMC's future manning and developments organizations. This group should enable a long-term focus, develop prioritized capability programs, and create lines of effort to achieve the stated objectives.

MARSOC should also develop a MARSOC strategy, campaign plan, and communicate the MARSOC narrative of the future force similar to USASOC. The key separation between the USASOC and MARSOC strategies and campaign plans is the level of detail in the USASOC lines of effort. USASOC in their three documents presents concise strategy with lines of effort followed by a short narrative that is easily understood by internal and external personnel. USASOC publishes these documents in an unclassified forum so they are easily obtained by internal and external personnel who want to understand the direction of the command. The researcher understands the significant manpower difference between USASOC and MARSOC, however the recommended dedicated core personnel group could write similar documents that provide a clearly defined way ahead for MARSOC. This would enable the command to stay focused on primary objectives, evaluate progression, and shift fires where appropriate to continue towards the command's objectives.

Capabilities should be identified to meet the demands of the future operating environment coupled with a MARSOC strategy that clearly communicates the plan across the force. The capabilities presented in this thesis are a recommendation for further analysis and consideration and will provide the command with capabilities to enhance the current force and enable the future force.

For Further Study

The capabilities provided in this document each require further research. First, the unclassified information provided to the author only satisfies answering the wave top questions of capabilities that the ACERM, Spike NLOS, and Switchblade are able to achieve. There are substantial classified documents available for research that clearly define the capabilities of these weapon systems, to include operational employment. Not discussed in sufficient detail were the doctrine, organization, training, material, leadership, education, personnel, and facilities implications of these capabilities (DOTMPLF). Questions such as are other services procuring these devices? What are the results of Spike NLOS in combat operations when employed by other North Atlantic Treaty Organization countries? What are the development, procurement, and sustainment costs associated with these weapons? Which one of these weapons can provide a near-term, mid-term, and long-term solution to MARSOC? Are any other SOF organization already employing these capabilities? What airspace coordination is required to employ the Spike NLOS and Switchblade, and does the coordination reduce the benefit of the weapon?

Development of a CA and MISO capability should be analyzed through DOTMLPF as well. Questions to ask: How does the force screen and select individuals to attend CA and MISO training? What are the manpower impacts and time considerations to send individuals to these courses? Does MARSOC have enough personnel to backfill MSOTs whose members attend CA and MISO training? Will USASOC permit MARSOC to send individuals to CA and MISO training, and what coordination is required with USASOC? What are the costs associated with attending the USASOC

training courses and sustainment of those skills? Specifically, MISO, what are the additional equipment requirements?

Development of a cyberspace capability requires significant research on the DOTMLPF implications. The unclassified materials available answer few questions in regards to military cyberspace operations. What cyberspace capabilities are other SOF organizations using at the tactical level? What coordination, authorities, and permissions are required to use those capabilities? What equipment and training are required for the use of cyberspace capabilities? How does MARSOC nest itself within the larger military cyberspace architecture? What does SOCOM forecast for tactical cyberspace capability requirements? How do we educate the force on cyber operations given their over classification so the force understands what capabilities to request?

Unanswered Questions

The primary research question asked according to the *JOE 2035*, what capabilities does a Marine Special Operations Company (MSOC) require? The researcher only provided three areas of consideration to address the primary research question. MARSOC should conduct further analysis of the future operating environment using classified materials available to the command such as a review of Geographic Combatant Command and TSOC concepts of operations plans (CONPLANS), intelligence and threat summaries for the regions MARSOC is deployed, and review capabilities that could enhance operations and intelligence fusion.

The first secondary question addressed the primary threats. The researcher analyzed the primary threats from an unclassified perspective. Further threat analysis should be conducted in a classified environment to analyze enemy capabilities and

limitations to enable the command to identify the most effective capabilities. The second secondary question addressed whether organizational changes were required by MARSOC to meet the future operating environment? This area requires further analysis as well, and selection of one or more of the capabilities in this thesis will require a deep dive through the DOTMLPF process. The last area recommended for further research is how does MARSOC prepare a tactical-SOF element to conduct combined arms in all domains. There is a significant amount of strategic information available on the employment of the Joint Force in the future operating environment with little analysis to how the tactical forces will operate. Continued research on the employment of the tactical force will highlight further capabilities requirements.

GLOSSARY

Antiaccess. Action, activity, or capability, usually long-range, designed to prevent an advancing enemy force from entering an operational area. Also called A2.[104]

Area Denial. Action, activity, or capability, usually short-range, designed to limit an enemy force's freedom of action within an operational area. Also called AD.[105]

Asymmetric. In military operations the application of dissimilar strategies, tactics, capabilities, and methods to circumvent or negate an opponent's strengths while exploiting his weakness.[106]

Civil Affairs. Designated Active and Reserve Component forces and units organized, trained, and equipped specifically to conduct civil affairs operations a and to support civil-military operations.[107]

Civil Affairs Operations. Actions, planned, executed, and assessed by civil affairs forces that enhance awareness of and manage the integration with the civil component of the operational environment; identify and mitigate underlying causes of instability within civil society; or involve the application of functional specialty skills normally the responsibility of civil government. Also called CAO.[108]

Close Air Support. Air action by manned or unmanned fixed-wing and rotary-wing aircraft against hostile targets that are in close proximity to friendly forces and that required detailed integration of each air mission with the fire and movement of those forces. Also called CAS.[109]

Combatant Command. A unified or specific command with a broad continuing mission under a single commander established and so designated by the President, through

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[104] Joint Chiefs of Staff, *DOD Dictionary of Military and Associated Terms* (Washington, DC: Government Printing Office, June 2017), 16.

[105] Ibid., 18.

[106] Ibid., 21.

[107] Ibid., 35.

[108] Ibid.

[109] Ibid., 38.

the Secretary of Defense and with the advice and assistance of the Chairman of the Joint Chiefs of Staff.[110]

Concept Plan. In the context of joint operation planning level 3 planning detail, and operation plan in an abbreviated format that may require considerable expansion or alteration to convert it into a complete operation plan or operation order. Also called CONPLAN.[111]

Counterinsurgency. Comprehensive civilian and military efforts designed to simultaneously defeat and contain insurgency and address its root cause. Also called COIN.[112]

Counterproliferation. Those actions taken to reduce the risks posed by extant weapons of mass destruction to the United States, allies, and partners.[113]

Counterterrorism. Activities and operations taken to neutralize terrorists and their organizations and networks in order to render the incapable of using violence to instill fear and coerce governments or societies to achieve their goals. Also called CT.[114]

Cyberspace. A global domain within the information environment consisting of the interdependent network of information technology infrastructures and resident data, including the Internet, telecommunications networks, computer systems, and embedded processors and controllers.[115]

Direct Action. Short-duration strikes and other small-scale offensive actions conducted as a special operation in hostile, denied, or diplomatically sensitive environment and which employ specialized military capabilities to seize, destroy, capture, exploit, recover, or damage designated targets. Also called DA.[116]

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[110] Joint Chiefs of Staff, *DOD Dictionary of Military and Associated Terms*., 41.

[111] Ibid., 49.

[112] Ibid., 56.

[113] Ibid., 57.

[114] Ibid.

[115] Ibid., 60.

[116] Ibid., 71.

Electronic Warfare. Military action involving the use of the electromagnetic and directed energy to control the electromagnetic spectrum or to attack the enemy. Also called EW.[117]

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 its security. Also called FID.[118]

Global Positioning System. A satellite-based radion navigation system operated by the Department of Defense to provide all military, civil, and commercial users with precise positioning, navigation, and timing. Also called GPS.[119]

Gray Zone. Defined as competitive interactions among and within state and non-state actors that fall between the traditional war and peace duality."[120]

Host Nation. A nation which receives the forces and/or supplies of allied nations and/or North Atlantic Treaty Organizations to be located on, to operate in, or to transit through its territory. Also called HN.[121]

Information Operations. The integrated employment, during military operations, of information-related capabilities in concert with other lines of operation to influence, disrupt, corrupt, or usurp the decision-making of adversaries and potential adversaries while protecting our own. Also called IO.[122]

Intelligence, Surveillance, and Reconnaissance. An activity that synchronizes and integrates the planning and operation of sensors, assets, and processing, exploitation, and dissemination systems in direct support of current and future operations. This is an integrated intelligence and operations function. Also called ISR.[123]

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[117] Joint Chiefs of Staff, *DOD Dictionary of Military and Associated Terms*, 79.

[118] Ibid., 96.

[119] Ibid., 103.

[120] United State Special Operations Command, "The Gray Zone," 1.

[121] Joint Chiefs of Staff, *DOD Dictionary of Military and Associated Terms*, 109.

[122] Ibid., 115.

[123] Ibid., 120.

Irregular Warfare. A violent struggle among state and non-state actors for legitimacy and influence over the relevant population. Also called IW.[124]

Joint Functions. Related capabilities and activities placed into six [now seven] basic groups of command and control, intelligence, fires, movement and maneuver, protection, sustainment, [and information] to help joint commanders synchronize, integrate, and direct joint operations.[125]

Joint Special Operations Task Force. A joint task force composed of special operations units from than one Service, formed to carry out a specific special operation or prosecute special operations in support of theater campaign or other operations. Also called JSOTF.[126]

Joint Terminal Attack Controller. A qualified (certified) Service member who, from a forward position, directs the action of combat aircraft engaged in close air support and other offensive operations. Also called JTAC.[127]

Line of Effort. In the context of joint operation planning, using the purpose (cause and effect) to focus efforts toward establishing operational and strategic conditions by linking multiple tasks and mission. Also called LOE.[128]

Military Information Support Operations. Planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals in a manner favorable to the originator's objectives. Also called MISO.[129]

National Security Interests. The foundation for the development of valid national objectives that define United States goals or purposes.[130]

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[124] Joint Chiefs of Staff, *DOD Dictionary of Military and Associated Terms*, 123.

[125] Ibid., 130.

[126] Ibid., 135.

[127] Ibid., 136-137.

[128] Ibid., 146.

[129] Ibid., 156.

[130] Ibid., 166.

National Security Strategy. A document approved by the President of the United States for developing, applying, and coordinating the instruments of national power to achieve objectives that contribute to national security. Also called NSS.[131]

Operational Preparation of the Environment. The conduct of activities in likely or potential areas of operation to prepare and shape the operational environment. Also called OPE.[132]

Organic. Assigned to and forming an essential part of a military organization as listed in its table of organization for the Army, Air Force, and Marine Corps, and are assigned to the operating forces for the Navy.[133]

Preparation of the Environment. An umbrella term for operations and activities conducted by selectively trained special operations forces to develop and environment for potential future special operations. Also called PE[134]

Signals Intelligence. 1. A category of intelligence comprising either individually or in combination all communications intelligence, electronic intelligence, and foreign instrumentation signals intelligence, however transmitted. 2. Intelligence derived from communication, electronics, and foreign instrumentation signals.[135]

Signals Intelligence Operational Tasking Authority. A military commander's authority to operationally direct and levy signals intelligence requirements on designated signals intelligence resources, includes authority to deploy and redeploy all or part of the signals intelligence resources for which signals intelligence operational tasking authority has directed. Also called SOTA.[136]

Special Operations. Operations requiring unique modes of employment, tactical techniques, equipment and training often conducted in hostile, denied, or politically sensitive environments and characterized by one or more of the following: time sensitive, clandestine, low visibility, conducted with and/or

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[131] Joint Chiefs of Staff, *DOD Dictionary of Military and Associated Terms*, 166.

[132] Ibid., 178.

[133] Ibid., 180.

[134] Ibid., 189.

[135] Ibid., 217.

[136] Ibid.

through indigenous forces, requiring regional expertise, and/or high degree of risk.[137]

Special Operations Forces. Those Active and Reserve Component forces of the Services designated by the Secretary of Defense and specifically organized, trained, and equipped to conduct and support special operations. Also called SOF.[138]

Special Reconnaissance. Reconnaissance and surveillance actions conducted as a special operation in hostile, denied, or diplomatically and/or politically sensitive environments to collect or verify information of strategic or operational significance, employing military capabilities not normally found in conventional forces. Also called SR.[139]

Terrorism. The unlawful use of violence or threat of violence, often motivated by religious, political, or other ideological beliefs, to instill fear and coerce governments or societies in pursuit of goals that are usually political.[140]

Transnational Threat. Any activity, individual, or group not tied to a particular country or region that operates across international boundaries and threatens United States national security or interest.[141]

Theater Special Operation Command. A subordinate unified command established by a combatant commander to plan, coordinate, and support joint special operations. Also called TSOC.[142]

Unconventional Warfare. Activities 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. Also called UW.[143]

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[137] Joint Chiefs of Staff, *DOD Dictionary of Military and Associated Terms*, 221.

[138] Ibid.

[139] Ibid., 222.

[140] Ibid., 238.

[141] Ibid., 243.

[142] Ibid., 240.

[143] Ibid., 245.

Unified Action. The synchronization, coordination, and/or integration of the activities of governmental nongovernmental entities with military operations to achieve unity of effort.[144]

[144] Joint Chiefs of Staff, *DOD Dictionary of Military and Associated Terms*, 246.

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