VIETNAM 1963-1973: TEN YEARS OF OPERATIONAL CONTRACT SUPPORT

A Monograph

by

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ABSTRACT

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The private military industry has always played a significant role throughout American military history. Much of the current literature, particularly concerning the recent conflicts in Iraq and Afghanistan, magnifying negative aspects of individual contractors, not the strength of the entire industry. Other literature specifies concerns of overreliance as an indicator of a decreased ability to conduct military logistic operations. The purpose of this study is to show the private military industry as beneficial to military operations and pose the question of whether the private military industry negatively affects the future logistical capabilities in the United States Military. This study answers this question by demonstrating the necessity of private military companies to provide logistical requirements during ten years of the Vietnam War. This examination of one case study confirms that the private military industry does not threaten the future of logistics, but strengthens its capability. Proper integration of private military companies can enable force projection and operational reach within an austere environment.

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ACRONYMS

Army Doctrine Publication
Army Doctrine Reference Publication
Brown & Root and J. A. Jones
Brown & Root Services
Commission on Wartime Contracting
Demilitarized Zone
Director of Construction
Executive Outcomes
Global War on Terrorism
Joint Publication
Line of Communication
Military Assistance Command-Vietnam
Military Consultant Firms
Military Provider Firms
Military Professional Resources, Incorporated
Military Support Firms
North Vietnamese Army
Operational Contract Support
Operation Enduring Freedom
Operation Iraqi Freedom
Private Military Contractor
Private Military Firm
Petroleum, Oil, and Lubricant
Private Security Contractor
Raymond, Morrison-Knudsen
United States

UN United Nations

VC Viet Cong

WIP Work In Progress

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INTRODUCTION

Private contractors play a significant role in supporting the military in conflict zones and have done so throughout American military history.¹ Current literature discussing the most recent conflicts in Iraq and Afghanistan suggests a significant increase in the use of private contractors. This increase leads to concerns of overreliance as well as fraud, waste, and abuse. In 2012, Dennis J. Ortiz wrote a monograph, Contracting Effects on Logistics Capabilities and Readiness, addressing the likelihood of Army logistics becoming ineffective due to this current trend.² Ortiz suggests that the Army must create a balance between the operational logistic force and private contractors to preserve the Army's logistical ability and relevance for future operations. Current military doctrine directs continuous collaboration with private contractors, and historical examples show close relationships between contractors and the military, specifically the Army. Given Ortiz's suggestion and current doctrine, are private contractors negatively affecting the future of U.S. Army logistics to the point of ineffectiveness? This study endeavors to answer this question by demonstrating that contractors are necessary to provide logistical requirements to support U.S. military actions during conflicts. Even with concerns of overreliance and fraud, waste, and abuse, contractors are beneficial and necessary to military operations because they extend operational reach, increase force projection, and give the operational force a greater chance of success. To help strengthen this thesis, it is necessary to explore a working theory to predict the response within a constructed framework.

In his doctorial dissertation, Bruce E. Stanley suggests that the current literature falls short of precisely explaining the phenomenon of the growing relationship between contractors

¹Commission on Wartime Contracting, *At What Cost? Contingency Contracting in Iraq and Afghanistan* (Washington, DC: U.S. Government Printing Office, June 2009). 21

²Dennis J. Ortiz, "Contracting Effects on Logistics Capabilities and Readiness" (Monograph, School of Advanced Military Studies, Fort Leavenworth, KS, 2012), 1.

and the U.S. Government.³ Although the literature attributes the increased use to basic principles of supply-demand theory, it is a very simplistic explanation needing further refinement. Stanley points out that these authors often overlook the government's considerable purchasing power over contractors. The U.S. Government creates a market whereby it becomes the sole buyer on the demand side.⁴ Stanley suggests that self-imposed political restrictions, such as a reduction in military force structure and caps, compel the government to use private contracting as a tool of foreign policy.⁵ His study points out private contractors fill the void created by these restrictions.

The purpose of this study builds upon Stanley's assertions by analyzing the role of contractors in relation to U.S. Army logistics, operational reach, basing, and force projection. It approaches the problem through the lens of supply-demand theory. This research uses three hypotheses to determine the relationship between the U.S. Government and the host nation, specifically South Vietnam during the Vietnam War. This study attempts to show that the host nation's inability to support the requirements of the U.S. military forces throughout the war increased the need for contractor support. Additionally, it argues that using contractors does not threaten the future of U.S. Army logistics, but strengthens its capability to support the requirements of deployed forces in an austere environment.

The significance of this study contributes to the assumption that the U.S. Government will continue to use contractors as a tool, to ensure success in future conflicts. It also provides insight into the importance of integrating contractors early in the planning process as well as throughout the execution of an operation or conflict. Operational planners, who understand the capabilities of the private military industry, can integrate their expertise early in the planning process, increase the ability to adapt, and gives the operational force a greater chance of victory.

³Bruce E. Stanley, "Selective Privatization of Security: Why American Strategic Leaders Choose to Substitute Private Security Contractors for National Military" (diss., Kansas State University, 2012), 1. ⁴Ibid., 30.

⁵Ibid., 43.

This study strives to enhance logistical understanding by demonstrating how contractors serve as enablers to tactical, operational, and strategic planners. Integration of the private military industry is, in fact, at the heart of logistics.

There is a clear lack of understanding and consensus when describing private contractors. Thus, it is important to define and delineate key terms that appear most often in literature in order to provide a consistent language throughout the research. First, distinguishing between the terms *mercenary* and *private military industry* will clarify the difference between legitimate and illegitimate organizations on the battlefield. Although mercenaries and the private military industry are similar as they both seek to profit during times of war and conflict, the term mercenaries invokes images of immoral killers for hire or illegitimate individuals or organizations. This study defines the private military industry as a legitimate, profit seeking organization that sets terms and conditions with their employer – the government. There are three key terms associated with the private military industry that emerge from the literature. These key terms are private military company (PMC), private security company (PSC), and private military firm (PMF). These terms, considered interchangeable by some, have different meanings that are unique to each other.

In 1998, David Shearer was one of the first authors to use the term PMC, and it has since become one of the most widely used and recognized terms to describe civilians in a conflict zone.⁶ He was one of the first to acknowledge and criticize the rise of PMCs, whose influence increased with the end of the Cold War.⁷ This new emergence of PMCs could disturb the sense of balance between a government and its military. Since Shearer's articles, there have been numerous authors defining new terms to describe the growing services offered by the private

⁶Deborah D. Avant, *The Market for Force: the Consequences of Privatizing Security* (New York: Cambridge University Press, 2005), 1-2.

⁷David Shearer, *Adelphi Paper*, vol. 316, *Private Armies and Military Intervention* (Oxford: Oxford University Press for the International Institute for Strategic Studies, 1998), 23.

military industry. Carlos Ortiz and Deborah C. Kidwell both use the term PMC, but have minor differences in their definition. Ortiz defines PMCs as "legally established international firms offering services that involve the potential to exercise force in a systematic way and by military or paramilitary means, as well as the enhancement, the transfer, the facilitation, the deterrence, or the defusing of this potential, or the knowledge required to implement it, to clients."⁸ Ortiz, agreeing with Shearer, recognizes that PMCs could destabilize the government's ability to manage the monopoly of violence.⁹ He emphasizes the legitimacy of these PMCs by offering a legality discussion while operating on the battlefield as well as in the international business community. Kidwell defines PMCs as "profit-driven organization that provides professional military services for a global market."¹⁰ She addresses the way the PMCs see themselves as a business. As a business, PMCs adhere to strict company policies to adapt to the changing markets, meet market demands, and make money. Ortiz and Kidwell approach their definitions of PMC from different directions, but they lead to the importance of PMC's legitimacy.

Deborah D. Avant addresses this same legitimacy used by Ortiz and Kidwell, but uses the term PSC to "denote the whole range of for-profit security companies because it both more aptly describes the range of services these companies provide and avoids adding a new acronym to the list."¹¹ Like Shearer, Avant recognizes the rapid increase of PSC use beginning in the early 1990s. Due to this increase, Avant focuses on PSC's effect on "controlling violence."¹² While she concludes that PSCs can enhance the ability to project military force as a force multiplier, she

⁸Carlos Ortiz, Private Armed Forces and Global Security: A Guide to the Issues (Santa Barbara, CA: Praeger Security International, 2010, 48.

⁹Ortiz, 161.

¹⁰Deborah C. Kidwell, *Public War, Private Fight? The United States and Private Military Companies* (Fort Leavenworth, KS: Combat Studies Institute Press, 2005), 1.

¹¹Deborah D. Avant, *The Market for Force: the Consequences of Privatizing Security* (New York: Cambridge University Press, 2005), 1-2.

¹²Ibid., 5-6.

recognizes the likelihood of PSCs destabilizing the market of force.¹³ While Avant primarily uses PSC in her discussions of the private military industry, she also acknowledges the argument of both PMC and PSC. Even though the early debates drew a line so PMCs do military tasks and PSCs do policing tasks, Avant believes that the distinction is "to hard to maintain given the variety of services that any given company may provide."¹⁴

Another view is a hybrid of these models. Sarah Percy and Stanley both use PMC and PSC in their writings to specify the difference between the two services while analyzing both sides of the argument. To Percy, PMCs specialize in military skills potentially engaging in combat operations and PSCs offer advice, training, and fixed-site security without the likelihood of combat.¹⁵ Stanley further refines Percy's definition by strictly identifying PMCs as a logistical, consulting, and training focused companies, which provide "technical support, transportation, maintenance, engineering, and basic life support needs."¹⁶ His definition of PSCs is very similar to Percy's, explaining that PSCs provide policing and security services such as "fixed base security, convoy security, and individual personnel security."¹⁷ This study uses Stanley's definition of PMCs because it focuses on the logistical aspect of the private military industry and helps focus the case study to the aspects of operational reach, basing, and force protection. Using the term PMC and, specifically, Stanley's definition will help maintain continuity with his research as well as help to build on his assertions.

Yet another view redefines the private military industry using the term PMF to describe the entire industry. Peter Singer defines PMFs as "private business entities that deliver to

¹³Avant, 259.

¹⁴Ibid., 1.

¹⁵Sarah Percy, *Mercenaries: The History of a Norm in International Relations* (Oxford: Oxford University Press, 2007), 60-61.

¹⁶Stanley, 1.

¹⁷Ibid.

consumers a wide spectrum of military and security services, once generally assumed to be exclusively inside the public context.¹⁸ From this definition, three categories emerge based on the capabilities and services they provide. The three categories are military provider firms (MPF), military consulting firms (MCF), and military support firms (MSF).¹⁹ MPFs concentrate on tactical situations, often participating directly in actual conflict; MCFs focus on building capabilities within the client's military or civil defense forces; and MSFs contribute many forms of nonlethal assistance to military forces in the field, including transportation services, maintenance and supply, logistical and technical support, engineering, intelligence, and financial management.²⁰ It is important to define the term PMF, and specifically MSFs, because they directly relate to the case study. In South Vietnam between 1963 and 1973, several American companies realigned and reorganized into a larger conglomerate, known as RMK-BRJ in order to meet the demands for military support.

Since the study focuses on the support to the U.S. military, it is important to identify the military definition of logistics, which is responsible for providing internal military support. U.S. Army doctrine defines logistics as the "planning and executing of the movement and support of forces."²¹ Logistics operations focus on the ability to prepare and equip the maneuver force to conduct missions. In order to ensure the proper employment of logistics, U.S. Joint and Army doctrine describe seven core functions or capabilities. These seven core functions are "deployment and distribution, supply, maintenance, logistic services, operational contract support

¹⁸Peter W. Singer, *Corporate Warriors: The Rise of the Privatized Military Industry*, Cornell Studies in Security Affairs (Ithaca: Cornell University Press, 2003), 8.

¹⁹Ibid., 91.

²⁰Singer, 91-97.

²¹U.S. Army, Army Doctrine Publication (ADP) 4-0, *Sustainment* (Washington, DC: CreateSpace Independent Publishing Platform, 2012), 1.

(OCS), engineering, and health services".²² This study focuses on logistics as it pertains to tasks performed by military and PMCs. The ability to conduct logistic core capabilities, whether performed by the military or PMCs, has a direct impact on ensuring the accomplishment of the mission.

The other military terms used throughout this study are operational reach, basing, and force projection. Operational reach, an element of operational art and design, is the "distance and duration over which military power can successfully employ its capability and extend its influence."²³ The ability to determine a unit's operational reach can influence locations or future locations of forward basing. Basing, or base camps, are locations where a military force can live and operate. Basing directly affects combat power and can enable and extend operational reach.²⁴ Force projection is the "ability to project U.S. military power over an extended area to meet requirements for military operations."²⁵ To gain and maintain the initiative, the military must be able to extend its combat power quickly and decisively. Used together, operational reach, basing, and force projection increases the range of influence, either by weapon systems or by the ability to occupy by force in order to seize, gain, and maintain the initiative to resolve conflicts.²⁶

In summary, this study uses PMC, as defined by Stanley, as a way to provide continuity to his research while building upon his assertions. Singer's definitions of PMF and MSF provide additional terms to describe multiple PMCs as well as the category of services those firms provide, specifically logistics, transportation, supply, and engineer services. The military terms of

²²ADP 4-0, 1; U.S. Joint Chiefs of Staff, Joint Publication (JP) 3-0, *Joint Operations* (Washington, DC: U.S. Government Printing Office, 11 August 2011), III-35; U.S. Joint Chiefs of Staff, Joint Publication (JP) 4-0, *Joint Logistics* (Washington, DC: U.S. Government Printing Office, 16 October 2013), II 2-II 12.

²³JP 3-0, GL-15.

²⁴ADP 4-0, 12.

²⁵JP 3-0, GL-10.

²⁶JP 5-0, V-43.

operational reach, basing, and force projection helps focus the examination of the case study and provide consistent language throughout the research.

The theoretical framework that guides this study is the general economic theory of supply and demand. Edwin Mansfield defines economics as "the way in which resources are allocated among alternative uses to satisfy human wants."²⁷ In an open marketplace, price is a reflection of supply and demand. In a perfectly balanced competitive market, consumers' needs and wants are met by the goods and services provided by the supplier. The private contractor market in the U.S. does not adhere to the perfect competitive market model. The U.S. Government, primarily its military, is the sole purchaser of the numerous contractor services, creating an imbalance in the market called a monopsony. Mansfield defines the phenomenon of monopsony as "a situation in which there is a single buyer."²⁸ Stanley states that a basic examination of the supply and demand theory only provides the foundation to explain the relationship between the U.S. Government and PMCs. The U.S. Government, as the sole buyer, has considerable purchasing power with the ability to determine which contractors operate within the market.²⁹ This study uses the framework of the microeconomic phenomenon of monopsony to explain the relationship between the U.S. Government and private contractors during the Vietnam War.

Three hypotheses that direct this study analyze the role of contractors in relation to U.S. Army logistics, operational reach, basing, and force projection. First, when there is a need to expand operational reach, then the use of PMCs increases. Second, when the host nation's infrastructure cannot support logistical requirements, then a reliance on PMCs increases. Third, when the size of the military decreases, then the dependence on PMCs increases. In order to

²⁷Edwin Mansfield, *Microeconomics: Theory and Applications*, 5th ed. (New York: Norton, 1985), 1.

²⁸Mansfield, 405.

²⁹Stanley, 29-33.

determine the validity of these hypotheses, this study asks specific questions to focus the research of the case study.

Six research questions guide this study and enable the assessment of the three hypotheses. These questions aid in the research of the case study to focus on specific relationship qualities between the military requirements, host nation capabilities, and PMCs between a specific timeframe in U.S. military history. First, how many military Soldiers deployed to South Vietnam between 1963 and 1973? Second, what are the logistical infrastructure requirements needed to support the U.S. Army? Third, how many ports, roads, rails, and airfields were in South Vietnam in 1964? Fourth, how many PMCs were in South Vietnam supporting the military effort during Vietnam War? Fifth, what was the role of the PMCs in Vietnam? Finally, how much did the U.S. Government spend on the PMCs?

There are many historical examples of PMCs supporting the U.S. military. This case study looks at the U.S. Government's experience with PMCs, the host nation, U.S. owned PMCs, and military operations in South Vietnam between 1963 and 1973. The outcome of the case study shows the drastic effect PMCs have on operational reach, basing, and force projection. Although this study generalizes examples and lessons from one case, it is applicable to today's operational planners. The results are examples of increased operational logistic capability to tactical units. This study is limited to the availability of data through public record and does not contain classified information. U.S. Government records provide the bulk of information on contractors, U.S. military intervention, their involvement, and relationship to each other. Therefore, only empirical evidence available through public records and secondary sources are used.

Following the introduction, Section Two presents the literature review and relevant research associated with the problem. Section Three presents the methodology and procedures used for data collection and analysis. Section Four contains data analysis of the case study and answers the research questions against the original hypotheses. The final section is the conclusion, which discusses the findings and provides recommendations for future research.

9

LITERATURE REVIEW

This section provides the justification for conducting further research concerning the government's use of PMCs in foreign conflicts, and the relationship to operational reach, basing, and force projection. Most researchers and authors describe the increased use of PMCs began either in the early 1990s or the end of the Cold War. They generally attribute this increase and the government's relationship with PMCs to the basic economic principles of the supply and demand theory.³⁰ Stanley was one of the first to attempt a further explanation of this phenomenon through the lens of a market imbalance known as a monopsony. Stanley asserts that monopsony "provides a more nuanced theory that provides a better starting point to understand the relationship of the US military to the private security industry."³¹ This study seeks to examine the increased relationship between the U.S. Government and PMCs through the theoretical framework of monopsony and three conceptual variables, tied to Stanley's dissertation, explaining the reasons for the employment of PMCs. These three variables are the size of the national military, operational reach, and the host nation's capabilities. The following reviews the relevant existing literature concerning the private military industry, the general theory of demand and supply, this study's theoretical framework of monopsony, and the variables explaining the reasons the U.S. Government uses PMCs.

Since the United States entered the Global War on Terrorism (GWOT), the private military industry has been in the public's eye more than ever. Public concerns of the military's use of PMCs began after numerous negative media reports ranging from illegal actions by individual contractors, kidnappings, deaths, and awareness of the enormous amount of money spent on employing the private military industry. These reports altered the public's perception of the entire industry. Although these are very real issues and concerns, it does not define the

³⁰Singer, 53; Avant, 30.

³¹Stanley. 22.

industry or devalue the reasons the U.S. Government decided to employ PMCs. After years of concern, the U.S. Congress established the Commission on Wartime Contracting (CWC) to address issues of management and accountability, logistics, security, and reconstruction.³² By June 2009, an initial report began a two-year study addressing the increased concerns and fears of overreliance, overspending, and the loss of U.S. military effectiveness. The intent of this study was to "diagnose specific problems, uncover systemic causes, and produce actionable recommendations" concerning the continued use of PMCs.³³ The report, submitted to the U.S. Congress in August 2011, discussed the significant role contractors play in the conflicts in Iraq and Afghanistan, to include numbers of contractors employed and the money spent.³⁴ The final report found that the U.S. Government employed over 262,000 private contractors in Iraq or Afghanistan in 2010, and spent over \$206 billion between 2001 and 2011.³⁵ It is important to understand that the term *contractor* is not the same as PMCs. The term contractor relates to an individual in the employment of a PMC; contractors are a part of the PMC. Likewise, a PMC is part of a larger PMF. The U.S. Government employs PMCs and PMFs, not individual contractors, to accomplish the mission. Nevertheless, the conclusions of the CWC report address some of the same concerns that authors, writers, and researchers have focused on before and since the U.S. engaged in the GWOT.

Existing literature attempts to characterize and define the changing environment of the private military industry. Shearer was one of the first authors to define the term PMC, and started the discussion on the growing and dynamic characteristics of the industry. He asserts that trends in post-Cold War international affairs resulted in increased influence of PMCs in the 1990s. Some

³²Commission on Wartime Contracting, At What Cost?, 2-3

³³Ibid., 6.

³⁴Commission on Wartime Contracting, *Transforming Wartime Contracting* (Washington, DC: U.S. Government Printing Office, August 2011). 2.

³⁵Ibid., 22.

of these trends include military-force reductions, declining standards of the armed forces, and increased civil wars. Shearer points out that the "U.S. armed forces employs one third fewer [uniformed] personnel than at their Cold War peak."³⁶ This reduction in force structure decreases the military's ability to deploy to unstable and developing countries. As a result, the "Western interest in maintaining the standard of armed forces in the developing world has declined."³⁷ This decrease in personnel and a reluctance to intervene increased the likelihood of conflicts in these same developing countries. Shearer uses the U.S. military intervention in Somalia as an example of these post-Cold War trends. After the overwhelming victory in the 1991 Gulf War, the U.S. military underestimated the situation in Somalia, and did not give it the attention needed to succeed. Because of this, the "U.S. forces were compelled to fight a [conflict] on terms more favourable to the Somalis."³⁸ To test his assertions, Shearer researched two case studies involving Executive Outcomes' (EO) combat operations in Angola and Sierra Leone, and Military Professional Resources, Incorporated's (MPRI) training operations in the Balkans. The case studies found that both EO and MPRI played instrumental roles in altering the course of conflict. In Sierra Leone, EO compelled the opposing force to negotiate and sign a peace treaty. In Bosnia, MPRI's training and equipment program was an important tool in the eventual signing of the Dayton Accord.³⁹ Shearer concludes that the private military industry can be an effective tool, and is not likely going away any time soon. He also concludes that PMCs are a response to a clear need in the market no longer met by the government. He states that PMCs give governments "the means to quell civil conflicts that appear intractable" and can enhance the capability of the

³⁷Ibid.

³⁸Ibid., 33.

³⁶Shearer, 26-27.

³⁹Shearer, 65-66.

military to ensure victory.⁴⁰ Shearer's assertions and conclusions only began the discussion on the private military industry, which increased as the U.S. engaged in the GWOT.

Another influential author on the subject of PMCs is Singer. In 2003, Singer not only continued the discussion, but also increased the number of characterizations and developed new terms to define and refine the evolving industry. Singer, agreeing with Shearer, points out that the trend of using the private industry increased after the end of the Cold War, and does not seem to be slowing down.⁴¹ Unlike private actors in the past, PMFs today are taking advantage of gaps in military capability because of the decrease in force structure.⁴² Singer, adhering to Shearer's post-Cold War international trends, recognizes the relationship between the increased PMF and the decreased size of Western militaries as well as the will of the governments to intervene in the increasing conflicts around the world.

Singer acknowledged three patterns that explain the increase in conflicts and the growth in global violence. The first pattern is the collapse of states, which were under the protection or external support of the Soviet Union. By the end of the Cold War, many of these states were "financially fragile, patriarchally structured, and lacked systems of accountability."⁴³ Without external support, weak states were vulnerable to attacks from other state or non-state actors. The second pattern is the increased likelihood of cross-border fighting. With the collapse of the security balance, once maintained by the regional superpower, weak states looked to hire PMCs to build up their military and security forces. Finally, the third pattern is the "remarkable growth in the influence of international markets" or globalization.⁴⁴ These patterns were a result of the post-Cold War removal of controls held by superpowers, and the increased tensions between

⁴⁰Shearer, 75.

⁴¹Singer, 49.

⁴²Ibid., 48.

⁴³Ibid., 50.

⁴⁴Singer, 51.

weak states causing increased instability. Singer concludes that the fall of the Soviet Union created a security gap, which produced "a vacuum in the market of security," now met by the private military industry.⁴⁵

Like Shearer, Singer researched case studies in order to characterize different services provided by PMFs. Singer asserts that "firms that participate in the military industry neither look alike nor do they even serve the same markets."⁴⁶ Following Shearer's line of thinking, Singer uses the case studies of EO's involvement in Africa as an example of a MPF, and MPRI in the Balkans as an example of a MCF. Singer furthered the discussion by adding a case study researching Brown & Root Services (BRS), an American based support firm, as an example of a MSF. By researching specific aspects of the private military industry, Singer concludes that the entire industry is "dynamic and full of possibilities and changes."⁴⁷ Although Singer adds new terms and attempts to refine the characteristics of the industry, he admits that future research is necessary in order to achieve further understanding and to maximize the industry's potentials, while decreasing the challenges.

Shearer and Singer are examples of pre-GWOT authors focusing on the growing private military industry. They laid the basic framework in which many current authors follow while exploring the characteristics and dynamic relationship the private military industry has with the security market. Each post-GWOT author uses the most recent conflicts in Iraq and Afghanistan as examples to bring new insights to the characteristics of the industry, and shed light on the relationship between PMCs and their employer, in this case the U.S. Government. Post-GWOT authors like Avant, Kidwell, and Ortiz agree with Shearer and Singer, believing that the private military industry is not a new phenomenon or that it is going away anytime soon. These post-

⁴⁵Singer, 49.

⁴⁶Ibid., 88.

⁴⁷Ibid., 242.

GWOT authors, in their unique way, build upon the foundations set up by Shearer and Singer. They attempt to add additional clarity and precision in their exploration of the characteristics and relationships.

Avant, building on Singer's work, asserts that PMCs provide specific military services to the security market.⁴⁸ Although she recognizes the increase of the private military industry's relevance to the theory of supply and demand, she does not use the theory to examine the industry. She examines these services by acknowledging Shearer's concerns of destabilizing the government's ability to manage or control violence.⁴⁹ She concludes that although PMCs offer opportunities to state and non-state actors, employing PMCs eventually leads to tensions between the government and the company regarding who ultimately controls the force. While the use of PMCs can increase and enhance military capabilities, it is essential to eliminate potential tensions, and create the proper policies prior to their employment.⁵⁰Like Shearer and Singer, Avant uses the case studies of EO in Sierra Leone and MPRI in the Balkans, but adds the United States' use of PMCs although it is a powerful state. Comparing the cases in weaker states, such as Sierra Leone and Croatia, to a strong state like the United States, Avant recognizes there is still an opportunity for tension.⁵¹ She concluded from her case study that weak states tend to benefit quicker, but pay more for PMC services then stronger states.

Kidwell uses an historical look to analyze the use of PMCs from the Revolutionary War to the present. She asserts that PMCs have and will always be present during times of war.⁵² She even goes as far as calling the use of PMCs a new "way of American warfare" and important

⁴⁸Avant, 3.

⁴⁹Ibid., 5.

⁵⁰Ibid., 259.

⁵¹Ibid., 138-142.

⁵²Kidwell, 65.

enablers to future conflicts because of their ability to enhance effectiveness.⁵³ By conducting case studies on Operations Iraqi Freedom and Enduring Freedom, she addresses the potential cost effectiveness of PMCs. Unlike government services, PMCs see themselves as a business and, therefore, stress profit and growth.⁵⁴ As a business, they attempt to maintain an edge on their competition through three management techniques: privatization, outsourcing, and timed production and delivery. Privatization encourages reduction in overhead and fosters competition, reducing cost, and increasing customer service. Outsourcing allows the company to focus on specific core competencies. Timed production and delivery allows managers to predict production dates and lower storage cost.⁵⁵ Because PMCs see themselves as a business, they continuously strive to decrease cost and increase quality of products and services, both beneficial for the employer of the PMC.

Like Kidwell, Ortiz adds to the literature by asserting that PMCs see themselves as a business and, therefore, there is an inherent need to legitimize their existence throughout the national and international business community. He recognizes, similar to Singer and Avant, that PMCs provide specific services to the market. These military and security-related services, once solely provided by a national military, police force, or other government services, are now specialized by the private military industry.⁵⁶ Ortiz, agreeing with Shearer, recognizes that this shift to the private industry could destabilize the government's ability to manage the monopoly of violence.⁵⁷ He emphasizes the legitimacy of these PMCs operating on the battlefield as well as the international business community by addressing the Montreux Document. This document is an initiative of the Swiss Government and the International Committee of the Red Cross with the

- ⁵⁴Ibid., 27.
- ⁵⁵Ibid., 28-29.
- ⁵⁶Ortiz, 6.
- ⁵⁷Ibid., 161.

⁵³Kidwell, 27, 65.

aim to create a global standard of operations for the private military industry.⁵⁸ The significance of this document, endorsed by the United States, is that it addresses the private military industry as legitimate organizations, unlike the incomplete United Nations (UN) and humanitarian laws that address PMCs as mercenaries.

Ortiz does not use case studies in his writing, but uses historical accounts as examples to continue the debate on the impact to international politics and security. Keeping in line with the previous authors, Ortiz asserts there is a noticeable expansion of PMC beginning in the 1990s.⁵⁹ Like Shearer, Avant, and Kidwell, this change also marked a "profound change in the traditional state monopoly over legitimate violence."⁶⁰ He recognizes this new expansion is a direct result of the Cold War ending, and diminishing political and financial motivation to intervene in international civil wars or conflicts. This diminishing will left a "security gap" for PMCs to fill."⁶¹

Each of the aforementioned authors add to the existing literature by characterizing the growing trends and services provided by the private military industry. Shearer began the discussion by addressing three post-Cold War trends. Because of these trends, PMCs could resolve conflicts quicker and enhance a national military's ability to achieve victory. Singer increased the characterization and furthered Shearer's assertions by acknowledging three patterns, explaining the increase in global violence. Singer concluded that this increase was a direct result of the removal of international controls after the fall of the Soviet Union. Building upon these two authors, Avant, Kidwell, and Ortiz added their own characterization on the continuing evolution of the private military industry. Avant recognized the tensions between the private and public

⁶⁰Ibid.

⁵⁸Ortiz, 56-57, 205 ⁵⁹Ibid., 115.

⁶¹Ibid.

sector through a discussion of who has the legitimate control of violence. Kidwell further characterizes PMCs as a business, and, therefore, must adhere to business-like principles to maintain validity among other businesses. Ortiz, building on Avant and Kidwell's characterization of legitimacy, asserts that it is important for PMCs to operate legally within national and international law as well. Although each author of current literature defines the private military industry differently, they all agree that the industry is not a new phenomenon, and it is here to stay, if not increase, and that PMCs can enhance military capabilities and effectiveness. They each address the growing and evolving characterizations of the private military industry by refining the previous author's characteristics. They also acknowledge that economic principles govern the relationship between each PMC and the government employing their services.

As stated in the introduction, the framework guiding this study, found in existing literature, is the general economic theory of supply and demand. This study uses Mansfield's definition of economics, which is "the way in which resources are allocated among alternative uses to satisfy human wants."⁶² Furthermore, as matter of national defense, economics is the driving factor that enables the conduct of war.⁶³ Existing literature, such as Avant and Ortiz, points to the private military industry as the resource that satisfies the wants of the open global market. Mansfield concludes that the "market for every good has a demand side and a supply side."⁶⁴ In an open market, price is a reflection of supply and demand. To strengthen the assertions, consistent in the existing literature, it is important to examine the laws of supply and demand.

⁶²Mansfield, 1.

⁶³Ron Smith, Military Economics: the Interaction of Power and Money (New York: Palgrave Macmillan, 2009), 1.

⁶⁴Mansfield, 45.

The laws of demand and supply are a function of price. As the price increases or decreases, there is a predictable response in the demand and supply of a product or service. The law of demand indicates that as the price decreases, the demand for a product or service increases. Likewise, as the price increases, the demand responds by decreasing. The law of supply, however, inversely responds to a change in the price, meaning as the price increases, the supply increases; and as the price decreases, so does the supply. The general laws of demand and supply, as a function of price, attempts to reach the equilibrium price under a competitive market.⁶⁵ However, the private military industry in the United States does not adhere to the perfect, competitive market model.

The U.S. Government, primarily its military, is the sole purchaser of the numerous contractor services, creating an imbalance in the market. Mansfield describes this market phenomenon as a *monopsony*. He defines monopsony as "a situation in which there is a single buyer."⁶⁶ While authors of existing literature adhere to the basic principles of supply-demand theory, Stanley challenges this simplistic explanation. He asserts that the supply-demand theory only provides a foundation to exploring the relationship between the government and the private military industry. Instead, Stanley states, "Monopsony provides a more nuanced theory that provides a better start point to understand the relationship of the US military to the private security industry."⁶⁷ In order to provide continued continuity with Stanley's research, this study uses the phenomenon of monopsony as the theoretical framework when researching the relationship between the U.S. Government and PMCs during the Vietnam War.

After reviewing the existing literature to explore the relationship between PMCs and the U.S. Government, it is important to review key conceptual variables to explain the reasons for

⁶⁵Mansfield, 45-46.

⁶⁶Ibid, 405.

⁶⁷Stanley, 22.

continued use. Shearer, Singer, Avant, and other authors indicate a link between the employment of PMCs and the theory of demand and supply. However, Stanley asserts that the rise of PMCs "is not driven purely by the market, but rather by the needs and constraints of a monopsonist actor, the military."⁶⁸ This next section briefly discusses three key conceptual variables that explain the reasons for the government using the private military industry. These three variables are the size of the national military, operational reach, and host nation capabilities.

As the first variable, the size of the national military is central to explaining the reasons for employing PMCs. Each existing literature indicates a strong correlation between the growing private military industry and the decrease in the size of militaries throughout the world. Shearer was one of the first to recognize this variable in his first trend in international affairs. Through his research, he asserts that the U.S. military forces "employ one-third fewer [uniformed] personnel than at their Cold War peak."⁶⁹ Likewise, Avant, Kidwell, and Ortiz each affirm this reduction and recognize that these cutbacks in personnel facilitated the supply of skilled workers able to fill the increasing global demand for military and paramilitary personnel.⁷⁰ This trend is consistent in the U.S. Military when its size as a whole began to decrease in the late 80s until the United States' involvement in the GWOT in 2001. In 1988, the total size of the U.S. active duty military was 2,163,200 (Figure 1).⁷¹ In 2000, the size reached 1,365,800, its lowest point since pre-Cold War.⁷² In only twelve years, the U.S. Government reduced its total active military size by almost 800,000 soldiers, a thirty-seven percent decrease. It was not until after the attacks of 11 September 2001 and beginning the GWOT that the size of the active military began to shift

⁶⁸Stanley, 34.

⁶⁹Shearer, 26-27.

⁷⁰Avant, 31; Kidwell, 27; Ortiz, 52.

⁷¹"The Military Balance." *International Institute for Strategic Studies*, http://www.tandfonline.com/loi/tmib20 (accessed 13 March 2014).

⁷²Ibid.

upward until its peak of 1,536,657 in 2010.⁷³ This data continues to indicate a possible correlation between the increased dependence of PMCs to the decreasing size of the national military.

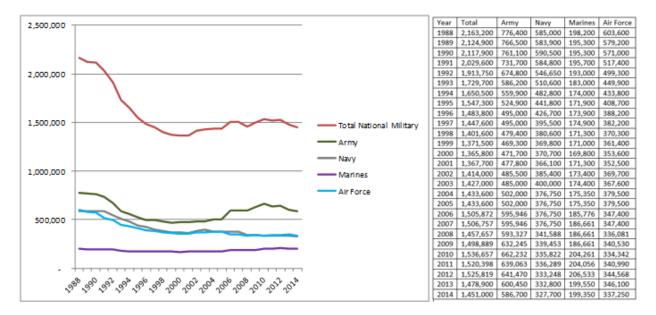


Figure 1: Total Number of Military Personnel 1988-2014

Source: Created by author from data collected from "The Military Balance." International Institute for Strategic Studies website, http://www.tandfonline.com/loi/tmib20 (accessed 13 March 2014).

The second variable explored throughout this study is operational reach. As stated in the introduction, operational reach is the "distance and duration over which military power can successfully employ its capability and extend its influence."⁷⁴ Since 2001, the GWOT continues to challenge the U.S. Military's operational reach, specifically the distance and duration of the military force. As an example, after 2003, the U.S. military became involved in a two-front conflict, Operations Iraqi Freedom (OIF) and Enduring Freedom (OEF), and was at risk of overextending its capability and ability to influence the outcome. The U.S. government determined that outsourcing to a PMC would allow the military to retain a greater influence over

⁷³"The Military Balance."

⁷⁴JP 3-0, GL-15.

military tasks.⁷⁵ Therefore, the U.S. Government employed PMCs to provide the majority of military support services in OIF and OEF to allow uniform personnel the ability to perform military-specific missions. The use of PMCs in OIF and OEF are current examples that link the necessity to expand operational reach to the increased use of PMCs.

The third and final variable examines the host nation capabilities. These capabilities include the capacity and ability to properly receive an occupying military force as well as provide continuous logistical support needed to sustain active fighting. In order to help a foreign nation, it is important to send the fighting force first in order to provide security and stability in the region before any other military and non-military activities take place. Because of this, the U.S. military depends on the host nation to have sufficient facilities to receive airplanes and ships at the ports to initiate military actions within the borders of the nation. Along with inbound facilities, the ability to transport the supplies to the front lines falls on the host nation as well. If the host nation cannot meet these two capabilities, or if the host nation's government is unwilling to provide the support needed, the military will require supplemental resources such as PMCs.

Supporting Stanley's assertion, these three conceptual variables show the needs and constraints of the military that drive the increased relationship and employment of PMCs. This study maintains that the government's use of PMCs is not a new phenomenon, and will only continue throughout future U.S. military conflicts. The increase in services provided by the PMCs is a direct reflection of the relationship the U.S. government has to the private military industry. The three conceptual variables recognize the U.S Government as a protected monopsonist and, therefore, demands services to meet the needs of constraints of the military. The following case study seeks to examine these three key variables and their relationship to the increased dependence on PMCs during the Vietnam War. Understanding the relation during the Vietnam

⁷⁵Kidwell, 28.

War can shed light on the current trend and the consistent reference in existing literature. The next section provides the methodology to conduct the case study.

METHODOLOGY

The purpose of this study is to build upon the assertions provided in Stanley's dissertation and challenge Dennis Ortiz's thesis that private contractors negatively affect the future of U.S. Army logistics to the point of ineffectiveness. This research will provide a case study, and examine the role of PMCs and the U.S. involvement in South Vietnam between 1963 and 1973. During this time, logistical buildup was secondary to combat forces due to strategic directives from the U.S. Government. The South Vietnamese infrastructure had proven insufficient as logistical support requirements quickly grew. The U.S. Government used PMCs due to host nation inadequacies and continued force-level ceilings. This study evaluates PMCs as a necessary capability in providing logistical support to U.S. military during the Vietnam War.

This study uses Alexander George and Andrew Bennett's method and logic of structured, focused comparison. George and Bennett devised this method to "study historical experience in ways that would yield useful generic knowledge of important foreign policy problems."⁷⁶ The structured requirement in their method requires researchers to ask specific questions to reflect the objectives within the case study. These questions will guide and facilitate standardized data collection to avoid familiar patterns and pitfalls. The focused requirement directs specific research objectives and theoretical focus that are appropriate for the objectives.⁷⁷

This study examines the U.S. military requirements, host nation capabilities, and the role of PMCs in South Vietnam through six focused questions. Question One asks how many soldiers were deployed to South Vietnam between 1963 and 1973. This question focuses specifically on

⁷⁶Alexander L. George and Andrew Bennett, *Case Studies and Theory Development in the Social Sciences* (Cambridge, MA: The MIT Press, 2005), 67.

⁷⁷Ibid., 67-69.

the number of U.S. Soldiers and how many were deployed between each year. Understanding the number of soldiers will point to the increase or decrease in the needs or resources from year to year. Question Two asks what were the logistical requirements needed to support the U.S. military in the Vietnam War. The increase or decrease of logistical requirements from year to year indicates the level of stress put on the existing systems of the deployed force or the host nation. Question Three asks how many ports, roads, rails, and airfields were in South Vietnam before 1964. This question shows the level of capability within South Vietnam prior to the involvement of the United States. Question Four asks the number of PMCs employed in South Vietnam during 1963 and 1973. Question Five asks what the specific role was of the PMC in Vietnam. Questions Four and Five highlight the difference between the U.S. military requirement and host nation capability by showing the utility of PMCs. Finally, Question Six asks how much money did the U.S. Government spend on the PMCs during the Vietnam War. This final question points to the importance, it shows the correlation between the year-to-year sizes of the military to the increased use of private military industry.

This section restated the reasons for this study, and the method used to analyze and examine the Vietnam War as the case study. It also presented the questions that guide and focus the research to achieve the objectives of the study. While the research relies on one case study, it is supplemented by comparison of current literature of PMC use in South Vietnam. A deeper understanding of PMCs benefits future operational planners, illustrating the necessity for integration early into the planning process.

CASE STUDY

This section examines the strength of the theory of demand and supply of a protected monopsony to define the U.S. Government's relationship with the private military industry. This study consists of an in-depth historical examination of a single case to expand on Stanley's assertions by introducing additional examples of another U.S. military conflict. In addition, this study challenges Dennis Ortiz's thesis by examining the correlation between the use of PMCs and the military's ability to extend operational reach and increase force projection. This section consists of four parts: an introduction, an overview of the case, and an examination of the focused questions. The introduction provides the justification for selecting the case. The overview summarizes the U.S. involvement in Vietnam between 1963 and 1973. This case study uses focused questions to examine the empirical evidence.

The Vietnam Conflict is vastly different from any other U.S. military conflict. In contrast to World War II and Korea, U.S. combat forces in Vietnam fought as small units in constant pursuit of the enemy with no front lines or secure areas.⁷⁸ This was the first instance in modern history where the U.S. Army established logistical bases in a country with no recognized friendly territory. During the escalation years, 1963-1967, the U.S. Army logistical system had no historical consumption rates or support estimates in which to begin providing logistical forecasting.⁷⁹ During the withdrawal years, 1968-1973, the task to transition support from U.S. combat operations to the improving of South Vietnamese Army facilities and depots occurred.⁸⁰ To understand logistical problems and conditions, it is important to understand the sequence of events during the U.S. involvement in South Vietnam.

The Joint Chiefs of Staff established the Military Assistance Command-Vietnam (MACV), a small, temporary headquarters, tasked to advise and assist the South Vietnamese government in its struggle against the Communist-led North Vietnamese insurgency.⁸¹ MACV's

⁷⁸Lieutenant General Joseph M. Heiser Jr., *Vietnam Studies: Logistic Support* (Washington, DC: Department of the Army, 1974), 7.

⁷⁹Ibid., 37.

⁸⁰Ibid, 191.

⁸¹Richard W. Stewart, *American Military History, Volume II: The United States Army in a Global Era, 1917-2010 (Center of Military History Publication)*, Revised ed. (Washington: Department of the Army, 2010), 297.

initial objective was to expand South Vietnamese forces by the end of 1964.⁸² However, all progress halted after the assassination of South Vietnamese President Ngo Dinh Diem and U.S. President John F. Kennedy in November 1963.⁸³ Throughout the following months, political unrest continued in South Vietnam culminating with another coup, that one bloodless, in January 1964.⁸⁴ With the South Vietnamese government and military administration temporarily paralyzed, the Viet Cong (VC), supported by the North Vietnamese Army (NVA), continued their successful guerrilla campaign throughout South Vietnam.⁸⁵

In August 1964, North Vietnamese patrol boats attacked the US Naval destroyer USS Maddox while surveying North Vietnam's coastal defenses in the Gulf of Tonkin.⁸⁶ After diplomatic failure, President Johnson authorized sustained air offensive against North Vietnam.⁸⁷ President Johnson feared increased involvement in Vietnam would jeopardize his election, but to his surprise, the American population supported his decision.⁸⁸ Five days later, the U.S. Congress overwhelmingly passed the Gulf of Tonkin Resolution, allowing the President to take the necessary steps to protect against future attacks, which involved the use of all armed forces.⁸⁹ This began the planning process and mobilization of ground troops for employment in South Vietnam. U.S. ground troops quickly increased from 17,000 in the middle of 1964 to 124,000 by the end of 1965.⁹⁰

- ⁸⁶Cosmas, *Escalation*, 158, 166-67; Stewart, 302.
- ⁸⁷Herring, 108.

⁸²Graham A. Cosmas and Center of Military History, *MACV: the Joint Command in the Years of Escalation, 1962-1967* (Washington, DC: Military Bookshop, 2006), 80.

⁸³George C. Herring, *America's Longest War: The United States and Vietnam, 1950-1975* (New York: John Wiley & Sons Inc., 1979), 105-107.

⁸⁴Cosmas, *Escalation*, 118; Herring, 111.

⁸⁵Cosmas, *Escalation*, 139.

⁸⁸Cosmas, *Escalation*, 159; Herring, 108.

⁸⁹Cosmas, *Escalation*, 166-167.

⁹⁰Herring, 108.

In April 1965, President Johnson authorized an increase in military personnel to 300,000, of which 20,000 were logistical troops. These additional logistical personnel formed the 1st Logistical Command and established a planning group to support the rapid deployment of U.S. combat forces, increased logistical requirements, and developed a logistical concept for South Vietnam.⁹¹ This plan, after clearly identifying U.S. logistical requirements, established two major base depots and four support commands throughout the South Vietnam area of operations.⁹²

The United States continued to increase its presence in South Vietnam with a total number of deployed soldiers reaching over 300,000 in 1966, and increasing to 430,000 in 1967.⁹³ Due to this accelerated increase in personnel, the international community began to recognize the United State's commitment to the Vietnam conflict. During this time, the U.S. military adopted a force-oriented strategy that implemented "tightly controlled and limited military actions" specifically to keep the People's Republic of China and Russia from intervening.⁹⁴ By the middle of 1967, the U.S. people, growing weary of war, increased anti-war demonstrations throughout country. President Johnson worked to gain support from Congress and the U.S. people, but the realization that the number of U.S. Soldiers killed in action, now over 16,000, overshadowed any positive gains. Trying to convince the American people, General Westmoreland reported to the press that reduced fighting and positive reports were indications that the war in Vietnam was ending.⁹⁵ However, this report came weeks before the NVA attack into South Vietnam.

⁹¹Heiser, 5-7.

⁹²Lieutenant General Carroll H. Dunn, *Vietnam Studies - Base Development in South Vietnam 1965-1970.* (Washington, DC: Department of The Army, 1972), 40, 45-46.

⁹³Herring, 108.

⁹⁴Antulio J. Echevarria II, ed., "American Operational Art, 1917-2008," in The Evolution of Operational Art: From Napoleon to the Present, ed. John Andreas Olsen and Martin Van Creveld (Oxford: Oxford University Press, 2011), 153.

⁹⁵Stewart, 334.

In mid-January 1968, the NVA launched the Tet Offensive, joining forces with the VC.⁹⁶ The coordinated attack affected approximately one hundred South Vietnamese cities and towns, including thirty-six provincial capitals and sixty-four district towns (see Figure 2).⁹⁷ The intentions of these attacks were to break the "will" of the South Vietnamese people, and eliminate its relationship with the United States. NVA and VC leaders hoped that the South Vietnamese people would see them as "liberators" from an oppressive U.S. occupation by abandoning the defense for an offensive attack.⁹⁸

The Tet Offensive fell short of its three objectives to show the world the weakness of the South Vietnamese government, persuade the U.S. that it could not win, and increase pressure for negotiations.⁹⁹ However, the U.S. Military saw this offensive as a North Vietnamese failure and a U.S.-South Vietnamese victory. The publicized events began to polarize the U.S. Government and its people even further due to the number of U.S. troops committed to operations in South Vietnam.

⁹⁶Graham A. Cosmas, *MACV: The Joint Command in the Years of Withdrawal, 1968-1973* (Washington, DC: Department of the Army, 2007), 59; Herring, 183; Stewart, 335.

⁹⁷James H. Willbanks, *Abandoning Vietnam: How America Left and South Vietnam Lost Its War* (Lawrence: University Press of Kansas, 2004), 5; Stewart, 336.

⁹⁸Herring, 184.

⁹⁹Herring, 185; Cosmas, Withdrawal, 59.

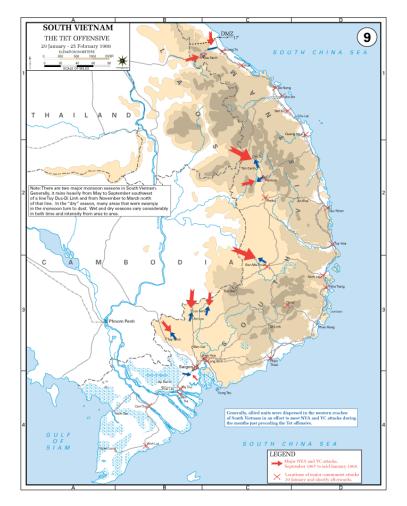


Figure 2: Map of Tet Offensive

Source: "United States Military Academy: West Point," accessed 12 February 2014, http://www.westpoint.edu/history/SiteAssets/SitePages/Vietnam%20War/Vietnam09.gif.

While President Johnson echoed General Westmoreland's statements to "hold the line" and support the possibility of sending more troops, the American people became less convinced. Even after President Johnson approved a request for 10,500 Soldiers, General Westmoreland requested an additional increase of 206,000 (half for fighting and half in reserve).¹⁰⁰ As public opinion waned, so did President Johnson's resolve for continued involvement in Vietnam, and he denied the request. Although public opinion was declining, President Johnson believed that

¹⁰⁰Herring, 190-191; Cosmas, Withdrawal, 92-95.

decisions concerning Vietnam outweighed the political gains. He did not want politics to sway or divert his attention from Vietnam.¹⁰¹ President Johnson did not seek reelection, and Richard Nixon won the Presidential election in November 1968.

During his election campaign, Richard Nixon promised to end American involvement in Vietnam. His promise included the systematic process of removing U.S. troops and handing the fighting to the South Vietnamese government and people.¹⁰² Soon after taking office, President Nixon publicly announced his intention to change U.S. objectives in Vietnam allowing "self-determination" for the people of South Vietnam and the new "Vietnamization" policy.¹⁰³ In April 1970, the President ordered the withdrawal of 150,000 U.S. troops over the next twelve months. Implementation of his order coincided with the North Vietnamese military's shift in focus from the capital of South Vietnam to the capital of Cambodia, Phnom Penh. Due to this shift, the Nixon Administration increased attacks on known NVA locations across the Cambodian border.¹⁰⁴

Vietnamization became part of a larger strategy that included the reduction of U.S. Military presence as well as providing maximum assistance to the South Vietnamese Army.¹⁰⁵ During this time, NVA and VC soldiers continued to conduct tactical and logistical operations in Cambodia and Laos with little threat from the U.S. and South Vietnam, which threatened all allied progress in South Vietnam.¹⁰⁶ Due to the threatening actions by the NVA and VC, President Nixon ordered offensive actions against enemy locations in Cambodia and Laos, known

¹⁰¹Herring, 212.

¹⁰²Willbanks, 19.

¹⁰³Willbanks, 15; Norman B. Hannah, *The Key to Failure: Laos and the Vietnam War* (Lanham, MD: Madison Books, 1987), 277-279.

¹⁰⁴Hannah, 281.

¹⁰⁵Willbanks, 16-19.

¹⁰⁶Stewart, 350.

as the Cambodian Incursion.¹⁰⁷ The attacks, beginning in April 1970, sparked nationwide protests and riots because the President escalated a war he had promised to reduce.¹⁰⁸ Congressional challenges to the President's military authority increased, leading to Congress passing the Cooper-Church Amendment in December 1970, which "prohibited any U.S. forces from operating on the ground inside Cambodia or Laos."¹⁰⁹ The amendment inadvertently allowed the North Vietnamese to consolidate and reorganize without threat of attack during the following year.

Vietnamization and pacification efforts intensified throughout Southern Vietnam with the purpose of turning the fighting over to the South Vietnamese and reducing the U.S. troop strength as quickly as possible. By the end of 1971, 177,000 U.S. troops redeployed, leaving just over 210,000 U.S. troops in South Vietnam.¹¹⁰ The decrease of troop strength and military presence was the focus throughout the following months. The American people viewed the decrease of violence and increased troop withdrawal as an indication of the successful implementation of Vietnamization. In January 1972, 50,000 U.S. troops redeployed, bringing the troop levels to 158,000, the lowest since 1965. Attempting to change the perception of an unpopular war, the President ordered an additional 70,000 U.S. troops home by 1 May 1972.¹¹¹ The units on the ground transitioned their focus from fighting and advising to redeploying.

With the majority of U.S. troops out of Vietnam, the NVA conducted what the U.S. recognized as the Easter – or Spring – Offensive. This offensive, conducted in March 1972, began when the NVA and VC crossed the demilitarized zone (DMZ) at the 17th Parallel to attack into

¹⁰⁷Cosmas, Withdrawal, 297-298.

¹⁰⁸Cosmas, *Withdrawal*, 301-302; Herring, 232.

¹⁰⁹Hannah, 282-283.

¹¹⁰Willbanks, 122-123.

¹¹¹Ibid.

South Vietnam from Cambodia and Laos.¹¹² The enemy's plan was to attack along three fronts and surprise South Vietnamese and U.S. troops (see Figure 3). The fighting continued until mid-May when the areas seemed to stabilize and the fighting declined. The offensive began to stall after the NVA and NVC outran their ability to sustain ammunition and fuel levels.¹¹³

During this same time, President Nixon ordered strategic bombing raids of North Vietnam's largest cities, Hanoi and Haiphong, with hopes of forcing North Vietnam to sign an armistice. These raids, immediately condemned by the U.S. people, increased the urgency of peace talks. In January 1973, peace talks in Paris finally succeeded in producing an armistice and a cease-fire agreement. By March of 1973, the MACV dissolved, and the last U.S. troops withdrew, ending the United State's involvement in Vietnam.¹¹⁴

¹¹²Willbanks, 126; Cosmas, Withdrawal, 356.

¹¹³Stewart, 360.

¹¹⁴Ibid., 363.

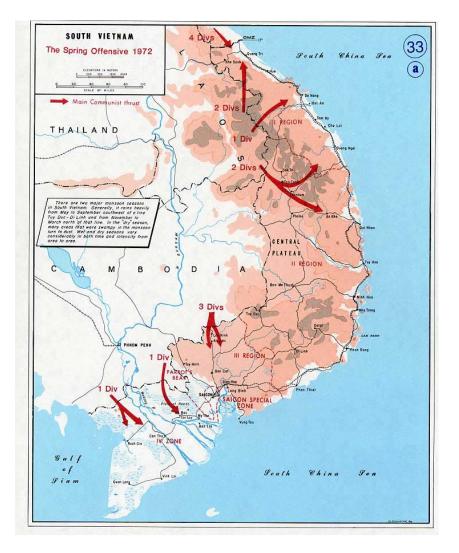


Figure 3: Map of the Spring Offensive

Source: "United States Military Academy: West Point," accessed February 2014, *http://www.westpoint.* edu/history/SiteAssets/SitePages/Vietnam%20War/vietnam%20war%20map%2033.jpg.

How many U.S. Military Soldiers deployed to South Vietnam between 1963 and 1973? This question analyzes the size of the military deployed to South Vietnam between 1963 and 1973 to determine the requirements for providing not only life-support supplies, but the number of facilities needed to house and feed each soldier. This question attempts to determine if the size of the deployed military relates to the number of PMCs used. If the size of the deployed military increases due to increased intervention, then there should be an increase of PMCs. U.S. Soldiers deployed to South Vietnam beginning in 1963 with 15,575 personnel, and steadily grew over the next five years. Military personnel levels grew from 17,033 in 1964, to 124,363 in 1965, to 305,183 in 1966, to 437,103 in 1967, and finally reaching 537,377 in 1968.¹¹⁵ (See Figure 4) These levels decreased from 510,054 in 1969 to 390,278 in 1970. The most significant decrease went from 212,925 in 1971 to only 35,292 by the end of 1972, over an eighty-three percent drop in military force.¹¹⁶ Finally, by the end of the 1973, there were only 265 U.S. Soldiers left in South Vietnam.¹¹⁷

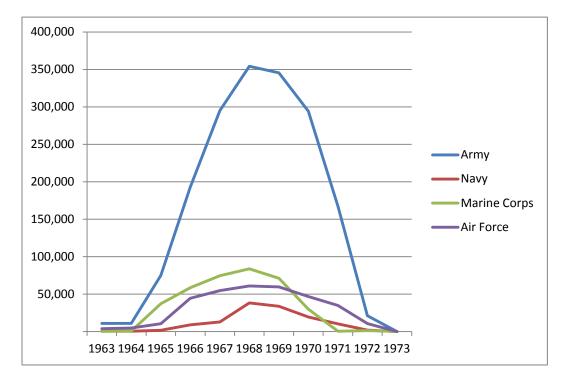


Figure 4: Military Personnel Strength - South Vietnam

Source: Created by author from data collected from "Worldwide Manpower Distribution by Geographical Area (M05)." Defense Manpower Data Center. https://www.dmdc.osd.mil/appj/dwp/reports.do?category= reports&subCat=pubs (accessed 25 March 2014).

¹¹⁵"Worldwide Manpower Distribution by Geographical Area (M05)," *Defense Manpower Data Center*, https://www.dmdc.osd.mil/appj/dwp/reports.do?category=reports&subCat=pubs (accessed 25 March 2014).

¹¹⁶Ibid.

¹¹⁷Ibid.

What are the logistical infrastructure requirements needed to support the U.S. Military? The 1st Logistical Command determined the three basic infrastructure requirements were ports, basing, and transportation (See Table 1). The requirement for ports included six deep-water ports and eight air bases. The deep-water ports maintained and operated twenty-eight deep-draft berths capable to receive military vessels. These deep-draft berths required significant dredging operations in order to accomplish this requirement. The air bases needed to maintain seventy-five runways capable of landing and launching fighter jets and C-130s. The requirement for basing included more than ten million square feet of warehousing, twenty-six hospitals, and over five million square feet of storage specifically for ammunition. Finally, the 1st Logistical Command determined, due to the poor road quality and limited mobility, the need for over four thousand kilometers (over 2,500 miles) of new highway to transport personnel and cargo from the ports to their bases.

Table 1: Logistical Requirements Determined by 1st Logistical Command

Po	orts:					
	6 deep-water ports with 28 deep-draft berths (Sea)					
	39 million cubic meters of dredging (Sea)					
	8 air bases, each with 10,000-foot runways (Air)					
	75 C-130 / fighter jet runways (Air)					
Basing:						
	10.4 million square feet of warehousing					
	434,000 acres of land clearing					
	26 hospitals (8,280 beds)					
	3.1 million barrels of POL storage					
	5,460,000 square feet of ammunition storage					
	280,000 kilowatts of electrical power					
Tı	ransportation:					
	4,100 kilometers of highway					

Source: Table created by author from Lieutenant General Joseph M. Heiser Jr., Vietnam Studies: Logistic Support (Washington, DC: Department of the Army, 1974).

It was not until the activation of the 1st Logistical Command in April 1965 when the determination of theater-wide logistical requirements became evident.¹¹⁸ The 1st Logistical Command was responsible for the oversight of all logistical activity throughout South Vietnam. The 1st Logistical Command developed a plan to support operations throughout Vietnam, beginning by the establishment of two major base depots located in Saigon and Cam Ranh Bay, and four subordinate support commands.¹¹⁹ The Saigon Depot managed the support commands in Vung Tau and Can Tho, both located in the southern region. The Cam Ranh Bay Depot managed the support commands in Nha Trang and Qui Nhon located in the central and north regions. Additionally, the following construction programs were determined as the principal logistical requirements for each of these depots and support commands:¹²⁰

During 1965 and 1966, deep draft cargo ships arriving in South Vietnam could only embark at the Saigon Port, the only port with piers that could accommodate the current military vessels. The only other exception for embarkation were the small, two-berth ports at Cam Ranh Bay, which could only process shallow draft ships, requiring the military to transfer equipment and supplies from deep water to shallow draft vessels. Control of these ports centered on the local civilians under the management control of the Republic of Vietnam's governmental Port Authority. Regulations emplaced by the Vietnamese government slowed the embarkation of equipment and supplies, increasing the backlog of vessels waiting offshore.¹²¹ By the end of 1966, U.S. military requirements grew, increasing the need for additional deep draft ports.

By April 1967, the first U.S.-constructed deep draft port was active and many more under construction. By December 1967, there were ten active ports throughout the country of South

¹¹⁸Heiser, 235.

¹¹⁹Ibid., 13.

¹²⁰Dunn, 40.

¹²¹Ibid.

Vietnam. Seven deep draft ports in Saigon, Qui Nhon, Cam Ranh Bay, Vung Ro, Vung Tau, Cat Lai, and Nha Trang and three-shallow draft ports located at Dong Tam, Phan Rang, and Can Tho.¹²² These improvements to port capabilities brought a reduction in the average time that deep draft ships waited for a berth from an average of twenty-days in 1965 to less than two-days in 1970.

Airport activities became instrumental to move cargo and personnel quickly into the country. While cargo and equipment moved primarily by ship, personnel and priority cargo moved by air. The inflow of personnel increased the necessity for life-support supplies and exacerbated the problem of limited port accessibility throughout South Vietnam. Adding to the difficulty was the need for construction materials to establish habitable buildings for the soldiers to live and work. Even with the growing number of troops on ground, construction materials continued to constitute forty percent of materials coming into South Vietnam during 1965 and 1966.¹²³ South Vietnam's infrastructure could neither receive the amount of materials and personnel nor physically house the number of U.S. Soldiers during this influx. Likewise, the U.S. military could not sustain these continued increases in demands without external support.

Basing plans prior to the buildup came to recognize that operations would operate in primitive areas. Because of this, a large construction effort became necessary in order for personnel, military and civilian, to live and operate. The majority of these base locations were devoid of logistics support capabilities, and efforts to improve them would take time and money.¹²⁴ The 1st Logistics Command recognized the need for different types of basing determined by location, activity, and anticipated duration of occupancy. The MACV set standards and criteria for construction of three different types of bases. These base types were field,

¹²²Heiser, 23-27.

¹²³Dunn, 17.

¹²⁴Heiser, 188.

intermediate, and temporary. The number of Soldiers occupying these stations determined the funding of each base. The construction cost estimates per man were set for field bases at \$240.00, intermediate at \$560.00, and temporary at \$940.00.¹²⁵

Movement of personnel and cargo through the airports and seaports were important factors. During the buildup period between 1963 and 1967, more than twenty-two million short tons of dry cargo and fourteen million short tons of bulk petroleum travelled along the numerous road and rail networks in Vietnam.¹²⁶ While it was the 1st Logistical Command's responsibility for the oversight of all logistical activity, the MACV established and coordinated movement control in South Vietnam with the use of the Traffic Management Agency. The Traffic Management Agency directed, controlled, and supervised all movement of cargo and personnel throughout South Vietnam. They also served as a point of contact for all users of military highways, railways, and inland waterways.¹²⁷

The lack of numbers and capability limited tactical truck companies to local line haul from ports to their bases of operation. Military transportation companies could not meet the demands as personnel and requirements increased. These requirements had to either wait for the arrival of additional military transportation units or use commercial trucking contractors. Additionally, road conditions restricted military and contractor highway transportation. By the end of 1966, over 4,100 km of highway were under repair.¹²⁸

How many ports, roads, rails, and airfields were in South Vietnam prior to 1964? Prior to 1964, South Vietnam had two deep draft berths at the Port of Saigon, a degraded road network, 870 miles of railway, and three airports located in Saigon, Da Nang, and Cam Ranh. South

¹²⁵Dunn, 71-75.

¹²⁶Heiser, 157.

¹²⁷Ibid., 159.

¹²⁸Dunn, 40.

Vietnam possessed little to no capability to support requirements essential for the U.S. military. Prior to U.S. involvement in 1963, the Republic of Vietnam had a low level of industrialization with limited modern logistic facilities.¹²⁹ The South Vietnamese logistic system, designed to support the South Vietnamese Armed Forces, was unable to support other forces, especially a major U.S. force. Although the small, highly fragmented system supported a small U.S. advisory mission, it could do no more than provide minimal logistical effort for additional units.¹³⁰

The main entrance to South Vietnam is through its seaports, which the South Vietnamese government limited U.S. use to one of its two, deep draft ports located in Saigon. Prior to U.S. increased involvement in 1964, there was no need to have more deep-draft ports because the economy never exploited its shipping potential. Seasonal typhoons and heavy winds affected the port structures, increasing the risk to additional ports throughout the coastal country.¹³¹ Although the Port of Saigon was the primary port, there were additional shallow-draft ports along the coast. There were additional ports located at Cam Ranh Bay, Nha Trang, Qui Nhon, and Da Nanng, but the U.S. lacked the shipping ability to use the shallow-draft ports. During the increased flow of materials for the U.S. military, the South Vietnamese government limited the use of the ports to one berth in the Port of Saigon. As ninety percent of all cargo, material, and equipment were planning to arrive in Vietnam by deep-draft vessel, these limitations created a massive backup.¹³² Due to the lack of capability to receive U.S. vessels at the current ports and the limited shipping options for the U.S. military, planning and developing additional deep draft ports became essential for future operations during the Vietnam Conflict.

¹³⁰Ibid.

¹²⁹Heiser, 8-9.

¹³¹Dunn, 7.

¹³²Ibid., 50.

Within South Vietnam itself, there were four methods of transporting materials and supplies in South Vietnam: road, rail, water, and air.¹³³ Each method of travel was relatively unreliable and the physical factors of the country increased the limitations. Road conditions consisted of degraded pavement in larger cities and ports, while conditions in more rural areas worsened to dirt roads. The main highways were five to six meters wide in good areas, but narrowed as they went into the mountains. Numerous, inadequate bridges created difficult travel throughout most of the rural and mountainous regions. Constraints placed on the U.S. by the South Vietnam government limited road transport to and from the ports and bases. In its then current condition, the roads could not support the weight and volume of increased military traffic.¹³⁴ The roads required improvement to become safe and passable for heavy vehicles and continuous traffic. Even with their limitations, the highways created accessibility to more of the country than that of the railways.

While the road networks enabled greater accessibility, the railroad system was the quickest mode of transportation available between limited cities and ports. Prior to 1965, South Vietnam contained about 870 miles of operable railways, which the majority of the miles consisting of lines to and from the coast to the capital of Saigon.¹³⁵ Water transportation, other than sea transport, played a larger role in the southern delta region of South Vietnam. There were roughly 3,000 miles of navigable waterways in the lowlands, but most lacked the ability to transfer between other methods of transportation. In addition, South Vietnam had three airfields, which one was an international terminal in Saigon allowing commercial and personnel air travel in and out of the country.

¹³³Lester A. Sobel and Hal Kosut, eds., *South Vietnam Volume 2 1966-1967: U.S. - Communist Confrontation in Southeast Asia*, 2nd ed. (New York: Facts on File Inc., 1973), 2:11-13.

¹³⁴Dunn, 12.

¹³⁵Ibid., 11.

How many PMCs were in South Vietnam supporting the military effort during the Vietnam War? It is difficult to determine the exact number of PMCs used throughout the duration of the conflict due to the numerous subcontracting and outsourcing within the private military industry. Due to this limitation, this research focused primarily on the one American consortium, Raymond, Morrison-Knudsen (RMK), Brown & Root, and J. A. Jones (BRJ). RMK-BRJ won the majority of contracts throughout the Vietnam War, and after RMK's merger with BRJ in 1965, became the largest pool of construction companies in American history.¹³⁶ Prior to 1965, RMK was the primary construction PMC in South Vietnam employing an average of 3,000 personnel, building and maintaining small airstrips, and supporting the military advisory team.¹³⁷ After the Tonkin Gulf incident in August 1964 and President Johnson's decision not to activate National Guard and Reserve units, the U.S. involvement in South Vietnam escalated dramatically.¹³⁸ This escalation in military personnel imposed major restraints on the deployment of sufficient logistical capabilities and began the increase dependence on RMK-BRJ. Due to this increased dependence, employee numbers went from 3,946 in the beginning of 1965 to 26,515 by the beginning of 1966. The peak of their employment reached 51,044 by July 1966 (See Figure 5).¹³⁹ As the number of military personnel increased, the levels of RMK-BRJ employees decreased. By the mid-1967, the consortium's employment averaged around 20,000 throughout the duration of the U.S. involvements. By 1973, RMK-BRJ cancelled or closed all projects and personnel no longer under their employment. Because President Johnson did not activate the Reserve units and the lack of host nation support, there was an increased reliance on PMCs for the major construction efforts in South Vietnam.

¹³⁶Richard Tregaskis and Kenneth E. Bingham, *Seabee Book-Southeast Asia: Building the Bases the History of Construction in Southeast Asia: Vietnam Construction* (Washington, DC: CreateSpace Independent Publishing Platform, 2011), 3.

¹³⁷Ibid., 67-69.

¹³⁸Dunn, 42.

¹³⁹Tregaskis and Bingham, 82; Heiser, 189.

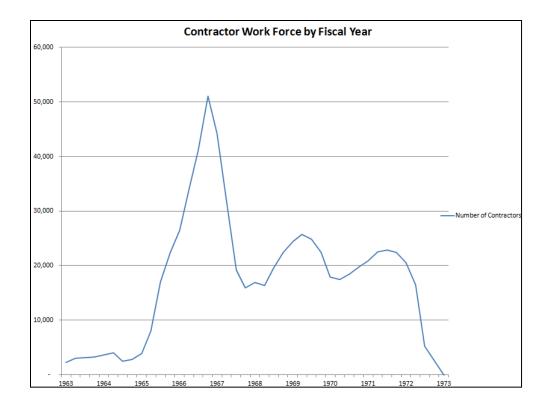


Figure 5: RMK-BRJ Personnel

Source: Created by author from data collected from Richard Tregaskis and Kenneth E. Bingham, Seabee Book- Southeast Asia Vietnam Construction: Building the Bases the History of Construction in Southeast Asia (Washington, DC: U.S. Government Printing Office, 1975), 426-427.

What was the role of the PMCs in Vietnam? Prior to 1964, RMK-BRJ was responsible for the direct support of the Special Force camps, abbreviated airstrips, and the military advisory teams within South Vietnam. By the end of the war, RMK-BRJ was responsible for coordinating military engineers and Seabees. They built six ports with twenty-nine bases, eight jet airfields with 10,000-foot runways, hospitals containing 6,200 beds, 14 million square feet of covered storage, 1,600 miles of paved roads, and housing for 450,000 Vietnamese service members and their dependents.¹⁴⁰

¹⁴⁰Tregaskis and Bingham, 2.

By 1965, military leaders determined that South Vietnam had inadequate ports and airfields, no logistic organization, and no supply, transportation or maintenance troops to assist with the influx of military personnel.¹⁴¹ The lack of logistical capability of the host nation developed the concept of logistical islands. These logistical islands, or strong base areas, divided South Vietnam into four geographical areas to focus logistic efforts. (See Figure 6) The concept permitted continuous, sustained operations throughout South Vietnam.¹⁴² Although the concept alleviated logistical issues in combat, it increased requirements for a large military installation to operate ports, transportation, and basing.

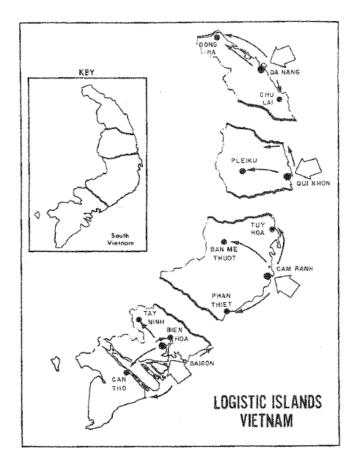


Figure 6: Map of Logistic Island - South Vietnam

¹⁴¹Tregaskis and Bingham, 69.

¹⁴²Ibid., 136-138.

Source: Tregaskis and Kenneth E. Bingham, Seabee Book- Southeast Asia Vietnam Construction: Building the Bases the History of Construction in Southeast Asia (Washington, DC: U.S. Government Printing Office, 1975), 419.

Throughout the Vietnam War, seaports were the primary mode of transporting commodities or classes of supply into South Vietnam. The building of deep seaports was the first of many emergency construction contracts executed by RMK-BRJ. Prior to 1966, Saigon had the only deep draft piers in the country. Additionally, the South Vietnamese government would only permit the U.S. to operate through one of those piers. The other possible sea entry for U.S. military use was the two-berth pier at Cam Ranh Bay built by RMK in 1964. Construction efforts began in the summer of 1966 in Da Nang, Cam Ranh, and Qui Nhon to increase the number of deep-water piers accessible to U.S. cargo ships. (See Figure 7.) By mid-1967, six additional deepwater ports were operational along the coast of South Vietnam.¹⁴³ The all-out effort of PMCs in South Vietnam eliminated the backlog of cargo ships in less than one year. After the initial surge of deep-water ports, minor port construction began in Cua Viet, Hue, Chu Lai, Vung Ro, Nha Trang, and Dong Tam.¹⁴⁴

¹⁴³Tregaskis and Bingham, 238.

¹⁴⁴Ibid., 229.

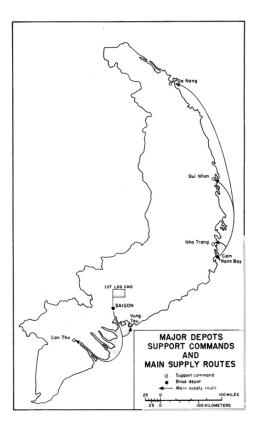


Figure 7: Map of Major Depots Support Commands and Main Supply Routes

Source: Lieutenant General Joseph M. Heiser Jr., Vietnam Studies: Logistic Support (Washington, DC: Department of the Army, 1974), 12. http://www.history.army.mil/books/Vietnam/logistic/chapter2.htm (accessed February 2014).

Airports were the secondary mode of transporting commodities into South Vietnam and were the primary mode of transporting personnel. There were three main airports in South Vietnam located in Saigon, Da Nang, and Cam Ranh.¹⁴⁵ These airports, not limited to transport personnel and equipment, were also Air Force fighter jet landing and staging bases. Because of their condition, the runways were in desperate need of repair and became emergency contracts. The Air Force demanded that each runway consists of a concrete runway 10,000 feet long, 150 feet wide, and 11 inches thick on 8-inch soil cement sub-base.¹⁴⁶ To accommodate the Air Force

¹⁴⁵Tregaskis and Bingham, 143.

¹⁴⁶Ibid., 149.

requirements, redirection of construction materials went from buildings to airfields. RMK-BRJ accomplished the construction of one 10,000-foot runway in sixty-seven days.¹⁴⁷ By 1971, RMK-BRJ completed construction of eight jet airfields throughout South Vietnam.

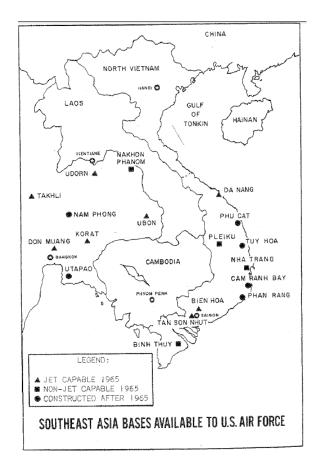


Figure 8: Map of Southeast Asia Bases Available in Asia

Source: Richard Tregaskis and Kenneth E. Bingham, Seabee Book- Southeast Asia Vietnam Construction: Building the Bases the History of Construction in Southeast Asia (Washington, DC: U.S. Government Printing Office, 1975), 220.

Ground transportation became a major issue for military vehicles. Hauling heavy

equipment and materials ruined the already weak road network. Constructing necessary

operational road networks was a coordinated effort between PMCs and the military. During the

¹⁴⁷Tregaskis and Bingham, 146.

buildup phase, 1963-67, the main objective of the road network was local hauling of equipment and resources. The completion of deep-water and minor ports meant increased traffic to and from bases and their supported logistical hubs. After local road networks improved, RMK-BRJ and the military moved on to the Lines of Communication (LOC) project. This LOC project became very important after 1967 because it extended the operational reach of combat units. By the end of the war, new or improved roads extended more than 3,198 kilometers. (See Figure 9) The U.S. military was responsible for 1,759 kilometers, and RMK-BRJ was responsible for 1,047 kilometers. The LOC project was less important for military use, but determined to be a necessity for the people of South Vietnam. Even after the U.S.'s decision to withdraw, the LOC project continued until its conclusion in May 1972.¹⁴⁸ The following table indicates the scope of RMK-BRJ's portion of the LOC project:

location	Length	Cost	Start	Finish
Tan An	1,343'	3,400,000	1-Jun-71	25-Mar-72
Ben Luc	1,738'	3,523,000	9-Jul-71	29-Apr-72
Binh Lai	1,819'	3,600,000	29-Jul-71	4-Apr-72
Bien Hoa	2,654'	4,783,000	15-May-71	1-May-72
Binh Phuoc	1,587'	4,496,000	11-May-71	11-Apr-72

Table 2: RMK-BRJ Contribution to LOC Program

Source: Richard Tregaskis and Kenneth E. Bingham, Seabee Book- Southeast Asia Vietnam Construction: Building the Bases the History of Construction in Southeast Asia (Washington, DC: U.S. Government Printing Office, 1975), 426-427.

¹⁴⁸Tregaskis and Bingham, 418-419.

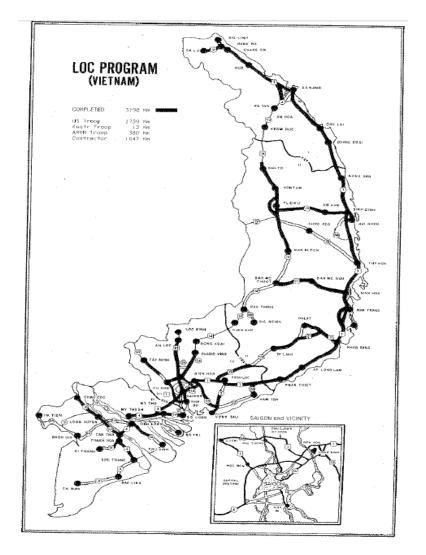


Figure 9: Map of LOC Program

Source: Richard Tregaskis and Kenneth E. Bingham, Seabee Book- Southeast Asia Vietnam Construction: Building the Bases the History of Construction in Southeast Asia (Washington, DC: U.S. Government Printing Office, 1975), 419.

Although RMK-BRJ was the primary PMC for construction, other PMCs transported the goods from base to base or from port to base. The three major trucking PMCs used in the Saigon area were Equipment Inc., Philco Ford, and Do Thi Nuong. Trucking and stevedore services in the Qui Nhon area used the Han Jin Company of Korea. The Alaskan Barge and Transport

Company provided stevedore, trucking, and intra-coastal barge movement at each of the ports, but primarily between Cam Ranh Bay port and it supported bases.¹⁴⁹

Along with ports and road networks, there were extensive buildup of base camps, supply depots, maintenance facilities, storage facilities, and parking lots. This increased the number of supplies and equipment needed for combat and support. The three largest storage areas, Saigon, Da Nang, and Cam Ranh were operational by the end of 1966 to accommodate the influx of equipment and supplies from the sea and airports. These storage areas coincided with the deepwater ports, main road networks as well as the logistical island concepts.

How much did the U.S. Government spend on PMCs throughout military occupation? The total amount the U.S. Government spent, designated as Work in Progress (WIP) projects, was approximately \$1,914,600,000 between 1963 and 1973.¹⁵⁰ Prior to merging with BRJ in 1965, RMK construction jobs in South Vietnam were in direct support of the Special Force camps, abbreviated airstrips, and the military advisory team.¹⁵¹ In the middle of 1964, monthly WIP projects ranged between \$1.3 and \$1.5 million. RMK feared they no longer had construction opportunities in South Vietnam.¹⁵² Ironically, by the end of the year, instead of losing contracts, they were in need of expansion.

As military personnel and equipment increased, RMK-BRJ increased their size and scope. Their monthly WIP increased from \$28 million in May 1966 to a peak of \$64 million in September 1967. RMK-BRJ was aware of facilities not only for their customer, but also for the safety and security of its own equipment and supplies. RMK-BRJ owned more than 5,000 pieces of equipment and rented over 1,000 more, including barges, tugs, and dredges. The value of their

¹⁴⁹Heiser, 164.

¹⁵⁰Tregaskis and Bingham, 426-27.

¹⁵¹Heiser, 67-69.

¹⁵²Ibid., 63.

supplies, estimated at \$44 million in 1965, increased to \$162 million by the end of 1966. Because of this increase, it began erecting its own facilities alongside the military. By 1972, RMK-BRJ occupied ninety-seven warehouses throughout South Vietnam and hired its own internal security to ensure the safety and security of their personnel, equipment, and supplies.¹⁵³

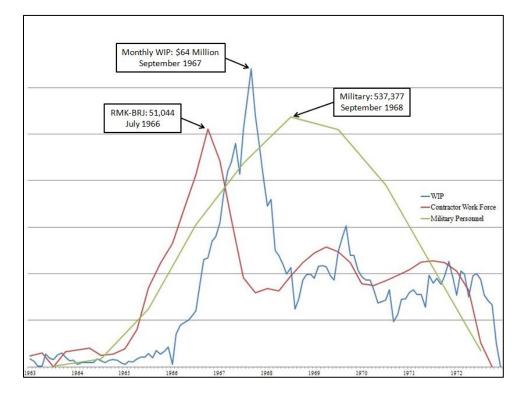


Figure 10: WIP, RMK-BRJ employees, and Military Personnel

Source: Created by author from data collected from Richard Tregaskis and Kenneth E. Bingham, Seabee Book- Southeast Asia Vietnam Construction: Building the Bases the History of Construction in Southeast Asia (Washington, DC: U.S. Government Printing Office, 1975), 426-427; "Worldwide Manpower Distribution by Geographical Area (M05)," Defense Manpower Data Center, https://www.dmdc.osd.mil/appj/dwp/reports.do?category=reports&subCat=pubs (accessed 25 March 2014).

FINDINGS AND ANALYSIS

Hypothesis One states that when there is a need to increase operational reach, then the

use of PMCs increases. The evidence suggests that Hypothesis One is supported. Operational

¹⁵³Tregaskis and Bingham, 281.

reach, necessary for successful operations, is the distance and duration over which military power can successfully employ its capability and extend its influence. To facilitate operational reach, there was a requirement to increase port (sea and air) operations, operational base infrastructure, extensive road networks, and the ability to transport personnel and equipment. PMCs performed these tasks independently during the escalation years of 1963-1967. During this time, the priority of deployed Soldiers went to the infantry. While U.S. military logistic support was second in priority, it was necessary to use contractors to help receive soldiers and equipment at the ports and onto the newly built bases. After the escalation years, PMCs collaborated with the military, engineers and Seabees to build other bases, warehouses, and was critical throughout the LOC project. These combined projects increased the number and quality of bases, expanded warehousing locations, and extended highway road networks more than 3,198 kilometers throughout South Vietnam, facilitating operational reach.

Hypothesis Two states that when host nation infrastructure cannot support logistical requirements, then there is an increased reliance on PMCs. The evidence suggests that Hypothesis Two is supported. South Vietnam's military logistic system, designed to support their military structure, was only able to provide minimal support to the small U.S. advisory team prior to 1965. At the time, there were only two deep draft ports in Saigon and two shallow water ports at Cam Ranh Bay capable of receiving military and cargo ships transporting personnel and equipment. Regulations by the South Vietnamese government limited the embarkation to one deep-draft pier in the Port of Saigon. By December 1967, ten ports were operational for U.S. military use: seven deep draft ports and three shallow. These additional ports improved ship wait time from twenty days to less than two-day average by the end of 1970. Increased port demands amplified movement from ports to bases along road networks. Prior to 1965, road conditions were very poor, but by 1966, 4,100km of highway was under construction or completed. Other PMC projects included eight jet airfields with 10,000-foot runways, twenty hospitals with a total of 6,200 beds, 14 million square feet of covered storage, approximately ninety-seven supply and

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maintenance warehouses, and housing for 450,000 Vietnamese service members and their dependents. These completed projects, all credited to the PMCs, reflected South Vietnam's lack of infrastructure required for U.S. military occupation.

Hypothesis Three states that when the size of the military decreases there is an increased dependence on PMCs. The evidence suggests that Hypothesis Three is not supported. Military personnel increased steadily from late 1964 and peaked by September 1968 with 537,377 U.S. Soldiers. At the same time, the contractor work force grew more rapidly until it peaked at 51,044 personnel in July 1966, two years prior to the peak of U.S. military. This shows an increased reliance upon PMCs during the buildup, but not necessarily, when the military decreases as Hypothesis Three suggests. This instead indicates the logistical need for PMCs presence earlier during the escalation years. The dependence on PMCs during that time directly reflected the decision to deploy logistical forces secondary to the fighting force. After July 1966, there was a dramatic decrease in PMC presence as the military force continued to increase, indicating the deployment of logistical capabilities. After the military peak in 1968, military numbers dropped as fast as they grew until the total withdrawal of U.S. Military by May 1972. During this time, PMC work force fluctuated between 18,000 and 27,000 personnel. This does not show any connection between the number of Soldiers decreasing and PMCs increasing.

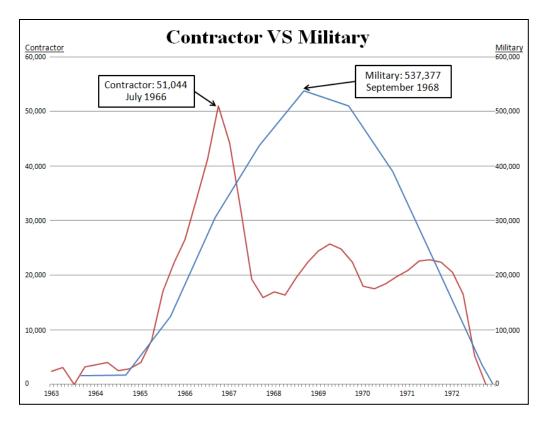


Figure 11: PMC vs. Military Personnel Strength

Source: Created by author from data collected from Richard Tregaskis and Kenneth E. Bingham, Seabee Book- Southeast Asia Vietnam Construction: Building the Bases the History of Construction in Southeast Asia (Washington, DC: U.S. Government Printing Office, 1975), 426-427; "Worldwide Manpower Distribution by Geographical Area (M05)," Defense Manpower Data Center, https://www.dmdc.osd.mil/appj/dwp/reports.do?category=reports&subCat=pubs (accessed 25 March 2014).

CONCLUSION

This study posed the question of whether private contractors negatively affect the future of U.S. Army logistics to the point of ineffectiveness. The argument suggested that the Army must create a balance between the operational logistic force and PMCs to preserve relevance for future operations. This study approached this argument by examining the relationship between the U.S. Government and private contractors through the economic theory of supply and demand as the theoretical framework. Stanley asserts that the relationship between the U.S. Government and the private contractor industry does not adhere to the basic balanced market proposed in the supply-demand theory. Instead, this relationship operates in an imbalanced market where the U.S. Government becomes the sole buyer on the demand side. This is a microeconomic phenomenon known as monopsony where demand, not price, controls the purchasing power. The three hypotheses sought to determine the relationship between the U.S. Government, the host nation of South Vietnam, and the private contractor industry. The goal of the study was to enhance logistical understanding that contractors are enablers and have a positive effect on operational reach, basing, and force projection. This section examines the significance of the study and suggests further research.

The significance of these findings strengthens the need to integrate contractor capabilities early in the planning process as well as throughout the execution of missions. This study shows that PMCs continue to play a significant role in U.S. military support. Current literature continues to address and magnify the negative aspects of contracting, such as concerns of overspending and overreliance. This study confirms the use of contractors does not threaten the future of logistics, but strengthens its capability and fills the void needed to support the requirements of a deployed force. The Vietnam War case study illustrates that contractor capability can enable force projection and operational reach within an austere environment. Operational planners will increase the likelihood of tactical, operational, and strategic success throughout the battlefield by integrating and incorporating contractors within the planning and execution process.

The need for further and continuous research is apparent. Further study may include case studies where a non-U.S. Government entity used PMC throughout a conflict. This focus would compare how other governments use PMC with how the U.S. Government uses them in the same manner. These outcomes could improve future employment of PMCs in a multinational conflict. Other considerations would include a case study where the U.S. Government employed multiple small PMCs throughout a conflict instead of one large conglomerate. The findings may be able to show options when employing contractors in future conflicts. A final recommendation for future research would look at the military contracting efforts throughout the Vietnam War, specifically

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the U.S. Army Engineers and U.S. Navy Seabees. This study took a narrow focus on a very complex situation of logistical support through ten years of the Vietnam War. Many topics or questions came to the surface throughout the process of research not mentioned in the study. A major focus of the research was the construction efforts of the American conglomerate, RMK-BRJ. The U.S. Army Engineers and U.S. Navy Seabees had significant influence on the completion and success of the contractor's construction operations. Further study, focusing directly on the Engineers and Seabees, would show the successful collaboration of military and civilian relations in an austere conflict zone.

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