Building the Army of the Republic of Vietnam’s Logistical System: Lessons Learned

A Monograph

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**14. ABSTRACT**

The US military, combined with the Army of the Republic of Vietnam (ARVN), spent almost twenty years creating a capable ARVN logistical system. That system, built within the confines of an agrarian society, was completely reliant on US military aid, and evolved into a system that operated with little US interference. However, multiple lessons applicable to future logistics building come from this successful mission. The lessons included limitations within the advisor-training program and not utilizing South Vietnamese expertise and knowledge in the training. Other lessons were the lack of unity-of-command within the advisory mission, and the consequence of placing military and civilian advisors within the logistical system. The final lesson was transferring the US Army’s excess use of supplies in combat operations to an agrarian society with limited access to industrial goods.

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Abstract


The US military, combined with the Army of the Republic of Vietnam (ARVN), spent almost twenty years creating a capable ARVN logistical system. That system, built within the confines of an agrarian society, was completely reliant on US military aid and evolved into a system that operated with little US interference. However, multiple lessons applicable to future logistics building come from this successful mission. The lessons included limitations within the advisor-training program and not utilizing South Vietnamese expertise and knowledge in the training. Other lessons were the lack of unity-of-command within the advisory mission, and the consequence of placing military and civilian advisors within the logistical system. The final lesson was transferring the US Army’s excess use of supplies in combat operations to an agrarian society with limited access to industrial goods.
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**Acronyms**

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<tr>
<td>AAR</td>
<td>After Action Review</td>
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<td>ALC</td>
<td>Area Logistic Command</td>
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<td>ARVN</td>
<td>Army of the Republic of Vietnam</td>
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<td>CLC</td>
<td>Central Logistics Command</td>
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<td>CMH</td>
<td>Center of Military History</td>
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<td>COIN</td>
<td>Counter-Insurgency</td>
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<td>DMA</td>
<td>Data Management Agency</td>
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<td>LDPC</td>
<td>Logistical Data Processing Center</td>
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<td>MACV</td>
<td>Military Assistance Command Vietnam</td>
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<td>MAAGV</td>
<td>Military Assistance Advisory Group Vietnam</td>
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<td>NMMA</td>
<td>National Material Management Agency</td>
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<td>Security Forces Assistance</td>
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<td>TERM</td>
<td>Temporary Equipment Recovery Mission</td>
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<td>TOA</td>
<td>Table of Organization</td>
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<td>United States Army Vietnam</td>
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Introduction

The US Army sees developing foreign militaries as crucial to future conflicts. Analyzing historical Security Force Assistance (SFA) campaigns provides lessons that will improve the US Army’s ability to conduct future operations. Logistics are an essential, but often overlooked aspect of previous SFA operations. Recent studies have synthesized logistics within SFA across multiple campaigns leaving a gap in the US Army’s current understanding. In-depth analysis of individual campaigns completes the US Army’s understanding of logistics within SFA. The two-decade Vietnam War is an effective historical analog for current and future SFA efforts because it encompassed the full range of logistics development. The war evolved from a small training and advisory mission to a massive US combat effort that ended with the transition of responsibility to South Vietnam. Analyzing the development of the Army of the Republic of Vietnam’s (ARVN) logistical system and the US Army logistical advisory mission presents a successful SFA logistics campaign but also provides several lessons for future SFA operations.

Analyzing the evolution of the ARVN logistical system provides a complete understanding of the US Army’s SFA logistical operation in South Vietnam. From the beginning, the US military worked to create logistics capability in the newly formed ARVN. South Vietnam had very little modern infrastructure or industrial capability after the devastation of World War II and the Indochina War. The lack of industry and infrastructure meant that the ARVN was reliant on US military aid to both develop itself and then to defend itself from an internal insurgency and

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1 Joint Publication (JP) 1-02, Department of Defense Dictionary of Military and Associated Terms (Washington, DC: Government Printing Press, 2010), 215. JP 1-02 defined Security Forces Assistance as, “The Department of Defense activities that contribute to unified action by the US Government to support the development of the capacity and capability of foreign security forces and their supporting institutions.”
a modern North Vietnamese Army.\(^2\) It was from within this context that the US Army built the ARVN logistical systems.

The US Army built the ARVN logistics apparatus from a system that was heavily reliant on US Army capability to a regional depot system that assumed control of all logistical operations as the US Army withdrew. The ARVN logistical system formed around a growing US military presence in South Vietnam. As the logistical system grew, it operated alongside and through existing US Army infrastructure. As the ARVN developed and the US Army relinquished dominance of combat operations, the ARVN logistical system evolved and became the primary role of support to combat operations. The logistical system functioned well supporting a 500,000-man army conducting national-level combat operations while being relatively free of US Army assistance.\(^3\) The relative robustness of the ARVN logistical system is a testimony to the successful US Army effort despite the ultimate outcome of the war.

The heart of the US Army’s effort to build the ARVN logistical system was the advisory mission. The US army advisors in South Vietnam were the first to receive institutional training because the US Army recognized the need for its advisors to have greater cultural and linguistic understanding. Even with the training, the differences with their ARVN counterparts frustrated the advisors. The advisors and the ARVN soldiers worked through their differences, and eventually trained and developed ARVN logisticians emerged. As ARVN logistical units capabilities increased, they collaborated with peer US Army units and received additional training, resulting in even more capable ARVN logistical units. The increased ARVN logistical


capability enabled the ARVN to assume logistical responsibility as the US Army withdrew from South Vietnam. The US Army logistical advisors were an integral part of the ARVN logistical development and capability, and provided guidance until South Vietnam was conquered.⁴

Four lessons from the US Army’s approach to developing ARVN logistics are applicable to future SFA efforts. The US Army advisors did receive institutional training, but the advisor-training program did not adequately leverage South Vietnamese expertise and knowledge in the training. There was a lack of unity-of-command within the advisory mission which caused confusion for the ARVN and caused inefficiencies in developing the ARVN logistical system. The advisors not only provided guidance to the ARVN, but they also directly manipulated the logistical system. This caused a reliance on advisors within the logistical system that proved difficult to break. Finally, the advisors taught the ARVN to operate similarly to the US Army, but the ARVN did not have the abundant resources of the US Army. This made the ARVN more reliant on US military aid. These lessons came about from conditions created by the US Army within an otherwise successful approach. Understanding the actions that created these conditions could prevent mistakes in future SFA operations.⁵

**Literature Review**

Most current sources on ARVN logistics development fall into one of five broad

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⁵ Ramsey, *Advising Indigenous Forces*, 40-44; Vien et al., *U.S. Advisors*, 111, 120. Ramsey discussed the origins of the training. Vien discussed the need for in country ARVN input into the logistical advisor training and the issues with unit-of-command.
categories: doctrine and after action reviews (AARs), the South Vietnamese experiences captured in the Indochina Monograph series, the US Military’s post-Vietnam War educational series, the critical opinions of the conduct of the war, and the multiple recent studies of US Military Counter-Insurgencies (COIN) and Security Forces Assistance (SFA) operations for the Global War on Terrorism. These different areas have multiple works focusing on varying aspects of South Vietnamese military and industrial development, some of which focus exclusively on logistics. However, very few sources apply a holistic approach. They emphasized only limited perspectives such as the South Vietnamese experience working with US advisors, the US Army’s doctrinal approach, or a broader study with only a small portion focused on the Vietnam War. Synthesis of all the literature allows a more complete understanding of the US military’s approach to building ARVN logistics, the competing motivations behind the approach, and the overall effectiveness of the approach.

The Vietnam War era doctrine and AARs give a period-specific understanding of the US military’s attempt at building logistic capability. The US Army’s operating logistic doctrine does not provide insight into how it mentored and developed South Vietnamese forces, but it does show the mindset of how Army logisticians viewed operations. This allowed accurate analysis to determine the cultural and institutional motivations that drove the US Army’s advisory approach. The development of advisory doctrine and the subsequent evolution of that doctrine throughout the war focused primarily on combat arms and provided little data about mentoring logistics. The doctrine was useful for determining the US Army’s method for selecting and preparing soldiers for the mentor mission. The primary manual, Field Manual (FM) 31-73, produced by the Special

Warfare Center, was the basis to train potential advisors. The manual evolved, with one major edition change, from the *Advisor Handbook for Counterinsurgency* to the *Advisor Handbook for Stability Operations*. The latter version of the manual presented a mature understanding of advisor operations in the Vietnam War and added a more technical understanding of training and assisting a host nation force. Both documents demonstrated the US Army’s concern for developing host nation awareness within its force by focusing on developing an understanding of the host nation’s language, culture, terrain, and economy. But, the manuals also focused the advisors towards applicable Army manuals for the conduct of various operations, which means the US Army’s approach to advising was to build a host nation military capability that mirrored US Army doctrine. Further, the combat service support emphasis was minimal within the advisory doctrine.

AARs for operations in Vietnam provided relatively immediate feedback to the US Army and ARVN. The immediacy of these AARs created limited analysis of longer-term implications, but provided insightful implications of tactical actions. Most of the numerous AARs centered on specific campaigns or battle and focused on US Military and ARVN interaction and conduct. One such AAR, the 1969 Ben Het-Dak To Campaign lessons learned study, provided comments such as:

**d. Advisor Influence**

(1) Observation: Advisors attempted on occasion to solve logistical problems through advisory channels.

(2) Analysis: In several cases US advisors took it upon themselves to solve ARVN logistical problems. Advisors requests usually resulted in an input to the ARVN system at the corps level rather than through the normal chain. ARVN was hesitant to react to US-

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8 FM 31-73, 1, 6.
initiated requests.
(3) Conclusion:
(a) The ARVN logistical system is workable. When advisors take unilateral action, ARVN unit commanders rely on advisors to complete such actions.
(b) Actions on the part of advisors or US senior commanders that circumvent the ARVN logistical system degrade the system.9

This one particular observation does not reflect the overall American approach to developing Vietnamese logistical capability, but with similar observations as part of the broader AAR collection showed trends within the advisor approach. This trend represented the conflict within advisors between the desire to develop Vietnamese logistics versus the desire to enable combat operations. This trend is just one of many derived from analyzing the AAR pool as a whole.

The United States Military Assistance Command Vietnam (MACV) Command History Collection provides a MACV command history by year. Compiled as a series in the 1980s, it consists of a collection of primary documents produced during and immediately after the war. The series provided a historical snapshot of the command. It does not comprehensively address the method MACV employed to build ARVN logistical units and capabilities, but it does expose the growing issues of supplying the ARVN and US forces over the course of the war. The collection highlighted issues with the complex US logistical bureaucracies that hampered early logistical operations, and how the command developed systems and work-arounds as the war continued to expand.10

The first post-war analysis of the US effort to build ARVN capability comes from a


10 US Army, *Senior Officer Debriefing Reports: Senior Advisors, ARVN, 1st, 3rd, 5th, 7th, 9th, 25th and 18th Infantry Divisions* (April 12, 1973); US Army, *Debriefing report COL Janes R. Henslick Senior Advisor, 2d ARVN Division* (January 27, 1973); US Military Assistance Command, Vietnam, *Vietnam Lessons Learned No. 76: Vietnamization* (November 22, 1969); US Military Assistance Command, Vietnam, *The Ben Het-Dak To Campaign: Lessons Learned Case Study of ARVN Assumption of Responsibility in Northern Kontum Province* (August 24, 1969). There are more AARs, but these were the most prevalent documents.
group of expatriated former South Vietnamese senior officers working for the US Army Center of Military History (CMH) during the late 1970s and early 1980s. These officers produced a multi-document series titled the *Indochina Monographs*, in which they provided historical analysis of the Vietnam War from the South Vietnamese perspective. The series provided an extremely positive view of US military and ARVN relations, and outlined effective military and civilian cooperation that led to the virtual defeat of the insurgency. The overall thesis is that the armies of North Vietnam, and not internal turmoil, defeated the South Vietnamese. This view placed the responsibility on the political leadership of both United States and South Vietnam and not the armies.11

The *Indochina Monographs* offered a unique, non-American perspective on the conduct of the war. The monographs served as a starting point for most modern Vietnamese advisory effort analysis. More recent Vietnam War scholarship heavily utilized the *Indochina Monographs* because series consisted of original sources. Therefore, the *Indochina Monographs*’ influence permeates Vietnam War narratives.12

The South Vietnamese viewpoint provided insight into the political and military factors not easily available to western authors. For instance, in the *Indochina Monograph, ARVN Logistics*, Lt. Gen (R) Dog Van Khuyen factored those issues into his analysis from the standpoint of national logistic capability. He started by analyzing the overall South Vietnamese economic situation. He then showed how the economy changed and reacted during different

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12 See the bibliographies to many of the modern monographs listed in the attached bibliography.
aspects of the war, using the changes in economy to represent the effectiveness of the South Vietnamese war effort. He further addressed how the American military advised and assisted the ARVN and provided military aid at the national level. He focused on the relations between the advisors and their ability to duplicate US Army doctrine within the ARVN, and the overall evolution of the ARVN logistical system as it improved with the mentorship of US advisors.\textsuperscript{13}


The US Army advisory documents were written from the US Military perspective and captured the frustration felt by the US Army as the institution tried to recover from the war. While describing the US approaches to building the ARVN, they articulated the conflict between the ARVN and US Army. These documents displayed the friction between the two armies in detail, which serve as a counterpoint to the optimism present in the *Indochina Monographs*. This tone created an opportunity for real critique, which outlined the difficulties of trying to build an

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\textsuperscript{13} Khuyen, *RNAF Logistics*, Indochina Monographs (Washington, DC: US Army Center of Military History, 1980). The monograph was written in 1976 but printed in 1980. This portion is analysis of the overall theme of the monograph and is not taken from any specific page.

American-style military from a culture foreign to the American way of life and war.

Lieutenant General Joseph M. Heiser Jr’s monograph, *Logistic Support*, outlined the US Army’s major logistical actions from 1965 to 1971. Lieutenant General Heiser was the head of the 1st Logistical Command, the senior most US Army logistical command in South Vietnam, making him the foremost US Army expert on logistics operations in South Vietnam. His analysis was free from the strategic critiques of CMH series and instead described, “Selected logistic events in order to assist the Army in its development of future operational concepts and provides reference material for a comprehensive historical record.”\(^{15}\) Several sections of his monograph explained the ARVN logistics systems, the US effort to build those systems through partnership, and then the process to make the ARVN logistical systems self-sustaining for the eventual US withdrawal. Heiser’s monograph synthesized first-hand logistical accounts into one concise document that consolidated the US military’s logistical trials and tribulations during the Vietnam War.

Congruent with the CMH and other US Army historical writings, academics and military historians produced several influential works that presented explanations for the Vietnam War. Many of these works questioned US policy and strategy. Authors like Andrew F. Krepinevich and Harry G. Summers offer differing explanations for the fall of South Vietnam.\(^{16}\) Generally speaking, these two views create the framework for the academic arguments on the US successes or failures in South Vietnam. Various authors emphasized different aspect of the war from within these two theories. One such work is *ARVN: Life and Death in the South Vietnamese Army* by


Robert K. Brigham.

Brigham’s book was a study of the ARVN development, culture, and life. He focused on the everyday aspects of developing a new South Vietnamese Army and not the actual combat employment. He analyzed aspects of the army, from cultural alignment, to the draft process, foreign equipment, and US interaction. While he emphasized little logistics, he provided a more pessimistic interpretation of the ARVN’s view of US advisors, which countered the positivism of the Indochina Monographs. The contradiction provided a balance to analyze advisor actions and effectiveness during the war.17

The final literature group is the recent studies conducted by numerous military research organizations that utilize previous nation and military building activities as example for the current Global War on Terrorism (GWOT). This group consists of academic monographs and information geared towards military professionals to provide historical context to develop strategies for contemporary issues. Examples of these works include Robert D. Ramsey III’s Advising Indigenous Forces: American Advisors in Korea, Vietnam and El Salvador and Advice for Advisors Suggestions and Observations from Lawrence to the Present, and the School of Advanced Military Studies (SAMS) monographs “Security Force Assistance: The Key to Self-Reliance” by Major Lowell E. Howard, Jr. and “Logistics in Security Force Assistance: Sustainable Partner Development” by Major J. Troy Fisher. The papers cover various subjects: advisor operations, foreign partner logistics, and contractor support to the host nation. The historical context was analyzed through the contemporary lens, to find similarities to current operations. While they provided good analysis of the US approach, they have limited

17 Brigham, ARVN Life and Death in the South Vietnamese Army.
explanations of why the United States chose its approach.18

The missing element within the above-described body of work is determining the reasoning behind US military’s approach, and its overall effectiveness for the South Vietnam. From the collective body, a picture appeared that outlined the good, the bad, and the ugly of the US attempts to develop the ARVN. Through all the varying topics, biases, and justifications, an explanation emerges. An explanation influenced by the competing needs of a western power and an eastern underdeveloped nation, by the constant evolution of policy, and by the ever-escalating battlefield. An in-depth analysis of the available literature could provide insight into the overall success of the US Army effort and glean lesson learned with potential applicability to current and future operations.

Building South Vietnamese Logistical Systems

…[T]he effectiveness of any field support system of necessity depended on the source of supply from the rear, particularly, the financial resources that sustained an army in time of peace as well as in time of war.

--Dong Van Khuyen, RNAF Logistics

Logisticians often state that the last mile is the hardest and most difficult part of the logistical system. This mile is the one that is fraught with the most danger, requires the most coordination, and largest distribution of assets. This concept presents the problem of logistics from a uniquely American perspective. As an economic world power, the United States can project force throughout the world and employ its industrial base to provide what it needs to fight and win wars. South Vietnam’s economic situation was completely different. In its situation, the

last mile was the same as the first. With almost no military industrial complex, the only mile it had was from US aid bases to the battlefield.

South Vietnam was mostly an agrarian society when the United States began its aid and mentorship program in the mid-1950s. The small Asian country’s economy depended on exporting rice and rubber. The combined impact of World War II and the French-Viet Minh War reduced the country’s agriculture yield by a third to half, limiting the economy’s power to import. The war further devastated the national infrastructure, destroying much of the main rail lines and 60 percent of the road network, further affecting the ability to move goods. With almost no industry, all equipment, light and heavy machinery, and manufactured goods were imported.\(^{19}\) The reduced exports, reliance on imports of all modern equipment, and limited transportation infrastructure left South Vietnam completely reliant on US foreign aid.

Following World War II, France fought a communist uprising in its colony of Indochina. From 1950 to 1954, the United States provided France 1.1 billion dollars in aid, with 746 million dollars directly funding the French Expeditionary Force in Indochina. In the 1954 Geneva Accords, France recognized the independence of the newly formed Democratic Republic of Vietnam (North Vietnam) and the Republic of Vietnam (South Vietnam). All parties agreed to a cease-fire, and the Indochina War ended. As part of this agreement, the newly formed Republic of Vietnam (South Vietnam) continued to receive French assistance, and all communist forces withdrew to North Vietnam. The United States expanded its regional assistance mission and created a joint advisory command with French forces in 1955. However, as time went on, France reduced its commitment to South Vietnam. By 1957, France removed all advisory forces and left the mission to the United States. In 1959, North Vietnam openly supported irregular warfare against South Vietnam. The United States Military Assistance Group Vietnam (MAAGV) was

\(^{19}\) Khuyen, *RNAF Logistics*, 6-7.
forced to build a South Vietnamese Army while in a state of war.\textsuperscript{20}

The United States sought to design the ARVN modeled after US Army doctrine, force structure, and equipment. After trying several different formations, MAAGV eventual settled on a table of organization (TOA) similar to US divisions with three infantry regiments artillery, engineers, and enablers. In 1959, MAAGV reorganized the ARVN into three corps with seven infantry divisions and various separate airborne and ranger units. MAAGV organized, equipped, and trained the ARVN to fight foreign invaders, similar to the US experience in the Korean conflict.\textsuperscript{21} Some former ARVN officers contended that the MAAGV decision to go with the medium divisions met US tactical requirements but was counter to their desires to create lighter divisions. These generals desired smaller, lighter formations that were prepared to face internal insurgent threats and external invasion. However, the ARVN accepted the proposed MAAGV formations and doctrine because South Vietnam relied on US economic and military aid.\textsuperscript{22}

For practical reasons, the US Army outfitted the ARVN with US equipment. Since World War II, the French relied heavily on US military equipment and employed similar equipment in the Indochina War. As the French forces withdrew from South Vietnam in the late 1950s, the influx of US equipment continued. With large stockpiles of weapons and ammunition from World War II and the Korean War, the US could equip the ARVN with leftover equipment, especially as the US Army modernized for the 1960s. As the war continued and the ARVN consumed older items, the US Army replaced ARVN stocks with modern equipment. The US Army could provide


\textsuperscript{21} Khuyen, \textit{RNAF Logistics}, 25; Vién et al., \textit{The US Advisors}, 15.

\textsuperscript{22} Brigham, \textit{ARVN Life and Death in the South Vietnamese Army}, 5-7.
modern equipment because it reached its desired levels.\textsuperscript{23}

A US-equipped ARVN was clearly advantageous to the US Army. It provided equipment that matched the doctrine that MAAGV employed to train the ARVN, that the US advisors understood how to employ, and that the US Army could easily sustain. Further, the ARVN history with similar equipment meant existing institutional knowledge within the ARVN.

However, US equipment ensured that the ARVN would remain completely reliant on the US Army for all supply and sustainment even after the US mentor mission stopped. Some questioned if the South Vietnamese reliance on US military supplies as a way to appease the United States industrial military complex. In any event there was no local military industrial base to draw from. South Vietnam would be reliant on foreign support for all military equipment, regardless of its origin. Further, because institutional knowledge existed from historical use of US equipment, switching the ARVN to a different set of equipment would incur additional training and time. The United States choosing its own equipment was both practical and efficient.

With force structure, tactical doctrine, and equipment based on the US Army, the ARVN developed logistical and sustainment systems that mirrored the US Army. The logistical system evolved from the late 1950s through the withdrawal of most US forces in 1973. It changed from one that was reliant on US Army influence and control to an autonomous system of regional depots and attached supporting units, resupplied by military aid based on historical consumptions levels.\textsuperscript{24} The ARVN logisticians utilized area support through Area Logistic Commands (ALC) that coordinated support between direct support units, regional maintenance centers, and division logistical battalions. This system, while mirroring US Army systems, was effective throughout

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{23} CMH PUB 90-10-1, 100-102.
\item \textsuperscript{24} Heiser, \textit{Logistic Studies}, 235.
\end{itemize}
\end{footnotesize}
the war because it was designed for the unique geography of South Vietnam.\textsuperscript{25}

The ARVN logistical architecture evolved between 1954 and 1968, when it settled on a very Americanized organization. At the national level, the lead logistician was the both the Deputy Chief of Staff for Logistics and the Central Logistics Commander (CLC). Under those positions, there were departments for ordnance, engineer, transportation, signal, medical, quartermaster, central purchasing, and commissary departments. Each of these departments was responsible to coordinate with MACV to review and establish TOAs, control the inflow of major end items, prepare the military aid and budget estimates, manage the budget, request supplies, determine the required logistical force structures, create support procedures, and ensure the economical and timely use of military aid.\textsuperscript{26}

Under the CLC, the ARVN furcated area support down into five ALCs. South Vietnam divided logistical support into five different sectors, north to south, with an ALC assigned to each. The centers provided all classes of supplies (minus medical), end items, and funding to ARVN units within their geographical areas. With the exception of specific combat situations, supporting units organic support assets received all support from the ALCs. In those few cases, the ALC was responsible to coordinate directly with the regionally associated US Army logistic for any mutual support. There was strict separation of support at the field level.\textsuperscript{27} The ALCs supported the ARVN through prepositioned stocks, while the US Army supported itself. There were limited times where both armies received support from the other’s logistical systems, but a

\textsuperscript{25} Khuyen, \textit{RNAF Logistics}, 450.


\textsuperscript{27} The term field level support is similar the current doctrinal definition of general support.
system existed to reimburse the supporting units stockage.28

Figure 1. Area Logistic Commands and transportation Infrastructure Map


This system had three inherent shortfalls that forced reliance on the US military

28 Khuyen, RNAF Logistics, 38-40; Troung, RVNAF and US Operational Cooperation and Coordination, 38.
infrastructure: the national transportation system, port operations, and national petroleum facilities. Already damaged from World War II and the Indochina war, the continued combat operations further strained the national transportation infrastructure in spite of efforts to rebuild and improve. Because of this, South Vietnam had limited military and civilian assets to move supplies from the national level to the ALCs. During combat operations, the ARVN had limited airlift capacity to move mass supplies to sustain large formations conducting offensive operations in the restricted jungle and mountainous terrain. The CLC and ALCs coordinated directly with their US military peer counterparts to receive transportation support. This reliance became a limitation for South Vietnam as the war evolved and US military assets withdrew from the country.

The US military also maintained control of all port activities within South Vietnam. Working through local contracted Vietnamese companies and labor, the US military controlled all civilian and military goods coming through the ports. The combination of United States controlled ports and transportation infrastructure meant that the ARVN had little logistic infrastructure from the national level to the regional levels. This compounded the logistical issues that occurred as the United States withdrew support to South Vietnam.

South Vietnam was also reliant on US military and commercial capabilities for the national level receiving, processing, and storage of petroleum products. The US military and civilian oil companies received all foreign aid petroleum at the port. These entities controlled all storage facilities above the CLC and ALCs. Mostly United States controlled transportation assets shipped fuel from US military controlled storage facilities to South Vietnamese depots throughout


the country. The depots were the first location where South Vietnamese logisticians took control and responsibility of their fuel requirements.\textsuperscript{31} These facilities had virtually no bulk storage capability, so almost all fuel was stored in 50-gallon drums and 5-gallon cans. The lack of bulk storage created a requirement to track drums and cans, which resulted in an elaborate exchange system for empty containers.\textsuperscript{32} This system slowed the processing of fuel, requiring tank to container transfer, and gave the ARVN limited bulk fuel capability. The lack of bulk fuel capability and the lack of national-level logistics infrastructure was a South Vietnamese limitation as the United States withdrew from the country.

At the tactical level, the ARVN built dedicated logistical formations that modeled US Army tactical logistical units. Each division had a logistics battalion that consisted of one quartermaster, ordnance, signal, transportation, and engineer company. These companies, combined with the ALC assets, were able to provide most direct support to the divisions. ARVN divisions, augmented by the ALCs, were able to support airborne, ranger, and marine battalions as they maneuvered around the country.

In the latter years of the Vietnam War two major events occurred that reshaped the ARVN logistic systems. The first was the 1968 North Vietnamese Tet Offensive. The enemy offensive, while effectively depleting the Viet Cong offensive capability, reduced many gains achieved in creating transportation infrastructure, reduced the rice production level by almost a half, and almost eliminated any industry growth within the population areas. The reduction of goods and available taxable income increased the need for more US financial aid to continue to fund the war. Further, the Tet Offensive served as a tipping point for US commitment as popular support within the United States rapidly eroded. In 1968 a new US President was elected on a

\textsuperscript{31} Troung, *RVNAF and US Operational Cooperation and Coordination*, 39.

\textsuperscript{32} Khuyen, *RNAF Logistics*, 51.

President Nixon’s policy of “Vietnamization,” which was the systematic removal of US military assistance while simultaneously increasing the size and autonomy of ARVN units, MACV had to reorganize and improve ARVN logistical capability to augment reliance on US infrastructure. From 1968 to 1972, MACV oversaw intensive logistical improvement plans and reorganizations to prepare the ARVN for US military withdrawal. These initiatives set the conditions for the ARVN to assume control of all regional and national-level logistical infrastructures and operate with limited US influence.\footnote{Khuyen, *RNAF Logistics*, 29, 130-134.}

After an intensive review of ARVN shortcoming, MACV established the Logistics Master Plan (LMP) concept to modernize the ARVN for Vietnamization, which consisted of two primary programs, and six sub programs. The first primary program was the Combined Logistic Offensive Plan which was a short range plan designed to identify issues, assign responsibility to create solutions, and monitor completion status. A second long-term initiative was the Logistics Improvement Plan (LIP), which were specific projects and objectives geared towards creating ARVN autonomy. Both programs led to the creating of three new departments under the CLC and increases to ALC and division level logistical assets.\footnote{Heiser, *Logistic Studies*, 238-239; Khuyen, *RNAF Logistics*, 134-141; Vien et al., *The US Advisors*, 108. Heiser discussed the MAC-V improvement plans. He further discussed the six sub plans with five geared towards improving and transferring facilities, but were not necessarily based on changing how the ARVN conducted logistics and one partner improvement plan. Khuyen discussed the changes to the ARVN formations. Advisors discussed the Pathfinder programs, Pathfinder I set the conditions for change and Pathfinder II was a later follow committee for further improvements.}

The Logistical Data Processing Center (LDPC), a new department under the CLC, replaced MACV’s Data Management Agency (DMA) and assumed responsibility of collecting,
storing, and exploiting all logistics data. This center was engendered from the LMPs South Vietnamese Armed Forces Automated Material Management System. From 1969 to 1971, MACV conducted a careful screening and training process to find the right Vietnamese officers to manage the complex computer systems required to conduct data analysis. By 1972, the LDPC assumed responsibility of the DMA facilities and function. The LDPC produced cyclical and monthly outputs. The cyclical outputs were reports produced two to three times per week on supply exceptions, available balances, transactions, and variable locations. The monthly reports were summaries of national-level depots stockages, maintenance recapitalization, and supply transactions. Developing an ARVN logistical automation system was a necessary step to prepare the ARVN to become a fully autonomous military.

The CLC also created the National Material Management Agency (NMMA) to standardize supply procedures, regulations, and directives. Prior to the agency’s creation, each department had their own procedures, creating complexity and confusion. The NMMA standardized, and then educated and trained the depots for operation within the new regulations. The organization then became the enforcement mechanism for the CLC commander to ensure compliance within the depots, which improved overall efficiency within the ARVN logistics system.

Spawned from the LIP, the CLC created the Equipment Recovery Center to control equipment modernization and manage the national-level repair systems. It served to ensure cannibalization of all excess and obsolete equipment to maximize the availability of repair parts. It further established procedures for evacuation, turn-in, and scrapping of equipment. These two tasks, previously managed by the MACV, enabled the ARVN to maximize available assets to

37 Khuyen, RNAF Logistics, 136-138.
increase organizational readiness rates as access to U.S. stocks decreased.\textsuperscript{38}

Along with reorganizing at the national level, the LIP began reorganizing the ALC and division organic logistical assets. Starting with the divisions, the logistics battalion was reorganized into a battalion with a supply company, maintenance company, and operations division. The reorganization created a capability to push three mobile sections forward, expanding the operational reach of regiments away from the division headquarters. If further offered an economy of assets, allowing the battalion to prioritize and flex support assets to other areas.\textsuperscript{39}

In support of the new battalions, the LIP reorganized regional assets to provide flexibility to the divisions. The ALCs consolidated and organized the various separate support companies into commodity battalions. The consolidation of battalions under the ALCs enabled economy of force for all field level logistic assets. The battalions were able to move forces to support division operations and keep pace with the increased size and frequency of ARVN combat operations as the US military executed Vietnamization.\textsuperscript{40}

The real test for the new reorganization came during the 1972 Easter Offensive, in which the NVA launched a massive invasion of South Vietnam. The ARVN rapidly moved forces and supplies from rear bases to forward positions along the North Vietnamese border, which displayed the great multi-decade effort the MACV and ARVN planners did to create a tenable system of logistics.\textsuperscript{41} During this period, Advisors assessed their divisions’ logistical assets as well-trained and able to sustain combat operations, only hampered by the availability of supplies.

\textsuperscript{38} Khuyen, \textit{RNAF Logistics}, 138.
\textsuperscript{39} Ibid., 130.
\textsuperscript{40} Ibid., 131.
\textsuperscript{41} Ibid., 231.
above their level. It appeared, based on the assessment of both the ARVN and US advisors, that Vietnamization worked and the ARVN was prepared to sustain itself.

As the US forces continued to withdraw there was one last round of ARVN logistics reorganization. In 1972, the Pathfinder I and II committee met, consisting of representatives from the CLC, MACV J4, US Army Material Command, and US Army Strategic Communications Command. These committees recommend several consolidations of logistical assets under the ALCs. Two additional depots were created to support the 1st, 2nd, and 5th ALCs. Higher-level maintenance was consolidated into one company per ALC, with all direct support maintenance units consolidated from 132 to 13, spread out amongst the ALCs. Finally, the committee initiated the process to create uniformed prescribed load lists and authorized stockage levels for the ALCs and their subordinate units. The Pathfinder committees created the final changes to the ARVN logistical system that was used for the remainder of the war.

With all US military assets redeployed and US funding decreased, the ARVN logistic system had to independently sustain itself. While the ARVN had an adequate system to support combat operations, they were only responsible for supplying from the ports to the units. South Vietnam was still completely reliant on US foreign aid. In 1974, the US Congress reduced military aid to South Vietnam by one billion dollars and another 700 million dollars in 1975. The military aid reduction reduced ARVN purchasing power by 50 percent. At the same time, additional Soviet military aid increased North Vietnamese purchasing power by 70 percent. The funding disparity hindered the ARVN logistical system’s ability to sustain operations against the attacking North Vietnamese. The almost twenty year US military effort to create ARVN logistical

43 Khuyen, RNAF Logistics, 140-141.
44 Ibid., 237-239.
system failed, not because of US Army failure, but from a political decision that removed the aid provided to South Vietnam.

The Advisor: Train and Advise

The US Military mission in South Vietnam began and ended with its advisory effort. Long before the addition of major combat formations, the US Army committed advisor teams to train and advise ARVN units through inception to combat operations. As with all other War Fighting Functions, the logistical mentor process evolved from its inception to a calculated educational process to fit the right soldiers to advise ARVN units. These advisors, often undervalued by the US Army, were required to create a modern logistical system and soldiers from a foreign and culturally different society that was mostly agrarian and possessed little formal education.

There are conflicting views of the relationship between the ARVN and the US advisors. Some post war analysis painted a picture of conflict, mistrust, and cultural incompatibility. In many cases, advisors treated the ARVN soldier as inferior counterparts and showed little respect for their military prowess. The ARVN viewed the US soldier as arrogant and wasteful, and disrespectful to the Vietnamese culture. This paints a picture of distrust and distain between the two counterparts and leaves little room for cooperation, mentorship, and collective development. This distrust is in line with the modern narrative that the ARVN force was a lazy, unorganized mob, which relied on the US Army to fight their war.

Other sources portrayed a symbiotic relationship where the advisor and advisee worked together to create a capable ARVN force. Multiple ARVN officers wrote in the Indochina

Monograph The U.S. Advisors:

45 Ramsey, Advising Indigenous Forces, 54.

46 Brigham, ARVN Life and Death in the South Vietnamese Army, xi.
To the Vietnamese officers and men who benefited from his expertise and experience, the US adviser was both a mentor and a Samaritan. Regardless of his level of assignment or branch of service, he could be subsumed by a common trait: a sincere desire to help and devotion to those he advised. Whatever his approach to advisory duties, he always performed with dedication and competence. For nearly two decades, these qualities were the hallmark of the US adviser in South Vietnam.47

The more positive view of the advisor relationship, while accounting for shortcomings in both the ARVN and US advisors, accounts for the reality of the Vietnam War, in which the ARVN bore a large brunt of the war, totaling approximately 200,000 military killed and countless civilian casualties.48

The contradicting narratives showed an inconsistent interpretation of the shared advisory experience. As with all human endeavors, multiple factors lead to the variety of experiences. However, the Vietnam War marks the first time the US Army attempted to mitigate the variations by creating a standardized system of training for advisors. The training evolved throughout the twenty-year advisory mission, but for the most part, by the height of the war all advisors started their mission with some cultural immersion, language, and special mission training.49

Logisticians were part of the advisory mission from the very beginning. Initially, the logistics advisors suffered from the same systemic problems as all other advisors. Until the mid-1960s, the US Army placed little emphasis on the selection criteria for advisors. The earliest advisors had little training or little direction for the mission, and were mostly people selected for yearlong tours based on deployment eligibility and not special skills. With tours lasting only eleven months, most advisors had no incentive to build the relationships or skills required to create long-term results. Further, as the war progressed, officers would spend six months advising

47 Vien et al., U.S. Advisors, v.
48 Brigham, ARVN Life and Death in the South Vietnamese Army, xi.
49 Ramsey, Advising Indigenous Forces, 73.
and then six months on staff, increasing the turnover and further decreasing continuity.\footnote{Ramsey, Advising Indigenous Forces, 37-38.}

From 1964 to 1970, the US Army formalized the advisor process, including the training for Advisors. The first school in the United States was the Military Assistance Training Advisory (MATA) course under the Special Warfare School, which later evolved into the Institute of Military Assistance (IMA). By 1972, the MATA course evolved into a twelve-week Military Assistance Security Advisor course (MASA). Further, as formalized schooling evolved the formations created the first advisory doctrine, FM 31-73 Advisor Handbook for Stability Operations.\footnote{Ibid., 40-42.} The development of advisor training mirrored the adoption of Vietnamization policy, with the advisor focus shifted from assisting to advising.

During the early stages of the war, the US Army made little effort to create a sustainable ARVN. The battalion level advisors were mostly combat arms and considered multifunctional. The expectation was the battalion level advisors could train the ARVN on everything from combat operations to sustainment.\footnote{Ibid., 32, 35. Page 32 clarified advisor team dispositions and location, and page 35 outlined expectations.} This left the logistics advisors to train and establish higher-level logistics capability. However, prior to 1964 the advisors served as much in an assist role as they did as advisors, leaving the ARVN completely reliant on the established US systems. With little guidance from doctrine and a non-existent logistical base, the advisors naturally gravitated toward their knowledge base and established a host nation logistical system patterned on their own.\footnote{Ramsey, Advising Indigenous Forces, 32; Vien et al., U.S. Advisors, 98. Ramsey outlined the lack of guidance and Advisors outlined the creation of systems based on US Systems.}

Prior to 1964, force cap requirements limited the number of logistics advisors to the MAAGV mission. As a work-around, the US Army established the Temporary Equipment

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Recovery Mission (TERM), which consisted of 350 US logistical personnel. Officially, TERM’s mission was to recover US equipment given under the French mission prior to 1965. However, MAAGV had other intentions for it and used it to develop training programs to build an ARVN logistical capability. This workaround represented the first US advisory effort to establish host nation logistical capabilities. By 1960, the force cap issues were resolved, and TERM was absorbed into MAAGV.54

Post 1960, logistical advisors, now with the authority of MAAGV, assumed the development of ARVN depots and ALCs. Teams of both US military advisors and civilian technical experts worked with ARVN counterparts. By 1962, these teams spread further down, to include ALC DS units, with teams answering directly to an ALC advisory team leader. These elements lived and worked within the ARVN facilities, with the US military personnel primarily focused on staff work and planning, and the technical advisors working on daily logistical operations. The linkage of joint staff work, planning, and assistance in daily operations made the advisory teams an integral part of the ARVN architecture.55

The US Army muddled through the advisory effort during the mid-1960s as it shifted towards large combat formations and assumed the primary combat role. During this phase in the war, advisors’ role changed to more liaison and coordination than one of advising. This time also saw more training and mentoring from US Army units and less from the advisory teams. The advisors’ time was monopolized by the requirement to coordinate between US Army and ARVN units.56

The primary command responsible for logistical advisory shifted from the MACV G4 to

54 CMH PUB 90-10-1, 7-8; Spector, Advice and Support: The Early Years, 262.
55 Vien et al., The US Advisors, 99-100.
56 Ramsey, Advising Indigenous Forces, 35.
the USARV headquarters, making logistical advisory a service responsibility. This made the mentorship convoluted because there was ARVN component level headquarters. The ARVN G4 received input from both MACV and ARVN G4s. However, this did allow greater coordination between US ARMY and ARVN logistical units because both advisory teams and conventional units were under the same command. While the advisors were consumed with coordination between counterparts, the opportunity existed to integrate peer level commands to provide greater training opportunities for ARVN units.57

By this phase in the war, the majority of ARVN logistical training occurred as service specific schools located. Patterned off the US ordnance, quartermaster, and transportation branches, each branch ran its own training center and created separate operational doctrines. A logistics school was developed for officer and continued education, with emphasis on general and not branch specific logistics. Each school had dedicated advisory and technical teams. In addition, most US Army service school-trained ARVN officers went to the ARVN training centers to pass their educational experience on to the force.58 However, despite these efforts, the overall training of the average ARVN soldier was poor.59 The informal training relationship between US Army units and the ARVN presented an opportunity to correct ARVN training issues.

By 1965, with the advisory and US Army logistical effort now under one command, the possibility for peer training emerged. There was a corresponding US field logistic support unit for each ARVN logistic support area. The US logistic units had no official responsibility to train the ARVN units. However, these units were instrumental increasing ARVN efficiencies within their branch specific services. Further, as the ARVN modernized to US equipment, the US soldiers’

57 Vien et al., The US Advisors, 100-101.
58 Khuyen, RNAF Logistics, 88-89; Vien et al., The US Advisors, 169. The signal and engineering branches also fell under the auspices of logistics in the ARVN.
59 CMH PUB 90-10-1, 34-36.
expertise provided critical maintenance and sustainment training. Further training opportunities
came from combined fuel and transportation missions.\textsuperscript{60} The combined logistical effort provided
ARVN units a model to emulate.

By 1968, with the US Army developing new strategies to transition combat operations to
ARVN forces, advisory efforts received a fresh emphasis. The MACV G4 resumed responsibility
for logistic mentorship. However, after the success of the informal unit partnership, MACV
started a formalized partnership program geared towards unit development and as a way to
prepare the ARVN logistical system for Vietnamization. This formal program was project Buddy.

In 1969, as part of a broader MACV project to transfer responsibility to ARVN forces,
Project Buddy, “was designated to teach the South Vietnamese Army to assume responsibilities
in the logistics area by providing on-the-job training in logistics skills and management.”\textsuperscript{61} The
initial plan placed both advisors and ARVN logistical units under the command of the US 1\textsuperscript{st}
Logistical Command for long term on-the-job training, with the units and advisors transitioning
back to ARVN staff control in conjunction with the Vietnamization process.\textsuperscript{62} In execution, the
results of Project Buddy are contradictory.

1\textsuperscript{st} Logistical Command prepared a detailed plan to conduct Project Buddy, of which the
US logistical withdrawal plan relied. However, 1\textsuperscript{st} Logistics Command, MACV, nor the ARVN
was not committed to conducting Project Buddy. MACV decided that the plan to attach advisors
and ARVN units to 1\textsuperscript{st} Logistical Command was not feasible and the endeavor should only
include the training requested by the ARVN. By 1970, only 9,300 ARVN soldiers received

\textsuperscript{60} Vien et al., \textit{The US Advisors}, 101.
\textsuperscript{61} Heiser, \textit{Logistic Studies}, 241. It appears that the term Buddy was used to describe the
informal partnership between ARVN and US forces prior to 1968. However, the formal Project
Buddy was initiated by then LTG Heiser, commander 1\textsuperscript{st} Logistics Command. For more
information see, Clarke, \textit{Advice and Support: The Final Years, 1965-1973}.
\textsuperscript{62} Clarke, \textit{Advice and Support: The Final Years}, 429.
training in conjunction with Project Buddy. However, MACV renewed its interest in Buddy shortly after 1970. However, 1st Logistical Command saw MACV’s efforts as less than committed to a centralized program. The ARVN was only interested in on-the-job training that their service schooling system could not fulfill, so MACV would not support a centralized program. Instead, in response to ARVN desires, the Project Buddy system happened in a decentralized manner, much like the informal process that existed prior to Vietnamization. In fruition Project Buddy became a, “policy rather than a plan or program.”

However, the ARVN viewed the effects of Project Buddy differently. The combined operations and on-the-job training provided the ARVN personnel insights into the US logistical planning process. With limited institutional experience, and the ARVN taking a backseat to US forces in major combat operations, the opportunity to collaborate with U.S support unit staffs offered a glimpse into functioning logistical units. Through liaison visits, the ARVN learned staff planning processes and regional level material management. The interaction allowed the ARVN systems to reduce logistical friction form experienced personnel. This interaction laid the groundwork Vietnamization and the eventual handover of all logistical operations to the ARVN.

In conjunction with Project Buddy, several US Army units conducted Switchback operations with ARVN units. Switchback, a part of Vietnamization, was a direct transfer of mission and equipment from an existing US Army to an ARVN unit. From the ARVN perspective, Switchback operations complemented Project Buddy when transitioning US Army

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63 Clarke, Advice and Support: The Final Years, 429-430; Heiser, Logistic Studies, 241. Clarke went into a little more detail in the friction between 1st Logistical Command and MAC-V. Heiser provided the numbers trained and details on how the program did not achieve its goal.

64 Clarke, Advice and Support: The Final Years, 430.

65 Vien et al., The US Advisors, 103, 176.
logistical functions to ARVN units. However, 1st Logistic Command units, which were not part of the MACV advisory effort, had a different view of the transition process. From their perspective, the system was fraught with systemic maintenance issues and corruption. It was not the transition that forced the ARVN logistics system to work, but the pressures of combat during the 1970 Cambodian campaign forced them to acknowledge and address their logistical faults.66

As Vietnamization took full effect and the US withdrawal imminent, the need to transfer more responsibility to the ARVN was evident. With its manpower limitations, MACV established mobile advisory teams to conduct training and surge advisory capability in 1970. These teams operated from the field depot headquarters and advised multiple units. With the approach of the 1973 cease-fire, the pace at which the US military turned over national functions increased dramatically. Advisors and ARVN national-level assets worked feverishly to prepare integrated communication systems, calibrations, lines of communication management, and port operations for transition.67

All US Advisors withdrew from South Vietnam by April 1973. The process of overseeing Security Assistance Agreements fell to the newly established US Defense Attaché Office (USDAO).68 While the cease-fire treaty did not allow for US advisors, the ARVN treated the USDAO officials as advisors. The Paris Agreement limited the USDAO size, so contracted technical advisors filled the void. The frequent visits by USDAO personnel always, whether US military or civilian technical advisors, aided in solving issues and reassured ARVN logisticians of

66 Clarke, Advice and Support: The Final Years, 431; Vien et al., U.S. Advisors, 176.
67 Vien et al., U.S. Advisors, 103-104.
68 The Paris Treaty or Agreement was the agreement made by North Vietnam, South Vietnam, and the United States of America on 27 January 1973. It was supposed to mark the end of the war, and signified the removal of US forces with the exception of select personnel. For more information see, Cao Van Vien, The Final Collapse, Indochina Monograph (Washington, DC: US Army Center of Military History, 1985).
the US Army’s continued resolve to support the ARVN.\textsuperscript{69}

In spite of a massive US advisory effort, North Vietnam conquered South Vietnam in 1975. The speed at which South Vietnam fell following the Paris Treaty shocked both friend and foe.\textsuperscript{70} The fall of the Saigon regime left many questioning the US Army’s approach to both the conduct of the war and its advisory approach. Regardless of the many difficulties, the US Army logistical advisors and civilian technical experts worked diligently to train and mentor ARVN support soldiers, overcoming vast cultural and language barriers to create a robust and capable logistical base.

\textbf{Lessons from the Study}

The fall of South Vietnam officially marked the end of the United States twenty-year campaign to build the ARVN. Critics view South Vietnam’s defeat as a referendum on the US Army’s misguided strategies. However, as shown above, the combination of the US Army’s logistical advising effort and the dedication of ARVN logisticians effectively built a sustainable and capable ARVN logistics force. Even as a success, there were several approaches, some purposeful and other unintended, applied by US Army advisors that had unforeseen consequences that affected the ARVN logistical system. These consequences and their actions that caused them are areas for future consideration when conducting SFA. Future advisory efforts must consider limits within the US Advisor training system, lack of unity of command within logistical advisory operations, the reliance on advisors and technicians as part of the system, and transferring the American excessive use of material and equipment to the ARVN thought process.

Learning from its previous experience in Korea, the US Army established specific

\textsuperscript{69} Vien et al., \textit{U.S. Advisors}, 104.

training for advisors. This training plan and its evolution over twenty years was an impotent component of the US advisors’ success. However, there were shortcomings within the training. The logistical advisor-training path was a US dominated enterprise with little input from their ARVN counterparts. A joint MACV, ARVN in-country training course, with emphasis on the ARVN cultural expertise would have produced a better advisor. Further, with little logistic emphasis in the US advisor course, the advisors deployed with no knowledge of the ARVN logistical system. A joint training system to prepare logistical advisors would have helped remove preconceived biases from the advisor. Removing bias would allow the advisors to identify the difference between a cultural difference and a logistical issue. ⁷¹

The ability to interpret the difference between cultural issues and real problems was a missing element in many advisors. Advisors often focused on issues that they believed went against good military discipline. These issues included pilferage, waste, and corruption. However, the advisors often misinterpreted the ARVN willingness to permit these incidences. Instead of addressing these issues as corruption, advisors reported them as part of logistical inefficiency. Many advisors presented a feeling of frustration from operating within the perceived corruption, but they did not want to risk their counterparts losing face. However, the ARVN was responsive to allegations of corruption and investigated all allegations. For the most part, there was manageable corruption, but the ARVN dealt with these issues, and ultimately improved their efficiencies at their own pace. ⁷²

Further, Project Buddy created an unidentified issue in training the logistical advisor

⁷¹ Ramsey, *Advising Indigenous Forces*, 40-44; Vien et al., *U.S. Advisors*, 120. Ramsey discussed the origins of the training. Vien discussed the need for in-country ARVN input into the logistical advisor training.

⁷² Ramsey, *Advising Indigenous Forces*, 51; Vien et al., *U.S. Advisors*, 116-117. Ramsey discussed the need to always present the ARVN counterpart in a positive light. Vien discussed the advisors’ fear of reporting corruption and the ARVN’s willingness to deal with it.
pool. That is, while the US Army had a concerted effort to train advisors, many of the logistical advisors were not actually advisors, and therefore did not go through the US Army’s training program. As previously stated, a large portion of logistical training post 1964 occurred by partnering ARVN logistical units with peer 1st Logistical Command units. Both armies’ logistical leaders credit the on-the-job training with preparing the ARVN to assume full control of in-country logistics. However, 1st Logistical Command units were in place to support US Army operations and were not privy to the stateside training. Partner units are the most likely sources for many of the perceived frustrations stemming from the training and advisory efforts. A unified in-country training plan would have put advisor-trained personnel within the 1st Logistical Command units. Having trained personnel could have improved the partnership effort and alleviated some of the frustration felt by both nations.73

In spite of the addressed issues, the US Army’s Advisor training effort was a realization of lessons learned from previous conflicts. While it did not solve all problems, it was a step forward in addressing cultural differences and educating US soldiers on advisory operations. Critical analysis of the training system will allow for the continued improvement of the process for future operations.

The logistical advisory effort existed under multiple commands throughout the conduct of the war. It started under MAAGV and MACV, then under the US Army Vietnam (USARV) G4 and 1st Logistical Command from 1964 to 1968, and then back to MACV. Specific strengths and issues arose as the advisory efforts were under the different commands. The ARVN, US, and

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73 Ramsey, *Advising Indigenous Forces*, 51; Vien et al., *U.S. Advisors*, 116-117, 176; Heiser, *Logistic Studies*, 240. Ramsey discussed the training for advisors. Vien discussed both the training for advisors and the Buddy program. Heiser discussed the Buddy program. Based on the writings, it conjecture that the Buddy participates did not receive the US Army advisor training because it happened in the United States, and Buddy participates were sent to South Vietnam to fill normal units not advisor positions.
MACV all had different perspectives on the best way to accomplish the task. Regardless of the way chosen, when MACV controlled the logistical advisors there was a lack of unity of effort and command between logistical partnerships and advisory operations. When USARV and 1st Logistical Command controlled the logistical advisors there was a lack of unity of effort and command between the logistical advisors and the advisory command.74

The logistical advisory mission moved from MACV control to USARV as the US Army assumed the primary warfighting role. The transition allowed one command simultaneous control of the tactical advisory and training effort. The training partnership achieved during this phase propelled the ARVN forward and improved the capability of ARVN logistical formations. However, while it improved the overall quality of the ARVN soldier, it created a rift between field level and institutional level advisory operations.75

The JGS G4 and the services specific command advisory operations still belonged to MACV. The separation between the two US Army commands left the ARVN confused, because they were not sure whose guidance to follow, especially considering the two often gave conflicting guidance. The ARVN considered this arrangement less than optimal. This forced the JGS G4 to work with two separate agencies instead of one unified command. They did recognize the importance of the improvements the relationship made at the tactical level, but they found it inconsistent with building the national logistical system as a whole. They also believed it hindered the transfer process once Vietnamization occurred.76

Further, moving unit level logistical advisors under USARV G4 and 1st Logistical

74 Heiser, Logistic Studies, 232-233. Heiser refers to the command as being under US Army Forces Vietnam, but 1st Logistical Command was the senior logistical element for US Army Forces Vietnam and was responsible for partnering operations.

75 Vien et al., U.S. Advisors, 111.

76 Ibid., 111.
Command separated logistical advisors from their combat arms counter parts. The teams directly supporting the ARVN maneuver formations received guidance from a different command than their logistical counter parts. This caused a lack of clarity between the two separate elements, and did not create a matched training path for combat arms and the logistical branches. However, by 1968 the responsibility returned to MACV.77

The MACV controlled the logistical advisory mission caused a different set of issues. The ARVN and MACV both relied on the 1st Logistical Command to continue partnered training and transition to ARVN control as the US Army withdrew. However, the 1st Logistical Command had one vision of the required training based on their day-to-day interaction with the ARVN. The ARVN JGS G4 had a different view based on their belief in the effectiveness of their developed training systems. The MACV G4 and advisors tended to agree with the Vietnamese. Without a unified command to resolve the issue, the differences caused a reduction in the US Army logistical responsiveness to the ARVN. This tension is the reason the formalized Project Buddy system was not nearly as successful as the informal partnership training that occurred when 1st Logistical Command controlled both missions.78

The command relationship conflicts between the conventional logistical command and the advisory command are important to understand for future SFA efforts. There is no clear advantage to either system, with both systems enhance certain aspects of logistical development. Each of the commands had differing requirements, and managed the mission to best support their requirements. Historical analysis does not provide a specific answer to the question of command relationships, but it does show the need to balance the command relationships against desired outcomes.

77 Vien et al., U.S. Advisors, 111.
78 Vien et al., U.S. Advisors, 111; Clarke, Advice and Support: The Final Years, 429-430; Heiser, Logistic Studies, 241.
The employment of logistical advisors set the tone for building the ARVN logistical infrastructure and training ARVN logistics soldiers. Their effort was instrumental in the ARVN’s ability to sustain itself throughout the conduct of the war and after the withdrawal of US forces. However, analyzing their use within the ARVN systems and their relationships with their counterparts shows a created dependence on US personnel within the South Vietnamese systems. This dependence detracted from South Vietnamese autonomy and led to questions about historical claims of ARVN standalone logistical capability.

The interjection of US Advisors, technicians, and partnered units within the ARVN physical space created conditions for dependence. This process did allow direct and almost constant interaction between ARVN and US personnel that increased engagements and further progressed the ARVN capability. However, the advisors did not serve only as advisors and moved into the assistance realm. Once the advisors started assisting, they became an integral part of the system. The process of Vietnamization did not remove the need for advisors and in many ways reinforced the need.

As operations continued, and transitioned to South Vietnamese control, the ARVN had to sustain itself. Multiple AARs discussed the improvements and successes of ARVN logistics. After the 1970 Cambodian campaign, the official MACV history stated, “All tactical planning, logistics support, and actual leadership of the Vietnamese side of the campaign were Vietnamese... It convinced American advisors that the RVNAF was well on its way toward prosecuting the war on its own.” However, the AARs also state comment that the advisors were usually able to resolve any issues that South Vietnamese could not. As one AAR stated, “Advisors have been checking all available channels to determine the availability of 105mm...”

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tubes.” The other sections discuss the need for advisor emphasis to ensure the ARVN resolve issues, or the unwillingness of ARVN officers to report problems higher, requiring the advisor to fulfill this role. The advisors own reports contradict their narrative that the ARVN developed a completely independent logistical system.

The reliance on the advisors was not solely an ARVN problem and much of the blame for the continued necessity rested on the advisors themselves. Many of the advisors interjected and solved problems rather than allowing the South Vietnamese to solve problems for themselves. As one AAR capturing lessons learned stated, “Efforts to assist ARVN logistics be directed at advising ARVN commanders to plan for sustained operations and take proper action through ARVN logistical channels. Emphasis should be placed on advisor restraint in attempting to solve ARVN logistical problems through advisor channels.” The requirement to capture this lesson came from the propensity of some US Advisors to solve issues for the ARVN versus forcing the system.

The employment of civilian technical advisors further exasperated the logistical systems reliance on advisors. Technical advisors, paid for and employed by US funds, operated alongside ARVN logisticians and provided crucial logistical, sustainment, and maintenance expertise. The planning factors and requirements for technical advisors is a point of historical contention. Some critics believed that the ARVN had little input for the numbers and types of technical advisors. Instead, MACV command was the decision maker, and placed the civilian technicians as they saw fit. The critics question whether MACV employed an unnecessarily large civilian workforce,

81 Ibid., 69.
83 Truong, *RVNAF and US Operational Cooperation and Coordination*, 81-82. Truong discussed how Advisors would still cut through supply red tape, even as the ARVN became more autonomous.
and thus did not empower the ARVN logisticians to deal with many problems themselves. Further, as the US military advisors left South Vietnam, the United States employed additional civilian technical advisors to replace military personnel. The USDAO civilian technicians integrated into ARVN operations, mostly at the national level. As Lieutenant General Dong Van Khuyen, the former Commander Logistics Command and last JGS Chief of Staff stated, “Despite the formal relationship occasioned by the new circumstances which prohibited the Americans from acting as advisers, ARVN logisticians placed their total confidence on USDAO officers and treated them as if they were advisers.” This statement showed that even as the US withdrew from South Vietnam, the ARVN relied on US logistical advisors, and the United States continued to reinforce South Vietnam’s need for logistical advisors.

The US advisory effort was an important piece of building the ARVN logistical system, and the created system enabled the sustainability of the ARVN. It was a herculean effort by the Advisors to build and the hand over operations to the South Vietnamese. However, acknowledging the reliance on advisors as an integral part of the ARVN logistical system is important to understand the effects of US advisory efforts. Understanding the dilemma created advisor reliance, and its ultimate inevitability, can better prepare the US Army for future advisory operations.

Another unintended consequence of creating an American style logistical system in an austere agrarian society is the imposition of the US Army concept of excess. The US Army’s conduct of war benefited from a strong economy with seemingly unlimited resources. Both tactical and logistical advisors, operating within the ARVN, imparted their concept of warfare upon the ARVN. This caused a cultural clash between the Vietnamese mindset and the western

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84 Vien et al., *U.S. Advisors*, 101-104, 111.
85 Ibid., 104.
use of copious amounts of firepower.

From the beginning the US Army forced military formations upon the ARVN that they did not agree with. The South Vietnamese wanted lighter and more agile infantry based formations that worked within their concept of warfare. The US Army, instead, exported a model that mirrored American divisions. Building these formations forced the ARVN, with the direction and training of advisors, to adopt the US Army’s systems of battle. Just as the US Army fought, the South Vietnamese relied on excessive amounts of firepower. The excessive amounts of firepower meant that ARVN logicians had to maintain excessive amounts of stocks to keep up with ARVN demands.

As the ARVN logistical system improved, the ARVN still struggled to maintain the required levels of supply. The depots were supposed to maintain 90 days of supply of needed material, but due to overuse, especially in artillery rounds, the depots struggled to achieve required levels. Partnered operations transferred much of the reliance on excess to the ARVN. When ARVN units worked with US Army units, the US advisors worked through US channels to increase supplies rates to ARVN units. This improved the overall morale of ARVN soldiers and the effectiveness of fighting units. As Vietnamization occurred and US units pulled back, the South Vietnamese struggled to keep their soldiers supplied at the levels the soldiers expected.

The levels of support expected by ARVN soldiers increased the demand for US aid funds and supplies. Frustrations strained the relationships between advisors and advisees as MACV would attempt to curtail ARVN expenditure. Budget cuts and fund reductions had sizeable impact

86 Brigham, *ARVN Life and Death in the South Vietnamese Army*, 4-6.
87 Clarke, *Advice and Support: The Final Years*, 327.
88 Truong, *RVNAF and US Operational Cooperation and Coordination*, 82; US Military Assistance Command, *Vietnam, The Ben Het-Dak To Campaign*, 21. Truong discussed the linkage between partnership and supply assistance, and the AAR discussed the difficulties with maintaining days of supply.
on the ARVN’s ability to conduct combat operations. To augment this, US units would “loan” the ARVN supplies from US in-country stocks. This exacerbated the problem, and served only as a short-term fix. As the US Army withdrew, it increased the ARVN depot levels stocks by transferring US assets, which helped in the short term. However, as US aid dwindled the ARVN’s bolstered stocks depleted.89

The US Army’s access to its powerful economic and industrial base shaped the way it conducts warfare. The US Army has access to massive amounts of supplies and equipment. The US advisory effort in Vietnam shows that the American soldier will transfer that concept to a foreign nation. Learning this lesson from the Vietnam War should inform future SFA efforts.

The above four areas of focus should not dismiss the success of the US Army logistical building effort in Vietnam. Rather they show that in spite of the success, there were areas that the US Army could have improved upon. The approaches chosen by the US logistical advisors and ARVN logisticians had unforeseen consequences, which challenged the success of the mission. However, understanding the unintended consequences that emerged from the Vietnam effort can aid the US Army in creating approaches for developing foreign nations military logistical capability that do not recreate the same mistakes.

**Conclusion**

The US Army’s effort of build the ARVN logistical system was a success. A combined United States and South Vietnamese effort constructed a national-level logistics system from depleted and destroyed infrastructures. Starting from a small program and moving to a national

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89 Vien et al., *U.S. Advisors*, 99; Clarke, *Advice and Support: The Final Years*, 377; Cosmas, *MACV The Joint Command in the Years of Withdrawal*, 391; CMH PUB 90-10-1, 192; Heiser, *Logistics Support*, 235. Vien discussed the frustration caused by the budget cuts, Cosmas discussed the transfer of equipment, and the Vietnam Studies product discussed the loaning of supplies and equipment. Heiser discussed the transferring of equipment to the ARVN.
military partnership program, the approach built a modern and capable system which maintained and sustained a modern 500,000-man army. While effective, several unintended consequences from the approach offer lessons to future Security Force Assistance operations.

South Vietnam’s reliance on military aid is irrelevant when determining the success of US Army efforts in the Vietnam War. South Vietnam’s reliance on US military aid was the result of the agrarian economy with little industrial infrastructure and not a fault of the US Army’s approach. Critics could question the need for modern military formations that required large infusions of US equipment and supplies. Some of these critics were South Vietnamese Generals, who did question the formation early in the ARVN development. However, the final battles of the Vietnam War proved the need for a modern ARVN. Saigon did not fall to a local insurgency. It fell to a modern North Vietnamese army that received funds and equipment from the Soviet Union and China. The modern North Vietnamese threat validated the need to create a modern ARVN and therefore validated the reliance on foreign military aid.

Although the South Vietnamese military relied on US aid, the ARVN logistical system proved capable of supporting its army through continuous combat operations. Starting with a small advisory team, the US Army developed an ARVN logistical system from almost nothing. The remnants of the French-trained logistical system left little to work with, and by the late 1950s the US Army and ARVN leaders initiated the development of an ARVN logistical system. As the ARVN evolved to pattern US Army combat formations, so too did the logistical system. As the system evolved, joint US and ARVN studies, such as the Pathfinder Committees, determined and implemented structural reorganization within the national and unit level logistical systems. The continual update to the organizational structure enabled the ARVN to conduct perpetual, almost

90 Vien, *The Final Collapse*, 19, 33, 38, 158-159. All these pages discussed the North Vietnamese Army’s reliance on Russia and China.
unilateral combat operations, such as the Easter Offensive, which empowered the US to withdraw its forces in 1973.

The builders of the ARVN logistical system were US Army advisors, who worked alongside their ARVN partners to train and develop both ARVN logistics soldier and units. These advisors, who were the first US military advisors to receive institutional training prior to beginning their tours, dealt with multiple cultural and language issues. They worked within the ARVN system to improve the system’s functioning. Regardless of cultural friction and differences of opinion, the advisors and advisees continually improved the system. As the ARVN logisticians advanced, US logistical and support units partnered with peer ARVN units, and the latter received on-the-job training. The on-the-job training allowed the ARVN to learn from a functioning organization and was essential to ARVN improvements. When the US Army attempted to formalize the on-the-job training, under the Project Buddy program, issues arose between multiple US commands that prevented the program from reaching maturation and achieving its goals. Nonetheless, the on-the-job training was an important component in preparing the ARVN logistic system to operate without US influence. After the US withdrawal multiple US military personnel and contracted civilian technicians stayed in South Vietnam under the USDAO. While not officially advisors, because of treaty restrictions, the USADAO members insured the arrival of military aid and provided needed technical expertise to maintain ARVN system.

The establishment of the ARVN logistical system and the advisor process had several unintended consequences. Acknowledging these consequences offers areas of critique and potential for future operations. The first area was the shortcoming in the institutional advisor training and the lack of South Vietnamese advice within the training. Establishing advisor training was an improvement over previous wars, but training would have benefited from South Vietnamese input. The input would have provided better cultural insight to advisors. Further, with
on-job-the training identified as essential for success, only the advisors received the institutional training and not members of partnered units. The partner units, who were not technically advisors, would have benefited from South Vietnamese influenced training.

The second consequence was trouble from a lack of unity of command of logistical advisors. Logistical advisors started under MAAGV/MACV, then moved under USARV, and then back to MACV. As the 1st Logistical Command, US’s senior logistical command, attempted to formalize the Buddy program, MACV did not provide full support. While acknowledging the importance of on-the-job training, MACV had different priorities that conflicted with 1st Logistical Command. This caused conflict and prevented the program from achieving its full potential.

The third consequence was creating a reliance on advisors within the ARVN logistical system. The logistical advisors did not simply teach and provide guidance; they were actually a part of the system. US soldiers, and civilian technicians worked right alongside ARVN soldiers. As the US military withdrew, the South Vietnamese logisticians had to learn to work without the advisors. The need for advisors was so great that as MACV transitioned to the USDAO, the ARVN still treated the USDAO members as advisors.

The final consequence was transferring the US Army’s excessive use of equipment and martial to the ARVN. The US Army operated with the backing of a strong economy, which the ARVN did not enjoy. Partnering had the effect of transferring the massive use of supplies to the ARVN. This made the ARVN even more reliant on US military aid. As aid dwindled, sustaining the ARVN became increasingly difficult.

Analyzing how the US military built the ARVN logistical system and understanding the consequences that came from that approach, offers lessons for future similar US missions. However, it is important to understand that there were other aspects of building logistics within the Vietnam War. Further study of the US approach to the Navy of the Republic of Vietnam, the
Air Force of the Republic of Vietnam, and the pacification programs would create a more complete understanding. This understanding combined with analysis of US advisory missions will better prepare the US Army in the future.
Bibliography


